# Title: The impact of constructive news on affective and behavioural responses

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Biography

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**Abstract**

*The fact that the news has a negativity bias is relatively undisputed. But is this a matter for concern? In this study, two experiments explored the impact of different types of constructive news stories on readers’ affect, motivation, and behavioural intentions. Study 1 examined news stories with either a solution frame or catastrophic frame, and Study 2 examined stories that evoked either positive or negative emotions. Findings revealed that catastrophically-framed stories and news stories that evoked negative emotions reduced intentions to take positive action to address issues, and resulted in negative affect. In contrast, solution-framed stories and news stories that evoked positive emotions resulted in more positive affect and higher intentions to take positive action, and were still perceived as legitimate journalism. Respondents expressed greater preference for solution-framed news. The conclusion is that more constructive journalism would better serve society.*

# **Keywords**

# Positive news; negative news; constructive journalism; solutions journalism; positive psychology; experiment.

There is little argument that the content and tone of the news has a bias toward conflict and negativity (Harcup and O’Neill 2017). While the negativity of the news is relatively undisputed, what is more contentious is the question of whether this is a matter for concern, given that journalists have a responsibility to consider society’s best interests (Siebert, Peterson, and Schramm 1956). This question can be addressed from the perspective of the institutional role of news in a pluralistic society. Hence the question of interest is: what are the impacts upon society of a predominantly conflict-driven, negative bias to the news? The question can also be addressed from the commercial perspective in terms of whether this bias attracts or repels potential news consumers. This is of relevance to the news industry which has struggled with declining audiences (Schudson 2011), with some researchers suggesting the depressing and negatively framed content as partial contributors to the decline (Bennett 2016).

This paper addresses this question by exploring the impact of constructive news stories. Constructive journalism, an emerging form of news, can be practiced in a number of ways (McIntyre and Gyldensted 2017), and this paper examines two such forms - writing news stories with a solution-oriented frame and writing news stories that evoke positive emotions. Through two experiments, this study examined the impact of these types of constructive news stories on individuals’ affect, motivation, and behavioural intentions. We also test participants’ preferences for solution- versus catastrophic-framed news stories and whether stories that evoke positive emotions are regarded as less newsworthy.

We begin by critically exploring the basis and justifications for the negative bias to the news. We then present some of the unintended consequences of a negative bias, reviewing literature that discusses effects of negative news on audiences. Next we discuss distinctions between alternative journalistic approaches such as ‘positive news’ and ‘constructive journalism’ (Wenzel, Gerson, and Moreno 2016). To date, there is limited empirical data on the effects of more constructively framed news on audiences, so we draw upon the positive psychology literature to explore likely effects of more positive approaches on affect, engagement and behavioural intentions. We follow with two empirical studies that compare responses to solution-framed and catastrophically-framed news content on affect and behavioural intentions (study 1) and examine the impact of news stories that evoke positive, neutral or negative emotions on participants’ affect and engagement (study 2). Study 2 includes an assessment of the extent to which constructive journalism aligns with core functions of journalism (such as serving as a watchdog and informing the public with the information they need to participate in their civic duties). Study 2 also allows for a test of broaden-and-build theory (Fredrickson 2001) which asserts that positive emotions broaden the thought process and encourage individuals to approach problems rather than avoid them.

## **Literature Review**

## *Negativity in the news*

Gieber (1955) referred to negative news as “those items that report social conflicts and disorganization,” including political, economic, military and social tensions, crime and disasters (p. 311). Riffe (1993) listed negative story topics including crime, accidents and disasters, as well as internal or international conflict, displaced persons and refugees. Others have defined negative stories as those with downbeat tones (Harcup and O’Neill 2017).

News serves several purposes that explain its negativity bias. Lasswell (1948) identified the surveillance of the environment, including the disclosure of threats, as a core function of communication. It has been argued that negative news prevails because humans are biologically built to look for such environmental threats (Kamhawi and Grabe 2008, Shoemaker 1996). This is understood by journalists and news editors who typically foreground the most alarming information in their presentation of the news and journalists are trained to understand conflict and ‘bad' events as newsworthy (Harcup and O’Neill 2017).

News journalism may serve as a tool to catalyse positive change (Nelson 2016). Interviews with news editors revealed that this catalyst function was a common justification for focussing on conflict and what has gone wrong (Baden 2015). News also functions to hold those in power accountable. This ‘watchdog’ role is a core democratic function of journalism (Entman 2005); is seen to be a bulwark against misuse of power (Gans 2010), and thus tends to involve reporting on topics such as corruption, further explaining why much news is inherently negative. Additionally, some have argued that the confrontational and negative style of political reporting can lead to a healthy scepticism (Schuck, Vliegenthart, and De Vreese 2016).

