

Dissemination of textile and apparel environmental information on Facebook

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Textile and apparel (TA) industry is being highly criticized for its negative impact on the environment (Quantis, 2018). A combined effort from all major stakeholders of the TA supply chain is imperative to reduce the harmful impact of the industry. However, without conscious and active participation of the consumers, the effort of cleaning up the TA supply chain might be hindered. Facebook, a popular social networking site platform of information generation and dissemination, can play an important role in making conscious consumer. The purpose of this study was to investigate what formats and the contents of TA industry-related environmental information posted on a Facebook page leads to a higher level of engagement.

Nine pieces of information were selected from available sources (i.e., YouTube, websites etc.) for each of four main aspects of TA environmental sustainability: water, chemical, energy and waste. The information was posted in three different formats namely video, infographic and weblink (text) over two weeks on an experimental Facebook page. The researcher was the creator and admin of the page. Data was collected from a convenience sample of 46 U.S. participants, aged 18-35 (millennial cohort). The participants were instructed to indicate their level of engagement using a system of responses (Table 1).

The aggregate engagement scores following this system revealed that participants engaged more in video format (504) followed by infographic (492) and weblink (405). A one-way ANOVA

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was conducted to compare the engagement score generated by information shared via video, infographic and weblink formats. The result showed that there was not a significant effect of formats on engagement generation ($F [2,33] = 0.42, p = .66$). The descriptive finding is supported by other studies. For instance, a study dealing with a smoking cessation program found that information posted in video format generated more engagement than text posts (Duke et al., 2014). Similarly, it was found that Facebook posts get 2.3 times more engagement with images than those with texts (Mawhinney, 2017).

Table 1
Scoring rule for Facebook engagement

Level of Engagement	Expression	Points
None: Did not read the post	No expression	0
Low: Viewing the post (reading or viewing) with little to no response.	Clicked a 'Reaction'	1
Moderate: Thinking about the information and having something to say about it. For example, after reading an article a participant might think "That's interesting!", "Really, I did not know this!" etc.	Added a 'Comment' about what he/she is thinking or 'Reply' if he/she agrees/disagrees with other participants	2
High: Responding to the information by wanting more people to know about it. For example, after watching a video one participant thinks "This information is surprising, I need to let others know"; "Hmm! People need to do something about this, I need to share this information"; "Good information, it's worth sharing," etc.	Clicked 'Share' and sent information to another publicly or privately	3

On the other hand, participants engaged more in water-related content (360) closely followed by waste-related content (357). Energy-related content received the lowest engagement score (341). A one-way ANOVA was conducted to compare the engagement score generated by water, energy, chemical and waste-related contents. The result showed that there was not a significant

effect of contents on engagement generation ($F [2,33] = 0.86, p = .43$). This might have occurred because participants could visualize the impact on water and waste on their daily lives as it is directly associated with everyday life. On the contrary, consumers have poor knowledge of energy-related climate change issues and the underlying science associated with it (Leiserowitz et al., 2011).

Social media campaigners (federal, private, non-profit, etc.) as related to TA environmental sustainability can utilize the findings to set information dissemination strategies. Consumer awareness is vital to ensure sustainable clothing consumption. A slight change in consumer behavior can have significant impact on ecological metrics. For instance, if all the U.S. people cut one load of clothing wash, it would save 21,865 million liters of water/year, considering 328.2 million people in the United States, and 66.62 liter per load of 4.04 kg (Cotton Incorporated, 2017).

References

- Quantis (2018). *Measuring fashion: environmental impact of the global apparel and footwear industries study*. https://quantis-intl.com/wp-content/uploads/2018/03/measuringfashion_globalimpactstudy_full-report_quantis_cwf_2018a.pdf
- Duke, J. C., Hansen, H., Kim, A. E., Curry, L., & Allen, J. (2014). The use of social media by state tobacco control programs to promote smoking cessation: A cross-sectional study. *Journal of Medical Internet Research, 16*(7), article e169
- Mawhinney, J. (2017). 42 visual content marketing statistics you should know in 2017. <https://blog.hubspot.com/marketing/visual-content-marketing-strategy>
- Leiserowitz, A., Smith, N., & Marlon, J. R. (2011). American teens' knowledge of climate change. Yale University. New Haven, CT: Yale Project on Climate Change Communication, 5.
- Cotton Incorporated (2017). LCA update of cotton fiber and fabric life cycle inventory. <http://resource.cottoninc.com/LCA/2016-LCA-Full-Report-Update.pdf>