Impact of Textual Content on Crowd-Funding Campaigns

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ABSTRACT

Crowd-funding has become popular in recent years. Many researches have been done to understand how different driving factors help the campaigns to reach their funding goal. Recently researchers found that the phrases used in the campaigns also have predictive power [5]. In this project, we verified that finding with interview and crowd-sourced surveys. We took some real campaign from one of the popular crowd-funding site called Kickstarter and manually included the phrases reported in [5]. We then asked the participants about their opinion regarding the modified campaigns. It is found that when the participants were not aware about the inclusion of the phrases, the phrases did not significantly drive their decision but when they were asked to particularly focus on the textual content of the campaign, more people liked the phrases which were predicted to have positive impact on the backers. We hope these initial findings can guide us to design some study which can observe the impact of textual content more precisely.

Author Keywords

Crowd-Funding; Kickstarter; Textual Content;

INTRODUCTION

Crowdfunding is a well established technique for raising funds in different industries such as technology, creative art, music, film and so on. The basic idea of crowdfunding involves raising many small amounts of money from a large number of people to fund a project or business venture. This concept is becoming increasingly popular because it does not necessarily require prior connection and reputation to successfully raise funds. Rather the new entrepreneurs can come up with their ideas and request funding from the crowd. Entrepreneurs use an open call on the internet to recruit, or crowdsource, fundraisers [1]. Crowdsourcing at its basic form is a problem-solving approach that outsources work to a large community. This can be done to gain knowledge, complete tasks, generate idea, and much more [7]. When entrepreneurs use crowdsourcing to fund their projects, people from a large pool can judge their proposals and decide whether they would like to fund the project or not. As this platform targets a large community, even a small contribution from each person can eventually allow the entrepreneurs to

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reach their goal. Although the basic concept of crowdfunding is becoming popular, there are many instances where the projects fail because they cannot raise their target fund within some deadline. Additionally, crowdfunding requires a large amount of work for the project creator and having information about how best to organize a campaign could be very beneficial [3]. Even though a large amount of research has been done in this domain to study why certain projects fail to raise their target funds, there is still a lack of information on how to best organize and present a crowdfunding campaign. Our project goal is to investigate the role of language in crowdfunding campaigns. More precisely, we would like to address the following research questions:

RQ1 Can we verify the impact of textual content on Kickstarter campaigns? If yes, can we measure this impact?

RQ2 Can changing the text have an effect on the amount pledged?

Our study aims to examine the correlation between textual content and the success of a campaign. We want to see if there is an effect between the textual content and the amount a person likes a campaign, and more importantly, the amount they are willing to pledge to back a campaign. Our study looks at campaigns as a whole, but we also take a close look to compare specific paragraphs within campaigns. We analyze our results based on gender, survey method, and familiarity with Kickstarter.

RELATED WORK

We began our project by finding and reviewing some literature in this research area. We looked into crowd-sourcing and research on crowdfunded campaigns. We identified some research which examined the effect of the presence and quality of a video in relation to the success of a campaign [2, 6]. This research provided an example of studying different factors that contribute to the success of a Kickstarter campaign. We also reviewed literature on how updates [4, 6] and the language [5, 2] used in the campaign changed the funding a campaign received. Specifically, we drew inspiration from Mitra and Gilbert who analyzed over 45,000 Kickstarter campaigns which had reached their last date for collecting funding [5]. They were able to generate a list of phrases that have been correlated either positively or negatively with predicting the success of a Kickstarter campaign. Although these phrases tend to be used in successful campaigns, we can not know why they are used, or if the phrases actually motivated the pledgers. We extend this research to look into a persons preference of different campaigns based on the language used.

METHOD

We conducted experiment in three phases. In the first phase, we did face-to-face interview with the students in the UIUC campus. In the second phase, we conducted a similar study in Amazon Mechanical Turk(MTurk) and in the third phase, we did another comparison experiment in MTurk.

Before going deep into each phases, let's discuss about the topic of the study. In order to understand the impact of textual content on the success of Kickstarter campaigns, we chose some actual business campaigns from the Kickstarter website. We selected campaigns from 3 different categories (1) Design (graphic design) (2) Film and (3) Music (Jazz and Rock). From each category, we took three campaigns. So in total we used nine campaigns for our study.