## *Unintended consequences of negative news*

These traditional roles provide an explanation, and possibly, justification for the predominance of negative news. However there can be unintended consequences. If negativity in political reporting is taken too far, it can lead to a spiral of cynicism and political apathy (Kleinnijenhuis and Donsbach 2008), especially when journalists frame news negatively, irrespectively of whether they are reporting on an inherently negative event. Conde, Calderón, and Pascual (2016) argue that the decline in political participation as a result of such negativity and cynicism poses “a significant challenge for democracy” (p. 161).

## *Effects of framing of news on affect and mental health*

There is also a growing body of evidence that the negativity of news presentation and content can lead to mental health issues such as depression, stress, worry and anxiety (for a review see Szabo and Hopkinson 2007). For example, a study of 500 TV news viewers found that viewers with a high frequency of viewing newscasts were 1.6 times more likely to report anxiety symptoms such as uncontrolled fear, physiological hyper-arousal, sleeping difficulties, and fearful thoughts than those with a lower news engagement (Bodas et al. 2015). This confirmed findings that exposure to traumatic news can increase the risk of psychopathology such as Post-Traumatic Stress Disorder (PTSD) in the general population (Bernstein et al. 2007) and among journalists (Feinstein, Audet, and Waknine 2014).

A further ethical issue arises from evidence that consumption of negative news is not always necessarily a free choice, not simply because the most shocking elements tend to be the headlines that are hard to miss, but also due to a hard-wired evolutionary response to pay attention to alarming information (Kamhawi and Grabe 2008, Shoemaker 1996).

## *Effects of framing of news on behaviour*

Negative mental health outcomes from exposure to news is a societal issue that deserves consideration. However, an additional and associated outcome of the negative bias in the news relates to behaviour. Social psychological studies report ubiquitous findings that the more negative the affective state of the individual, the more negative their interpersonal evaluations and behaviours are (Veitch, Dewood, and Bosko 1977). For example, a controversial study using Facebook found that reducing the amount of positive emotional content in the newsfeed led to fewer positive posts and increased numbers of negative posts. Conversely increasing positive content led to more positive and fewer negative posts. This study illustrated the contagious nature of mood and how exposure to positive or negative information affects interpersonal behaviour (Kramer, Guillory, and Hancock 2014). In turn, negatively-framed news can also reduce helping behaviour, decrease tolerance, reduce perceptions of a community’s benevolence, lower evaluations of strangers, and cause feelings of helplessness (Galician and Pasternack 1987).

Besio and Pronzini (2014) argue that the media play a central role in the diffusion of values and setting of moral expectations. In the context of issues such as climate change, they refer to the media’s tendency to portray issues in terms that focus on drama and conflict as these are central news values. However, what might make good copy based on news values is not the same as what is likely to trigger positive action to address such problems. Kinnick, Krugman, and Cameron (1996) suggest that the media contribute to compassion fatigue, or a public “weary of unrelenting media coverage of human tragedy” (p. 687) through their constant supply of “bad news.” Focusing on conflict and disaster can also cause learned helplessness, which can be a paralysing psychological condition typified by effects such as lack of motivation to act, heightened negative emotionality, depression and feelings that any effort is unlikely to lead to successful outcomes (Maier and Seligman 1976).

Peterson and Steen (2002) are similarly critical of the news for magnifying stories of violence in a self-serving way to increase their impact. They claim that although this may serve the interest of the networks, it is contrary to the interests of their viewers, as it creates a pessimistic explanatory style which leads to apathy and depression. Their psychological analysis suggests that, while positive news can raise spirits and provide positive role models, bad news creates a self-fulfilling prophecy effect whereby the expectation that things will be bad leads to passivity and reduces motivation to act positively.

Baden (2014) explains this psychological process with reference to the theory of planned behaviour (Ajzen 1985) and shows that positive examples of behaviour are more likely to lead to more ethical intentions than negative examples. This occurs as positive examples norm ethical behaviour and increase perceived behavioural control (PBC), which is the opposite of learned helplessness. In contrast, negative stories were associated with less ethical intentions, due to increased cynicism and lower PBC. This dynamic is increasingly appreciated by environmental groups who realize that raising fears about the environment and climate change can be counter-productive, as it is more likely to engender feelings of helplessness. Catastrophic framing in particular tends to be disempowering, leading to apathy, denial and/or and fatalism, feelings which make people less likely to take positive action to address the issue (O'Neill et al. 2010).

Furthermore, when fear is provoked, this can trigger an evolutionary survival response which leads individuals to focus more on their own security and demonstrate less concern for others (Sheldon and Kasser 2008). Thus the current negativity bias is likely to reduce rather than increase levels of motivation to address important global challenges such as sustainability, climate change and poverty. This raises the stakes for society as a whole of the way in which news is presented.

