

Supporting Material

Table S1. Snapshot of money raised by projects on Cancer Research UK. Table shows money raised by the 43 projects that were live on Cancer Research UK on May 9, 2012 (data collected on this date from Cancer Research UK website: <http://myprojects.cancerresearchuk.org/projects>).

Funds raised (£)	Financial goal (£)
172,462	180,000
104,707	200,000
104,605	104,000
84,021	109,000
77,286	110,000
71,505	150,000
66,879	71,000
66,015	100,000
59,180	180,000
56,098	220,000
54,859	100,000
51,000	51,000
49,075	63,000
47,921	105,000
39,590	135,000
39,081	50,000
37,092	60,000
36,486	78,000
33,905	180,000
26,113	237,000
25,450	50,000
21,164	100,000
20,174	20,000

20,000	20,000
16,576	52,500
15,833	68,000
15,699	20,000
15,000	15,000
12,361	70,000
11,417	70,000
10,599	200,000
8,156	35,000
8,082	340,000
7,709	15,000
6,980	30,000
5,391	40,000
4,975	100,000
1,345	25,000
175	60,000
125	20,000
0	20,000
0	20,000
0	120,000

Table S2. Survey given to round one #SciFund participants. Numerous questions that required a response on a Likert scale (e.g., questions 47-55, 63-71) were changed to require specific numerical responses for the round two and three survey instrument. In addition, the round one dates associated with questions 72-74 were changed to the appropriate round two and three dates for their respective surveys.

1. Name
2. Age
3. Gender
4. #SciFund Challenge Project Name
5. Ethnicity
6. Current position
7. Your institution
8. What is the discipline of your highest degree?
9. What is your highest degree you have completed?
10. How many hours did you spend on your last grant proposal?
11. Over the past five years, what approximate percentage of your grant proposals have been funded?
12. Do you use Facebook?
13. If you use Facebook, how many Facebook friends do you have now?
14. Do you use Twitter?
15. If you use Twitter, how many Twitter followers do you have now?
16. If you use Twitter, for how many months have you been using it?
17. Do you have a science-oriented blog?
18. If you have a science-oriented blog, how many times a month on average do you post to it?
19. If you have a science-oriented blog, for how many months has it existed?
20. In the past twelve months, how many times have you: [Written a science-oriented article for a general interest news platform (print or online)]
21. In the past twelve months, how many times have you: [Given a public talk about science intended for an audience of non-scientists]

22. In the past twelve months, how many times have you: [Been interviewed by a journalist for a science story]
23. If you are engaged in other types of social media, please describe.
24. Did you have any experience with video editing prior to participating in the #SciFund Challenge?
25. If you do have video experience, how many videos have you worked on (no matter how short)?
26. How many hours did you spend: [Writing project text]
27. How many hours did you spend: [Working on your video]
28. How many hours did you spend: [Preparing images]
29. How many hours did you spend: [Preparing and sending out project rewards]
30. How many hours did you spend: [Making comments to other #SciFund Challenge projects on the wiki]
40. To what degree did you change your #SciFund Challenge project in response to feedback on the wiki or RocketHub? [Text]
41. To what degree did you change your #SciFund Challenge project in response to feedback on the wiki or RocketHub? [Images]
42. To what degree did you change your #SciFund Challenge project in response to feedback on the wiki or RocketHub? [Video]
43. To what degree did you change your #SciFund Challenge project in response to feedback on the wiki or RocketHub? [Rewards]
44. Did you shorten your video?
45. How many times did you change your video after posting it?
46. How many hours did you spend promoting your project?
47. What methods did you use to spread the word about your project (1 - not at all, 5 - a great deal)? [E-mail]
48. What methods did you use to spread the word about your project (1 - not at all, 5 - a great deal)? [Facebook]
49. What methods did you use to spread the word about your project (1 - not at all, 5 - a great deal)? [Twitter]
50. What methods did you use to spread the word about your project (1 - not at all, 5 - a great deal)? [Google +]

51. What methods did you use to spread the word about your project (1 - not at all, 5 - a great deal)? [Blogging on your own blog]

