

# Diverstudy

## Not Everyone is WEIRD

### Executive Summary

WEIRD – Western, Educated, Industrialized, Rich, and Democratic – individuals comprise the majority of participants in human behavioral research, despite representing only a sliver of the world's population (Henrich et al.). To tackle this WEIRD problem, we developed a framework to incentivize diverse cultural and ethnic student organizations to participate in paid research. Our product is a research pool that encourages sign ups from underrepresented communities, enabling researchers to build a more inclusive participant composition for their user studies. Within the UW community, we interviewed researchers from Foster, HCDE, and Psychology, and diverse student leaders. Their feedback confirmed a clear lapse in existing solutions to solve this problem. After building a prototype, we found that both groups of end users were receptive to adopting our product: researchers felt that they would be able to access a more inclusive population more easily, and minoritized communities felt that increased participation in research studies would lead to better representation for their communities. We've built a framework for gradually correcting the WEIRD problem and have shown its feasibility by applying it at UW. To scale this project, a similar framework can be adopted at other institutions through professors' networks, further diversifying both the pool and user research.

### Problem

Research is the cornerstone of our society – it enables innovation and progression towards a more advanced future. However, approximately 80% of research is conducted on WEIRD individuals despite these individuals only comprising 12% of the global population (Azar). WEIRD people are not representative of the general population; more specifically, many communities of color are inadequately represented in research. Dr. Michael Johnson, a researcher and member of the Diversity, Equity, and Inclusion Committee within the Foster School of Business, agrees that there is a heavy reliance on WEIRD individuals for research, and poses that this problem continues to persist because researchers lack incentive to diversify student participants ([Exhibit 1](#)). This problem also persists because students, including those of color, lack motivation to participate in research studies (Walter et al.). This lack of representation in research has serious implications in judicial systems, public policy, business operations, and education.

### Solution

We envision improving accessibility for researchers to underrepresented populations through a 5 step approach. Our framework is as follows:

1. **Identify** underrepresented populations in university research
2. **Contact** the leadership of student organizations
3. **Recruit** students to participate

4. **Share** data gathered with researchers
5. **Scale** to the local community

First, we will **identify** underrepresented populations by talking with researchers and determining which groups are not well-sampled within their research. Then, we will **contact** student-led groups, accessible in a university setting, to encourage participation from their members. Through social media, we can determine how to contact leadership and begin communication through email. We seek to develop an open and trusting relationship with these organizations and explain why their increased participation in research has a meaningful impact on their community with regards to public policy and beyond. To build this trust, members of our team should participate in events and meetings held by these groups to demonstrate our commitment.

Next, we will leverage these relationships to **recruit** members of these organizations with incentives provided by participating researchers. By filling out a short form on our website, students can sign up for the participant pool and make themselves eligible for research opportunities which compensate \$10-\$50 per hour ([Exhibit 5](#)). Student leaders almost unanimously agreed that monetary incentives were by far the most effective means of increasing participation in research studies ([Exhibit 2](#)). Moreover, our discussion with researchers like Dr. Michael Johnson and Adriana Germano assured us that funding would not be a concern because they are more than willing to pay for qualified and diverse participants ([Exhibit 1](#)). This evidence demonstrates that monetary incentives are a viable way to increase participation from our target group of students from underrepresented communities (Walter et al., Ejioogu et al.).

After a recruitment phase, we will **share** our pool with the researchers. It is important that we follow up with organizations, individual students, and researchers to ensure a higher response rate and resolve pain points in the process where possible. For researchers, the success of our product will be dependent on the number of students that we can recruit from diverse populations, particularly those that are not well-represented in research. For students, success will stem from an accessible survey that has questions that are respectful of their identity and do not invade their privacy. Finally, we can **scale** participation beyond the college setting by using both connections developed with the student organizations and professors' networks to expand to universities across the nation.

