

How Differences in Emotional Appeals Affects Charitable Behaviors

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Abstract

Both altruism and emotional experiences are commonly discussed together in the field of social psychology. Several studies have been devoted to finding connections between the two areas, many of which have provided more insight as to the true motivation behind altruism and charity as well as the impact of emotional experiences on human decision-making. This study intended to test precisely which emotions encourage charitable behaviors by manipulating the emotions felt by each test subject and then measuring how much altruism they would demonstrate immediately after. Though the experiment's credibility and accuracy are greatly limited by the small number of participants that were recruited and several errors in the methodology, the results ultimately concluded that sadness was the emotion most likely to induce altruistic behaviors.

Introduction

Concept of Altruism

Charities and the concept of altruism are frequently studied aspects of social psychology. The notion that human beings will choose to help others for no benefit for their own is indeed an interesting phenomenon, considering the commonly held belief that most humans are inherently selfish. In particular, the motivation behind aiding another without expecting a tangible reward has often been the subject of several theories regarding human behavior. When analyzing how charities motivate this behavior, it is clear that the use of pathos is favored by most, with several studies finding

that providing an emotional appeal enhances the persuasiveness of advertisements in general (Xie, Donthu, Lohtia & Osmonbekov 2004).

However, despite the seemingly unified stance that an emotional appeal will aid a charity advertisement's effectiveness, there is still no clear consensus as to what specific emotions are most effective in soliciting donations or inducing altruistic behaviors and what emotions may be less effective at the same task.

This study intended to test which of the most basic human emotions, happiness, sadness, anger, and disgust, are most likely to cause an individual to be altruistic. This was done by

manipulating the emotions that were felt by the participants of the study and then measuring how much altruism and charity they demonstrated immediately after the emotional experience.

However, before delving into the specific methodology behind the experiment, it is important to understand the related studies that have taken place prior to this experiment and the essential principles that were found from such studies.

Empathy-Altruism Hypothesis

The Empathy-Altruism Hypothesis was first proposed by Daniel Batson, a social psychologist who claimed that feelings of empathy and concern for others was the primary motivator of altruistic behaviors. In his book, *Altruism in Humans*, Batson provides essential pieces of evidence to support his hypothesis that empathy is an important factor in altruism.

The proposed explanation for this behavior was that an individual will try to eliminate the reason for their feeling of empathy by attempting to aid the person that they feel compassion towards. This led Batson to the conclusion that the more empathy one feels, the more likely they will be to commit greater acts of charity and altruism.

In *Altruism in Humans*, Batson clearly differentiates between merely helping others and true altruism, claiming that the latter must be done with the goal of increasing another individual's well-being. He believes that only when the motivation can truly be identified to

be exactly that can a certain behavior be considered altruism.

Based on this information, this study attempted to build a situation in which the primary motivator of the measurable dependent variable would truly be altruistic intentions, which led to the decision to have the dependent variable consist of an opportunity to donate to a certain charity with no benefit towards the individual participants.

Appraisal-Tendency Framework

Furthermore, it is also a well-established truth that businesses and organizations that thrive on charitable donations made by empathetic individuals often utilize an emotional appeal. However, Jennifer Lerner, Dacher Keltner, and Seunghee Han found that there was a scientific basis for this trend, largely due to the Appraisal-Tendency Framework (ATF).

This concept describes the ways that emotions influence an individual's decision-making process. In the case of Lerner, Han, and Keltner's experiment, the researchers were able to find that an emotional appeal lowers a person's perception of monetary value (Lerner & Keltner, 2008). This is essential knowledge to understand the present study as it heavily relies on the capabilities of emotional appeals to elicit a monetary donation from the participant, and knowing that this was conclusively possible was an important part of the research involved in designing the overall study.

The ATF also predicts that each emotion likely has a motivational property that uniquely

influences the human assessment of risk and monetary value. Several other academic discussions and research studies have also confirmed that advertisements will often be more successful if they exploit certain emotions more than others (Bennett, 2014; Septianto & Tjiptono, 2019).

