

A Proposal for a Multidimensional Analysis on the Psychological and
Physiological Impact of Consuming Positive Media

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Table of Contents

Introduction	3
Background and context	3
Problem statement	3
Research questions	4
Relevance and importance of the research	4
Literature review	5
Key concepts, theories and studies	5
Key debates and controversies	6
Gaps in existing knowledge	6
Research design and methods	3
Hypothesis	7
Abstract of methods	7
Participants	7
Surveys	7
Cortisol testing	8
Practical considerations	8
Implications and contributions to knowledge	9
Contributions to knowledge	9
Implications	9
Reference list	4

Introduction

Background and Context

News has always played a role in societies, from the ancient Han Dynasty's public news bulletins to social media news accounts that are followed by millions around the world today. In more recent times, discussions have emerged on the negative tone of the news. Many studies have shown that news tends to disproportionately cover negative events. (Niessner & So, 2018) (Conde et al., 2016). Many professionals in related fields argue that because one important function of news is to expose societal issues, it is natural for news to skew towards negative topics. Common phrases such as "No news is good news", also convey this attitude. Lately some have voiced opinions, however, that too much negativity in the news can have unintended negative consequences (Davey, 2020). Indeed, it has been found that negative news can have several negative effects both on the individual and societal scale (Hoog & Verboon, 2020)(Kleinnijenhuis et al., 2006).

Many media companies have turned to "Constructive Journalism" as a counterbalance to pessimistic news. Constructive journalism presents the same negative news in a positive light, often proposing solutions to the issues being discussed. This is different from "Positive Journalism", which we will study. Giselle Green, head of a radio news podcast called Constructive Voices, states her opinion of how "Positive journalism is not the same as constructive journalism. It is less serious or rigorous and often tells stories of heroes and individual events which don't have high significance to society" (*Accountable Journalism*, n.d.). This distinction is clear and shows that Positive media is a topic that deserves a study of its own.

It has been shown that constructive journalism can have many benefits to those who consume it regularly (Van Antwerpen et al., 2022), but there are very few, if any, studies that probe the effects of positive news. In order to better understand these impacts, we propose an empirical study. Our study aims to find the psychological effects of reading positive news. By doing so, we hope to determine whether regular consumption of positive news can offset the negative effects of negative news and/or have other benefits.

Problem Statement

Negative news is overly prevalent in the media and is more likely to be engaged with by media consumers. The vast amounts of negative media generates a variety of problems for consumers' health and lifestyle. It can impact one's ability to retain news and make decisions, one's mental health, one's willingness to consume news, and one's outlook on how they interact with the world around them.

Media companies tend to focus heavily on negative stories, often over exaggerating facts or framing neutral events in a negative way. Why are they inclined to do so? One possible reason is to increase readership. It has been shown that negative articles attract more viewership than other styles. This can largely be attributed to human nature. Recent studies show that people tend to be attracted to negative stimuli (Pratto & Oliver P., 1991). On online news websites, negative titles tend to accrue more clicks than their positively titled counterparts (Robertson et al., 2023).

This bias towards negative stimuli can lead people to subconsciously click on negative news articles more often, thus leading to these types of articles generating greater revenue for the publisher (Soroka, 2015). As most news companies are monetarily driven, the additional profit acts as an incentive for them to produce more negative articles.

The overabundance of news in general poses the threat of news overload, a phenomenon that occurs when a person is exposed to an excess amount of news and becomes numb to or dismisses the importance of news. The overabundance of negative news specifically poses different but similar problems, one being learned helplessness. Learned helplessness occurs when one is repeatedly exposed to a stressful situation to which they have no control over, the subject develops a sense of helplessness and believes their actions cannot change the outcome. Additional impacts of consuming negative news have been studied in depth. Past experiments have shown the increase in stress, measured through cortisol levels, of people directly after, the day after consuming this type of media (Marin et al., 2012). The constant negativity, lack of trust for news agencies, and the impact of news overload can cause news avoidance where consumers stop paying attention to news (Skovsgaard & Andersen, 2020). Whether intentional or unintentional, news hesitancy results in unengaging and uninformed citizens.

Research Questions

The goal for this study is to examine the varying effects of consuming positive media. We aim to do this by answering the following two questions with this study: What effect does consuming Positive Media have on subjective psycho/physiological well being? Does habitually reading positive news impact how often people read news? Both will involve a longitudinal study, with wellbeing being measured by a mix of surveys, interviews, and cortisol testing. Specifically, we will conduct surveys to measure participants' mental wellbeing and habit development, short interviews to gather qualitative data, and cortisol level testing to measure prolonged stress.

Relevance and Importance of the Research

We believe that this study will help companies' triple bottom lines (Campus, 2022). The triple bottom line is a way for corporations' to measure success through non-financial means. It measures several aspects of performance including impacts on the general public and consumers, the planet's ecological well being, and business prosperity. Our study will mainly address the impacts on people and prosperity. These will be addressed by measuring individual wellbeing (people), with the prosperity aspect being dependent on the results and whether or not they can be used to promote the consumption of positive media. This encompasses the impact on employees, customers, and local populations. Beyond the business aspects of prosperity, the contributions of knowledge that could be obtained would improve greatly upon a currently limited field of study.