For each campaign, we removed the video of the campaign so that the quality of the video will not have any impact on the decision of the participants. We also set the pledged amount for all the campaigns as \$1000 to equalize the effect of the amount (sometimes people get discouraged to pledge a project if they claim a large amount of money). We also set the number of backers as 0 so that the participants will not be encouraged to take their decision based on the number of backer, rather they will try to judge the merit of the campaign by themselves. We chose one picture from each campaign to express the basic theme of the campaign.

Our main focus was the text of the campaigns. That is why, we took the list of phrases reported in [5]. There were two lists in [5]. The first list showed the top 100 phrases which signaled that the project will be successfully funded. We call them the positive phrases. There were another list of top 100 phrases which signaled that the project will not reach their funding goal. We denote this list as negative phrases. We considered only these 2 lists of top 100 phrases in our project (although the paper reported a larger set of positive and negative phrases, but we did not consider those phrases because the impact of the phrases of the larger lists was much less than the impact of the top 100 phrases). For each campaign we created 2 versions. In one version, we added some positive phrases. We will denote this version as positive campaign and in the other version we only added some negative phrases from the above mentioned list. We will call that version as the negative campaign. On an average, we included 10 phrases for each version of the campaign. However in the process of adding these phrases, we tried our best to keep the theme of the content intact so that the main goal of the campaign does not get hampered. In total we had 9 positive and 9 negative campaigns. Here are three example paragraphs (one from each category) those show how we changed the campaign to generate a positive and negative version:

Design Original

All the pledgers will be the first ever to receive the gorgeous gift-wrap and gift-tags, depending on your pledge level. No one else will receive it first! Then they will be available on my various online shops, through my current stockists in England and I will also be showcasing it at my upcoming trade show in April. Exciting times ahead.

Positive

All the pledgers will be **given the chance to first** receive the gorgeous gift-wrap and gift-tags, depending on your pledge level. No one else will receive it first! **Your support will make the product accessible to the community through** my various online shops, through my current stockists in England. **The project will be showcased** at my upcoming trade show in April. Exciting times ahead.

Negative

All the pledgers will **receive an honorable mention postcard with the set of gift tags**, depending on your pledge level. No one else will receive it first! Then they will be available on my various online shops, through my current stockists in England and I will also be showcasing it at my upcoming trade show. **You can go to my personal website for more details about the trade show.**

Film

Original

So far we've been able to self fund but need to raise the funds to complete the last phase of filming and post production. Editing a documentary takes time as the material is a collection of disparate, authentic, unplanned, and inquisitive moments. Crafting the story is going to be fun, exciting and something we can't wait to jump into full time. Thank you for believing in our movie and us!

Positive

So far we've been able to self fund but need to raise the funds to complete the last phase of filming and post production. We would greatly be thankful for your help. Editing a documentary takes time as the material is a collection of disparate, authentic, unplanned, and inquisitive moments. Pledgers will be recognized in the credits of our film. Crafting the story is going to be fun, exciting and something we can't wait to jump into full time. Thanks a lot or believing in our movie and us!

Negative

So far we've been able to self fund but need to raise the funds to complete the last phase of filming and post production. We will soon be at the editing phase. Editing a documentary takes time as the material is a collection of disparate, authentic, unplanned, and inquisitive moments. We have lots of stories and clips to share. Crafting the story is going to be fun, exciting and something we can't wait to jump into full time. We hope to get this project finished within one year of the funding date. Thank you for believing in our movie and us!

Music Original

All the money we make from this project is going into making our CD's, posters, artwork costs and covering the cost of the venue for our launch night. We hope you enjoy listening to this music as much as we enjoy playing it, every contribution from you guys brings us closer to succeeding with this project. If you've stayed till the end of this thanks for reading and being a part of our musical journey.

Positive

All the money we make from this project is going into making our CD's, posters, artwork costs and covering the cost of the venue for our launch night. All supporters will receive my sincerest thanks, and I will mention your name on the inside of my album. Please note that space in the album is limited. We hope you enjoy listening to this music as much as we enjoy playing it, every contribution from you guys brings us closer to succeeding with this project. Thank you for your continued support. If you've stayed till the end of this thanks for reading and being a part of our musical journey.

Negative

All the money we make from this project is going into making our CD's, posters, artwork costs and covering the cost of the venue for our launch night. I have not been able to finish this album in the past because of problems on the part of the studio. I now only need one thing you to help support our efforts. Even a dollar short of our goal, we lose it all. We hope you enjoy listening to this music as much as we enjoy playing it, every contribution from you guys brings us closer to succeeding with this project. If you've stayed till the end of this thanks for reading and being a part of our musical journey.

