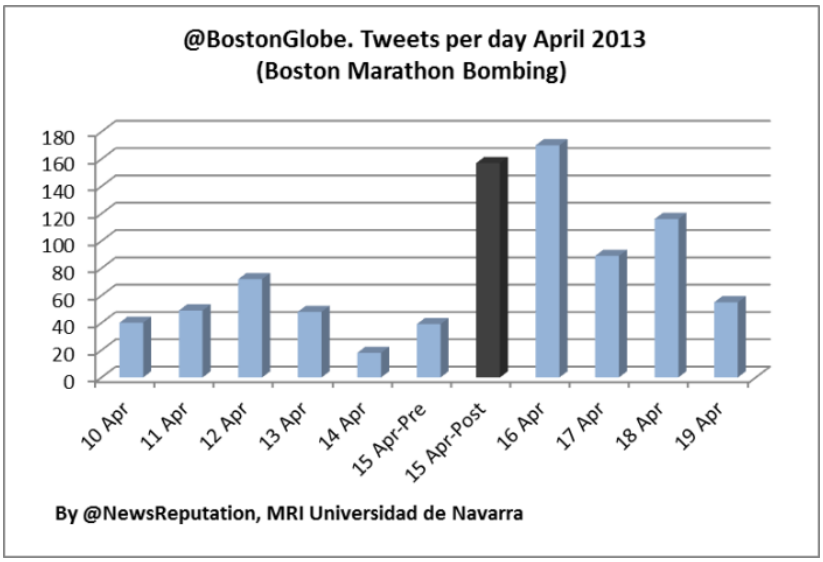
Negativity Bias, the Media, and Mental Health
by Heather Pidcock-Reed

On April 15, 2013, Dzhokhar Tsarnaev and Tamerlan Tsarnaev set off two bombs near the finish line of the Boston Marathon. Three people died and an estimated 264 others were injured. The aftermath of the bombing and the resulting manhunt for the perpetrators was covered extensively on television news, online news sites, and social media. Graphic images and video of the event were shown repeatedly.



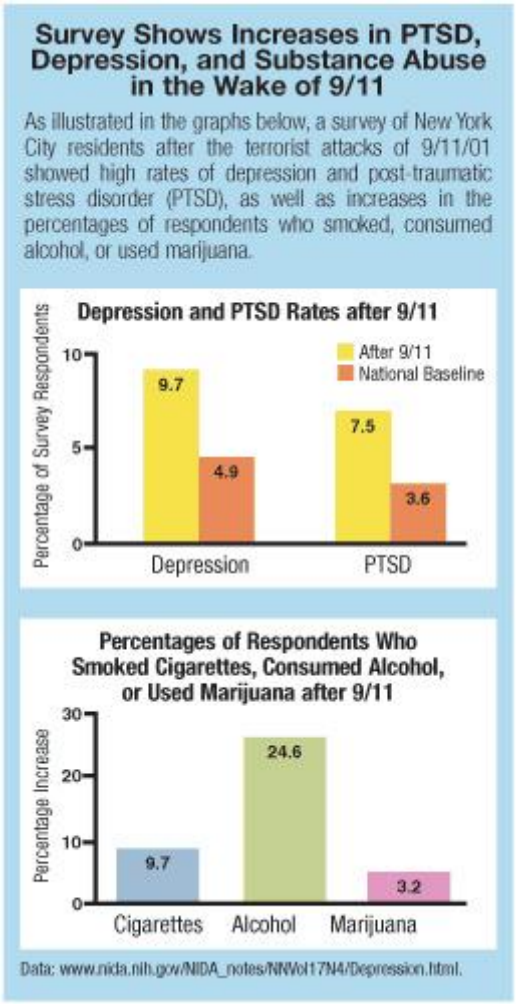
Approximately an hour and a half after the bombing there were more than 700,000 Tweets sent that mentioned the tragedy. A study by the Pew Research Center after the bombing found that 80% of Americans followed the story on television. Nearly half of the respondents (49%) received updates on the story online through their computer or mobile device, while around 25% of people followed the latest news on social media platforms like Facebook and Twitter.

The Boston Marathon bombing coverage is evidence that we live in a time and place where just about everyone in the developed world has instant access to breaking news from all around the globe. Social media studies conducted by the Pew Research Center in 2015 indicate that people (and especially Millennials) are beginning to rely more and more upon social media to follow breaking news. This news is often unverified and unfiltered.

Wherever one looks, whether it is television, online news, or social media, bad news is everywhere. The media and the public jump from tragedy to tragedy, obsessively covering and consuming the latest in horrific news. Mass shootings. Plane crashes. Natural disasters. War. Terrorism. Destruction. Death. This near constant bombardment of news and social media can have an enormous effect upon our mental health, our sense of well-being, and cause us to lose our sense of perspective on how much we are truly at risk of becoming a victim of tragic events.