## Prototype

When interviewing students, we found that monetary compensation was the most compelling incentive to participate in research studies. Likewise, we have support from researchers that we would have enough funding to provide sufficient incentives. Additionally, leaders of these student groups, like MiT (Minorities in Tech) and UW Community Aid, voiced concerns about exploitation or performative actions ([Exhibit 2](#)). Our platform does not make any value judgement on student backgrounds and we only share personal data with researchers whose studies are approved by the university's Institutional Review Board. Lastly, our survey is short

and sensitive to student privacy concerns, as almost all questions are optional ([Exhibit 5, Participant Survey](#)).

The primary problems that researchers faced with participant pools were potentially coercing underrepresented groups with high incentives, having participants distrust research, and ensuring a baseline of cultural representation (especially as the overall population of UW is highly WEIRD). Our prototype mitigates these problems by conducting outreach through student leaders of diverse backgrounds, ensuring that students are hearing about our product from a trusted source. In our interview with Mariam Mayanja, we learned that our website was unclear, as she could not tell whether compensation was guaranteed and we did not list an explicit range ([Exhibit 2](#)). Following our feedback session, we added more information about compensation and the tangible benefits of participating in user research to our website ([Exhibit 5, Join the Pool](#)). Our website is unlike existing participant pools because we are creating a resource for multiple departments and institutions – participants are exposed to cross-institutional opportunities and researchers from different fields can benefit from this diverse pool.

## Case Study – University of Washington

To validate our problem and solution, we executed the plan described in our framework at the University of Washington. Given that we are all current students at UW, this setting provided us with the most opportunities to get feedback from potential end users.

As part of our initial research to better understand this problem, we spoke to UW professors / PhD researchers (n = 5) from a variety of departments: 2 from Foster, 2 from HCDE, and 1 from Psychology. While all interviewees agreed that diversity is important for research studies, there were quite a few barriers that prevented them from seeing diverse participants in their pools. The most frequently mentioned barriers were a lack of incentives for professors to actively seek out inclusive participant pools and inaccessibility for both underrepresented communities and faculty. Through talking with Dr. Christina Fong, we learned about various efforts at the department / institutional level, such as the Bradford-Osborne Research Award, that encourage researchers to work with minority populations ([Exhibit 1](#)). Since these initiatives aim to address the first barrier, we diverted our efforts towards eliminating the latter barrier where we felt like we could have more impact.

An early breakthrough was during our discussion with Dr. Julie Kientz. We learned that she, along with a few undergraduate students, established DUB Pool (<https://sites.uw.edu/dubpool/>), a new university research participant pool. However, Dr. Kientz stated that they had no specific direction for recruitment and that the pool was largely unpopulated during the time of our interview ([Exhibit 1](#)). Upon conducting more research on the many participant pools at UW ([Exhibit 6](#)), the main themes we identified in current solutions were:

1. The lack of a central institution-wide participant pool
  - a. It is inefficient that each lab has to dedicate its own untrained personnel to create an exclusive pool. We felt a more optimal solution would be to have a trained group of people create a shared resource that could be accessed by all labs.
2. A lack of effort in specific outreach to underrepresented groups

We identified that we could support current participant pools with recruitment of non-WEIRD participants by conceiving an outreach plan that fostered trust in research. To increase the impact of our solution, we decided to create a central database of participants rather than to increase the diversity of any one department / lab-level participant pool. As we launch our solution, we hope to partner with UW researchers and existing participant pools instead of competing against them.

We focused our outreach efforts on ethnically diverse students groups who do not participate in research for various reasons: distrust due to previous exploitation, lack of awareness of research opportunities and impact, and logistical barriers to participating. UW is home to a wide array of cultural and ethnic student organizations (RSOs), many of which we were able to contact and interview throughout the quarter. We spoke to the leaders of RSOs (n = 9) such as HKSA, GEN1, and FASA. During these interviews, we found that community leaders were overwhelmingly in support of sharing these opportunities, but did express concern about a lack of clarity and transparency regarding the compensation strategy ([Exhibit 2](#)). As we mentioned above, we integrated their feedback into the design of the prototype to improve their experience using our product.