52. What methods did you use to spread the word about your project (1 - not at all, 5 - a great deal)? [Guest blogging on others' blogs]

53. What methods did you use to spread the word about your project (1 - not at all, 5 - a great deal)? [One-on-one conversations]

54. What methods did you use to spread the word about your project (1 - not at all, 5 - a great deal)? [Public talks/appearances]

55. What methods did you use to spread the word about your project (1 - not at all, 5 - a great deal)? [Communicating with journalists/bloggers]

56. If you used other methods to spread the word about your project, please describe.

57. Did you spread the word about your project via (1 - not at all, 5 - a great deal) [Personal connections]

58. Did you spread the word about your project via (1 - not at all, 5 - a great deal) [Professional connections]

59. What do you feel worked to get your project funded?

60. What do you feel did not work to get your project funded?

61. Do you feel that your #SciFund Challenge campaign was a success? Why or why not?

62. How many hours did you spend promoting OTHER #SciFund projects?

63. What methods did you use to spread the word about OTHER #SciFund projects (1 - not at all, 5 - a great deal)? [E-mail]

64. What methods did you use to spread the word about OTHER #SciFund projects (1 - not at all, 5 - a great deal)? [Facebook]

65. What methods did you use to spread the word about OTHER #SciFund projects (1 - not at all, 5 - a great deal)? [Twitter]

66. What methods did you use to spread the word about OTHER #SciFund projects (1 - not at all, 5 - a great deal)? [Google +]

67. What methods did you use to spread the word about OTHER #SciFund projects (1 - not at all, 5 - a great deal)? [Blogging on your own blog]

68. What methods did you use to spread the word about OTHER #SciFund projects (1 - not at all, 5 - a great deal)? [Guest blogging on others' blogs]

69. What methods did you use to spread the word about OTHER #SciFund projects (1 - not at all, 5 - a great deal)? [One-on-one conversations]

70. What methods did you use to spread the word about OTHER #SciFund projects (1 - not at all, 5 - a great deal)? [Public talks/appearances]

71. What methods did you use to spread the word about OTHER #SciFund projects (1 - not at all, 5 - a great deal)? [Communicating with journalists/bloggers]

72. How much effort did you make to spread the word about your project during: [November 1-15]

73. How much effort did you make to spread the word about your project during: [November 16-30]

74. How much effort did you make to spread the word about your project during: [December 1-15]

75. If you stopped promoting your project before the end of the #SciFund campaign period, please describe why.

76. What percentage of the contributors to your project do you personally know?

77. How many press or new media figures did you notify about your project?

78. How many live events (not via computer) did you use to promote your project?

79. If you hosted live events in support of your project, what was the average attendance at these events?

80. Do you feel that the #SciFund Challenge as a whole was a success? Why or why not?

Figure S1: **The pathway of interactions leading to money raised for projects in round two and three.** . Diagram shows the relationships between different variables in our analyses. Only those relationships that explained significant amounts of variation are included (LR χ^2 test $p \leq 0.05$). Coefficients represent linear relationships and are in the units of variables described. Sample size varies between each analysis represented in the diagram below due to differences in respondent behavior and the exclusion or inclusion of outlier data.

