

Black-ish Episode "Lemons": Creating empathy across divides

Media has the power to polarize - but it can also be used as a tool to create connection, understanding and empathy across deep divides. And in cultivating those things, entertainment media can help shape some of the social norms most essential for a healthy, pluralist democracy.

After the 2016 election, the production team of the sitcom Black-ish attempted to do exactly that: in the face of deep distrust and growing animosity between left and right, its episode "[Lemons made a case for empathy](#)", calling on its audience to consider that the "other side" may have a viewpoint worth listening to. Viewers observed characters articulating and navigating divergent perspectives, just as America itself was struggling to make sense of a political moment that had left the country deeply fractured. The episode suggested that even for those most upset by the election's outcome and determined to resist, perhaps there was value in seeking to humanize and understand those fellow citizens who had voted differently.

Did it succeed?

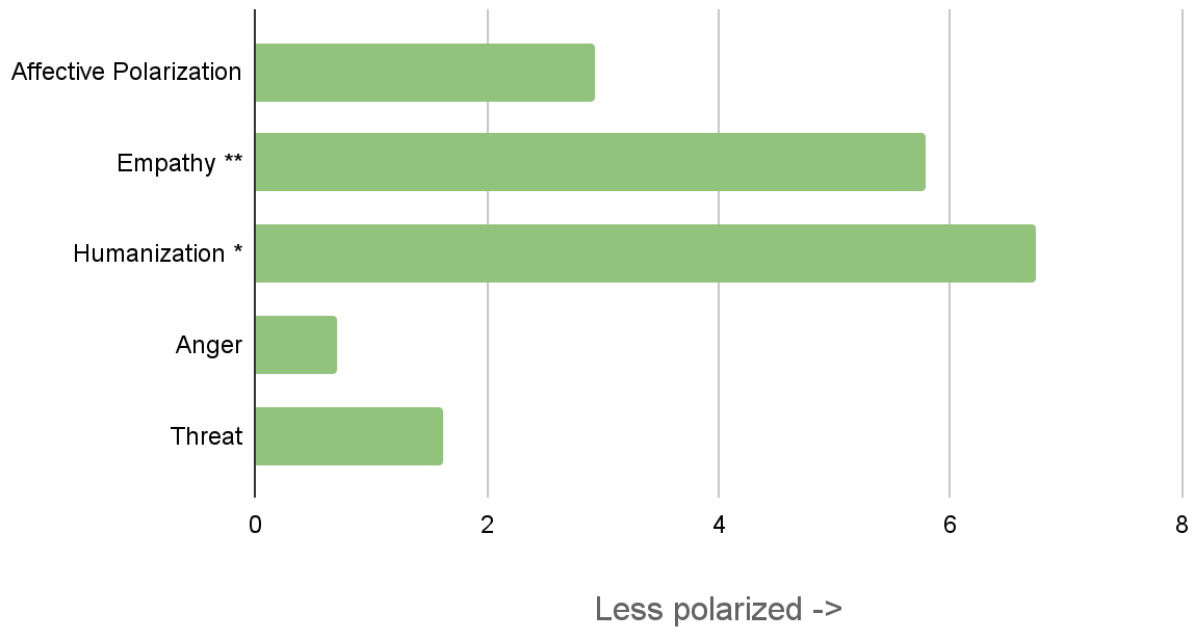
That's what BEL set out to answer in 2022. We conducted an online experiment testing whether watching "Lemons" left viewers with greater empathy towards Americans from the opposite party. We wanted to see if the episode had the impact its producers intended. Although we had a hunch it would, as social scientists we also knew that often intentions and hunches don't pan out in reality.

Testing the impact of Black-ish episode "Lemons"

How the test worked: We invited over 200 Americans, half who identified as Democrats and half Republican, to either watch "Lemons" or another prime time sitcom episode from the same season (with similar Nielson and IMDB user ratings). The week before we had asked them to answer questions about their empathy for voters in the other party, as well as other questions related to toxic polarization - "affective polarization" (animosity), humanization, anger and perceived threat toward counter-partisans. After watching the "Lemons" or another sitcom episode, we again asked them the same set of questions. What we wanted to see is if Lemons viewers' levels of empathy increased compared to the control viewers and whether their other feelings towards counter-partisans likewise moved in a positive direction.

You can see the results in the chart below. Participants who watched "Lemons" had a positive and statistically significant shift in their levels of empathy and humanization toward counter-partisans, compared to the control. We also see indications of positive shifts in affective polarization, anger and perceived threat, but those results were not statistically significant.

