



Climate Change And Instagram: Are Positive or Negative Advocacy Posts More Effective?

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INTRODUCTION

- Learning about climate change has been shown to cause anxiety, depression, PTSD, phobias in children (Burke)
- Adolescent environmentalists/advocates report greater self-confidence, citizenly behavior, and engage in more dialogue (Allen)
- Adolescents ages 8-19 hold misconceptions about climate change, possibly due to poor education (Lee)
- Younger people may be more likely to take action with regards to climate change (Lee)
- Social media may motivate people to take action about climate change (Senbel)
- Advocacy organizations use social media to influence behavior (Ciszek)

The **purpose** of this study was to understand whether viewing positively-framed and negatively-framed Instagram posts has an effect on adolescents’ wellbeing, mood, and advocacy.

METHODS

Setting: Online survey distributed using researcher’s Instagram and Snapchat stories as well as through iMessage. There were 2 survey conditions:

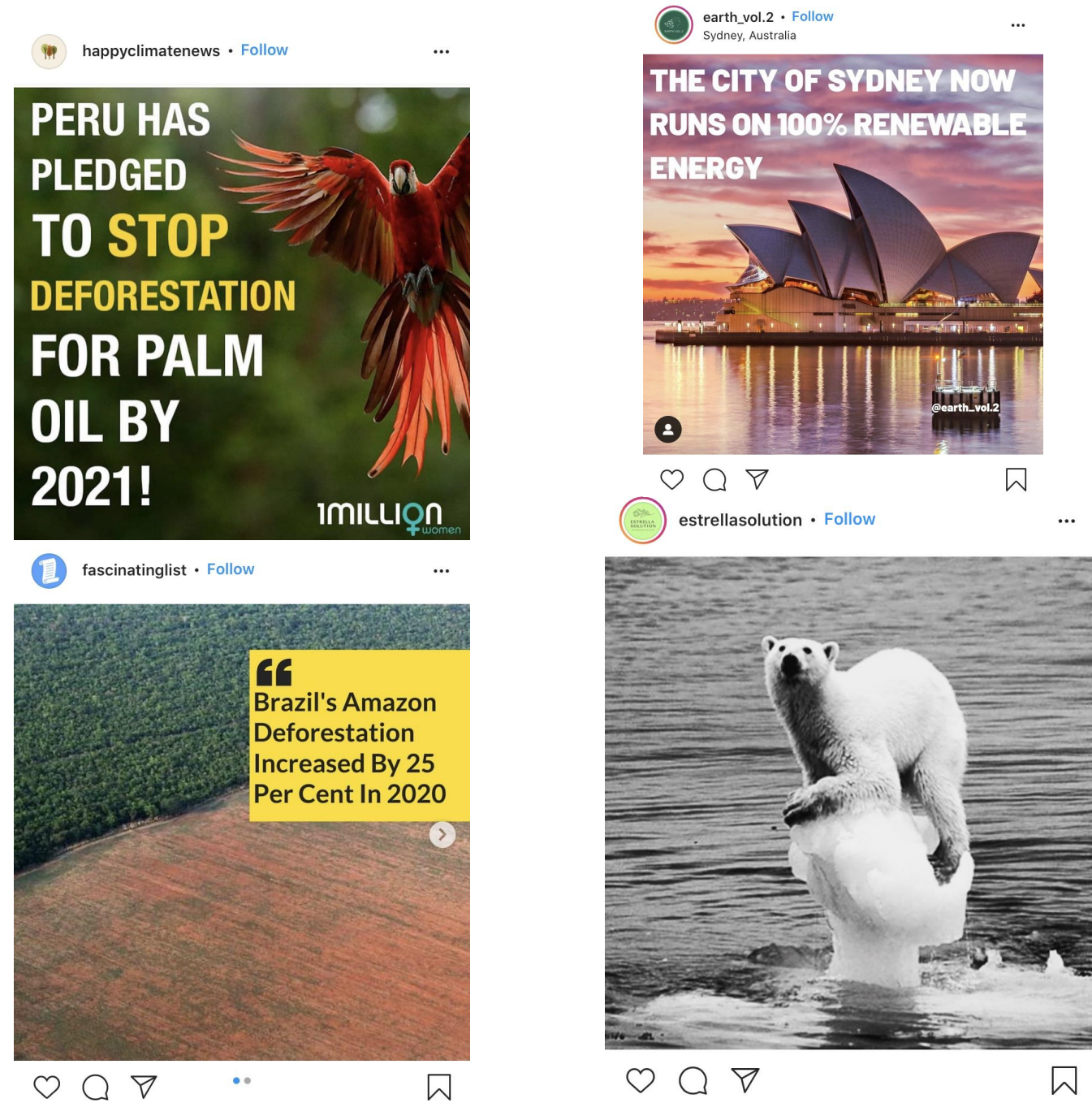
- Condition 1: Participants viewed 3 negatively framed climate change posts
- Condition 2: Participants viewed 3 negatively framed climate change posts

