

Understanding the Effects of Endorsements in Scientific Crowdfunding



Sanorita Dey



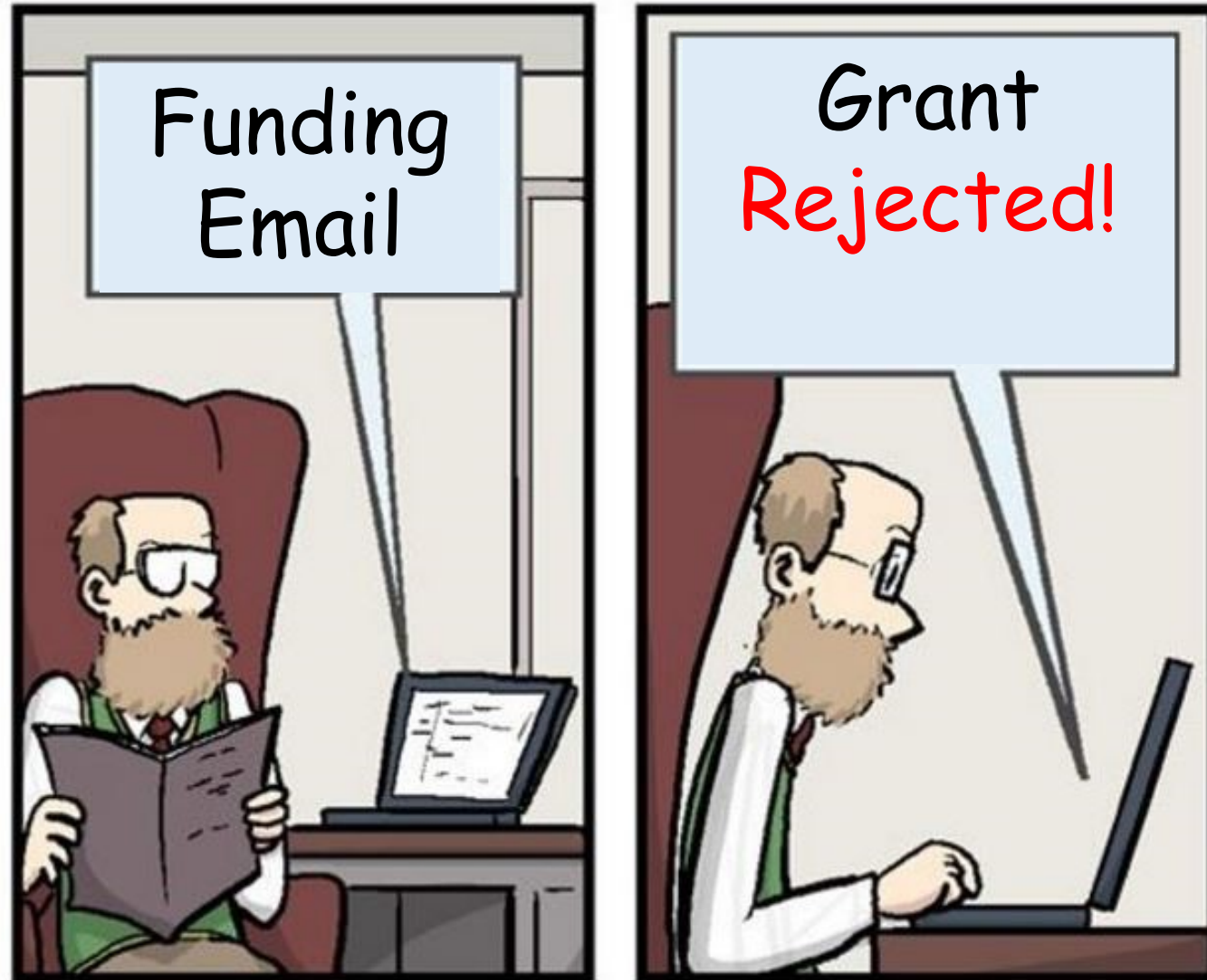
Karrie Karahalios



Wai-Tat Fu

University of Illinois at Urbana-Champaign

Research Funding Crisis



Alternative Source of Research Funding



An Example Scientific Crowdfunding Campaign

experiment

Search Projects, Topics & Lab Notes

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Improving the Efficiency of Charitable Crowdfunding