With such modified campaigns we did three phases of experiments which are described below:

Face-to-face interview

This is the first phase of our experiment. Here each member of our group met some students personally to know their opinion about our campaigns. To meet students from diverse major, each one of us went to different parts of the campus like Illini Union, main quad, business school, digital computer lab and so on. We offered some free donuts for taking part into this study. In total, we met 57 students for face-to-face interview. When one of us met one participant, we explained that we are conducting a study on Kickstarter campaigns. We also explained about the goal of kickstarter website in two sentences. After that we randomly chose one modified campaign and asked them to read the campaign. Once they are done reading, we handed over a survey form which had three parts. In the first part, we asked specifically about the campaign and in the second part we asked some general questions about the campaign. This is worth mentioning that when we gave one campaign to read, we mentioned that it is a real campaign collected from Kickstarter but never mentioned that we did some modification in any part of the campaign. In the first part, we asked in a likert scale of 1 to 7, how much they liked the campaign. We also asked them to assume a hypothetical situation where they have \$100 to pledge for that campaign. They had to mention an amount from that fund which they wanted to pledge for the campaign. However we gave them the option to not pledge any amount at all.

In the second part of the survey we asked the participants some general questions about kickstarter. Some important question were: 1) interest level in entrepreneurship, awareness about kickstarter or similar websites, previous experience of pledging in kickstarter, the factors those influenced their decision of pledging for our campaign etc. In the third part of the survey, we asked some demographic questions like age, profession and gender. The survey form is attached as an appendix at the end of this report.

MTurk Experiment

In the previous stage, we managed to gather data from only 57 participants which is not sufficient to measure the impact of the modified text. That is why, we decided to run the same study in Amazon Mechanical Turk. We randomly showed one campaign to the MTurk workers and asked them to do the same set of activities as we asked the participants in the face-to-face interview. However in the survey we asked two extra questions along with all the previous questions to make sure that the workers have atleast open the campaign provided through an url in the HIT. For each task, we offered \$0.05 to each worker. For each version we tried to collect around 20 responses.

Comparison Task

In the above two phases, we tried to understand the impact of textual content on the participants' decision in a passive way. In the third phase, we studied the same impact but in an active way. For that, we took one paragraph from both positive and negative version of the same campaign and posted it in the mechanical turk. We chose such a paragraph from the campaign were we included maximum number of foreign phrases. With those two versions of the same paragraph, we asked the user to choose which one they like more than the other. Here also we asked them to fill out a similar survey mentioned before but with few changes. Here we explicitly asked them why they like one paragraph over the other. We conducted this paragraph comparison study in MTurk for all the nine campaigns of our database.

In the next section, we will discuss about the analysis of results of all the above phases.

EVALUATION

In the evaluation section, we show the performance of the study in each phrase. We primarily analyzed the score of likeness and the pledged amount in the first two phases. We also looked at some other dimensions of the data we collected during our survey like the impact of gender, interest in entrepreneurship, awareness about crowd-funding etc.

Face-to-face Interview Results

For the face-to-face interview phase of our study, we were able to recruit a total of 57 participants (with a reported total of 31 males and 23 females). The average age of participants was 20.09 years with the majority being students of University of Illinois. The participants were from a wide range of departments on campus including Computer Science, Psychology, Economics, Political Science, Art and Biology. We analyzed how much the participants liked the campaigns (Likert scale of 1-low to 7-high) and found that the average was almost equal for positive and negative campaigns across all categories, with negative actually slightly higher in Design and Film (Figure 1a). The average total across all campaigns was 4.3 for the positive condition and 4.5 for the negative

Table 1: Top reasons for not previously pledging to Kickstarter.

No.	Reasons for Not Pledging Before
1.	Lack of money for pledging
2.	Lack of good quality campaign
3.	Not visited ant crowd-funding website
4.	Campaign's funding goal already reached
5.	Prefer to buy the finished product
6.	Not interested in investing in a campagin
7.	Not asked by anyone in particular
8.	Do not personally know anyone interested in startups
9.	Do not know how to pledge

condition. When using T-test for probability we found none of these results to be statistically significant (p; .05) (Figure 1c).