We will continue reaching out to student organizations for feedback, encouraging them to join our participant pool. To gauge the diversity of our pool, we will use the information that the participants provide through the initial survey to compare the demographics of our pool against existing participant pools. We hope to reach a critical point, described by the following goals:

- 50+ participants entered into the pool
- Demographics indicate a sample significantly different from WEIRD populations on at least one dimension
  - In this case, primarily differentiating by inclusion of non-Western, first-generation, or low-income students

After reaching these two goals, we will share our participant pool with researchers and allow an initial group of partner labs to utilize our product. With this, more researchers can see the clear impact of having an accessible, diverse participant pool. We will work closely with this early group of adopters to iterate on our solution based on their pain points. Potential directions to continue developing our solution could be expanding our outreach efforts beyond the campus community to reach a more varied set of participants or minimizing the logistical burden of scheduling, technology, and transportation for researchers.

## Business Model

With our solution, we plan on addressing both sides of the issues regarding a lack of diversity in research studies – helping researchers find a diverse group of participants, as well as connecting individuals of marginalized communities with research opportunities. As such, partnerships will be extremely important in implementing our solution. We would establish partnerships with cultural RSOs on campus, which would address potential barriers to entry and recruitment by establishing trust in individuals of underrepresented groups through leaders in

those communities. Many of the RSO leaders we spoke to in our interviews expressed interest in helping to raise awareness of our program if it were launched. We would also secure partnerships with university programs and organizations such as the Ethnic Cultural Center or the Office of Minority Affairs & Diversity at UW to help us promote our program.

On the research side, we plan to establish and maintain close relations with research groups and professors: our potential 'customers'. We will attract researchers by offering access to a sizable database of diverse and qualified participants. The researchers we interviewed recognized the importance of diversity and valued having an inclusive and representative, but most importantly physically-accessible, pool of participants from which they could sample.

Some main sources of competition lie in external pools of participants, such as MTurk ([Exhibit 4](#)). While MTurk may have broader reach in terms of scale, Dr. Johnson and Dr. Fong expressed that the WEIRD problem persists on top of added limitations in reliability of the data quality ([Exhibit 1](#)). Other platforms may guarantee quality respondents, but require additional costs. In other words, there is oftentimes a tradeoff between service cost and quality (Casler et al.). Additionally, we considered other potential solutions, such as a crowd-sourced platform for research data and a marketing platform which performs extensive social media campaigns to recruit participants. However, we ultimately determined that research is often too specific to leverage existing data, and that impersonal advertising would not help lower barriers to entry in gaining trust with our potential partners and end-users. Khatsini Simani from the Consulting and Business Development Center, which focuses on outreach to businesses in underserved communities, and several student leaders agreed that a personal connection, like word of mouth, was vital to encourage participation from minoritized populations ([Exhibit 3](#)).

Our business model is sustainable through funds primarily provided by researchers and grants. Researchers pay a fee to access our database of high-quality and diverse participants, and they have the capacity to pay for our product since research grants oftentimes include funding to compensate participants or otherwise gain access to data. In fact, Adriana Germano, a doctoral candidate, stated that people would be inclined to pay a higher price to access our pool if we could increase representation from hard-to-reach communities ([Exhibit 1](#)).

One of the strengths of our program is how scalable it is to not only the greater Seattle area, but other college campuses and their surroundings as well. To expand upon our connections with RSO groups, we envision reaching out to non-college students through the personal networks of diverse students which allows us to include populations outside of campus. Additionally, our business model of recruiting college-age students from minority groups through partnerships with RSOs may be replicated on other college campuses to diversify studies at universities around the nation and their surrounding cities.

We believe our idea has the potential to not only benefit the quality and applicability of research studies, but also to bring awareness to the value of diversity in research and beyond.

# Bibliography

## Primary Sources

Fong, Christina. Personal interview. 25 Nov. 2020.  
Germano, Adriana. Personal interview. 8 Dec. 2020.  
Johnson, Michael. Personal interview. 18 Nov. 2020, 15 Dec. 2020.  
Kientz, Julie. Personal interview. 16 Nov. 2020.  
Reinecke, Katharina. Personal statement. 10 Nov. 2020.  
Simani, Khatsini. Personal interview. 2 Dec. 2020.