## *Constructive journalism*

In 1993, former BBC journalist Martyn Lewis proposed more positive mainstream news coverage in a speech that was later published:

…the main criteria for commissioning and including stories should not be the degree of violence, death, conflict, failure, or disaster they encompass or represent, but should be based on the extent to which those stories shape or change, or have the potential to shape or change, the country or the world in which we live. These are criteria which will not only allow us to expose the injustices and the tragedies in the world, but also to give proper weight to the achievements, successes and triumphs. (Lewis and Rowe 1994, p.3)

Lewis was harshly criticized for promoting a “good” news agenda on the assumption that positive news would not fulfil journalism’s core functions (Bedell 1993). Similarly a study interviewing top news editors reported a dismissive attitude toward positively framed news and a perception that positive news is frivolous and a distraction from more important topics (Baden 2015). Some categorisations of positive news do focus on stories that can be seen as ‘frivolous’ such as Leung and Lee (2015) who distinguished five types of positive news: news that brings hope in a crisis, ‘good deeds’, touching life stories, news about celebrations or festivals, and national achievements. However they acknowledge this is a not a complete typology, and excludes similar but distinct approaches such as ‘constructive journalism’ and ‘solutions journalism’ to which Lewis was referring.

Constructive journalism is an emerging form of news that applies positive psychology techniques to the news process in an effort to publish more productive, solution-focused stories (McIntyre and Gyldensted 2017). The Constructive Journalism Project, for example, is a forum for debate on how to present news constructively, without positivity veering into propaganda or frivolity. Thus constructive journalism must adhere to the core functions of journalism to serve as a watchdog, alerting the public to potential threats and helping to create an informed electorate, and does not mean abandoning journalist rigour (Gyldensted 2015: 13). Constructive journalism, and similar forms such as solutions journalism, have gained momentum in the industry in recent years. For example, the *New York Times* publishes a blog series called *Fixes* that features solution-oriented stories, the *Washington Post* launched a newsletter called *The Optimist* meant to offer constructive stories, the *Guardian* has a weekly report with a solution-focus *The Upside* and the Danish news organization *De Correspondent*, which focuses on constructive journalism, has shown record-breaking success in crowd-funding and is now launching in the U.S.

There are several ways to practice constructive reporting (McIntyre and Gyldensted 2017), in particular, framing news stories with a solution-oriented focus, and using language in news stories that evokes positive emotions. The first technique, solutions journalism, involves reporting on how people are responding to social problems or in some way highlighting actual or possible solutions within the story (Wenzel, Gerson, and Moreno 2016). Preliminary evidence is emerging that including solutions in the story is more likely to inspire engagement in the issues presented (Curry and Hammonds 2014). The second constructive journalism technique involves evoking positive emotions, such as hope or elevation, through news stories. A study using both these techniques reported that children showed less negative emotional responses and more civic engagement to stories that included a solution and emphasised positive emotions than a problem focused story that emphasised negative emotions (Kleemans et al. 2017).

Although early evidence shows that positively framed news stories produce positive emotions (McIntyre and Gibson 2016, Gyldensted 2011), the impacts of positive news upon behaviour have yet to be fully explored. However, the growing field of positive psychology offers insights into likely effects. Fredrickson (2001) argues that positive emotions generally result in approach rather than avoidance. Her ‘broaden-and-build’ theory asserts that positive emotions broaden an individual’s thought-action repertoire by prompting him or her to ignore automatic behavioural scripts and pursue novel, creative paths of thought and action. This broadening of the mind builds lasting physical, intellectual, and social resources. Whereas negative emotions help us survive in immediate danger, positive emotions can help us thrive over time by building resources to use when necessary.

Particular positive emotions that lend themselves to constructive news stories are elevation and hope. Haidt (2003) conceptualized elevation as an emotional response to witnessing acts of virtue or moral beauty. Elevation can cause people to feel open and warm and motivate people to act more virtuously and want to affiliate with and help others. Elevation lends itself to being studied in a media or news context because it is experienced after witnessing or reading about *someone else* doing something virtuous (Oliver, Hartmann, and Woolley 2012). Similarly, hope might be experienced in news stories that highlight a silver-lining or a possible solution to an inherently negative event. For example, Prestin (2013) found that media depictions of an underdog struggling to achieve a goal evoked hopeful emotional responses in viewers and caused viewers to be more motivated to pursue their own goals.

In summary, while there are numerous studies illustrating that negative news stories can give rise to negative emotional states, there is little research on the effects of more positive approaches. In addition, no published research could be found that compares the impact of negative and positive news on behavioural intentions and engagement and explores the link between affective and behavioural responses. In this study, we present two experiments that compare affective and behavioural responses to negative news stories (catastrophic-frame, negative emotion-evoking words) to responses to positive news stories that incorporate key elements of constructive journalism: (solution-frame, positive emotion-evoking words). Based on the literature, we propose the following hypotheses:

H1: Exposure to both types of constructive news stories — those that use a solution-frame and those that evoke positive emotions — will result in more positive affect than exposure to negative news stories.