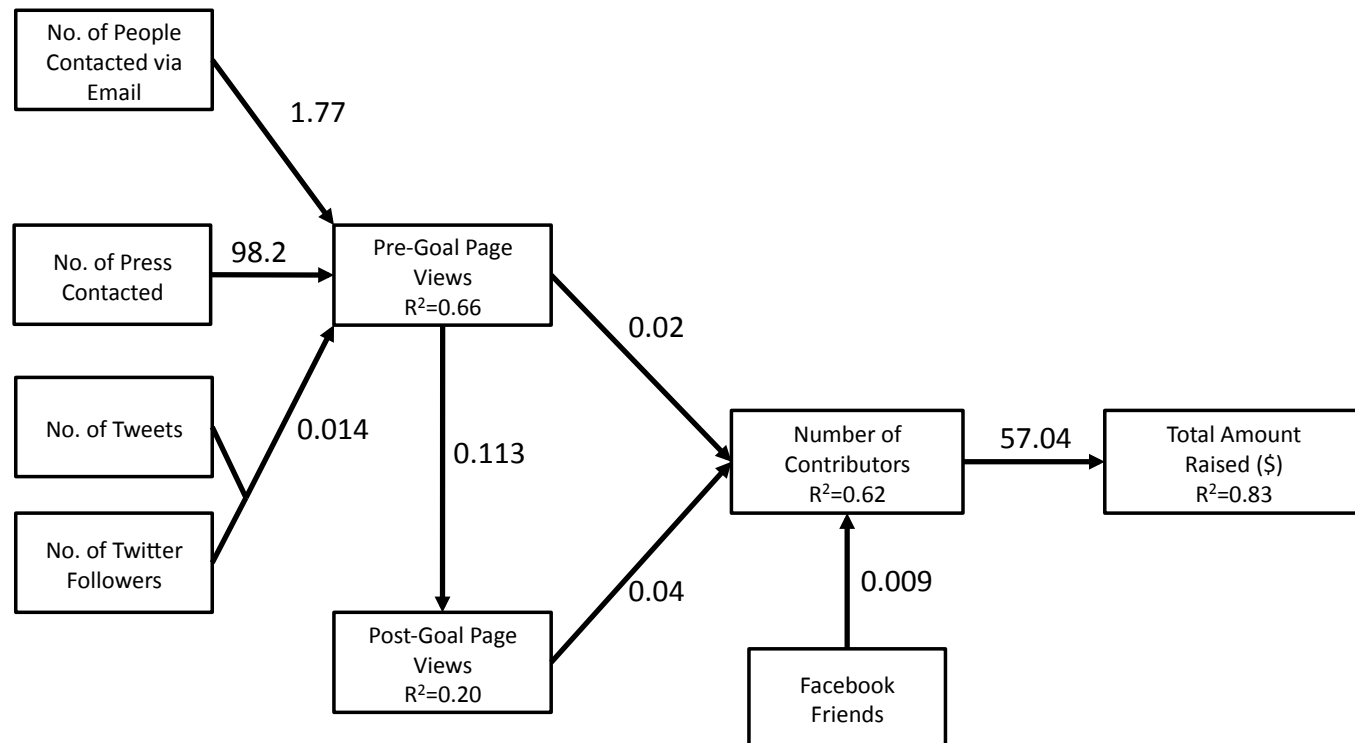


Figure S2: **Our view of how online engagement leads to a crowdfunded research project based on results from round 1.**

