Influence on Written Responses

**Introduction**

* 57% of Americans report that television is their main source of news, more so than radio, newspaper, or the internet. The average time spent watching television news each day is about 1½ hour (Pew Research Center, 2008).
* Past research has shown increases in the catastrophizing of worries, anxiety, sadness, mood disturbance, and a decrease in positive affect after viewing news media (Johnston & Davey, 1997; Szabo & Hopkinson, 2007).
* The current study examined the effect of news media on an undergraduate sample after viewing either a negative or a neutral-toned video, using a quantitative linguistic analysis of participants’ written responses to: “Describe your plans following college graduation.”

**Method**

* Participants were 128 undergraduate students from universities across the Midwest with an age range of 18 to 24, and a mean age of 20. 103 participants were female and 25 were male.
* The study was completed through a websurvey. Participants were randomly assigned to the negative-toned “Economic Crisis - Hard Times are Coming!” or neutral-toned “Great Pyramid Mystery Solved!” video condition.
* All written responses were converted to Microsoft Word files and underwent a spell check and the removal of double words, slashes, etc. before LIWC analysis.

**The Videos**

* Videos were found on YouTube.com, and judged by 4 independent raters using a 7-point Likert scale for the following:

    **The video had a...**
    **The video made you feel...**
    - Positive Tone  
    - Negative Tone  
    - Neutral Tone  
    - A lot of energy
    - Happy  
    - Cheerful  
    - Sad  
    - Depressed  
    - Anxious  
    - Indifferent

* Significant differences found in positive and negative tone, amount of energy, and whether each video made raters feel happy, cheerful, and depressed. Significant differences were not found in neutral tone, or in whether the videos made raters feel sad, anxious, or indifferent.

**Hypotheses**

* Mean percentage of Affective Process words used by participants who viewed the negative-toned news video would be higher than the mean percentages of participants who viewed a neutral-toned video.
* The mean percentage of upperclassmen participants’ Affective Process words would be significantly higher than the mean percentages of underclassmen participants’ affective process words.

**Examples of Affective Process Words**

<table>
<thead>
<tr>
<th>Affective Processes</th>
<th>Positive Emotion</th>
<th>Negative Emotion</th>
<th>Anxiety</th>
<th>Anger</th>
<th>Sadness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happy</td>
<td>Love, nice, sweet</td>
<td>Hurry, ugly, nasty</td>
<td>Worried, fearful, nervous</td>
<td>Hate, kill, annoyed</td>
<td>Crying, grief, sad</td>
</tr>
</tbody>
</table>

**Results**

* MANOVA showed no significant effect of the Age condition (F(6, 247) = .67, p = .65) or an interaction between Age and Video conditions (F(6, 247) = .18, p = .98). Mean percentages of words used by Upperclassmen were larger than Underclassmen participants, however, as predicted in all categories except anxiety.
* MANOVA showed a significant effect of the Video condition of Negative or Neutral tone on participants’ responses (Wilks’s Λ = .90, F(6, 247) = 4.49, p < .001, η² = .10).

**Discussion**

* The results support past research claiming the effect of news media on an undergraduate sample. Past research was furthered, now showing an effect of news media on future outlook in addition to present concerns and mood states.
* Use of the LIWC analysis program has been extended from its use in analyzing past memories and present thoughts to include texts concerning participants’ thoughts and ideas about their futures.
* Possibilities for future research include manipulating the video condition to compare different types of news programs, such as a traditional news program and a humorous or satirical news program like The Colbert Report. Video lengths are another source of manipulation, as the current study and past research has not extended past a 5 to 15 minute video range.
* Limitations to this research exist: the undergraduate sample cannot necessarily generalize to all populations, word counts per participant response varied greatly (from 2-489) and should be more consistent, and finally the LIWC program is limited to use of the LIWC analysis program has been extended from its use in analyzing past memories and present thoughts to include texts concerning participants’ thoughts and ideas about their futures.

**Paired-samples t Test Comparison of Video Condition Means**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Negative Mean</th>
<th>Neutral Mean</th>
<th>Mean Difference</th>
<th>t</th>
<th>df</th>
<th>p*</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Affective Processes</td>
<td>4.43</td>
<td>3.94</td>
<td>.49</td>
<td>-1.28</td>
<td>254</td>
<td>.203</td>
<td>-.16</td>
</tr>
<tr>
<td>Positive Emotion</td>
<td>3.57</td>
<td>3.64</td>
<td>.07</td>
<td>-1.61</td>
<td>254</td>
<td>.032</td>
<td>.02</td>
</tr>
<tr>
<td>Negative Emotion</td>
<td>1.21</td>
<td>1.44</td>
<td>.23</td>
<td>-4.83</td>
<td>254</td>
<td>.000</td>
<td>.61</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.15</td>
<td>.05</td>
<td>.10</td>
<td>-2.12</td>
<td>254</td>
<td>.035</td>
<td>.27</td>
</tr>
<tr>
<td>Anger</td>
<td>.26</td>
<td>.06</td>
<td>.20</td>
<td>-3.69</td>
<td>254</td>
<td>.000</td>
<td>.46</td>
</tr>
<tr>
<td>Sadness</td>
<td>.26</td>
<td>.11</td>
<td>.15</td>
<td>-2.57</td>
<td>254</td>
<td>.011</td>
<td>.32</td>
</tr>
</tbody>
</table>

Note: Mean Difference represents the means of Neutral video “Great Pyramid Mystery Solved!” minus the means of Negative video “Economic Crisis – Hard Times are Coming!”

*p < .05

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