The total reported average amount pledged for participants was \$11.00 for positive and \$14.00 for negative campaigns (Figure 1b). The difference in amount pledged for Design and Film was not significant and in fact the average was higher for the negative campaign. Similarly, for the category of Music the average was also higher for the negative condition (Figure 1c). However, the difference in averages was quite large, \$4.00 for positive vs \$19.00 in the negative condition. When the probability through students T-test was calculated for the pledged amount in Figure 1c, for design and film category the results are not statistically significant (p >0.05). However in case of music we found statistically significant result (p = 0.02) but it does not support the assumption that the positive phrases make the campaign more successful than the negative ones.

In addition to the quantitative analysis of the data from the in-person interviews, we examined the participants given reasons for not previously pledging to a Kickstarter campaign. These reasons were given by participants who were aware of Kickstarter prior to this survey, but who had not pledged to a real Kickstarter campaign yet. The top answers are shown in Table 1. The most frequent answer we saw was a lack of money to pledge. This is probably reflective of the demographics of our participants pool since they were mainly students. Another frequent response was not personally knowing someone who has started a campaign or lack of receiving a personal request to pledge. This reason shows participants are more keen to help people who they know personally. Therefore, perhaps the concept of friend-sourcing is more acceptable to the participants rather than crowd-sourcing.

MTurk Experiment Results

For the Amazon Mechanical Turk study we recruited a total of 285 participants, with a reported 141 male and 96 female participants. The average age of participants was 32.4 which is higher than the interview participants. The participants were from a wide range of professions including teacher, chemist, journalist, data entry operator, and hotel front desk manager. The reported professions of the MTurk participants reveals that most of the participants are employed in occupations

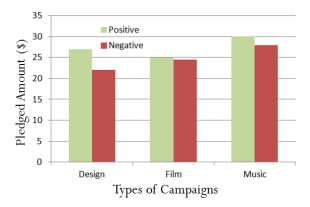


Figure 3: This bar plot shows the average amount pledged for the face-to-face and Mechanical Turk data combined together.

where they are required to sit in front of a desktop/laptop. The total average reported amount the participants liked the campaign they reviewed is shown in Figure 2a. Again, the average liking scores are almost equal for the positive and negative conditions across all categories. The total average for the positive condition was 5 and for the negative condition was 4.9. Our data for Mechanical Turk shows participants liked the positive campaign slightly more than the negative campaign for all categories except Design (5.3 for positive vs 5.4 for negative). However, none of these differences are statistically significant, as shown in Figure 2c.

The total reported average amount pledged for participants was \$30 for positive and \$27 for negative campaigns (Figure 2b). The difference in the average amount pledged was the greatest for the Design campaigns, \$33 for positive and \$12 for negative. In all categories the positive version of the campaign received a higher average amount pledged than the negative campaigns. However, the difference is small for Film and Music. Using a T-test for probability on this data we found no statistically significant differences in our data (Figure 2c. The difference in the amount the participants liked the campaigns for the Design category had the smallest p-value (0.25). The Film category had the highest p-value (0.81) for the pledged amount. Overall the average pledged amount for MTurk is higher than the same of face-to-face interview for both positive and negative campaigns. This is because some MTurk users pledged around \$80 - \$90 which was very rare in interviews. One possible reason could be because most of the MTurk workers are professionals, they may tend to pledge more than the students.

Combined Result for interview and MTurk

When we analyzed all of the data combined (face-to-face interview and the Mechanical Turk survey) we found the largest difference in average pledged to be in the Design category. For Design the average amount pledged was \$27 for the positive campaigns and \$22 for the negative campaigns. For all campaigns the average pledged was at least \$22 and the highest average was \$30 for positive Music campaigns (Figure 3).

Impact of Gender

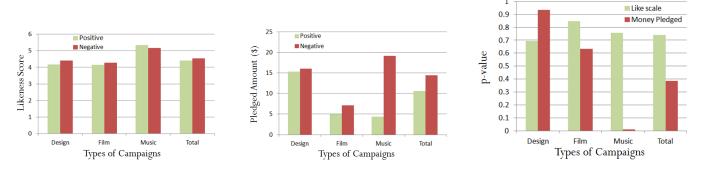


Figure 1: Results from face-to-face interview: (a) average likeness score; (b) average pledged amount; (c) p-value from ttest for average likeness and pledged amount.