However, the issue of precisely what emotions contribute most to altruistic behaviors is still largely unclear, which is precisely what this experiment intends to elucidate, adding on to this discussion that has been started by previous researchers.

Incidental Emotions

Lerner's previous work in studying the various types of emotions that an individual can feel and how they each impact their judgment is also valuable research that can be applied to this experiment.

In particular, the idea of incidental emotions, in which an emotional experience manages to influence a person's judgment within a seemingly irrelevant situation, is heavily involved within this study. This is because the emotional experience and the dependent variable measuring altruism that is being tested by this study was completely separate from one another, being connected only by the fact that the dependent variable was revealed to the study participant immediately after the independent variable.

Because of this, the effect that incidental emotions can have on an individual is a principle that the present experiment will both

rely on and build upon based on the data and the results of the study.

Self-Transcendent Emotions and Prosociality

Another significant principle to consider for this experiment are self-transcendent emotions, which are defined as human emotions that detract from typical human selfishness and instead directs an individual's concern towards situations outside of their personal lives (Fredrickson, 2013; Van Cappellen and Rimé, 2014; Stellar et al., 2017). Emotions such as awe, gratitude, and, most importantly for this experiment, compassion, are emotions that encourage individuals to look past their personal lives and consider others. These emotions tend to increase prosociality (Stellar et al. 2017), which are behaviors that are done for the benefit of others, an idea that is incredibly similar to the concept of altruism.

Particularly for this experiment, it is very important to have a firm understanding of what self-transcendent emotions are, and what behaviors they can motivate in humans. Because feelings of awe or compassion can motivate prosociality and altruism, these emotions were added as a measure of emotion to see if there would be any correlation between the measure of charity and the amount of awe or sadness for another individual was felt by the study participant.

The Study

This study worked to address this critical issue by comparing the effects that three emotions--happiness, sadness, and anger--have on the

likelihood of charitable actions. It will add on to the multitude of previous research that has been done by providing further insight into what motivates altruistic behavior in a more practical, realistic setting to test exactly which of the most common human emotions lead to more charitable actions. In doing so, the study found valuable information regarding which emotion contributes most to charitable actions, though several flaws in the methodology may have reduced the accuracy of the data collected.

Methodology Participants

The test subjects for this experiment were recruited through various social medias including Discord, Instagram, and Reddit, as well as various Pioneer alumni. The participants were made up of a variety of different ages, races, and nationalities due to the use of online recruitment. However, due to the time restraints on the recruitment period, only a small number of individuals were able to be recruited. A total number of 24 participants were recruited for this experiment 22 of which were used as viable results. Afterwards, the subjects were presented with a survey that would provide them with a video and several questions. After they fill out the survey, their answers were recorded as part of the final data set.

Independent Variables

The study manipulated the types of emotions that each individual feels as the independent variable. Each individual was randomly assigned to a group that would be shown a different video

found on the Internet. The individuals were not told that they were assigned to a group and were left to assume that there was only one type of video shown for all participants.

Group 1 was exposed to a video that is intended to elicit happiness and awe from the viewer, Group 2 was given a video for sadness, and Group 3 was given one for a sense of anger and disgust. The clip for happiness was taken from a video titled "Where the Hell is Matt?" on Youtube and depicted a man dancing in various different locations throughout the world. The video for sadness was taken from a video that included several clips that were intended to make the viewer cry and depicted the story of a woman being diagnosed with a terminal illness and confronting her family. The third video for anger and disgust was a clip from an advert from the organization PETA and depicted the abuse of chicks in the Indian meat industry and how they were killed.

Each video was cut down to approximately two minutes to ensure that the survey would not take too much time, and the participants were allowed to move on to the next part of the survey after completely watching the video. Because two of the videos contained distressing images, there was also a trigger warning at the start of the survey. Immediately after watching the video, the participants would be presented with various questions that served as measures of altruism, which was the dependent variable of the study.

