Pilot Study Examining Differences in Perceptions of Small versus Large
Environmentally Focused Nonprofit Organizations & Donor Intent to Give
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Abstract

Deciding on which charity to support through a donation can be a difficult decision, and these decisions are oftentimes made based on perceptions versus charity focus and effectiveness. The purpose of this study was to examine perceptions of people within my local community regarding their reported likelihood of donating to small versus large environmentally focused nonprofits. The results of this study indicate that there were no significant differences between community members' preferences for local (small) and regional (large) charities in terms of intent to donate. This research also shows that there are no significant differences between small and large nonprofits in terms of their focus areas as measured by their key terms in their mission statements. This research can help inform local community members about the similarities and differences between smaller local charities and larger scale charities, and understand the importance of supporting local charities.

Introduction

Nonprofits depend on the generosity of citizens, foundations, and grantors to fund the execution of their missions, and these organizations have the potential to make substantial positive impacts on humanity and the environment. However, deciding on which charity to support via a monetary donation can be a difficult decision (Ein-Gar & Give'on, 2022). These decisions are oftentimes made based on perceptions of what makes a nonprofit impactful such as efficiency or cost effectiveness (Byrd & Cote, 2016; Leardini, Rossi & Landi, 2020; Spiteri, 2022) and ability to scale (Byrd & Cote, 2016), specific donor motivations (Degasperi & Mainardes, 2017; Leardini, Rossi & Landi, 2020; Waniak-Michalak & Perica, 2021), adherence to local norms versus global or self identity norms (Lindersson et al., 2019), and geographic scale (Chapman et al., 2022).

Nonprofit Characteristics

Efficiency pertains to the organization's overhead-to-program expense ratio and scaling pertains to the organization's ability to grow its footprint and therefore its impact (Byrd & Cote, 2016). This focus on overhead-to-program expense ratios can result in what is known as "starvation cycles" (Byrd & Cote, 2015, p. 57) where the viability of the organization is at significant risk. For example, an efficient organization would run on a very low budget. This leads to "starvation cycles" because the organization is trying to be as lean as possible to appeal to funders and donors resulting in insufficient resources to implement their programs. Given that efficiency and scale are significantly influenced by resource availability, smaller organizations may be more likely to suffer from starvation cycles, which could negatively impact their ability to execute against their mission. In fact, Mitchell & Calabrese (2022) highlight that an organization's trustworthiness is erroneously a function of their ability to minimize overhead, which negatively impacts an organization's ability to executive against the mission.

Geographical proximity and scale also influence donor behavior. For example, Chapman et al. (2022) found that international charities tend to share a donor base and local charities also tend to share a donor base. This implies that charities can tap into the donor base of other charities focusing on similar causes within the same region. While not specifically stated in their research, this finding also implies that some donors may have a preference for certain geographical regions and scales.

Donor Characteristics

Research conducted on donor motivations and behavior indicate that several potential factors come into play. For example, levels of perceived trust, organizational characteristics, perceived level of reward, organizational leadership influences, personal benefits or interest in future services, characteristics of those benefiting, and environmental influences (Degasperi & Mainardes, 2017). Similarly, Leardini, Rossi & Landi (2020) found that for environmental nonprofits specifically, financial efficiency, organizational transparency, assets indicating degree of financial sustainability, and brand image promotion through fundraising efforts (similar to trust, organizational characteristics, and leadership influences) were significant predictors of donor giving. Finally, research conducted by Waniak-Michalak & Perica (2021) also found that trust is an important factor in giving, as is the cause area and age of the organization. NGOs that focus on helping animals and the environment receive the least amount of financial support, but it isn't clear if there is less concern for that cause or simply less trust in those types of cause areas. However, earlier research has shown that the bias in favor of anthropogenic causes is minimal at best in controlled trials (Liebe & Jahnke, 2017). Therefore it is important to control for nonprofit causes when exploring differences in intent to give based on other factors such as size of charity, scale, efficiency, etc.

Donor degree of identification with local versus global norms is another donor characteristic to consider when exploring causes for intent to donate. Local norms pertain to a person's specific circumstance or local setting. For example, if people within a given community recycle at high rates, we would expect that to influence the behavior of other people in that community. Lindersson et al. (2018) conducted an experimental study to test the hypothesis that a local norm superiority effect plays a role in donor intent. Specifically, the researchers hypothesized that potential donor's local norms associated with their immediate environment would be superior to global norms (outside their immediate environment). However, the results of their study did not support the research hypothesis indicating that descriptive norms (local, global or social identity) are equally important in determining a donor's likelihood of donating to a given nonprofit.