By Yi-Chieh Lee and Chi-Hsien Yen

Backed by Wai-Tat Fu, Leo Feng, Denny Luan, Vicky Liu, Chi-Hui Yen, Max Churak, Yang David, Ziang Xiao, Yu-Chun Yen, Nini Hsieh, and 7 other backers



University of Illinois at Urbana-Champaign Champaign, Illinois Computer Science Education

\$800

Pledged

30% Funded \$2,700 Goal 13 Days Left

Back This Project

? How does this work?

Overview Methods Lab Notes (3) Results Discussion (4)



About This Project

Prior studies have shown existing crowdfunding platforms often lead to inefficient allocation of funds to projects. Our platform allows donors to express preferences of multiple projects and reallocate

Budget

We will use most of the budget to pay the participants who join our experiments and interviews. We will visit more than 20 public schools in the Illinois state and conduct workshop as well as interviews with the teachers to know their experience with using crowdfunding platforms. We want to adopt our new system in the educational crowdfunding and help schools raise funds for improving teaching quality.

Therefore, our first step is to interview the teachers who have used any crowdfunding platforms before. In addition, we will conduct interviews with (potential) donors to understanding their consideration of donating their money. Based on their experience, we can modify our system and propose a new crowdfunding platform for helping educational crowdfunding campaigns.

Our future goal will extend the system to various charitable crowdfunding platforms to help charity crowdfunding can work efficiently.

| | |
|---------------------------------|---------|
| Recruit participants (Donors) | \$1,100 |
| Recruit participants (Creators) | \$1,100 |
| Transportation | \$500 |



Endorsed by

I am writing to endorse the campaign launched by Yi-Chieh and Chi-Hsien. Yi-Chieh and Chi-Hsien are working as my PhD students for the last two years. They are one of the most passionate and enthusiastic researchers I have ever met. They painstakingly worked to build a more efficient and more practical economic model for donors of the charitable crowdfunding campaigns. Now, they desperately in need of this funding to experimentally prove that their model can work better than the existing systems. I donated to this project myself, I hope you will

I'm Yi-Chieh's MS advisor. This study aims to solve an important problem in crowdfunding. It could really benefit both donors and fundraisers and thus foster the development of crowdfunding.



Wen-Chieh Lin
Professor
National Chiao Tung University



Wai-Tat Fu
Associate Professor
University of Illinois at Urbana-Champaign

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University of Illinois at Urbana-Champaign Champaign, Illinois Computer Science Education

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Associate Professor
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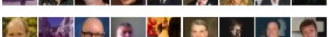
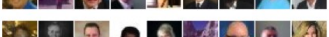




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Endorsements: In Other Forms



Skills & Expertise [Edit](#)

[+ Add a skill](#)

| | | |
|----|-------------------------|---|
| 29 | Social Media Marketing |  |
| 29 | Social Media |  |
| 18 | Social Media Strategist |  |
| 15 | Social Networking |  |
| 13 | SMO |  |
| 10 | Training |  |
| 7 | LinkedIn Strategies |  |
| 7 | Facebook |  |
| 5 | Social Marketing |  |
| 5 | Selling Skills |  |

Letter of Recommendation

Dear Mr Smith,

I am pleased to recommend Michael for the position of Director of Development at XYX Corporation. As VP of Application Development, I was Michael's direct supervisor from 2009 through 2012. We worked closely together on several key projects, and I got to know him very well during this time.