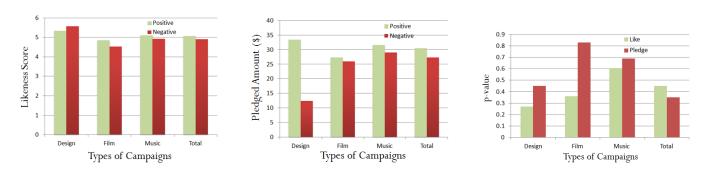


Figure 2: Results from experiment conducted in Mechanical: (a) average likeness score; (b) average pledged amount; (c) p-value from ttest for average likeness and pledged amount.

In the survey, we also asked the users about their gender. About 85% participants reported about their gender. Based on that, we tried to analyze whether gender has any effect of the pledged amount or the liking score. To understand the impact we plotted the average liking score for male and female participants separately for both interview and MTurk data in Figure 4. In the figure, the pair of bars in the left side show the result for the in-person interview whereas the two pairs in the right represent data from MTurk. The figure shows that for interview, the female participants liked the campaigns slightly more than their male counterparts (average rating of 4 for males vs 5 for females). But in MTurk, the male participants showed higher average (4.9) likeness score than the average for females (4.5). However the difference is slight and not statistically significant in both the scenarios. We also analyzed the average pledged amount for male and female participants both in MTurk and in interview (Figure 5). Interestingly in all the four cases the female participants pledged more on average than the males. We are not sure about the exact reason behind this but it may happen because most of the startups are launched by males. That is why they might become more concerned about the pledging amount and tried to judge the merit of the campaign more critically.

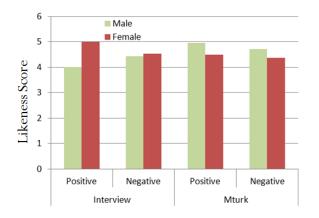


Figure 4: Gender based average likeness score for face-to-face interview and Mechanical Turk survey data.

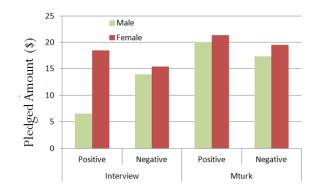


Figure 5: Gender based average pledged amount for face-toface interview and Mechanical Turk data.

Interest in Entrepreneurship

We also analyzed the data based on reported interest in entrepreneurship. We wanted to look at this correlation because we were interested to see if a person had a higher interested in entrepreneurship are they more likely to back other entrepreneurs. We found for the in-person interview data a fairly normal distribution of reported interest in entrepreneurship. For the in-person data most people (24%) marked 5 for their level of interest. In contrast, for the Mechanical Turk survey, most participants (34%) marked 7 for their level of interest (Figure 6). When looking at the participant's level of interest in comparison to the amount they pledged we found a great difference in the data between in-person interviews and Mechanical Turk. Those that reported a level 7 interest in the Mechanical Turk survey pledged an average of \$55 compared to those that reported a level 7 interest in the in-person interview (average \$15). In fact, the MTurk participants with a level 7 interest pledged a much higher average than the rest of the participants across the board (Figure 7).

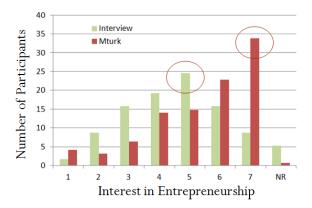


Figure 6: The histogram of interest in entrepreneurship in a Likert rating scale.

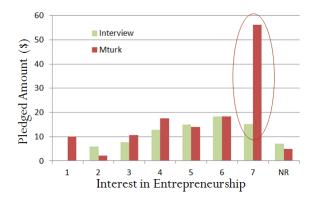


Figure 7: Pledged amount against interest in entrepreneurship.

Awareness about Kickstarter/Crowd-Funding

To understand whether the participants have prior knowledge about crowd-funding, we asked the participants if they had heard of Kickstarter prior to this study in the survey. Figure 8

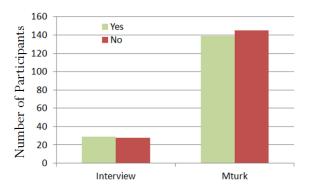


Figure 8: Number of participants who have heard of Kickstarter prior to our study.

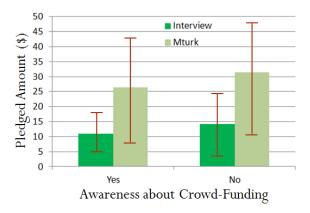


Figure 9: This chart shows the average amount pledged by participants who have and who have not heard of Kickstarter prior to this study.

shows the average awareness of crowd-funding for all participants. We can see that in both categories almost 50% participants were familiar with Kickstarter or something similar to that.