The current study did not incorporate donor characteristics into the analysis given that it was a pilot study focusing on nonprofit characteristics specifically. However, the participant pool consisted of relatively homogeneous participants who were all from the same local community, therefore it is assumed that donor characteristics are mostly

controlled through the selection of the participants. Also, donor perceived trust was likely held constant given that only charities listed as "Give with Confidence" were selected for the research survey, and all of the charities had an environmental focus.

Problem Statement

Understanding potential biases for donating to large scale global charities as opposed to small and more local charities is important to know to help mitigate these biases and generate more equitable giving. However, based on a review of the literature, there appears to be a lack of research in this area. While some of the research suggests that nonprofit size may be a factor given associations with age, efficiency, scale, etc. it is not clear if an actual bias exists based on these factors. Specifically, it is not known if donors are more or less likely to donate to a large-scale, more widely recognized charity, and if so, if those decisions coincide with actual differences in the missions of large versus small nonprofits or if potential biases are coming into play. Answering this question can help environmental nonprofits and prospective donors understand the real versus perceived tradeoffs of supporting larger more global organizations versus smaller local organizations.

Purpose of the Study

The purpose of this pilot study is to determine if there are differences between large (net value >= \$50M) and small (net value <= \$3.5M) environmental nonprofits in terms of (1) local community members' reported likelihood to donate and (2) the nonprofits' actual mission statements focus areas. The research hypothesis states that local community members will report a greater likelihood of donating to large nonprofits than smaller local nonprofits, and that despite this bias, smaller nonprofits will not significantly differ from larger nonprofits in terms of their focus areas.

Methods

This is a comparative non-experimental study. The researcher attempted to control for motivational factors such as trust and environmental influences by including only environmental nonprofits that were evaluated by a nationally recognized charity evaluator organization (Charity Navigator) and found to be trustworthy based on a seal of "give with confidence". This study is using both primary questionnaire data and archival data available online. The primary data being collected does not include any demographic or sensitive data, and given that this is a pilot study, IRB approval is not

required. The survey data is being collected to understand local community members' preferences for small versus large environmental nonprofits (if any preferences exist), and to provide insights as to their reasons for those choices (e.g., organizational characteristics, personal benefits, leadership influences, perceived level of reward, and who benefits most) by answering an open-ended question asking why they selected that charity. The online archival data was used to assess the probability of the nonprofit's mission statement aligning with a set of predetermined environmental keywords.

Data Acquisition & Description

Two forms of data were collected for this study. The first is questionnaire data obtained from 30 people in the local community (within approximately 30 miles of Homer Glen, IL) to ask them their likelihood of donating to three small nonprofits within their local community and three large regional (US wide) or global nonprofits, and their reasons for their decision. Participants will be informed of the mission statements for each nonprofit and they will be told that all six charities have been formally evaluated for trustworthiness and have been deemed as "give with confidence" charities.

The second data collection method was to identify 60 nonprofits (30 small and 30 large) from Charity Navigator that are denoted as "give with confidence". The mission statements were copied and pasted into an online tool to obtain probabilities that the nonprofit is associated with specific focus areas. The key words that were listed in the tool to determine probabilities of the particular nonprofit addressing the concern include the following: environment protection, conservation, biodiversity, environmental preservation, environmental restoration , sustainability, ecosystem services, local, global, sustainable development goals, education, and activism. The algorithm behind the tool is a pre-trained BART model published by Facebook (Lewis et al., 2020).

Data Cleaning & Preparation

The local community members' responses to the survey were entered into Excel and uploaded into a Python Jupyter notebook. There was no need for data cleaning or further preparation. Table 1 provides an example of the format of the data within the Jupyter Notebook.

Table 1

SurveyMonkey Data Excerpt

	Q1	Q2	Size	Count
0	The conservation foundation	They all seem great! This one seems more local	Small	1
1	Sierra club foundation	They have an excellent reputation and work tow	Large	1
2	The wetlands initiative	To the point	Small	1
3	Living lands & water	Our waterways and surrounding land are vital t	Small	1
4	National audubon society	Like the focus is protecting the natural habi	Large	1
5	The conservation fund	NaN	Large	1
6	National audubon society	Seemed to interest me more	Large	1
7	The wetlands initiative	Seemed to interest me more	Small	1
8	Living lands & water	Seemed to interest me more	Small	1
9	Living lands & water	Water is vital for everyone and it's important	Small	1
10	Living lands & water	Because I think it is important to keep our wa	Small	1
11	Sierra club foundation	Like its purpose and objectives	Large	1
12	The wetlands initiative	Looks like the money goes to directly support	Small	1
13	Living lands & water	Sharks	Small	1

For the probabilities data generated via the online tool, the raw probabilities were used so that parametric statistics could be used. All values entered into Excel fell within the expected range of 0 to 1 so there was no need to do data cleaning. The data were prepared for analysis by calculating a mean score and standard deviation across all 12 key words for each nonprofit. Therefore, each nonprofit had the individual probabilities for each keyword, an average across all 12 probabilities, and a standard deviation based on those 12 probabilities. The probability data was uploaded into a Python Jupyter notebook for analysis. Refer to Table 2 for an excerpt of the data.