Literature review

Key Concepts, Theories and Studies

Negative News

When reading the news, it is clear that negative topics are covered heavily by most media companies. It has been shown that most news covers topics that include violence, conflict, or suffering. In the study, "[Bad news revisited: The portrayal of violence, conflict, and suffering on television news](#)," Johnson aimed to find out whether US television news networks have a focus on covering negative news. An analysis of 100 TV news programs over a 6 month period showed that US television news did, in fact, cover negative news much more often than positive news. Furthermore, it was found that negative news was often aired at the beginning of the broadcasts, giving it a more substantial focus.

Consuming negative media can lead to real life health impacts. It can lead to raised stress levels even days after the event has passed. Negative media is so impactful to the reader that, when measuring individuals' stress levels after the Boston Marathon bombing, those who were directly exposed to the event had lower acute stress levels in the following days than those who were repeatedly exposed to news about it. (Holman et al., 2014). Aside from stressful events the emotional valence of TV news programs cause a change in the viewers mood as well. Negative news casts have the ability to increase feelings of anxiety and sadness (Davey, 2020).

Due to the prevalence of for-profit news organizations it is important to understand how biases impact a company's sales. When looking into the distribution of news and revenue generated it is easy to see why negativity is so prevalent, negative articles are more likely to draw reader engagement. Producing negatively toned articles have been proven to draw increased engagement and monetary benefits to those who market them. (Soroka, 2015). This increased sales benefit shows incentive for the aforementioned tendency for media companies to cover negative news.

Constructive News

Constructive journalism is a practice of writing through which journalists present a negative topic in a positive light. This is often accomplished by finding a silver lining and presenting to the reader how the topic in the article is progressing in a more positive direction. The important distinction is that constructive media still covers negative topics, while positive media completely avoids those. Constructive journalism has been gaining more and more traction as of late. While it maintains the distinct traditional role of journalism in democracies, it aims to do so in a way that promotes more social change and/or healthier habits for readers (Mast et al., 2019).

The purpose of constructive journalism is to provide a source of news that reduces the mental health impact on readers. Many viewed constructive journalism as a way to fight the negative effects of negative news while still keeping the reader informed and while it did increase the consumers mood it also lowered their comprehension of the information (Van Antwerpen et al., 2022).

Positive News

The effects of negative news and news in general are well researched. Studies that have presented information on the effects of viewing positive media are fairly scarce. This is in part due to it being a newer field of journalism while also being vocally criticized due to past ties with positive psychology. Despite scarcity, it has been demonstrated that viewing positive media causes a negligible difference in self reported anxiety levels and noticeably lower self reported sadness levels (Johnston & Davey, 1997). These effects have only been explored in the short term, and there are not many other studies that have been run to reinforce these results.

Key Debates and Controversies

There is some criticism of positive news. Some claim that positive news can be misleading, and lead people to ignore societal issues. This has been a common critique for a long time. In the 1990's, for example, there were ongoing debates about whether the overwhelming negativity in news media was justified. Many thought that yes, it was justified (Lichtenberg & MacLean, 1992), as a key function of the news is to bring attention to problems around the world.

Constructive news, while attempting to address this problem, does not completely get around the problem of negativity bias. It has been found that even when reading constructive news, readers will more likely remember the negative parts, giving it a much larger focus than presented. It has also been shown to lower readers' comprehension of the information and may even lower their trust of the source (Van Antwerpen et al., 2022).

Understandably, positive news is sometimes associated with positive psychology. The field of positive psychology was pushed to the popular domain by Dr. Martin Seligman in the late 1990's (*MARTIN E.P. SELIGMAN*, n.d.). The entire field has been heavily criticized, and many have made statements questioning the effectiveness of methods used by positive psychologists. One such critique brings into question the accuracy of measurements and scales that are commonly used in positive psychology (Brown et al., 2017). Some also criticize the Western-centric views of positive psychology. In positive psychology, it is assumed that wellness comes from internal processes, which is more commonly a western belief and is contrary to the belief that happiness is affected more by environmental factors (Brown et al., 2017). Positive psychology, while being a very popular field, has many criticisms and is often not regarded as a legitimate science.

Gaps in Existing Knowledge

Our research proposal aims to solidify the results from the current small pool of studies while building upon existing knowledge. Negative media has been studied intensively for many years. However, it is just recently that positive media has begun to be analyzed (Raney et al., 2020). There are few studies on positive media, and even less, if any, studies on the long term psychological and physiological effects of positive news. We aim to understand the long term

effects of consuming positive news, and whether it can be leveraged to create healthier news reading habits.

Research design and methods

Hypothesis

Habitually consuming positive news leads to improved mood, well being, and lower stress levels.

Abstract of Methodology

Participants will be split into two groups, each consisting of ~30 participants: The control group will continue their normal news reading habits, and the experimental group will read at least one positive news article on five days every week. A baseline measurement of wellbeing using PANAS and PSS-10, as well as a cortisol test will be taken before the study. During the study, these measurements will be taken once every 7 days. The study will last around 3 months. At the end of the entire study, this data will be analyzed for correlations between reading positive news and wellbeing.