We examined the relationship between prior knowledge of Kickstarter and the amount pledged for our sample campaigns. We found that in both cases, previously heard of and not heard of Kickstarter, MTurk workers gave more. The difference given between the two conditions was not large. The face-to-face interview group that had heard of Kickstarter gave an average of \$10 vs \$14 of those who have not heard of it before. The Mechanical Turk workers familiar with Kickstarter pledged an average of \$26 vs \$31 of the unaware participants. In both groups the participants not familiar with Kickstarter actually pledged more money (Figure 9).

Time Analysis

We also noted the average time spent per assignment during our Mechanical Turk survey. The average total time was 4.5 minutes for positive campaigns and 5.2 minutes for negative campaigns (Figure 10). This result is reassuring because it is similar to in-person interview time taken to complete the study. From that we can possibly conclude that on average users were reading through the campaign(assuming that the

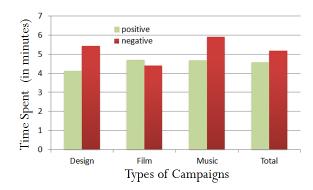


Figure 10: Average time taken by MTurkers per assignment.

participants of the interview actually read the campaign) and then taking time to think about their responses to the survey question.

Results for Comparison Task

In the third phase of our study, we asked MTurkers to compare just two paragraphs where the main theme of both the paragraphs were same but one paragraph contained some positive phrases whereas the other one contained some negative phrases. An example of the paragrphs we used is shown in Figure 15. The positive/negative phrases are highlighted in each. The participants were asked to view both paragraphs and then pick which one they liked better. We had a total of 109 participants (54 reported males and 33 reported females). The results show that more participants preferred the positive version (65 for positive vs 43 for negative). Using a chisquared test we found this result to be statistically significant (p=0.034).

When looking at the results of our campaign comparison and paragraph comparison study we were able to extract some common deciding factors for pledging. These are reasons participants listed as being a factor in their decision for how much to pledge to our campaign. Table 2 shows these common deciding factors for face-to-face and mturk study whereas Table 3 lists the factors mentioned by the participants in the comparison task. Some specific comments from participants in our study are as follows:

I don't like that B says it "needs money" - kickstarter folks tend to focus more on what they are going to do, because obviously they need money - but they also need enthusiasm on the part of donors or they won't get donors.

We get to be listed in the credits when for our contributions so it shows that our donations and help will be acknowledged.

I wasn't particularly excited by **the image**. I did like the stopmotion idea. It sounds like a fun project.

I like the **wording** better in the second one. It feels more direct and easier to process. Plus more inclusive of the donor.

I felt that B had a slightly more positive vibe ("We have lots of plans for the series"). It was also a bit more to-the-point ("Even a dollar gets us closer to our goal)

Table 2: Important factors reported for pledging and not pledging.

No.	Deciding factors for corresponding decisions
1	Liked concept/theme of campaign
2	Image on campaign
3	Liked concept/theme of campaign
4	Motivated by the rewards
5	Type of music, musicians (campaign category)
6	Doesnt have money
7	The finished product (liked/disliked, is it useful?)
8	Felt like helping the creator of the campaign
9	How close the campaign is to the goal

Table 3: Important factors reported for pledging and not pledging.

No.	Driving factors for corresponding decisions
1	Liked concept/theme of campaign
2	Image on campaign
3	Liked concept/theme of campaign
4	Motivated by the rewards
5	Type of music, musicians (campaign category)
6	Doesnt have money
7	The finished product (liked/disliked, is it useful?)
8	Felt like helping the creator of the campaign
9	How close the campaign is to the goal

Amount of detail, ability to hear the music (since this was about making an album), and **number of current backers**.

We can see that in some cases the participants specifically noted the language of the paragraph, but in other cases they liked some other elements: feel, image, category, helping others, the reward. Some participants even listed the negative phrases as something they liked about the text. We further discuss these results in the next section.

DISCUSSION

From our sample of 57 participants, we find that the average campaign like score was 4.3 in the positive case, and 4.5 in the negative case. This shows that the negative case was rated as being slightly better than the positive case. Looking at the results of our T-test, we find that this disparity is likely due to chance. This means that the inclusion of the positive or negative phrases in each campaign had little or no effect for how well the campaign was received. We also find that the average amount given to the positive campaign is about \$11, while in the negative case participants pledged \$14. Our evaluation indicates this result is not significant, except in the case of music. While the positive music campaign was rated slightly higher, respondents said they would pledge less. This could be due to our relatively small sample size, so we observe the result with additional survey data. We hypothesize that although the textual content may have some effect on how the campaign is rated or how much is pledged, the magnitude of the effect is small when the campaign is taken as a whole. It may also be the case that these phrases tend to be used in better campaigns, but do not necessarily motivate the user to give more, or rate campaigns more highly. Further research could look at how these phrases are commonly used, or how many phrases are need to elicit a significant response.