A study conducted in the aftermath of the September 11, 2001 terrorist attacks in the United States found that the more news coverage people viewed of the attacks, the more likely they were to develop symptoms of depression, anxiety, and Post

Traumatic Stress Disorder (PTSD). Those most likely to develop symptoms were those exposed to frequent live coverage of the events, as well as those who repeatedly watched the same clips over and over again throughout the course of television news programs.



The September 11th study was conducted prior to the massive popularity of social media sites like Facebook (2004) and Twitter (2006). Today, such as in the Boston Marathon bombing, there is the potential for people to be exposed to even more breaking news and live coverage of tragic and violent events. Other recent examples include events like the Sandy Hook elementary shootings, the Aurora, CO shootings, the terrorist attacks in Paris, the mass shooting/terror attack in San Bernardino, the bombing of the Russian airline en route to Egypt, the Malaysian Air plane crashes, and much more. Digital news and social media make it easier for us to "binge" on live coverage of these events.

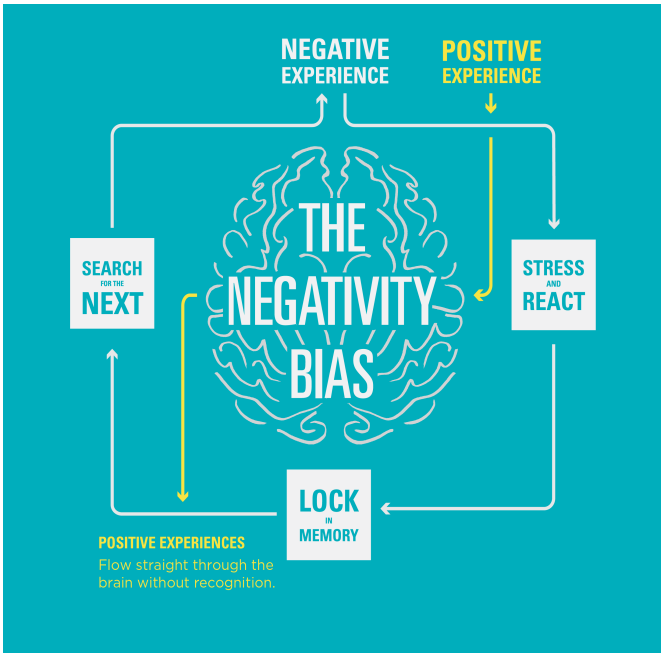
In the weeks following the Boston Marathon bombing, researchers conducted a study on the effects that the media coverage of the event had on people. The results were surprising. According to Alison Holman of the University of California, Irvine, and one of the contributing researchers, this study indicated that, "people who exposed themselves to six or more hours of media daily actually reported more acute stress symptoms than did people who were directly exposed – meaning they were at the site of the bombings."

The repeated exposure to graphic images, video clips, and news contributed to people developing symptoms similar to PTSD, even though these people were nowhere near the bombings and weren't directly impacted by them. This phenomenon is known as secondary PTSD. It has been documented not only amongst viewers and readers, but also in journalists who are overexposed to unedited material of traumatic events.

There is some indication that those who develop secondary PTSD, depression, or anxiety were already predisposed to or had those issues in the first place. While this may seem encouraging, there are also concerns for people who aren't at a high risk of developing these issues. Overexposure to violent and tragic media coverage can

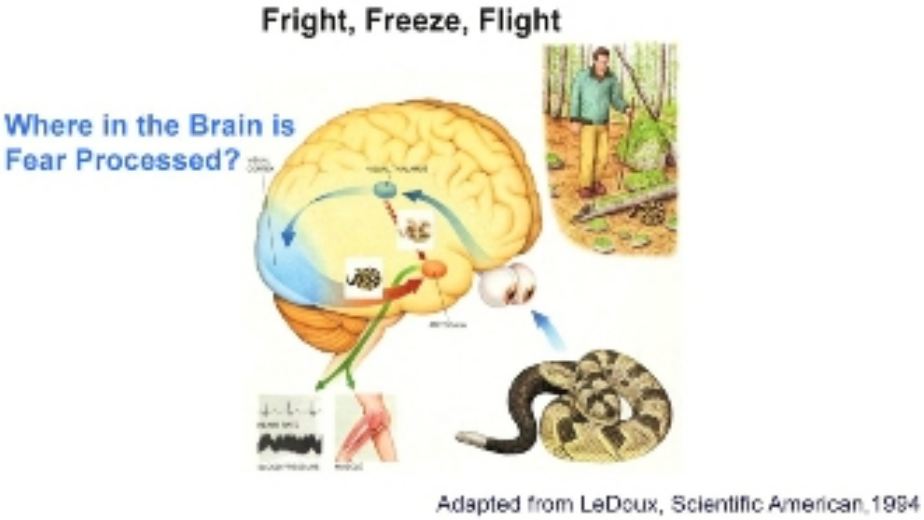
impact the mental health and well-being of an otherwise mentally healthy person through increasing feelings of stress, mild anxiety, and paranoia.