H2: Exposure to constructive news stories will result in higher motivation to take positive actions than exposure to negative news stories.

H3: Effects of exposure to both types of constructive news stories on motivation will be mediated by affect.

H4: Stories with a catastrophic-frame will capture attention more than stories with a solution frame.

Finally, this study explores preferences for positive or negative news and whether these news stories differ in terms of whether they are perceived to be fulfilling journalism’s core functions (such as serving as a watchdog and informing the public with the information they need to participate in their civic duties).

## **Study 1**

## **Method**

This study used a repeated-measures design, whereby all respondents were exposed to both conditions: solution-framed news and catastrophically-framed news stories, with order counter-balanced.

## *Sample*

Respondents comprised three cohorts: 132 from snowball sampling via social media, 40 higher education students as part of a class on experimental research methods and101 recruited from Amazon’s Mechanical Turk (MTurk), a crowd-sourcing labour market where researchers can pay ‘workers’ minimal wages to complete tasks. Several studies have explored the validity and reliability of samples from MTurk (Mason and Suri 2012) and concluded that MTurk produces reliable results, as long as tools are used to exclude low quality participants (Paolacci and Chandler 2014). Our tool was that participation in this study required respondents who met the criteria of 95%+ approval rate from previous tasks.

Respondents who completed the survey in less than 4 minutes (n = 14) were excluded on the basis that they would not have had time to read the news bulletins. The final sample was 259, comprising 134 males, 123 females; the most prevalent age groups were 25-30 (n = 101), 31-40 (n = 52), (18-24 (n= 37), 41-50 (n= 34) and the rest 51 or older. Nationalities were mixed, with the majority being Asian (n = 98), UK (n = 87), US (n = 36) or EU (n = 21). The sample was mostly from a high educational background (82% had a degree). No significant differences were found according to either cohort or nationality, so results were analysed as a whole.

*Procedure*

Respondents took part in an online survey and were exposed to positive (solution-framed) and negative (catastrophic-framed) versions of similar news stories. After each condition, respondents reported on the effect of the news report on their affect, motivation, attention and preferences.

## *Independent measures – stimulus materials*

Study 1 used two actual news stories that incorporated aspects of constructive journalism - solution-frame and positive tone - and two negative news stories which had a catastrophic-frame and negative tone. For ease of understanding these are referred to as either ‘positive news’ or ‘negative news’. The positive condition included an environmental issue (solution-frame) and a story about peace. The negative condition included an environmental story (catastrophic-frame) and a war story (Appendix 1).

## *Dependent measures*

*Affect:* As research already exists indicating that negative news gives rise to negative affect, and vice versa for positive news, the main reason for measuring affect in this study was to explore the relationship between affect and motivation to act for a good cause. For this reason, and in consideration of an international sample, the affect measures were kept as concise as possible. Thus, three simple bipolar single-item measures were used to capture affect. Respondents were asked ‘how does the positive/negative news above make you feel?’ from 1 (very pessimistic/sad/anxious) to 6 (very optimistic/happy/calm). These items were chosen based on the previous literature indicating impacts of news content/presentation on happiness, anxiety and pessimism (Harrell 2000, Johnston and Davey 1997, Szabo and Hopkinson 2007). Affective variables were combined into a composite score: posaffect and negaffect (α = .81 for posaffect, and α = .71 for negaffect).

*Motivation to act:* The kinds of positive actions that participants can realistically be expected to take following coverage of environmental/social issues were captured in the following four measures: 1. donate to charity, 2. be environmentally friendly (e.g. recycling, using less energy, producing less waste), 3. make opinions known (e.g. through voting, letters, protests), 4. take action to make the world a better place. Responses were given on a scale of 1 ‘much less motivated’ to 7 ‘much more motivated’: The four motivational variables were combined into a composite score: posmot and negmot (α = .88 for posmot; α = .89 for negmot).

*Attention:* Respondents were asked ‘What types of news are more likely to catch your attention?’ with response options of ‘positive news’, ‘equal/it depends’, ‘negative news’.

*Preference:* Respondents were asked ‘which kind(s) of news do you prefer to read?’ (positive, no preference, negative news).

*Qualitative analysis:* After each dependent measure, respondents were able to explain their answers in free text if they wished. The themes in each textual response were identified through a manual thematic analysis procedure (Braun and Clarke 2006). Individual quotes were coded under overarching themes, and then broken down into sub-themes/keywords.