Table 1 shows some of the reasons that those individuals who have previously heard of Kickstarter did not contribute in the past. We see that the most frequent response given indicates that the respondents were primarily concerned about the cost of the project. This is probably due to respondents being predominantly students. Many other common reasons focused around the idea that participants had not used crowd-funding before, or that they were not interested in crowd-funding in general. Another interesting subset of responses indicated that respondents had not been asked by anyone, or did not personally know anyone financing a project through crowd-funding. This may indicate that social media is an effective way to raise funds, and may explain the increased success rates of projects that connect their campaign with Facebook or other social networking sites.

In our survey of individuals on Mechanical Turk, we find an older audience, most of which has a job. The differences between the results of our in-person survey and Mechanical Turk survey may be explained by these demographic differences. While the former group tends to be predominantly comprised of young college or high school students, the second group was older, and may have different priorities or a dissimilar income. From our 285 participants, we find that the average like scale is similar with positive and negative averages being about 5 and 4.9 respectively. In all cases, the positive version had a higher amount pledged than the negative versions, and over twice as much in the case of design. This is interesting to note, and may show that the text in the positive examples actually did play a role. Looking at the results of our evaluations from this survey, we find that although the p-value is lower than in our previous in-person survey, they are still not low enough to consider the result statistically significant. This reinforces the idea that although some different may be observed, the magnitude of the effect seems to be small. When looking at the impact of gender, we found that males tended to rate the campaigns slightly higher, but not a significant amount. The more interesting result is that in all cases, female participants pledged more money for the campaigns than did male participants. The reason for this is left for further study, but we hypothesize that it may be the case that females tend to be more generous when giving to others, or the females surveyed preferred the design campaigns in question more so than did the male participants.

Next, we find an interesting difference between Mechanical Turk and those taking the survey in person. When looking at interest in entrepreneurship, we find that those who were administered the survey in the first case had a somewhat normal distribution. The distribution for those who took the survey online was heavily towards the high end of the scale, showing a higher interest. We hypothesize that while a normal distribution would be expected, those on mechanical turk may see themselves as more enterprising, or perhaps self-employed. It may also be the case that the data obtained from Mechanical Turk was of lower quality, and the participants cared less

about the result, so tended to pick the largest value. In addition to this result, we found that those that self-identified as being most interested in entrepreneurship pledged the most on average. This result is intuitive, as entrepreneurial individuals may see giving to the cause as an investment, or perceive giving as helping a fellow entrepreneur.

About half of the participants in both the online and in-person scenario had previously heard of Kickstarter. We found that those who had not previously heard of Kickstarter tended to give more. Although the result was not large, it is interesting to note. It may be the case that those familiar with Kickstarter had higher expectations for a campaign, or took the absence of some features, such as money pledged thus far, on the campaign to be cause for concern. These results were reinforced by later comments we collected about why participants did or did not like a campaign. We also saw, interestingly, that those on Mechanical Turk pledged much more in general, than those that were not. This may be caused by our earlier finding that many of those in the in-person portion of our study were young students. They may not have the disposable income that those with a full time job have. It could also be due in part, to our previous hypothesis that workers on Mechanical Turk were not as invested in the ideas, and rather just chose an arbitrary amount. In the last part of our project, we looked at the effects of paragraphs in isolation. When presented with both a positive and negative version of the same text, 65 preferred the positive while 43 preferred the negative case. This is important, because it tells us that the text does, in fact, have some measurable effect on preference. Although a large difference in preference between the negative and positive campaigns was not observed, we know that the text could have some effect. From this, we can hypothesize that the magnitude of the effect may not be significant in the context of a campaign. It could also be the case that a larger number, or more specific phrases could have some measurable effect. In future work, it would be helpful to have a standardized way of changing each campaign, and the context of each phrase should be looked at. Also to note, in the original paper by Mitra et al.[5], they mention reciprocity as a motivating factor for giving. It is important to look at if it is true the language making the difference, or rather the promise of some reward.