[wikiHow to Write a Letter of Recommendation](#)

Celebrity Endorsement



Purpose of Endorsements in Scientific Crowdfunding

Experts'
Endorsements



Potential
Non-expert
Donors

An Example Scientific Crowdfunding Campaign

Endorsed by

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Wal-Tat Fu

Associate Professor

University of Illinois at Urbana-Champaign

Research Goal

To understand how endorsements are related to the success of Scientific Crowdfunding Campaigns

Study Design

Study Material

337 Scientific Crowdfunding Campaigns
(Experiment.com)

211 Successful
Campaigns

126 Un-successful
Campaigns

810 Endorsements

Study Method

Mixed-Method Study

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graph TD; A[Mixed-Method Study] --- B[Qualitative Analysis]; A --- C[Quantitative Analysis];
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Qualitative
Analysis

Quantitative
Analysis

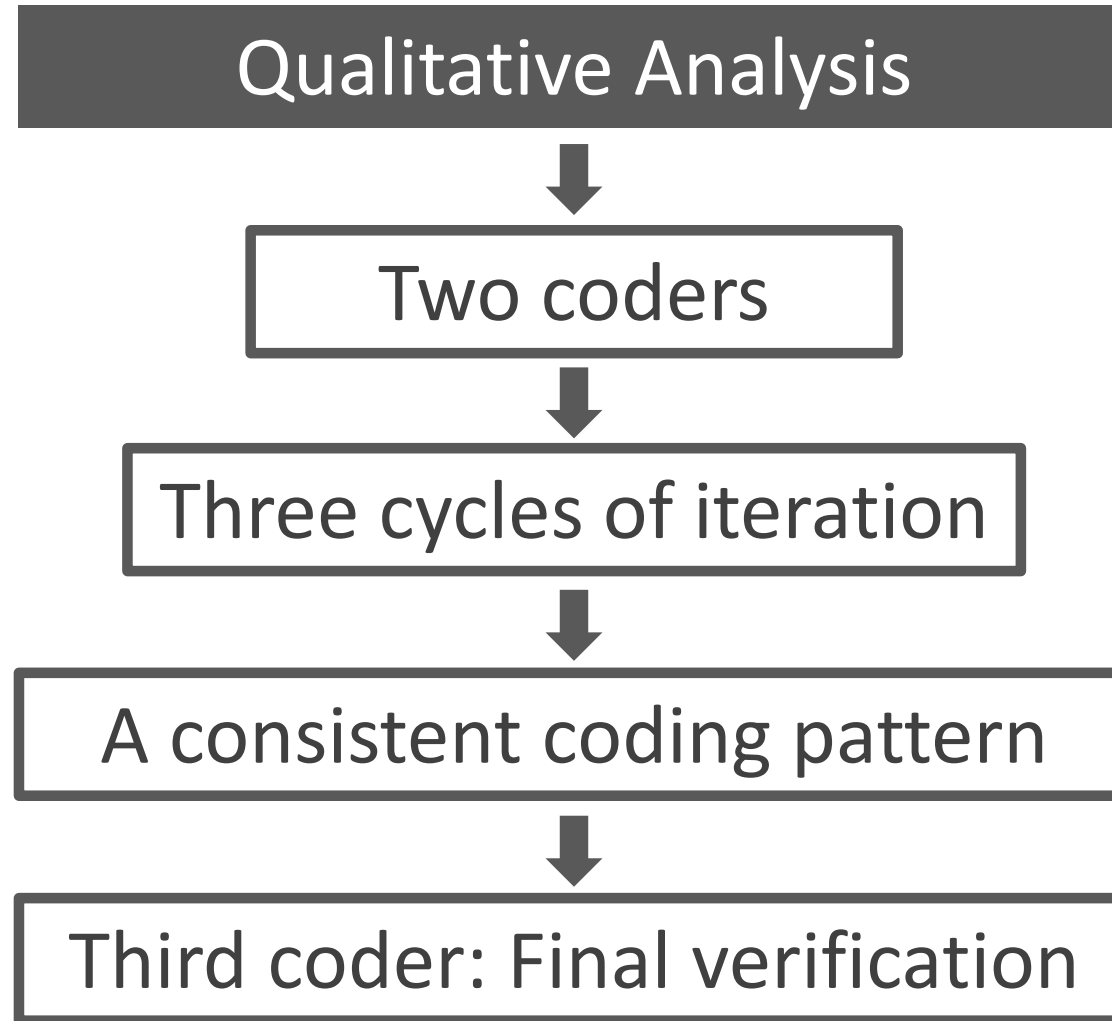
Study Method

Mixed-Method Study

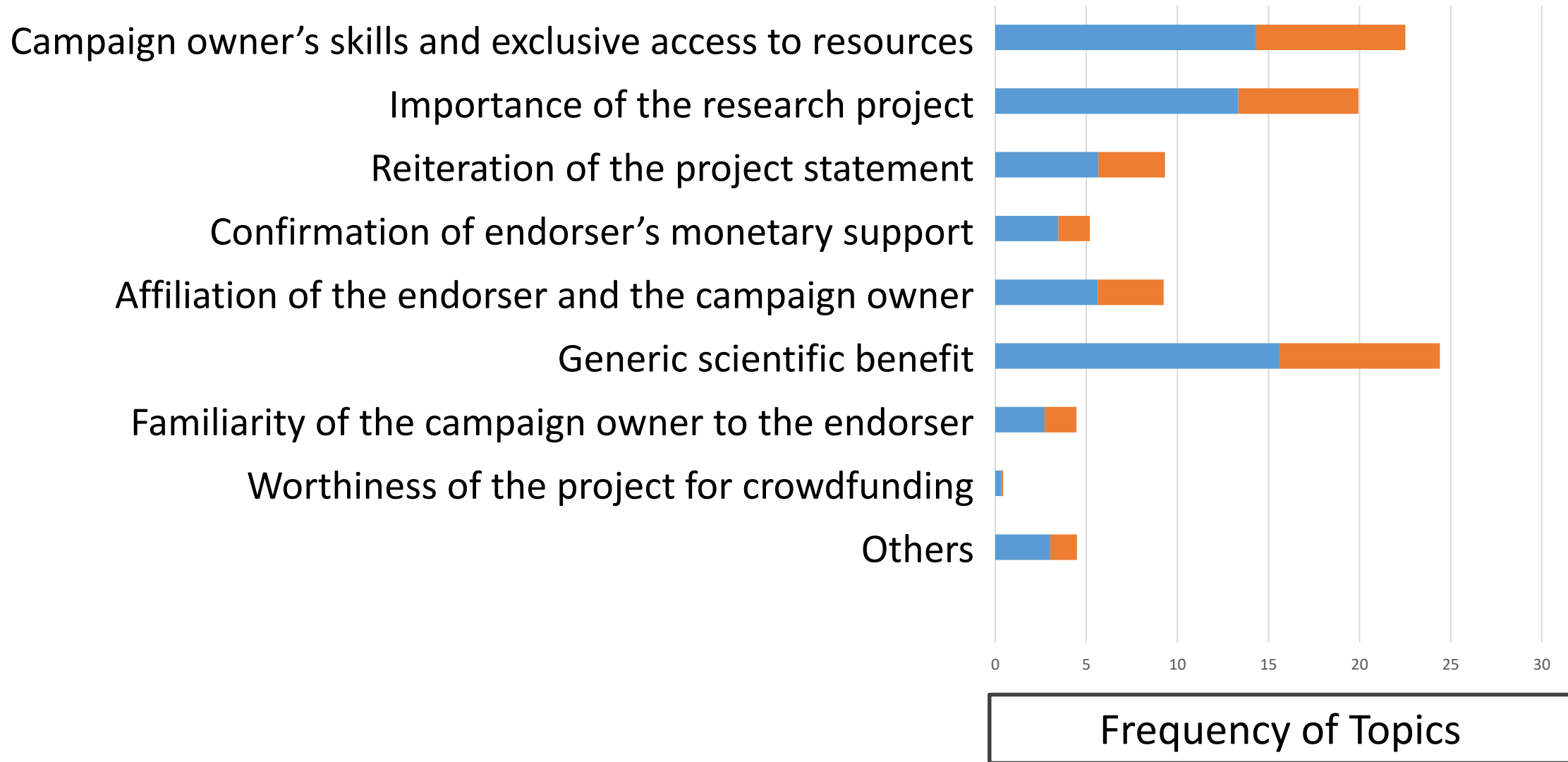
Topic Taxonomy