## **Results**

Results were analysed using a repeated-measures ANOVA. Table 1 shows affective and motivational responses to exposure to the positive and negative news stories. Results support hypothesis 1, that exposure to constructive news stories will result in more positive affect than exposure to negative news stories. Hypothesis 2, that exposure to constructive news stories will result in higher motivation to take positive actions than those exposed to negative news stories, is also supported by the data.

Table 1 here

### *Relationship between affective and motivational responses to news*

All positive affective measures correlated positively and significantly (p < .001) with all motivational measures. The strongest correlations were between the combined posaffect and the combined posmot (r = .43). This indicates that the more positive the emotional response to the story, the more motivated respondents felt to donate (r = .35), take action to make the world a better place (r = .41), be more environmentally friendly (r = .36), and voice opinions (r = .34).

Correlations between affect and motivations to act were different following exposure to negative news stories. In all cases there was an inverse correlation, whereby the more negatively respondents felt after the news stories, the less motivated they were to take action. The combined negmot correlated inversely (r = -.20, p = <.01, N = 256) with combined negaffect. The more negative the emotional response to the story, the less motivated respondents felt to take action to make the world a better place (r = -.19, p < .01), be more environmentally friendly (r = -.18, p <.01), donate to charity (r = -.15, p <.01) and voice opinions (r = -.16, p = <.01). These results were further corroborated in a mixed effects regression with random intercepts (online appendix).

This relationship between affect and intentions is also suggested by the qualitative comments. An analysis of the key themes is provided in Table 2.

Table 2 here

Sixteen respondents made reference to feeling motivated, empowered or inspired following the positive news story, and the tone of their comments suggest an active intention to take action:

*I felt like I have to join this mission together with all those who want to save the ocean and the variety of species live in the ocean. By doing this we can reduce global warming also.*

Many comments make an explicit connection between positive feelings and behavioural intentions, most often between the environmental story and environmental intentions:

*They make me feel hopeful about people in general and the future or people on this planet. It makes me want to be a better person and live every day to the fullest.*

Some comments referred generally to a sense of empowerment and self-efficacy:

*I love optimistic stories. They make one feel happy and hopeful. It makes you feel like anyone can make a difference.*

The tone of the qualitative comments following exposure to negative news stories is different, tending to be quite passive relating to the view that something should be done, rather than any active intention to do anything personally:

*The first one made me feel sad and hope we can do something to fix the problem with the reefs.*

Only one respondent expressed a positive intention to take action following the negative story. Rather, it was common for respondents to state how helpless they felt to take action:

*They make me feel sad. It feels like I want to protect the environment and those innocent civilians but I feel helpless thinking that there is not much I can do.*

In addition, it was possible to see how the helplessness was being processed emotionally, for some the negative emotions appeared to be turned inwards into depression and guilt rather than outwards to positive action:

*Knowing our natural reefs are collapsing and Syrian civilians are suffering war make me depressed. I feel angry and powerless. I feel compassion but guilty that I have done nothing to help. I feel there is nothing I can do to help.*

Another coping strategy seemed to be to adopt a philosophical stance:

*Concerned and sad, wishing something could be done but realizing this is part of living in a broken world.*

Or to just switch off emotionally altogether:

*Certainly not good, but being continually bombarded with bad news, I essentially feel nothing.*

Overall, these results provide preliminary support and lay the foundations for hypotheses 1, 2 and 3 stipulating that (1) exposure to constructive news stories will result in more positive affect, (2) exposure to constructive news stories will result in higher motivation to take positive actions and (3) effects of exposure to constructive news stories on motivation will be mediated by affect. These hypotheses are investigated in more detail in Study 2.

### *Attention*

When asked ‘What types of news are more likely to catch your attention?’ 26% said positive news, as opposed to 36% saying negative news, with 38% saying ‘It depends’. The mean was 2.09 (SD = .78) which showed a marginally significant deviation from the mid-point of 2 towards the negative pole, t (256) = 1.92, p = .056, partially supporting hypothesis 4 that catastrophically-framed news will capture attention more than stories with a solution frame.

Respondents’ accounts suggest that positive news seemed more consciously chosen, with a sense of agency implicit in their accounts, whereas the tone of most explanations for why negative news attracts attention suggests the news consumer is more passive – their attention is ‘grabbed’ not given.

*I like to read happy news.*

*Positive news motivates us but negative news always catches our attention more frequently.*

Accounts for why negative news attracts attention support the contention that negative news triggers a non-conscious, involuntary response to pay attention. None of the positive quotes gave rise to the kind of passive, ‘drawn in against my will’ response that many respondents expressed when describing why their attention is drawn to negative news.

*Bad news or tragedies just give me an uncontrollable impulse to find out more.*

Most of the rest focussed on the way the headlines are presented that are designed to attract attention, or by the fact it is more dramatic or shocking.