Alas, Ana. Personal interview. 23 Nov. 2020.  
Bonsol, Bianca. Personal interview. 12 Nov. 2020.  
Lee, Clarisse. Personal interview. 4 Dec. 2020.  
Malana, Aerin. Personal interview. 25 Nov. 2020.  
Mayanja, Mariam. Personal interview. 3 Dec. 2020.  
Nguyen, Kathy. Personal interview. 1 Dec. 2020.  
Tilly, Rayna. Personal interview. 16 Nov. 2020.  
Ye, Sunny. Personal interview. 29 Nov. 2020.

## Secondary Sources

Azar, B. "Are your findings 'WEIRD'?" *Monitor on Psychology*, vol. 41, no. 5, 2010, pp. 11, [www.apa.org/monitor/2010/05/weird](http://www.apa.org/monitor/2010/05/weird). Accessed 18 Dec. 2020.

Casler, Krista, et al. "Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing." *Computers in Human Behavior*, vol. 29, no. 6, 2013, pp. 2156-2160, [www.sciencedirect.com/science/article/abs/pii/S074756321300160X](http://www.sciencedirect.com/science/article/abs/pii/S074756321300160X). Accessed 18 Dec. 2020.

Ejiogu, Ngozi, et al. "Recruitment and Retention Strategies for Minority or Poor Clinical Research Participants: Lessons From the Healthy Aging in Neighborhoods of Diversity Across the Life Span Study." *Gerontologist*, vol. 51, 2011, pp. S33-S45. [www.ncbi.nlm.nih.gov/pmc/articles/PMC3092978/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3092978/). Accessed 17 Dec. 2020.

Henrich, Joseph, et al. "The weirdest people in the world?" *Behavioral and Brain Sciences*, vol. 33, 2010, pp. 61-135, [www.cdes.com.au/wp-content/uploads/2016/03/Workshop27JournalArticleWeirdestPeople.pdf](http://www.cdes.com.au/wp-content/uploads/2016/03/Workshop27JournalArticleWeirdestPeople.pdf). Accessed 16 Dec. 2020.

Walter, Jennifer K., et al. "Research Participation by Low-Income and Racial/Ethnic Minority Groups: How Payment May Change the Balance." *Clinical and Translational Science*, vol. 6, no. 5, 2013, [www.ncbi.nlm.nih.gov/pmc/articles/PMC5350891/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC5350891/). Accessed 16 Dec. 2020.

# Appendix

## Exhibit 1: Main Insights from Interviews with UW Researchers

### Primary Interview Questions:

- What do you normally do to recruit participants for your research studies?
  - Is it efficient or optimal? What do you wish you could change about this process?
- Are you aware of DUB Pool? What are your thoughts about having a shared participant pool for all researchers in the DUB group?
  - How would you improve the DUB Pool? How do you think this will affect you as a researcher?
- When recruiting for participants, do you consider cultural / ethnic diversity?
  - Do you believe diversity is important for the generalizability of human behavior research results? Why or why not? How important is it?
  - What pain points exist for recruiting and retaining minoritized communities?
- How has COVID-19 affected your ability to recruit participants?

**Dr. Christina Fong**, Associate Dean of Inclusion and Diversity and Teaching Professor of Management at the **Foster School of Business**

Interviewer: Daniel Zhu

- “[WEIRD] is not a problem that is just an issue for one or two departments – **this is something that impacts research that happens across all five of our departments**”
- “[We should be] encouraging our faculty to be thinking about and widening the social impact of the research that they do”
  - Dual top and bottom approach:
    - “What am I doing to speak to social inequities that might be in existing business structures? The more we encourage faculty to think about these issues, the more we can surface solutions. **What are we doing to make it easy for faculty to create those relationships, get access to data that speaks to those experiences?** Because the easier it is for them to get access to this data, the more likely it is for them to ask interesting questions that advance our knowledge. There need to be two things that happen at once”
- MTurk was at its heyday a couple of years ago, most top-tier researchers are moving away from this because the data is so unreliable / dirty, could be bots
  - Doesn’t have trust, so this is why establishing trust is important
- **Bradford-Osborne Research Award** in Foster
  - Creates some incentives / prestige for academics to start doing research on minority-owned businesses