of Endorsements

Quantitative
Analysis

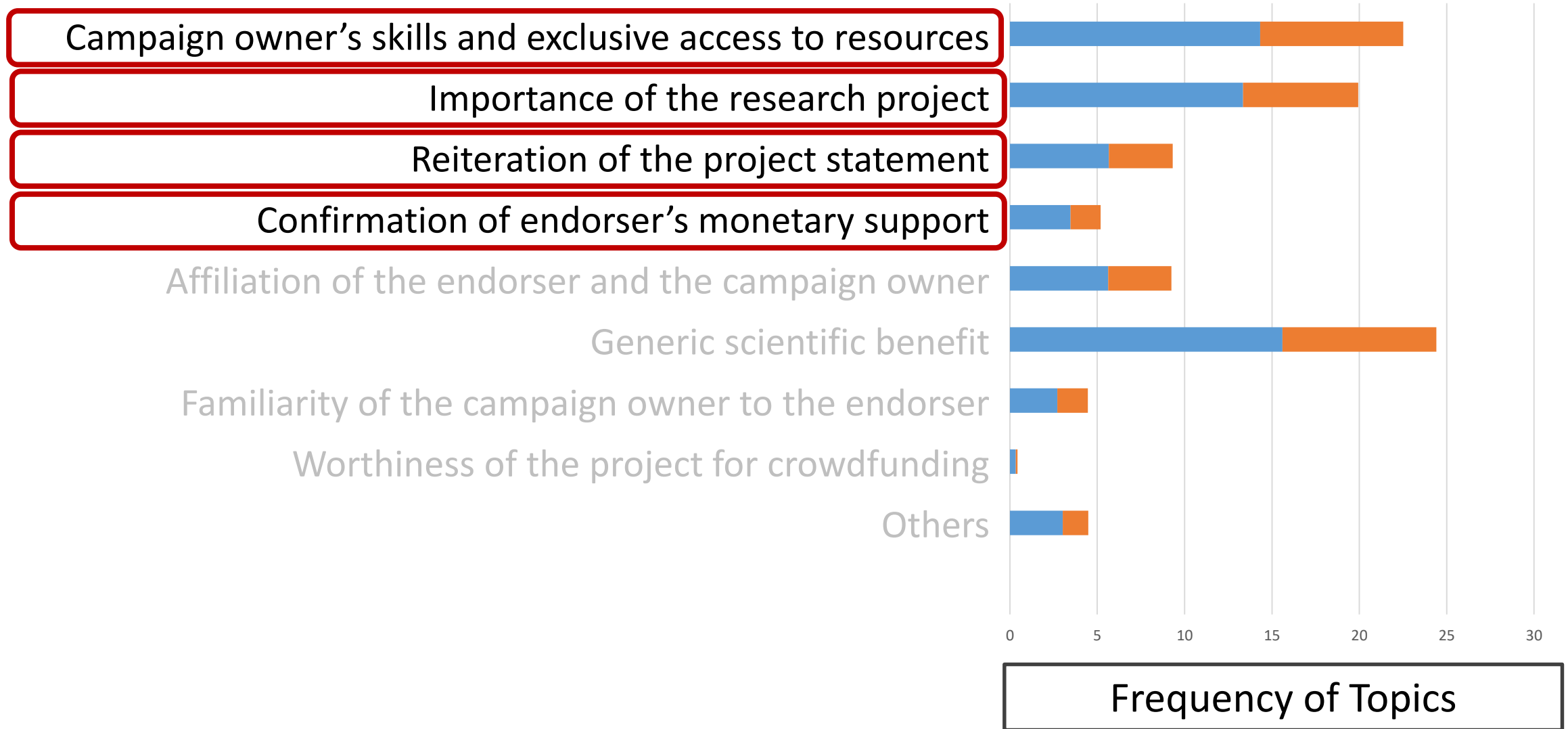
Topic Taxonomy of Endorsements



Qualitative Analysis: Taxonomy of Endorsements



Qualitative Analysis: Taxonomy of Endorsements



Qualitative Analysis: Taxonomy of Endorsements

Campaign owner's skills and exclusive access to resources

Example: Dr. Hopkins is an **outspoken** advocate for human rights, and a **passionate, enthusiastic, and hard-working** researcher whose contributions are **widely known and respected**"(E259)