Dependent Variables

The dependent variable was measured through the amount of altruistic behaviors demonstrated by the participant immediately after they are exposed to the emotion-inducing videos. This was measured through the opportunity to donate either or both time and money to a fake charity organization entitled Help the Homeless. The charity was fake to ensure that the participants had no predisposed knowledge or opinions regarding the charity that may have influenced their decisions. To authenticate the charity, the participants were first presented with a short mission statement from the charity that reads:

“Help the Homeless is a global non-profit organization dedicated to aiding homeless people in all nations and communities and striving towards eradicating homelessness completely. We are committed towards ensuring that all homeless individuals have the necessary education, support, and resources they need to be able to survive and achieve a better standard of living. We hope that you will donate to the homeless today through our Help the Homeless program.”

After this message, the participants were presented with the two questions to measure the dependent variable, which read, “How much would you be willing to donate to Help the Homeless?” and “Help the Homeless needs volunteers who are willing to organize events and fundraisers or come visit homeless shelters to aid homeless people. How much time would you be willing to spend volunteering for Help

the Homeless?” There will of course be no obligation for the participant to actually donate any of their time or money towards this false organizations. The scale for the charitable donation was from \$0 to \$50+ in increments of \$10, and the scale for the volunteering hours was from 0 to 5+ hours per week in increments of 1 hour.

Other Questions

The participants were also presented with several other questions, which were intended to gauge if they paid attention to the video and allow them to express what emotions they felt as a result of viewing the video.

These included, “Please give a brief, one-sentence description of the video that you watched,” and “What emotion did you feel as you were watching this advertisement/video?” The second question included a checklist with the emotions awe, amusement, sadness, anger, disgust, and fear being shown, each measured through a six-point scale ranging from “very slightly,” “a little,” “moderately,” “quite a bit,” and “extremely.” These questions were intended to judge whether the participant had actually watched the video and if their response was viable, as well as whether the independent variables had succeeded in eliciting the intended emotions from each viewer.

A few questions intended to judge the demographic of the participants were also asked, which asked the participants for their age, gender, and whether they regularly donate to charities or volunteer at non-profit organizations.

Now that the background and details behind the creation of the experiment have been summarized, it is possible to discuss the results of the study.

Discussion of Study

Hypothesized Results

Previous studies have shown that charities that raise money for disturbing or emotionally upsetting issues often use imagery that causes mixed, often negative emotions are shown to give the viewer a higher likelihood of donating to the charity (Bennett, 2014). Furthermore, other studies have shown that a feeling of compassion leads to a more successful charity--but only if its past performance has been particularly lackluster (Tjiptono & Septianto, 2019). Because of this, it was predicted that the likely result of the experiment would be that the experimental groups that were assigned to the two negative emotions, sadness and anger, will have a higher rate of donations and volunteering hours, especially because the viewer will not be given any insight as to the fake charity's previous performance.

Many may believe it to be natural at this stage to assume that sadness will be superior to anger in eliciting donations, particularly because of the prevalence of appeals to sadness in charitable advertising (Choi & Park, 2021), as well as the commonly-held belief that utilizing images of suffering can elicit feelings of empathy and motivate altruism, known as the sympathy-helping hypothesis (Homer, 2021).

However, it is important to note that research regarding the impact that sadness has on altruism and the likelihood of an individual donating to a charity has been largely conflicting. This is often because the situation it occurs in can greatly impact its effects, and the individual's knowledge regarding the specific charity can also be a factor. For instance, it has been revealed that charity appeals that appeal to sadness can sometimes demotivate charitable acts by causing the individual to become more suspicious of the charity and doubt that their donation will be used properly (Choi & Park, 2020). However, the same study found that when the donor has little reason to distrust a charity, an appeal to sadness no longer becomes a detractor for the number of donations made. Considering this research, it would indeed be unwise to assume that sadness would have a positive impact on the amount of money or time donated towards this cause, as the charity in question, "Help the Homeless" is one that was invented for the sake of this study.