Participants

In total, the research group will consist of ~30 participants who will be selected at random. These participants will be separated into two groups, one group will read a positive media article daily and the other group will not.

While random, some demographics are recommended to be excluded from the experiment as their current biological makeup could lead to skewed results. Women who are pregnant will be excluded, as pregnancy causes elevated cortisol levels throughout the day (Vining et al., 1983). People who smoke will be excluded, as smoking may raise cortisol levels (Stephoe & Ussher, 2006) People with depression and/or anxiety disorders will be excluded. Depression can raise baseline cortisol levels during the afternoon (Burke et al., 2005), which is when this study will measure cortisol. Anxiety disorders, while a little more unclear, may have an impact on cortisol as well (Vreeburg et al., 2010).

Surveys

Participants will complete PANAS and the PSS-10 each week. We are utilizing these surveys as a way to measure wellbeing. While wellbeing is a broad topic and difficult to define, we plan to gather a measurement of individuals' positive emotions, negative emotions, and stress levels. In gathering these values we aim to investigate the impact of consuming positive news on psychological wellbeing. Both the recommended surveys have been used often with studies proving validity and repeatability. (Crawford & Henry, 2004) (Klein et al., 2016).

The PANAS scale stands for Positive and Negative Affect Schedule (Watson et al., 1987). This survey consists of a list of adjectives that describe either a positive or negative emotion. There are 10 of each grouping spread mixed throughout the survey totaling 20 questions. The

surveyee ranks how well the emotion describes how they felt over the last week on a scale of 1-5 where 5 is the highest. When completed, the scores of the positive and negative emotions are tallied and separately. This presents them with both a positive score and a negative score. These scores range from 10-50 with the averages being 33.3 and 17.4 respectively (Watson et al., 1987).

The PSS-10, also known as the perceived stress scale (Klein et al., 2016), is a survey that consists of 10 questions used to measure the degree of psychological stress that a person is experiencing. The scale is quite simple, consisting of 10 questions, 5 positive and 5 negative. Each question has a response option of 0-4. Upon completion of the survey, scores are tallied up by, first, reversing the value of the positive questions (0=4, 1=3, 2=2, 3=1, 4=0) and then summing all of the scores together. People with low stress would score between 0-13, those with moderate stress would score between 14-26, and those under high stress would score between 27-40 (Klein et al., 2016).

Cortisol testing

Cortisol is a hormone that is released during periods of stress and can lead to health problems if they rise or fall out of a normal range. This normal range varies throughout the day, in the early morning (0600-0800) 10 to 20 micrograms per deciliter (mcg/dL) is considered good, while in the afternoon (1600) the normal range drops to 3 to 10 mcg/dL (*Cortisol (Blood) - Health Encyclopedia - University of Rochester Medical Center, 2023*). Some alternate sources view the normal ranges as slightly larger or smaller, however, normal levels should be near these measurements (*Cortisol Test, 2022*).

Cortisol levels will be measured in the same time window for all 40 participants each week. Each participant will choose a time between 1800 and 2100 to complete their tests. Cortisol levels follow a circadian rhythm. Thus, to eliminate the effect of the time of day on cortisol testing, the tests must be administered at the same time for every test. Cortisol levels fluctuate the most in the morning and are more stable in the evening (Mohd Azmi et al., 2021), hence the timeframe mentioned above.

Testing will be conducted on salivary cortisol. Salivary cortisol is found to be a good measure of adrenal function, as compared to serum cortisol levels (Vining et al., 1983). It is also easier, much less invasive, and less expensive than urinary or serum cortisol testing (blood testing). Given these benefits, we recommend the salivary testing method. Though, it must be made clear that the participants must not eat for a minimum of 30 minutes prior to testing otherwise the results may be incorrect.

Practical Considerations

It is important to mention and consider the ethical concerns posed by this study. In dealing with individuals' psyche, stress levels, and mental wellbeing it is recommended that each participant is given access to a counselor and/or psychiatrist should they need it. Participants must be made aware of their right to withdraw from the study at any time should they not want to

continue. They should also be informed on the goals of the experiment and be debriefed on the intentions behind the study. The confidentiality of participants and their data is crucial as well, thus their data must be well protected.

Implications and contributions to knowledge

Contributions to knowledge

Currently, there is a plethora of information on the effects that negative news can have on individuals/society. There are also some studies that demonstrate the effects of constructive news. However, positive news, being a relatively new field of journalism, remains a relatively unexplored field. Our study will look into the psychological/physiological effects of positive news and hopefully shed some light on potential benefits of reading positive news. Although this study is relatively small-scale, this would lead the way for larger studies on positive news, cementing a place for positive news in the media landscape.

Implications

The damaging effects of negative news have been well-documented - depending on the results of this study, there may be a benefit to society that could be realized through understanding the impact of positive journalism. Through further studies on the effects of positive news, news agencies might look into healthier, more effective ways of presenting news and readers could be encouraged to find healthier news consumption habits.

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