Qualitative Analysis: Taxonomy of Endorsements

Campaign owner's skills and exclusive access to resources

Importance of the research project

Example: I am really excited for the project. The benefits have **interesting theoretical implications**. The **study design** is **straightforward**, the **analytical techniques** are **appropriate**, and the insights gained will be valuable"(E139).



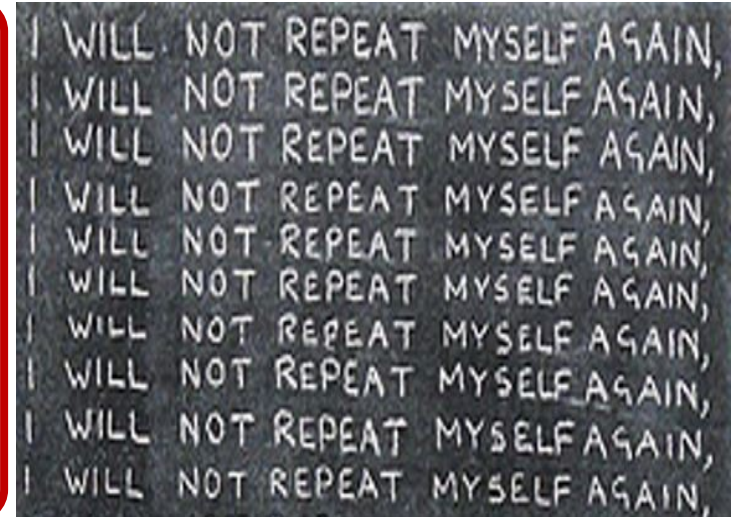
Qualitative Analysis: Taxonomy of Endorsements

Campaign owner's skills and exclusive access to resources

Importance of the research project

Reiteration of the project statement

Example: "Dr. Michael Ferro's proposed a **project to conduct an expedition to the West Coast of America** to document previously unknown species in the genus *Sonoma*" (E109).



Qualitative Analysis: Taxonomy of Endorsements

Campaign owner's skills and exclusive access to resources

Importance of the research project

Reiteration of the project statement

Confirmation of endorser's monetary support

Example: I am glad to **financially support** the novel approach being proposed to detoxify sewage.

Please donate for this project " (E98).



Study Method

Mixed-Method Study

Topic Taxonomy
of Endorsements

Quantitative
Analysis

Study Method

Mixed-Method Study

Topic Taxonomy
of Endorsements

Factor Analysis &
Logistic Regression

Quantitative Analysis: Factor Analysis

1. Campaign owner's skills and exclusive access to resources
2. Importance of the research project
3. Reiteration of the project statement
4. Confirmation of endorser's monetary support
5. Affiliation of the endorser and the campaign owner
6. Generic scientific benefit
- ~~7. Familiarity of the campaign owner to the endorser~~
- ~~8. Worthiness of the project for crowdfunding~~
- ~~9. Others~~

Quantitative Analysis: Factor Analysis

| | Beta-Coefficient | P-Value |
|---|------------------|---------|
| 1. Campaign owner's skills and exclusive access to resources | 0.31 | 0.03* |
| 2. Importance of the research project | -0.10 | 0.63 |
| 3. Reiteration of the project statement | -0.63 | 0.02* |
| 4. Confirmation of endorser's monetary support | 0.24 | 0.03* |
| 5. Affiliation of the endorser and the campaign owner | -0.08 | 0.81 |
| 6. Generic scientific benefit | 0.08 | 0.69 |
| 7. Familiarity of the campaign owner to the endorser | | |
| 8. Worthiness of the project for crowdfunding | | |
| 9. Others | | |

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Takeaway

- Informative and passionate endorsements are more effective than generic endorsements

Takeaway

Effective

Kaitlin has already completed **significant work** on the language, culture, and **history** of marriage equality. This research project will be an extraordinary opportunity for her to **apply that knowledge** and to **understand history** being made --as Ireland faces a national referendum on marriage in May 2015.

