Ask me or tell me?
Enhancing the Effectiveness of Crowdsourced Design Feedback

Supplementary Material

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Figure S1: **Manipulation Check Flyers.** We chose these four flyers from the pre-study based on their diverse styles and quality.
Figure S2: Manipulation Check UI: Statements First.
Figure S3: Manipulation Check UI: In-Between.
Figure S4: Manipulation Check UI: Questions First.
Flyer Design User Study

Part 1

Welcome and thank you for showing interest in the marvelous Flyer Design user study.

This user study consists of 2 parts and is about the effectiveness of non-expert design feedback on graphic designs. If you choose to participate, you will have to design a flyer for a sports event (part 1) and revise the design according to the feedback that we collected from non-experts (part 2). Each part will take about 45–60 minutes. You will be paid $35 after completing both parts, and you have a chance to win an extra $100 for the best flyer design.

Below is the flyer/ad for our user study with a summary of the necessary information. Click to enlarge.

For more detailed information about the user study click here.

If you want to participate, please click “Start” to proceed to the consent form. Otherwise, we wish you a pleasant day.

Figure S5: User Study Application: Session 1 Step 1. Welcome.
Consent Form

Please read the following text carefully, before you are participating in a study being performed by scientists at Harvard University.

Researchers: Fritz Leikchas and Spyridon Ampanavos
Faculty Advisor: Krzysztof Gajos

Key Information: The following is a short summary of this study to help you decide whether or not to be a part of this study. More detailed information is listed later on in this form.

Why am I being invited to take part in a research study? We invite you to take part in a research study because any adult is eligible for the research.

What should I know about a research study?

- Someone will explain this research study to you.
- Whether or not you take part is up to you.
- Your participation is completely voluntary.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- Your refusal to participate will not result in any consequences or any loss of benefits that you are otherwise entitled to receive.
- You can ask all the questions you want before you decide.

Statement of Consent:

☐ I have read the information in this consent form. All my questions about the research have been answered to my satisfaction. By checking this box I consent to participate in the study. Otherwise we wish you a pleasant day and deeply thank you for reading this document.

Figure S6: User Study Application: Session 1 Step 2. Consent form.
Pre-Study Questionnaire

All questions are mandatory unless otherwise noted.

What is your gender?
- Male
- Female
- Non-binary

What is your age?
- 18-25
- 26-35
- 36-45
- 46-55
- 56-65
- 66-75
- 76-85
- 86-95
- 96 or older

Are you professionally creating graphic designs; e.g., as a freelancer?
- Never
- 1
- 2
- 3
- 4
- 5
- Every day

How proficient are you with digital image editing tools like Adobe Photoshop?
- Completely unfamiliar
- 1
- 2
- 3
- 4
- 5
- Very familiar

How familiar are you with receiving feedback on your graphic designs?
- Completely unfamiliar
- 1
- 2
- 3
- 4
- 5
- Very familiar

What are you looking for in feedback? (Select all that apply)
- A rating of your work
- Concrete actionable advice on how to improve your work
- General advice on how to improve your work
- Thought-provoking inquiries to stimulate reflection
- Something else...

Do you feel confident designing a flyer for a sports event?
- No, not at all
- 1
- 2
- 3
- 4
- 5
- Yes, very much

Figure S7: Web Application: Session 1 Step 3. Pre-study questionnaire.
Software Tool

- Do not close this browser tab. Otherwise, data might get lost.

You can use any software to create the flyer design (explained on the next page). For example, Adobe Illustrator, Adobe Photoshop, Microsoft PowerPoint, Apple Keynote, Google Drawings, or similar software. If you have such a software installed and ready to use, please feel free to scroll to the bottom of this page to jump ahead to the next step.

We recommend Google Drawings if you have not used any digital graphics design tool before. If you already have experience with graphic design software, but you don’t have access to any such software tool, we recommend Gravit Designer.

To use Google Drawings, you need to have a free account with Google. For Gravit Designer, please either go to designer.gravit.io to use the online version of Gravit Designer or install Gravit Designer locally. Either way, you need to create a free account to run Gravit Designer. You might also want to take a quick look at this short tutorial to familiarize yourself with Gravit Designer’s user interface.

Finally, please make sure that you do not close this tab during the study.

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Figure S8: User Study Application: Session 1 Step 4. Graphic design software recommendation.
You are now ready to get started with your flyer design. The next step will present the instructions and requirements for the flyer design. We will begin monitoring the time after you have clicked on "Continue" and ask you to submit your design within 30-45 minutes.

If you submit your flyer design well after 45 minutes, we will not consider it a valid submission. Please make sure you are free and will not be disturbed in the next 45 minutes.

A timer will be shown for your convenience.

Figure S9: **Web Application: Session 1 Step 5.** Timer warning.
Flyer Design

Elapsed Time:
0 : 22

Instructions: You have 30-45 minutes to design a flyer for an open house event of Harvard’s Boathouse.

Technical Requirements:
- Size: 800 (width) x 1200 (height) pixels or a different resolution with a 2:3 aspect ratio
- File format: JPEG or PNG

Title: Harvard Open Boathouse

Description: The Harvard Boathouse is organizing an open house event to advertise its recreational rowing programs.

The event will take place at Harvard’s Boathouse on Saturday, April 4th, 2020, from 10:00 am to 4:00 pm.

During the event, students will be offered orientations about the boathouse, the facilities, activities, and programs. They will also have the chance to attend a short introduction to rowing in groups of 10 and will be able to go rowing with experienced members of the Harvard rowing community.