*The headlines for those are always bigger, and those are always the top story.*

### *Preferences*

When asked ‘Which kind(s) of news do you prefer? 47% said ‘positive news’, 47% said ‘no preference’ and 6% said negative news. The mean was 1.59 (SD = .61) which showed a significant deviation from the mid-point of 2 towards the positive pole t (257) = -10.80, p < .001.

### *Gender effects*

Gender differences were apparent, particularly for affective responses to positive/negative news (Table 1). Female respondents made a greater distinction in their response to positive/negative news. There was also a tendency for female respondents to show a greater preference for positive news (M = 1.53, SD = .59) than male respondents (M = 1.65, SD = .62) although this was only marginally significant (p < .10).

# **Study 2**

**Method**

Although the repeated-measures design in Study 1 reduces error from individual variance and thus increases power, it can also lead to potential demand effects as respondents may guess the hypotheses which may steer their responses (Howell 2012). Also, the fact that stimulus materials were taken from real news items meant it was impossible to present exact mirror image stories. Hence in Study 2, the authors adopted a between-subjects design and developed three versions of a bespoke news story where selected aspects were changed to evoke specific positively or negatively valenced emotions (Appendix 2). The positively-framed story is classed as a constructive news story because it evoked certain positive emotions. The stories were adapted from real news stories and manipulated to ensure that they conformed to journalistic standards. The inclusion of a control (neutral) version that lacked the specific emotion-evoking information also allows exploration of whether the differences observed in Study 1 were more driven by the positive or negative emotion-evoking conditions.

In addition to confirming hypothesis 1 with established measures of affect, this study examined an alternative means of assessing behavioural effects of exposure to positive and negative news. Based on Fredrickson’s (2001) broaden-and-build theory, positive emotions should motivate readers to engage. This engagement may comprise seeking more information, sharing stories on social media, signing a petition, or donating time or money to a cause. Thus variations of hypotheses 2 and 3 were proposed:

**H2a:** Participants who read news stories with positive emotion-evoking content will report stronger behavioural intentions to engage with the topic than those who read news stories with negative emotion-evoking content.

**H3a:** Effects of exposure to positive news stories on engagement intentions will be mediated by affect*.*

Constructive journalism and positive news approaches have been critiqued on the basis that a focus on positive emotions could result in stories that lack widespread social significance and are not consistent with journalism’s core functions. While there is little theoretical guidance in this domain, the dataset allows us to explore whether participants who read stories with positive emotion-evoking content perceive the stories to be less committed to journalism’s core functions than stories with negative emotion-evoking content.

## *Sample*

Participants were recruited from MTurk. After deleting unreliable data, the resulting sample consisted of 480 U.S. participants ranging in age from 18 to 75 (*M* = 38.42, *SD* = 13.51). The majority were female (55%) and white (77%). Half held a bachelor’s (37%) or graduate degree (13%).

## *Procedure*

Respondents completed an online survey. They were exposed to positive, neutral or negative emotion-evoking versions of the same news story, then reported on the effect of the news report on their affect, engagement intentions, and opinion on whether the story was consistent with journalism’s key functions.

## *Independent measures – stimulus materials*

A fictitious news site was created for this experiment. The site was designed using Adobe Illustrator and intended to look like a professional news website. Stories published on mainstream news sites were combined and manipulated to create the stimulus story, which was about a charity parking meter program. The story was manipulated to include either positive or negative emotion-evoking content. The story in the positive emotion condition was manipulated to evoke elevation, hope, happiness, joy, pride, and excitement through characters in the story. The story in the negative emotion condition was manipulated to evoke disgust, despair, sadness, guilt, worry, and anger through characters in the story (Appendix 2). The story was additionally stripped of its emotion-evoking text for the targeted emotions to create a neutral no-emotion control condition.

# *Dependent measures*

*Affect:*Affect was measured using a short form of the Positive and Negative Affect Schedule (PANAS) (Thompson 2007). Participants were asked to report *how they feel right now* at pre-test, and *how the story made them feel* at post-test. Participants were asked to rate their agreement with how much they felt upset\*, hostile\*, alert, ashamed\*, inspired, nervous\*, determined, attentive, afraid\*, and active (words marked with an asterisk were reverse coded). Because the PANAS is intended to be used as a bidirectional scale, the five items intended to measure positive emotional activation were averaged to create a composite variable (α = .81).