Informative and Passionate

Not-Effective

This is a **great project** from a great team! Please join me in **supporting them.**

Generic

Takeaway

- Informative and passionate endorsements are more effective than generic endorsements
- Endorsements focusing on campaign owner's skillsets are predictive to success

Takeaway

Effective

I know Sophia as an inquisitive, energetic young physician who practices medicine with passion. She could be the first to answer the question many women have regarding the use of placenta remedies.

Campaign Owner's Skillset

Not-Effective

Understanding the factors that determine what water people drink is essential if effective, long term solutions are to be found. This is a low risk- high gain project. I strongly endorse it.

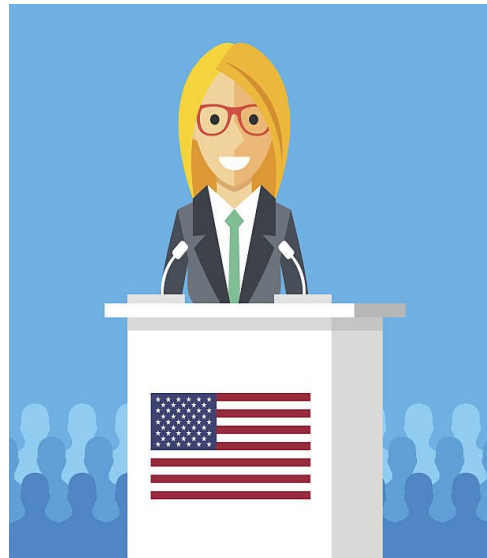
Importance of the Project

Takeaway

- Informative and passionate endorsements are more effective than generic endorsements
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- Platform designers can provide more specific guidelines to campaign owners to collect more effective endorsements

Broader Impact of Persuasiveness of Language

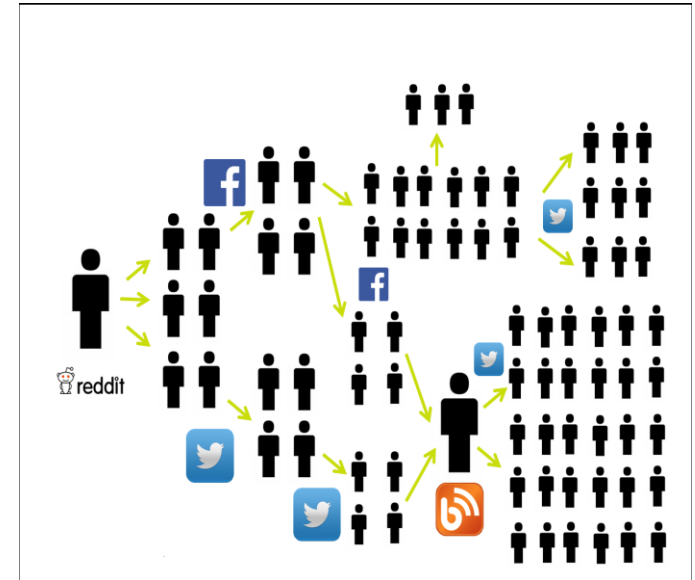
Persuasive Speech by Politicians



Catch-phrase in Advertisements



Virality in Social Network



Thank You

Understanding the Effects of Endorsements in Scientific Crowdfunding



Sanorita Dey



Karrie Karahalios



Wai-Tat Fu

Group Website

<http://cascade.cs.illinois.edu/>

Crowdfunding Projects @ UIUC

<http://crowdfund.cs.illinois.edu/>