The event has free admission and is restricted to Harvard students, faculty, and staff.

Goals:
- Get new students to know the space, the facilities, and the programs
- Attract beginners who are interested in rowing but haven’t tried before
- Bring new and old members together
- Increase awareness of Harvard’s Boathouse club

Target audience:
- Harvard students, faculty, and staff
- Sports lovers
- Novice and experienced rowers

Activities at the event:
- Tour of the Boathouse
- Orientation about the Boathouse, available programs
- Introduction to rowing
- Rowing with experienced rowers

Figure S10: Web Application: Session 1 Step 6. Design brief and initial design upload.
Congratulations

Do not delete the original file of your flyer design! We will reuse it in the second part.

We have successfully received your flyer design.

We will now collect feedback about your design and get back to you in the next week. The second session will take roughly the same amount of time as this session.

We hope you have a wonderful week and we are looking forward to seeing you next week! If you have any questions in the meantime, please do not hesitate to contact us.

Contact Us

Figure S11: **User Study Application: Session 1 Step 7.** Closing remarks.
Figure S12: **User Study Application: Session 2 Step 1. Welcome.**
Important

Please open the original file of your flyer design! Thanks.

Are you ready to revise your flyer design?

In the next step, we will present the feedback on your flyer design. After reading and reflecting the feedback you have a chance to address the feedback and improve your flyer design. The whole part should take about 45–60 minutes. We suggest taking about 15 minutes to think about the feedback and 30–45 minutes to revise the flyer design. We will begin monitoring the time after you have clicked on "Continue".

If you submit your flyer design well after 60 minutes, we will not consider it a valid submission. Please make sure you are free and will not be disturbed in the next 45–60 minutes.

A timer will be shown for your convenience.

Figure S13: **User Study Application: Session 1 Step 2. Timer Warning.**
Figure S14: User Study Application: Session 1 Step 3. Instructions for the design revision and feedback presentation.
Figure S15: User Study Application: Session 1 Step 4. Revision uploading.
Flyer Received!

We successfully received your revised flyer design!

**But the study is not over yet!** Please continue to the next page and tell us more about the usefulness of the feedback that you received.

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Figure S16: **User Study Application: Session 1 Step 5.** Upload confirmation.
Tell Us More About The Feedback

Below you’ll see the same feedback from before but this time you have to rate different aspects of the feedback so please read carefully!

This time, please tell us how useful each feedback item was for your flyer revision and how you perceived the tone of the feedback.

Again, all questions are mandatory unless otherwise noted. For your convenience, a checkmark (✓) will appear once you complete rating a feedback item. Also, this time you can change your selections if you wish.

<table>
<thead>
<tr>
<th>Initial Flyer</th>
<th>Revised Flyer</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Initial Flyer" /></td>
<td><img src="image" alt="Revised Flyer" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feedback</th>
<th>Rating</th>
<th>Toned of the Feedback</th>
<th>Feeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>What made you use only one color for the text?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The colors are too monochromatic. No contrast! Improved!</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was this feedback useful for revising your design?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No, not at all</td>
<td>1</td>
<td>Very negative</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>If so, why was the feedback useful? (If any select all that apply)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It indicated a specific issue of my design that I need to improve</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It inspired me to think about and change other aspects of my design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It provided interesting thoughts but didn’t make me change my design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The tone of the feedback is...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very negative</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>The feedback made me feel... (Select all that apply)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>angry</td>
<td>sad</td>
<td>intimidated</td>
<td>sad and excited</td>
</tr>
<tr>
<td>Why did you choose this particular background image? How does it connect to rowing?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The picture does not remind me of rowing.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was this feedback useful for revising your design?</td>
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<td>intimidated</td>
<td>sad and excited</td>
</tr>
<tr>
<td>What is the visual hierarchy of your elements and how does it support the reading flow?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very nice but the text at the bottom pops out more than the headline.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was this feedback useful for revising your design?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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</tbody>
</table>

Figure S17: User Study Application: Session 1 Step 6. Feedback rating.
Post-Study Questionnaire

All questions are mandatory unless otherwise noted.

You are almost done. Please tell us about the feedback process.

Overall, the feedback suggested that my design...

needed a lot of work 1 2 3 4 5 needed very little work

Overall, was the feedback useful for revising your design?

No, not at all 1 2 3 4 5 Yes, very much

Did you collect feedback or ideas for the revision elsewhere?

No, not at all 1 2 3 4 5 Yes, very much

How much have you improved your design in your own opinion?

No, not at all 1 2 3 4 5 Yes, very much

Do you feel confident designing a flyer for a sports event?

No, not at all 1 2 3 4 5 Yes, very much

OPTIONAL: Is there anything else you want to tell us?

Type your answer here.

Back  Submit Form  Quit

Figure S18: Web Application: Session 1 Step 7. Post-study questionnaire.
Congratulations

The user study is over! You did it. Fantastic job! 😊

We are deeply thankful for your participation. You will receive an Amazon gift card in the next couple of days.

In case your flyer design receives the highest ratings by our external jury of design experts, you will receive an award certificate and an extra Amazon gift card. We anticipate determining the winner in the next 1 or 2 weeks, depending on the availability of the external jury.

If you have any further questions please do not hesitate to contact us. We are here for you!

Your Flyer Design User Study Team

Figure S19: Web Application: Session 1 Step 8. Closing remarks.