*Behavioural intentions:*Seven behavioural intentions were measured to assess participants’ engagement with the story topic (Oliver, Hartmann, and Woolley 2012). Participants rated how likely, on a seven-point scale ranging from “very unlikely” to “very likely,” they would be to engage in actions, i.e.: read similar stories, share the story on social media, sign a petition in support of implementing charity parking meters, Like the story on Facebook, talk about the issue, donate money or volunteer. These behavioural intention variables were combined into a composite score (α = .84)

*Consistent with journalism’s core functions:*To test whether journalists can include positive emotions in a story while upholding the traditional purposes of news, this study measured participants’ perceptions of the story’s commitment to journalism’s core functions by asking participants to rate their agreement on a seven-point Likert-type scale ranging from “strongly disagree” to “strongly agree” with 16 statements. This included items such as ‘involved a socially significant topic’, ‘helped hold public officials accountable’ and ‘was informative’ (Appendix 3). These items were developed based on standard news values present in introductory journalism textbooks or otherwise regarded as traditional functions of journalism (Harrower 2007, Rich 2015). The results were formed into a composite variable (α = .89).

## **Results**

*Affect:* In support of **H1** (i.e. constructive news will lead to positive affect), a one-way ANOVA revealed a significant effect of emotion valence on positive affect (Table 3). Bonferroni post hoc comparisons showed that participants who read a story that evoked positive emotions felt significantly more positive affect than participants who read a story that evoked negative emotions. A significant difference was found between the positive emotion story and the no-emotion control condition but not between the negative emotion story and the control condition.

*Behavioural intentions to engage with topic:* As shown in Table 3, a one-way ANOVA revealed a significant impact of emotion valence on behavioural intentions, supporting **H2a** (i.e. news stories with positive emotion-evoking content lead to stronger behavioural intentions). Bonferroni post hoc comparisons revealed that participants who read a story that evoked positive emotions reported significantly stronger behavioural intentions to engage with the topic than participants who read a story that evoked negative emotions. There were no significant differences between the positive and neutral stories or the negative and neutral stories.

*Consistent with journalism’s core functions:* A one-way ANOVA revealed no significant relationship between emotion valence and readers’ perceptions of how successfully the stories upheld journalism’s main functions. In other words, evoking positive emotions in the news story did not cause readers to perceive the story as less valuable or newsworthy (Table 3).

Table 3 here

To further corroborate results, mediation as stipulated in **H3a** was tested through a series of regressions using the Baron and Kenny (1986) approach. Table 4 confirms the mediating role of affect (post-test). The estimation strategy is as follows: Model 1 establishes effect of news on behavioural intentions without controlling for affect (i.e. the potential moderator). Model 2 then establishes the effect of news on affect showing positive news lead to higher and negative news to lower scores on the affect variable. Model 3 then shows higher scores on the affect variable go along with higher scores on the behavioural intentions variable. The results fully support the mediation hypothesis (H3a). In other words, being exposed to positive news triggers positive feelings, which translate into a higher likelihood of becoming active for a good cause. Being exposed to negative news reduces the amount of positive feelings and thus participants are less inclined to take action for a good cause.

Table 4 here

Additionally, there is no visible difference between male and female respondents in these specifications. The variable reflecting consistency with journalism’s core functions is positive and significant in models 1 to 3 throughout indicating that stronger alignment with journalism’s core functions is positively associated with behavioural intentions and positive affect. Model 4 displays the results for the effect of the news conditions on the perception of journalism’s core functions. Both the coefficient for the positive and negative news condition are not significant. Thus, there are no differences with respect to the perceptions of journalism’s core functions.

## **Discussion**

Adopting a societal perspective, the results indicate that a move toward more constructive and less alarmist journalism would be beneficial for society. A current challenge facing western democracies is the increase in mental health problems, particularly anxiety and depression (MHF 2016). Although it is not claimed that negative news is the sole culprit, our results showing increased anxiety, sadness and pessimism (Study 1), and lower affect as measured by PANAS (Study 2) following exposure to negatively valenced news stories support the consistently reported negative effects of negative news exposure on affective and mental health outcomes (for a review see Szabo and Hopkinson 2007). An evolutionary explanation can explain why individuals are drawn to negative news (Kamhawi and Grabe 2008, Shoemaker 1996), but an evolutionary perspective might similarly trigger concerns that human beings have not evolved to have the worst of the world’s problems and conflicts distilled down to their most alarmist and shocking elements, presented to them several times a day.

The relationship found between affect and behaviour also suggests it would be beneficial to present the challenges facing society in a less bleak light. Although the assumption that presenting problems such as poverty, disasters, war, climate change in a negative light is likely to trigger proactive behaviour to address them is widespread among news editors (Baden 2015), the results presented show the opposite. As shown in Study 1, the more solution-oriented a news story was framed, and the more positive it made readers feel, the more likely they were to report motivation to take positive actions such as donating to charity, being more environmentally responsible, or expressing political opinions. Conversely, exposure to catastrophically-framed news stories led to lower motivation. Similarly in Study 2, news framing works through its effect on emotional processes, such that news incorporating positive emotion-evoking words leads to positive feelings, leading to greater engagement intentions.