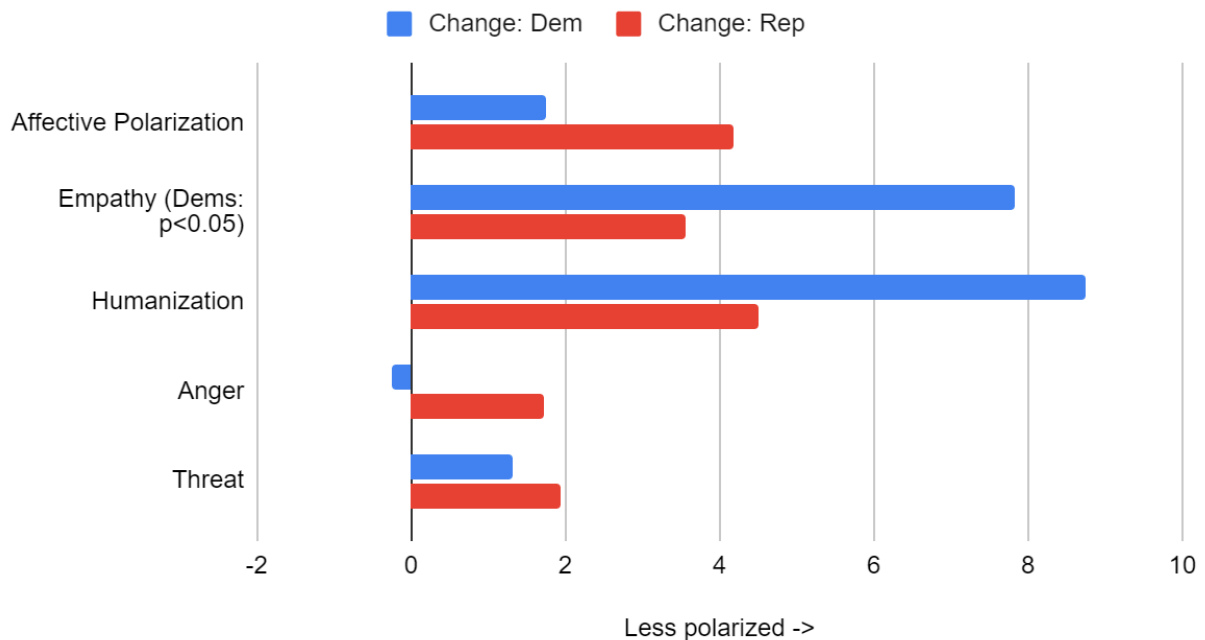
Viewing Lemons compared to other sitcom



*Stars denote statistical significance. * $p < 0.05$. ** $p < 0.01$.*

Importantly, the effects weren't driven by a change in attitude among only Democrats or only Republicans; there was no statistically significant difference between how participants in both groups reacted.

Viewing Lemons compared to other sitcom: Dems & Reps



What can we make of these results? It's always best to be cautious when interpreting data, but we can safely say these results are promising, if not impressive. First, we can have **confidence that watching “Lemons” has a positive impact on increasing viewers' empathy toward counter-partisans and reducing dehumanization**. We also have no reason to believe that this impact is different for Democrats and Republicans.

What we *cannot* yet say with confidence (given this test) is that “Lemons” had a positive impact on Affective Polarization, Anger or Perceived threat. These are what we call "null results"; they don't mean that “Lemons” *doesn't* have an effect in those dimensions, just that if there is an effect it would be too small for us to see with our limited sample size. It may also be that some intergroup attitudes are more fixed and harder to shift in a 22 minute time frame; it may be that making a dent on anger, for example, requires a longer and more intense intervention than viewing a sitcom.

Finally, we may ask how strong or *meaningful* the impact of “Lemons” is on viewers' levels of empathy and humanization. In both outcomes, there was about a 6 percentage point positive shift in attitudes among “Lemons” viewers compared to those who watched another sitcom. It's hard to say how meaningful a difference that is, but one rubric social scientists use is how much of a change that represents in terms of standard deviations. A rule of thumb is that any shift that is at least 0.2 standard deviations begins to be meaningful. In this test, we saw a difference of 0.25 in empathy, and 0.31 in humanization. In other words, **not only can we be confident that “Lemons” had a positive impact on viewers' level of intergroup empathy and humanization, but that impact is at least somewhat meaningful**.

Details on methodology, data and outcomes

This study was conducted by Julia Kamin, PhD, Research Consultant with Civic Health Project, with valuable feedback and input on the research design from Bob Quinn and Nick Stegnaro

Subjects are recruited on Prolific, a service designed for social scientists conducting online studies. We use Prolific because based on our findings in a pre-test, subjects demonstrate good attention which is critical as we ask subjects to watch long form videos, in this case 22 minutes long.

For this study, we recruited 500 Democrats and 500 Republicans on February 24, 2022 to take E-PQ's pre-survey, which asks subjects' attitudes on a number of polarization dimensions, presented in random order. (See outcomes and survey questions below.) As part of that initial survey we also asked about subjects' streaming services, in order to determine who had HULU subscriptions. It was necessary for participants to be able to watch *Lemons* on HULU, where it was available. As will be discussed more below, to keep the control experience as similar as possible, all control videos were likewise on HULU. Finally, on the pre-survey we included a simple attention check question. The pre-survey was completed by 1,000 subjects, of which 287 Democrats and 211 Republicans reported they used HULU and passed our attention check question.