Table 2Online Tool Probabilities Dataset Excerpt

NF	Name	Size	Revenue	Mission	EnvironmentProtection	Conservation	Biodiversity	EnvironmentalPreservation	EnvironmentalRestoration	s
1	The Conservation Fund	Large	\$221.5M	The Conservation Fund, working with public, pr	0.962	0.974	0.099	0.938	0.688	
2	National Audubon Society	Large	\$157.4M	The mission of the National Audubon Society is	0.768	0.917	0.911	0.796	0.833	
3	Sierra Club Foundation	Large	\$120.5M	The Sierra Club Foundation promotes climate so	0.919	0.893	0.345	0.755	0.297	
	The Wetlands	Small	¢o.u	The Wetlands Initiative (TWI)	0.074	0.026	0.540	0.070	0.002	

Data Analysis

For the first research question about likelihood to donate to a small versus large nonprofit, a chi-square goodness of fit test was used with a critical value of 3.84 (df = 1) and an alpha level of .05. In addition, word clouds were created based on the open ended question asking community members why they chose the charity that they chose. For the second research question, originally a multivariate analysis of variance (MANOVA) was planned, but the data were not normally distributed. Instead, Mann Whitney U-tests were conducted for each of the 12 keywords, and statistical significance was determined by an alpha level of .05. Specifically, the two groups were compared to determine if they were different in terms of their probabilities for each of the keywords. Finally, the results of the first analysis were compared to the second analysis to determine if participants' perceptions were consistent with the findings from the online tool.

Results

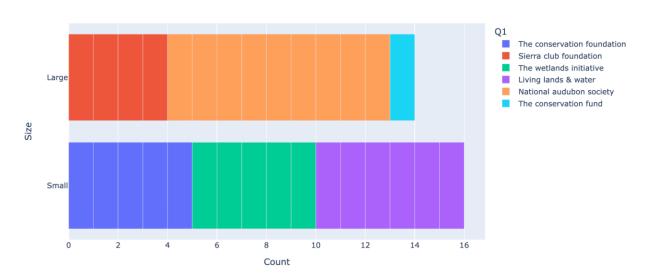
The results for the two study's research questions are provided in this section. For each research question, the descriptive statistics are presented followed by the results from the inferential statistical tests. Statistical significance was determined via an alpha level of .05. However, given that 12 tests were conducted for research question two, a family-wise error correction was applied to the alpha level using a Bonferroni adjustment. Therefore the alpha level of .05 was divided by the number of tests (12) resulting in an alpha level of .004 (Lee & Lee, 2018).

Research Question One

The first research question asked, "Are there differences in donors' likelihood to donate to small versus large environmental nonprofits as reported in a self-report survey?". The results of the selections are featured in Figure 1.

Figure 1
Participant Choice Frequencies by Nonprofit

Charity Selections



The results from the Chi-square goodness of fit test indicate that there were no significant differences in the choice frequencies between small and large nonprofits, $\chi^2(1) = 0.133$, p = .715.

When looking at the reasons for selecting a given charity, differences between the word clouds were found when comparing small nonprofits (Figure 2) to large nonprofits (Figure 3). With the large nonprofit selection group, community members were more likely to skip the question and not provide an answer (e.g., nan). Also, the respondents seemed less confident or matter-of-fact when selecting a small nonprofit given that they were more likely to use words such as "seem" or "seemed", "appear", "suppose", and "implies".

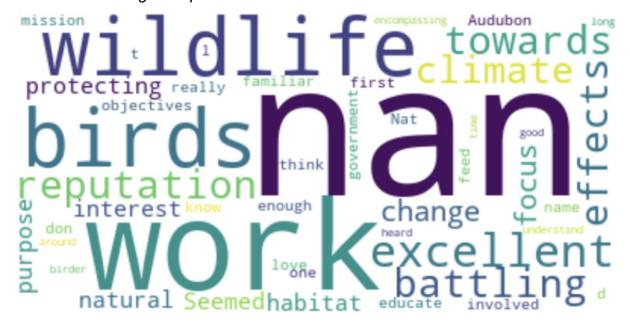
For the small nonprofit group specifically, resources such as "land" and "water" emerged as the main keywords, and "local" emerged as a point of interest. For large nonprofits, fauna (wildlife, birds), work, climate and reputation were points of interest. Also, the words tended to be more matter-of-fact (effects, change, protecting), but there were also words such as "seemed" and "think".