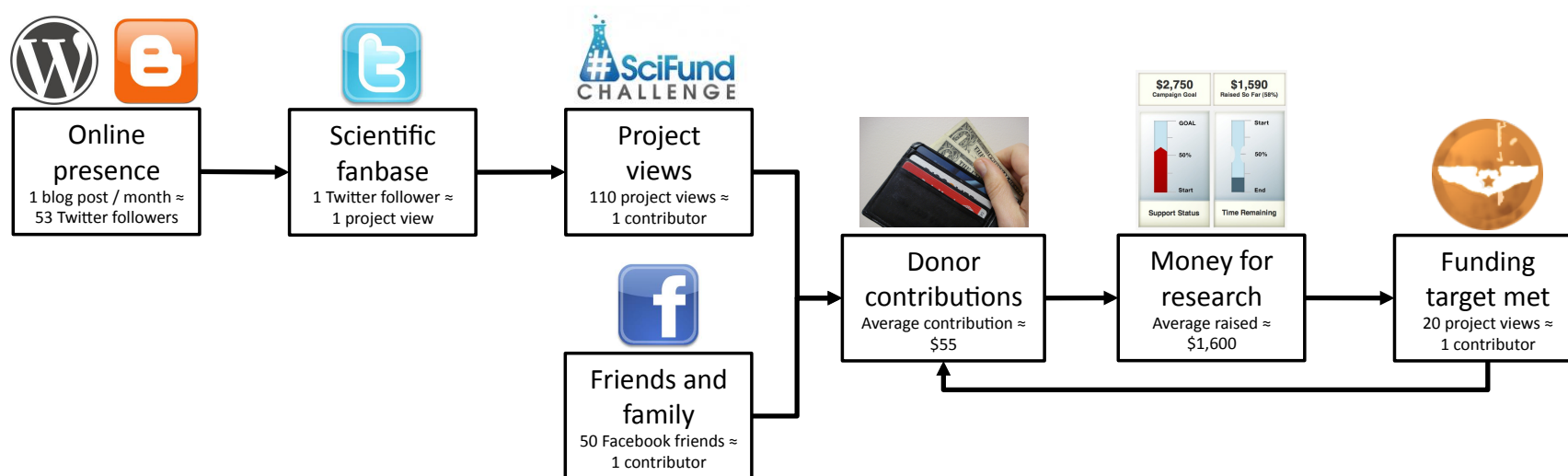


Figure S3: **The pathway of interactions leading to money raised for projects.** Diagram shows the relationships between different variables in our analyses. Only those relationships that explained significant amounts of variation are included (LR χ^2 test $p \leq 0.05$). Coefficients represent linear relationships and are in the units of variables described with one exception. The relationship between Facebook Likes and post-goal page views is exponential, and is shown as such. Sample size varies between each analysis represented in the diagram below due to differences in respondent behavior and the exclusion or inclusion of outlier data.

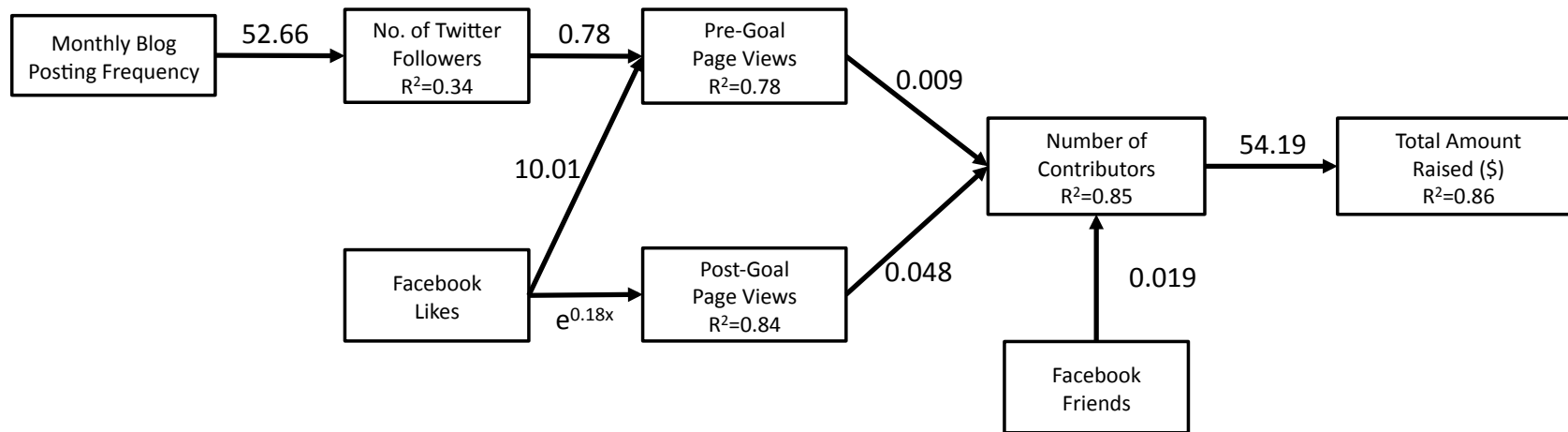


Figure S4: **Component-residual plots showing the relationship between pre-goal page views, press contacts, number of people emailed, and effort * engagement on Twitter in rounds two and three.** Tweet Reach = number of Twitter followers * number of tweets. Press2 = number of people contacted in the press. email = number of people contacted via email.