Because people will have no prior knowledge regarding this charity, they will have little reason to trust it and will likely be suspicious of it, leading to less charitable behaviors.

On the other hand, anger has been shown to have a powerful effect in motivating prosocial behaviors, reducing the relative importance of costs and encouraging people to fight against perceived injustices (Nelissen & Zeelenberg, 2009). Because the experimental group for anger will certainly have a target to direct their anger towards--being the Indian meat industry and its

practices of animal abuse—it can be hypothesized that the anger elicited by the video for the anger experimental group will lead to them donating the most of their money or time to the charity organization.

Results

Figure 1 below pertains to the likeliness of either volunteering at a charity organization or donating money to the same organization depending on what emotional video the participants were exposed to. It reveals that the video intended to elicit sadness from the participants had the highest average donation and volunteer rate, which rejects the hypothesis that an emotional appeal for anger would encourage the most altruistic behaviors.

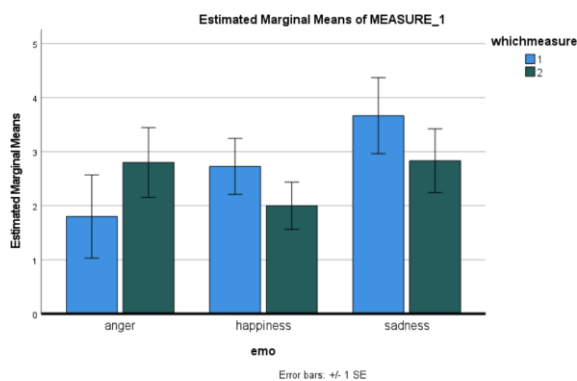


Figure 1. Describes which experimental group had the highest or lowest average donation or volunteering rates, which correspond to the blue and green bars respectively.

Figures 2 and 3 separate the two dependent variables, the amount of money donated and the amount of time dedicated toward volunteering, demonstrating that monetary donations showed a more clear distinction between the three

videos, while the volunteering hours showed much less substantial differences between the three groups.

Furthermore, it is important to note that the experimental group for anger showed a fundamental distinction from the other groups, as it was the only group where volunteering hours was greater than the amount of pledged money

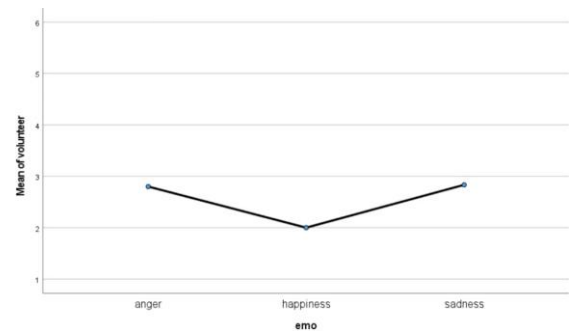


Figure 2. Shows only the average hours pledged to volunteering for each experimental group.

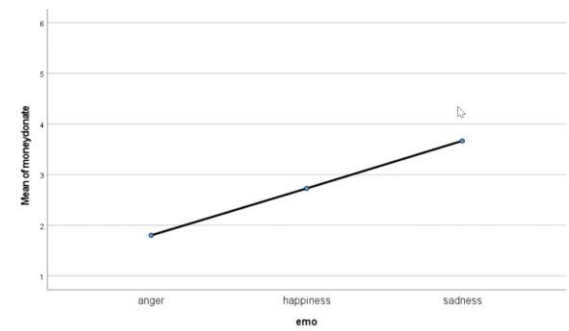


Figure 3. Shows only the average amount of money pledged to donate from each experimental group.