Figure 2

Word Cloud for Small Nonprofit Selections



Figure 3
Word Cloud for Large Nonprofit Selections



Research Question Two

The second research question asked, "Do small nonprofits differ from large nonprofits in terms of their mission statements as measured by their alignment with various key words?". The boxplots featured in Figure 4 indicate that there were some

differences in the median probabilities, but both groups had a large amount of variability in the scores in most cases. The histograms and scatter plots featured in the Appendix further demonstrate that the distributions were not normal. Therefore, nonparametric statistics were used.

Figure 4

Boxplots of Keywords by Nonprofit Size

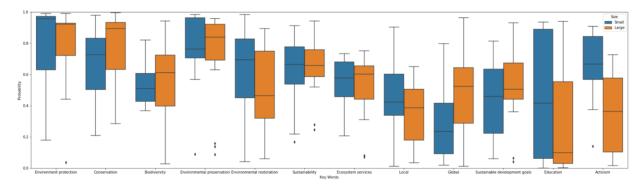


Table 3 provides the results of the Mann Whitney U tests. The results indicate that the two groups were statistically significantly different for activism only, p = .003. Specifically, small charities were significantly more likely to have activism as part of their mission statement than were large charities. Although not statistically significantly different, there were some directional differences in the median ratings. Smaller charities had higher median values for environmental protection, environmental restoration, local, education, and activism while larger charities had higher median values for conservation, biodiversity, environmental preservation, ecosystem services, global, and sustainable development goals.

Table 3
Mann Whitney U Test Results

Keyword	Test statistic	p value
Environmental protection	133.5	0.395
Conservation	88.0	0.320
Biodiversity	85.0	0.263
Environmental preservation	125.5	0.604
Environmental restoration	142.0	0.229
Sustainability	108.0	0.868
Ecosystem services	115.0	0.934
Local	129.0	0.507
Global	70.0	0.081
Sustainable development goals	90.0	0.361
Education	139.0	0.281
Activism	183.5	0.003

Discussion and Action Component

The results of this study suggest that donors are equally likely to make a monetary donation to a small environmental charity as they are to a large environmental charity. Therefore the research hypothesis was not supported. The results also indicate that small environmental charities are more similar to large environmental charities than

they are different in terms of their mission. However, small charities were found to have a stronger focus on activism than larger charities. These findings are important because they indicate that small charities are just as likely to focus on solving the same environmental problems, but they also have a stronger activism focus.

When comparing results from the first research question to the second, the themes that emerged in the community members' responses suggest that they might have more confidence in the larger charities, but they appreciate the local focus of the smaller charities. Another difference was the greater focus on resources such as land and water, when selecting the smaller nonprofits compared to fauna (wildlife, birds) when selecting larger nonprofits. This implies that there may be differences in community members' perceptions of small versus large environmental nonprofits. However, the results of the analyses indicate that these perceptions do not necessarily lead to more or less support for larger charities, and the only real difference between the two groups of charities is their focus on activism.

One unexpected finding was that the participants did not appear to be biased in terms of selecting larger charities in general, and the reasons for selecting larger charities did not appear to have anything to do with efficiency or scale, which is different from the findings of Byrd & Cote (2016), Leardini, Rossi & Landi (2020) and Spiteri (2022). However, there was one respondent who selected *The Conservation Foundation*, which is a small charity, and the rationale was, "foundation implies more longer term". This response does support the notion that sustainability of an organization is important, and sustainability is associated with efficiency and scale. Perhaps the respondents in this study did feel that efficiency and scale were important, but didn't factor it into their decision because the financial aspects of the charities were not provided.

While this research provides a glimpse into why people select specific charities, there are some significant limitations. The biggest limitation is the small sample size. This study was based on responses from 30 people within only one local community. Therefore, it is recommended that this study be replicated with a much larger sample. Another limitation is the lack of robustness of the survey. Given that this was a pilot study, the questions on the survey were very limited. Future research should consider participant characteristics as well and provide financial metrics associated with the

charities. Perhaps an experimental study could be done with fictitious charities and the financial metrics could be manipulated (small with better metrics and large with better metrics) to see if people are really more interested in the financial metrics versus the mission statements.

In terms of recommendations for practice, local charities could use this information in their messaging. Specifically, they can highlight that they have very similar objectives as larger charities, but they also have a strong activism focus. This could help with both securing additional funding and growing their volunteer base. Local charities will also need to indicate how their activism focus helps them achieve their objectives in relation to the other focus areas (e.g., conservation, environmental restoration, sustainability, etc.).

New Comparative Questions

Based on the results and limitations of this study, two new comparative questions are suggested for future research.

- 1. To what extent do differences exist in intent to donate to small versus large environmental charities when financial metrics are provided?
- 2. To what extent do differences exist in intent to volunteer when activism is specifically mentioned in the mission statement versus not?

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Appendix

Figure 5
Scatter Plots and Histograms for Keywords.