If bad news makes people feel so bad, why do they keep watching? It seems humanity is predisposed to seek out and react to bad news more than good news. This is why the old journalistic slogan "if it bleeds, it ledes" is so effective. Bad news draws people in. It makes them seek out even more news on the topic because they want to know how the story ends and how in danger they are of falling prey to whatever the bad news of the day is.



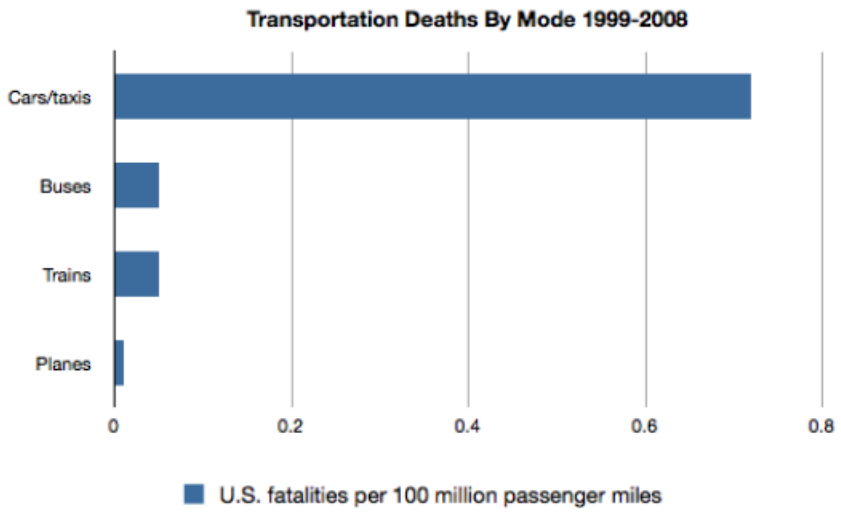
This seeking out and dwelling on bad news is known as negativity bias. The human brain is prone to latching onto bad news and staying latched onto the fears and worries caused by that news. This could be anything from worrying about job layoffs, having a difficult conversation with someone, or being a victim of a terrorist attack. This is due to the amygdala, the region of the brain responsible for alerting us to danger and giving us the ability to respond to that danger.

When alerted to danger, the amygdala sends signals to the rest of the body and sounding the alarm that danger is near. The body responds accordingly. The heart rate goes up, pupils dilate, and adrenaline surges. The heightened sensitivity gives the opportunity to fight or flee. This built-in alarm system helped our primitive ancestors to survive. It still helps us today, when we're put into somewhat risky situations like assessing whether or not to use that



rickety ladder, or whether or not the creepy looking guy on the subway is someone to be avoided or not. The amygdala, however, doesn't seem to know what to do when faced with modern media coverage.

Upon seeing bad news a person's amygdala fires up and causes the person to be on the alert for more danger, even if the threat isn't a likely one. The more inundated we become with media coverage of traumatic, tragic events the more likely our brains are going to think we are at risk. Much like a scraped knee that becomes increasingly irritated and painful the more one picks at it, the amygdala becomes hypersensitive to threats the more frequently it is exposed to hints of danger.



Take for instance, the fear of flying. Many people are fearful of flying. Upon seeing coverage of rare plane crashes, the amygdala kicks in, saying that we're in danger whenever we get on board a plane. Realistically (and statistically) speaking, we are far more likely to be killed in a car crash on the way to the airport, but the brain makes us believe that we're in more danger getting on that plane than driving our car.

The same process is at work when we react to media coverage of traumatic events. We latch onto the latest news of a mass shooting and we fear that we will become a victim of one. We see the breaking news of a terrorist attack and become fearful of one happening in our town. While there is a slight risk of that occurring, the amygdala tells us that we are in danger and we must stay alert in order to do something to get ourselves out of that danger.

This hypersensitivity leads to paranoia and further acts of violence in retaliation for certain events. Take for example, the number of mosques that have been vandalized in the wake of events like the Paris and San Bernardino attacks, as well as the increase in paranoid rhetoric and Islamophobia.

If this sounds depressing and hopeless (after all, we are fighting against a perfectly natural and useful feature of our brains), don't despair. By recognizing the inherent desire to look at tragic news, we can decrease the amount of activity that can lead to irrational and fearful behavior that harms our mental health and overall well-being.

While it is important to stay aware of current events, turning off the media and avoiding the news for a while can reduce stress and anxiety. Carefully choosing the media sources one uses for news can also have an impact on the amount of exposure breaking news coverage. News agencies can run warning about upcoming graphic images or video of the event before showing them. As we struggle to incorporate 24-hour access to news and social media, supporting new studies on the impact of this kind of coverage on our health can help us learn how to moderate and when to recognize how much is too much. Through actively avoiding continuous coverage we can reduce our stress and anxiety levels, while maintaining a realistic sense of the world around us.

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