Participants:
All participants had to be between the ages of 13 and 24

- Measures:**
All non-demographic measures were completed before and after viewing posts
1. **Mood:** Participants rated their mood twice on a scale of 1-7
 2. **Advocacy:** Participants rated their motivation to be a climate change advocate on a scale of 1-10:
“How motivated are you to advocate against climate change? Examples of advocating against climate change could be: attending marches or events, raising money, posting on social media, leading or starting programs, etc.”
 3. **Wellbeing:** Participants completed a modified version of the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS).
 4. **Demographics:** age, gender, and political affiliation

Conditions 1 & 2
Participants in condition 1 saw 3 positively framed climate change posts (see top) while those in condition 2 saw 3 negatively framed posts (see bottom). The posts were real Instagram posts found on the #climtechange and the #negativeclimatechange pages. For each post, participants listed 3 things they noticed.

After this, participants completed mood, wellbeing, and advocacy motivation ratings again.



RESULTS

103 young adults responded overall. We had 50 responses on the positive posts form, and 53 on the negative posts form.

Age:

Positive Posts:	Negative Posts:
14: 4% (2)	14: 5.8% (3)
15: 14% (7)	15: 19.2 (10)
16: 52% (26)	16: 55.8% (29)
17: 22% (11)	17: 9.6% (5)
18: 6% (3)	18: 5.8% (3)
19: 2% (1)	19: 1.9% (1)
	20: 1.9% (1)

Gender:

Negative Posts:	Positive Posts:
Male: 40.4%	Male: 38%
Female: 57.7%	Female: 60%
Other 1.9%	Nonbinary 2%

Political Affiliation:

Negative Posts:	Positive Posts:
Democrat: 82.7% (43)	Democrat: 76% (38)
Republican: 0.0% (0)	Republican: 8% (4)
Independent: 7.7% (4)	Independent: 4% (4)
Other: 9.5% (5)	Other: 8% (4)

	Mean Mood Before (SD)	Mean Mood After (SD)	P value
Positive Posts			
Mood	4.88 (1.13)	5.16 (1.11)	.01*
Wellbeing	49.96 (8.59)	51.32 (9.88)	.14
Motivation	7.38 (2.11)	8.08 (1.89)	.00*
Negative Posts			
Mood	4.66 (1.12)	4.32 (1.13)	.001*
Wellbeing	50.05 (7.54)	48.88 (8.00)	.062
Motivation	7.39 (2.56)	7.90 (2.08)	.001*

RESULTS

	Positive Post After	Negative Post After	P value
Mood	5.12 (1.09)	4.32 (1.13)	.00*
Wellbeing	51.32 (9.88)	48.88 (8.00)	.17
Motivation	8.08 (1.89)	7.90 (2.08)	.65

Example Quotes from Participants

“I felt proud of the people who came up with this idea. The picture makes me feel hopeful.”

“If they can do that why can’t everyone. 100% is a lot of percents.”

“It made me feel happy and hopeful. Like maybe more places can do this. The picture in the post looks nice.”

“It makes me feel good that they’re using renewable energy, which is better for the environment. The post could give more information.”

“Norway is cool for doing that. Rainforests are important so that’s cool. Why can’t the us do more stuff like this”

Summary of Findings

- Mood and motivation were significantly higher after viewing positive climate change posts
- Mood was significantly lower but motivation higher after viewing negative posts
- Mood was significantly higher after viewing positive posts than negative posts
- There were no changes in wellbeing before and after viewing positive or negative posts

Limitations

- While the survey was open to anyone, mainly democrats responded making it difficult to see differences by political backgrounds.
- To get a more accurate grasp of effects, a larger sample size would be necessary
- Although this project mimicked Instagram, it is hard to truly imitate what it is like scrolling through the platform
- Many participants fell around the 16 year old mark, and a larger age range would be important for future studies.

CONCLUSIONS

Both positive and negative posts promoted motivation to be an advocate, but positive posts enhanced mood while negative posts decreased mood.

Climate change organizations should positively frame Instagram posts in order to produce the next generations of advocates while also enhancing adolescent mood.

Climate change organizations should reach all demographics, including those from different age and political backgrounds.

In this study, the participants looked closely at each of the posts, pointing out things that they noticed. Climate change influencers should similarly encourage their viewers to really look at the posts.

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