These results support Fredrickson’s (2001) broaden-and-build theory of positive emotions, which asserts that positive emotions such as hope and elevation broaden the thought process and encourage individuals to approach problems rather than avoid them. Therefore, this study suggests that editors should reconsider their perceptions that positively framed news is frivolous and a distraction from more important news. Rather, this type of news is likely to engage readers, whereas negatively framed news is likely to disengage them, adding to the problem of compassion fatigue.

Study 1 compared responses to news stories with a solution frame to those with catastrophic frame, whereas study 2 focused on the positive and negative emotions evoked from the language of the news stories. In both cases, results were similar. This suggests that benefits to mental health outcomes, engagement and social/political participation may be attainable simply by more solution-focused framing, and the inclusion of positive emotion-evoking content in news stories.

The implications from a more commercial perspective are less clear. Although the data clearly show a strong preference for positive over negative news stories, consumer behaviours are complex and people do not always choose to consume the news they prefer (Swart, Peters, and Broersma 2016). Similarly, editorial choices are increasingly informed by the ‘click’ behaviour of online consumers. This suggests a worrying tension between commercial drivers which would lead editors to favour an alarmist tone in news reporting and ethical concerns which favour more solution-focussed framing. The issue here is that this ethical dilemma is obscured by the accepted wisdom that negative news *is* news (Baden 2015).

However using click behaviour to ascertain which news types are most commercially successful may well be a short-term and limited approach as it does not account for those who are repelled by the negative bias in the news and so do not engage with such sites and therefore do not have a chance to register their preferences. In practice, some news outlets that publish positive emotion-evoking stories are reporting financial success (Sillesen 2014). When the *Huffington Post*, for example, published a section dedicated to good news (McIntyre and Gibson 2016); traffic to *Huff Post Good News* increased by 85% in one year and the site’s content received twice as many social referrals as other content (Bilton 2014). In light of this success, the *Huffington Post* dedicated itself to more constructive stories (Huffington 2015).

**Limitations**

A limitation of Study 1 is the lack of a neutral category. Results show the difference between solution-framed and catastrophically-framed news, however, it remains theoretically possible that catastrophically-framed and solution-framed news may be processed via different psychological mechanisms. While evidence for mediation in Study 1 is provided in the online appendix, these results need to be considered with caution. Mediation effects were more pronounced in Study 2, which did include a neutral category, but the fictitious news story has less eco-validity. Thus, future research could try to identify such processes.

Constructive journalism can be implemented a number of ways and this study is limited in that it only tested two specific constructive techniques: focusing on a solution and evoking positive emotions.

It is also important to recognize that the impact of any one kind of news story might differ from the impact of regularly consuming negative or constructive news over months or years. In addition, although our results were suggestive of a link between affect and behaviour, behavioural intentions and motivations to act were measured rather than behaviour directly. Future research might include a longitudinal study that looks at the impact of negative or constructive news over time, and research to measure behavioural responses more directly.

Lastly, this study examined news consumers’ general affect after exposure to a news story. Future research might isolate and examine the impact of discrete emotions to identify the effects of specific emotions, like hope, rather than simply broader positive or negative feelings. Another emotion worth considering in future studies is awe, as Piff et al. (2015) found that experiencing awe can increase prosocial behaviour by causing people to situate themselves in a broader social context and therefore enhance their collective concern.

# **Conclusion**

The social responsibility theory of the press asserts that the media have a responsibility to consider society’s best interest (Siebert, Peterson, and Schramm 1956). According to the results presented here, society’s interests would be better served if news were more constructive as this is likely to lead to lower anxiety, greater happiness and optimism and greater citizen engagement. Further, the data showing a clear preference for positive news over negative news should be of interest to those who are concerned with the decline in news audiences.

It is concluded that constructive journalism needs to be seen as more than ‘nice to have’ and instead an essential part of news journalism, as consequences of the negative bias in the news matter hugely. Increasing mental health issues are imposing social and economic costs upon society. In addition, bearing in mind the serious behavioural changes necessary to address climate change and sustainability challenges, much greater attention needs to be paid to how media either encourage or provide a barrier to positive action. Of course we do not suggest that journalists omit important negative information to please their audiences. However, we argue that journalists should not sensationalize conflict or overly catastrophize negative information. We believe journalists can continue to uphold their duties to hold power to account and inform the public, even when the information is negative, by reporting stories of conflict and negativity in more constructive ways.

The aim of this paper is to contribute to debates about news journalism by presenting some much-needed empirical evidence showing the effects of positive/negative news framing upon behavioural and affective responses. It is hoped that this paper will highlight the societal issues associated with the way in which news is selected and presented and inform discussion on how to address these issues to enable more constructive and socially beneficial news journalism.

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