A week later, on March 2, we conducted the post survey, inviting the 498 qualified subjects to watch a video on HULU and answer a brief survey. At the beginning of the survey we confirmed with subjects that they had HULU subscriptions and that they would be able to watch a full 22 minute episode in another browser window and complete the survey in one sitting. Subjects who confirmed and consented to take the survey, were then assigned to a treatment or control condition. In the treatment condition, subjects were asked to watch the *Lemons* episode on HULU. In the control condition, subjects were randomly assigned to watch one of six sitcom episodes.

The selection of which videos to use as a control took some thought. Ideally we would use a single video that we knew was "neutral", one without a polarizing or depolarizing effect, but identifying such a neutral sitcom would be a trick in itself ("neutral" compared to what?). Instead we opted to select the six most "comparable" non-animated sitcom episodes on HULU to test *Lemons* against. All episodes were from the same prime time season as *Lemons*. The six series we selected had the nearest Nielsen ratings to *Blackish* (to ensure shows were comparably popular) and the episodes had same IMDB user ratings as *Lemons* (to ensure episodes had similar entertainment quality). When there were two episodes with the same IMDB rating, we selected the episode closest to the *Lemons* airing date. In doing so, we essentially are asking "what is the depolarizing effect of watching *Lemons* compared to watching a comparably popular and entertaining sitcom?" Intentionally, we did not make any judgment calls about whether any of the six episodes would be polarizing or depolarizing themselves; we were wary of stacking the deck in our test's favor by potentially removing other shows that might also be depolarizing.

After watching their assigned video, subjects were again asked the same questions about their attitudes toward counter-partisans.

Finally, at the end of the survey subjects were asked five attention check questions about the episode they watched. We included the attention check questions primarily as a way to incentivize attention: subjects knew they could earn up to an additional \$2 (on top of a base rate of \$4.50) from answering all the questions correctly. Subjects also saw two other attention check questions from which they could earn an additional \$0.2.

The post-survey was completed by 223 subjects, 116 Democrats and 107 Republicans. (There was no differential attrition: those who returned to complete the survey shared similar attitudes to those who did not.) Of subjects who completed the survey 110 were assigned to the treatment condition and 113 to control (3 in the treatment and 1 in control dropped out after assignment). Our sample size was smaller than intended; we aimed for 300 participants to complete the second wave, but we underestimated the number of participants we would need to recruit in the first wave given attrition. Based on power analyses, in order to detect a 5 pct pt increase in our DVs we should have approximately 150 subjects per condition.

To test the effect of being assigned treatment, we used a linear regression model on the difference between subjects' attitudes pre- and post- intervention. We looked at five outcome variables: Affective Polarization, Intergroup Empathy, Humanization, Anger and Perceived Threat. The first three are an index (average) of two survey items. Anger and Perceived threat are single items. All questions used a slider from 1 to 100.

Affective polarization items:

Please indicate how you feel toward [Republican/Democratic Party voters] using the scale below. 10 means that you feel very favorably or warm toward them, 0 that you feel very unfavorable or cold, and 5 is neutral.

[101 pt scale, 0 (Very cold) to 100 (Very warm)]

How comfortable are you having friends who are [Republican/Democratic Party voters]?

[101 pt scale, 0 (Not at all) to 100 (Extremely)]

Intergroup empathy items:

How much do you agree with the following statements?

I find it difficult to see things from [Republicans'/Democrats'] point of view.

It's important to understand [Republicans/Democrats] by imagining how things look from their perspective.

[101 pt scale, 0 (Strongly disagree) to 100 (Strongly agree)]

Humanization items:

How often do you think [Republican/Democratic Party voters] experience the following emotions?

- *Hope.*
- *Admiration.*

[101 pt scale, 0 (Never) to 100 (Very frequently)]

Anger:

How angry do you get just thinking about [Republican/Democratic Party voters]?

[101 pt scale, 0 (Not at all) to 100 (Extremely)]

Perceived Threat:

Would you say [Republican/Democratic Party voters] are a serious threat to the United States and its people?

[101 pt scale, 0 (Not at all) to 100 (Absolutely)]

Results

Outcome	Effect size (pct pts)	SE	Effect size (SD)	P-value	Significant after Holm adjustment?
<i>Affective Polarization</i>	2.9	1.8	0.12	0.1	
<i>Intergroup Empathy</i>	5.8	1.9	0.25	0.003	Yes
<i>Humanization</i>	6.7	2.7	0.31	.012	Yes
<i>Anger</i>	0.7	3	0.02	0.82	
<i>Threat</i>	1.6	2.8	0.07	0.56	