Meanwhile, Figure 4 shows data much more relevant to the success or failure of the methodology used in the experiment rather than the actual results. The data in these six graphs

represents how much of six emotions—awe, amusement, sadness, anger, disgust, and fear—was reportedly felt by the participants from each video. The six graphs present are all labeled on a scale of one to five, with five indicating that a great amount of the emotion, which is written on the y-axis of each graph, was felt after watching each type of video, which is written on the x-axis.

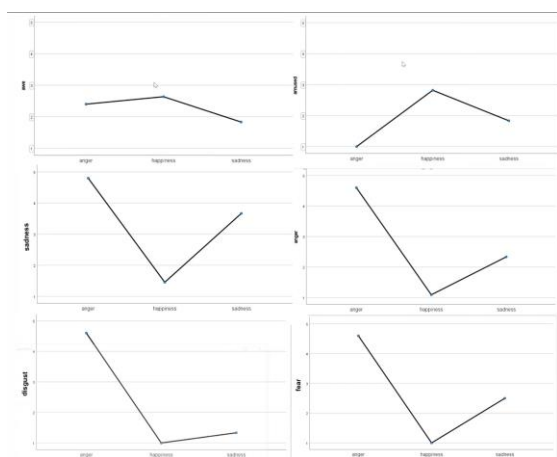


Figure 4. Depicts each measured emotion, awe, amusement, sadness, anger, disgust, and fear, according to how strongly people in each experimental group reported to have felt each emotion after viewing the video.

The graphs seem to indicate several important issues in the experiment’s methodology. Firstly, the video for happiness did not seem to induce very strong emotions within the participants, as the graphs for awe and amusement indicate little difference between the three groups, with amusement being marginally more successful than awe. Furthermore, it seems that the video for anger produced an overwhelmingly

distressing emotional impact on the viewers, as every negative emotion, including sadness, anger, disgust, and fear, were marked extremely high for the anger video. On the other hand, the sadness video seems to be the only experimental group that had the intended impact on the participants, as it reportedly invoked sadness and fear without much of any other emotion.

Finally, the table below, Figure 5, addresses all of the relationships and correlations between each of the emotions that each individual participant reported to have felt from the various videos, the amount of time and money that they donated, and their prior history with donating to charities.

		moneydonate	volunteer	emotions_1	emotions_2	emotions_3	emotions_4	emotions_5	emotions_6	donatehistory
moneydonate	Pearson Correlation	1	.562*	.642	.082	.156	-.211	-.327	-.115	-.143
	Sig. (2-tailed)		.006	.854	.717	.487	.345	.138	.610	.525
volunteer	Pearson Correlation	.22	1	.849	-.171	.490*	.187	.078	.247	-.053
	Sig. (2-tailed)	.006		.830	.447	.021	.380	.726	.287	.815
emotions_1	Pearson Correlation	.842	.849	1	.537*	.057	.005	.018	.030	.162
	Sig. (2-tailed)	.854	.830		.011	.800	.983	.935	.895	.472
emotions_2	Pearson Correlation	.862*	-.171	.537*	1	-.510*	-.540*	-.462*	-.559*	-.334
	Sig. (2-tailed)	.717	.447	.011		.015	.009	.031	.007	.129
emotions_3	Pearson Correlation	.156	.490*	.057	-.510*	1	.762*	.645*	.838*	.353
	Sig. (2-tailed)	.487	.021	.800	.016		<.001	.001	<.001	.187
emotions_4	Pearson Correlation	-.211	.187	.005	-.540*	.762*	1	.896*	.824*	.412
	Sig. (2-tailed)	.345	.380	.983	.009	<.001		<.001	<.001	.057
emotions_5	Pearson Correlation	-.327	.078	.018	-.462*	.645*	.896*	1	.807*	.526*
	Sig. (2-tailed)	.138	.726	.935	.031	.001	<.001		<.001	.013
emotions_6	Pearson Correlation	-.115	.247	.030	-.559*	.838*	.824*	.807*	1	.441*
	Sig. (2-tailed)	.610	.287	.895	.007	<.001	<.001	<.001		.040
donatehistory	Pearson Correlation	-.143	-.053	.162	-.334	.353	.412	.526*	.441*	1
	Sig. (2-tailed)	.525	.815	.472	.129	.107	.067	.012	.040	
	N	22	22	22	22	22	22	22	22	22

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Figure 5. Shows the correlations between each self-measured emotion, the donation history, the amount of money donated, and the amount of time volunteered for each individual participant.