One further interesting point is that although more individuals preferred the positive version, many individuals left comments highlighting the negative phrases of various campaigns as being the most appealing. While many liked the idea of having their name in an album or being recognized, many did not. This emphasizes the idea that although some phrases may tend to be positive or negative on the whole, personality differences determine which phrase individuals actually prefer. These personality differences may provide an avenue for further work and could be used to modify campaigns to better fit the personalities of those that may give to them.

In the sample campaigns, we set the number of backers as 0 so that the participant can take their decision in an unbiased manner (as they see that no one has already backed it, so they will try to take an intelligent decision depending on the merit

of the campaign). But in the comment section, some participants mentioned that they chose not to pledge any amount for the campaign because no one else has ever pledged for the same. So in other way, we can say that they could not trust the merit of the project. So the strategy used in our experiment had some drawbacks as well.

CONCLUSION AND FUTURE WORK

After completing this study we have not found a significant correlation between the positive predictive phrases listed in [5] and higher likelihood to pledge to a campaign, or to pledge more to a campaign. This is also consistent with our data for the negative condition. When directing the participants to directly examine the textual content in our paragraph comparison experiment, we did see a significant preference toward the positive predictive phrases. However, in a real Kickstarter campaign it is likely the results will be closer to our campaign comparison study. It is possible we did not use them in the same way and therefore our study does not accurately examine the impact of this textual content. We have only been guessing how exactly these phrases were used in the successful/failed campaigns that were previously analyzed. However we believe that while language will have some influence on motivating pledgers, there are many other different factors that contribute to the success or failure of a campaign.

Some options for continuing this work would include interviewing participants who are active on Kickstarter and having an actual in-lab study. Asking people to complete our survey around campus does not put the participant in a focused setting, they could be distracted or try to rush through our survey. An in-lab study would allow us to gain more of the participant's attention. If we were to continue this work we would also create a standardized way to modify the campaigns. For our study each of us modified some campaigns separately. It is possible we did not consistently increase the positivity/negativity of the campaigns. We also think looking into how other factors (video, rewards, social media) impact a campaign in relation to language is a worthwhile study. Many participants listed these factors as deciding reasons for pledging so it would be informative to see how they affect the success of a campaign when combined with positive or negative phrases. Lastly, we present the idea to modify campaigns based on personality traits. It is possible certain personalities tend to favor certain types of language. Perhaps textual content targeted based on personality traits will have have stronger impact than a general positive or negative phrase.

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Kickerstarter Campaign Survey

This study is being conducted as a class project for CS 565 - Human-Computer Interaction. The purpose of this research is to gain knowledge regarding crowd-funding, specifically Kickstarter. We would like you to answer the following questions regarding the Kickstarter campaign you have been shown.

Note: If you choose to partake in this study, your participation will be completely voluntary. You may choose to withdraw from the study as a participant at any time. You will not be penalized if you decide to withdraw as a participant.

Kickstarter - Campaign

The following questions will be used to collect information about the campaign we have showed you.

Please rate how much you liked the Kickstarter campaign.

Did not like at all O O Really liked

How much would you be willing to give for this project?

Please indicate an amount between \$0 and \$100

Kickstarter - General

The following questions will be used to collect information about your experience with Kickstarter and to get a better idea of your response to the campaign we have showed you.

1. How interested are you in entrepreneurship?

Please rate your level of interest.

2. Have you heard of Kickstarer prior to this study?

If yes, please continue to question 3. If no please continue to question 6.

- Yes
- No

3. Have you ever pledged to back a Kickstarter campaign? If yes, please continue to question 4. If no please continue to question 6.
○ Yes
○ No
4. If 'yes' to #3, about how many times have you pledged to back a Kickstarter campaign?
5. If 'no' to #3, why have you not pledged to back a Kickstarter campaign Please write a few reasons why you have not pledged before.
6. When deciding how much to give for the campaign we showed you, what factors influenced your decision? Example: things you liked, things you didn't like, and so on
Demographics
The following questions will be used to collect demographic information and will not be associated with any individual participant identifier. We will only use this information to summarize information about the participant pool of our study. Answering these questions is optional. You may respond to all, some, or none of the items
1. Age

2. Gender
3. Profession
Example, 1st year student in CS, English Professor, etc
Submit
Never submit passwords through Google Forms.
Provide Consta Provi
Powered by Google Docs
Report Abuse - Terms of Service - Additional Terms