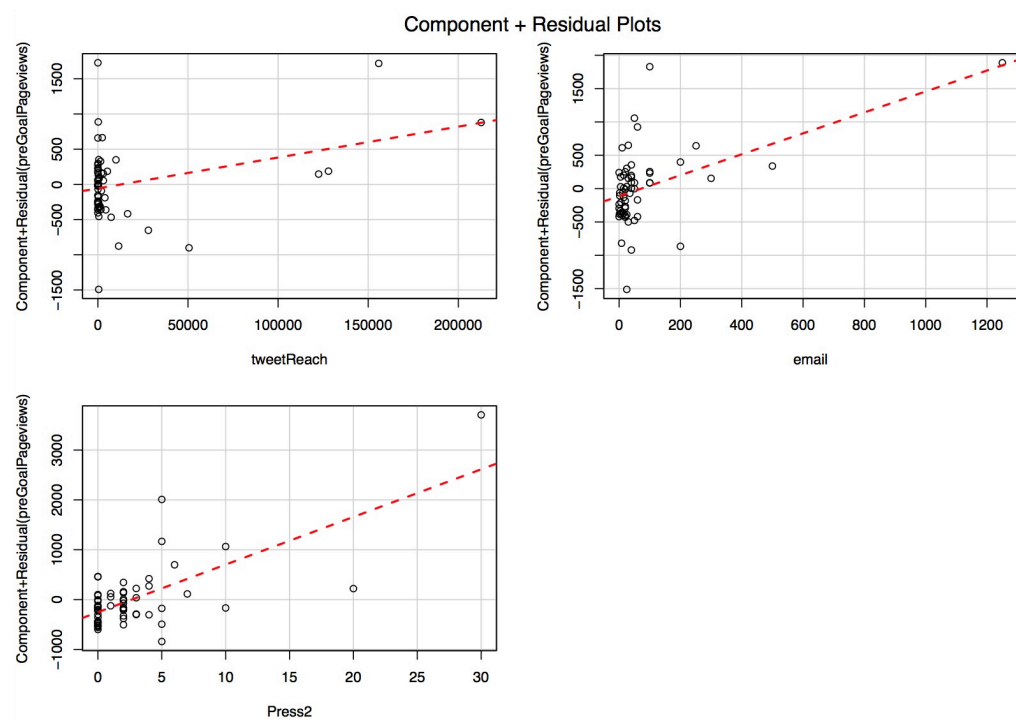
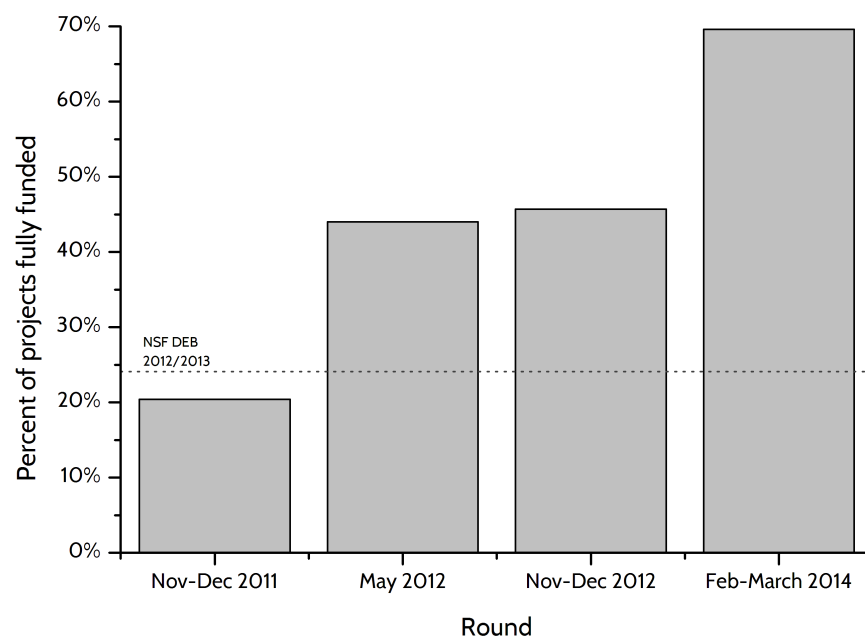


Figure S5: Changes in the percentage of projects hitting 100% of their funding goal over the four rounds of the #SciFund Challenge run to date.



NSF DEB full proposal success rate from
<https://nsfdeb.wordpress.com/2013/12/30/deb-numbers-fy2013-wrap-up/>