Keeping in mind that emotions 1, 2, 3, 4, 5, and 6 correspond to awe, amusement, sadness, anger, disgust, and fear respectively, there were several noticeable trends in which emotions the participants tended to feel simultaneously from a single video. Overall, anger was often felt in

tandem with sadness, disgust, or fear, sadness was strongly correlated with disgust, and disgust was strongly correlated with fear.

However, there was overall very little correlation between any of the emotions and the dependent variables of volunteering and donations that were intended to measure altruism, both negative and positive. Of course, this is to be expected considering the extremely small sample size of this experiment.

One somewhat significant correlation was the tendency for people who felt sadness to volunteer, which also matches the data from Figure 2, as the video intended to elicit sadness had the highest rates of volunteering out of the three experimental groups.

Overall, the correlations revealed several problems within the methodology of the experiment, and that perhaps certain variables did not have the intended result on the This further eludes to the idea that the results for this experiment may not have been particularly accurate, largely due to the small sample size that was relied on for this data set.

General Discussion

The data from the experiment was overall very valuable despite the limitations regarding the sample size and number of participants that were recruited for the study. Though it is certainly not a particularly trustworthy set of data, there are still several interesting ideas that can be derived from the results of the study.

For instance, it was reported that the video for anger, which was a clip depicting the abuse of

baby chicks in the Indian meat industry, ultimately caused many more emotions than just simply anger. The individuals who were assigned to this group reported that they felt disgust, fear, and sadness as well as the intended emotion, demonstrating a failure of the independent variable to achieve its main purpose.

However, this does bring to attention the idea of mixed emotions, which have reportedly been found to be the most effective emotional appeal in charity advertisements (Bennett, 2014). The data from this experiment, however, contradicts this previous understanding of mixed emotions as participants who were exposed to the anger video gave less to charity and offered to volunteer the least hours on average, giving rise to the question of whether a mix of overwhelmingly negative emotions can instead detract from an altruistic attitude.

Yet another aspect of the anger experimental group was that it was the only group in which more people offered to volunteer than to donate money, perhaps indicating that more distressing videos or imagery could encourage more physical actions rather than monetary donations.

Furthermore, an interesting finding of the experiment that was less related to the ultimate research question was that an individual's history in donating their time or money towards a certain cause had very little correlation with the same actions for the survey. This phenomenon could be motivated by two possible causes. Firstly, the fact that the participants do not actually have to follow through with the decisions they make during the

experiment could motivate them to give more to charity than they would have in a real scenario. A second, more optimistic possibility is that enduring such an emotional experience immediately prior to being presented with the opportunity to commit a charitable action created a situation in which the individual was motivated to be more altruistic.

If this experiment were to be replicated in the future, it would be essential to include many more participants to provide a more accurate insight as to what emotions truly motivate the most altruistic behaviors. The simple extension of time that was allowed for recruiting participants and collecting test subjects would have made for a much more improved experiment with further interesting results.

Furthermore, the independent variables must be changed so that they clearly elicit the single intended emotion, or to change the focus of research to focus on more broader emotions on a positive to negative scale. This would ensure that the correct emotions are attributed to the results of the dependent variables to truly find the most accurate correlation between emotional experiences and charitable behaviors. Also, holding this experiment in a real situation as opposed to an online survey to maximize the immersive experience for the participants would be the ideal condition to hold this experiment, should it be replicated in the future. By doing so, participants could be misled to believe that the actions of altruism that they commit to will have real effects, and the experiment could be

disguised as a charity survey to ensure more honest responses.

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