**Dr. Michael Johnson**, Management and Organization Lab Coordinator and Associate Professor of Management at the **Foster School of Business**

Interviewer: Daniel Zhu

- **Leverage online subject pools** (Mechanical Turk, Qualtrics panels) for recruiting participants for human behavioral studies
  - There is some evidence that these online pools are more representative than undergrad pools (in age & ethnicity)
  - Viewers in academic journals don't like it – since people may learn how to game the research – get lots of pushback
    - In general they believe that online pools are more representative but undergrad pools are preferred by committees
- Many participants are from the undergraduate population in introductory management courses
  - Diversity depends on Foster admissions, feels that Foster admits are pretty representative of UW population and therefore still WEIRD
- **Advantageous to use a larger sample pool for face to face studies**, online pool is likely better for online studies since its more representative of general, non-student population

**Dr. Julie Kientz**, Chair and Associate Professor at the department of **Human Centered Design and Engineering**

Interviewer: Lucy Jiang

- **DUB Pool is a new initiative** and it was inspired by the Communications Pool
  - For current research studies, the department compensates participants for the cost and time that it takes to get to campus for in-person studies
  - Type of incentive can be important (not all people accept e-gift cards and not all participants have email addresses)
- Students that are underrepresented in research are often in high demand, so you must **think about the ethics of recruitment**
  - Examples of underrepresented students include individuals with disabilities
    - However, they might be exploited since there are so few in the Seattle area who are available for in-person studies
  - Ensure that participants are not coerced into recruiting their personal networks for research studies
    - It is unethical to exploit participants of a lower socio-economic status by providing a high incentive, leading them to engage in riskier studies
    - Computing studies are not necessarily as risky as health studies, but they might have significant privacy concerns
- An additional incentive that we could provide (beyond monetary incentives) could be to allow people to **see how their contributions have contributed** to furthering research
- Some limitations on using online / open-source data

**Dr. Katharina Reinecke**, Associate Professor at the **Allen School of Computer Science and Engineering**

Interviewer: Lucy Jiang

- “Several research labs do [recruit for participants broadly at UW] ... We usually **post our research studies on the DUB mailing list** or similar to get people. Some departments



also have their own participant pools (e.g.: psychology). **DUB has been wanting to set [up] something like that in the past**, but I don't think it's quite there yet. I think it would be wonderful to create an opportunity like that, [it] would definitely be a win-win!"

**Adriana Germano**, Doctoral Candidate at the **Department of Psychology**

Interviewer: Darren Huang

- "There is a push to increase more cross-institutional collaborations between researchers to address this [WEIRD] issue as well as more community collaborations. For our science, having studies that move beyond WEIRD samples is very necessary"
- "If your proposed sample increased **in-person recruitment** for hard-to reach samples, I could see people paying a lot!"
- Pointed out MTurk, Prolific, and Qualtrics Panels as examples of obtaining diverse samples online, but noted that many racial groups, like Native Americans, are difficult to access or there aren't enough people on the platform who meet the study criteria.
- Unsure of how often paid/unpaid studies are conducted, but would guess that paid samples for specific participants is more often.

## Exhibit 2: Main Insights from Interviews with UW RSOs

### Primary Interview Questions:

- Have you ever participated in a paid research study? What was your experience like?
  - Would you want to participate in another paid research study? Why or why not?
- How does payment impact your likelihood to participate in a study?
  - Has your perception of a study's trustworthiness changed based on the incentive provided?
  - Have you ever participated in a risky study due to a high incentive?
- Do you think that others in your community / RSO would be interested in participating in paid research on campus? Why or why not?
  - As a leader, how would you feel about sharing these paid research opportunities with your community?
  - How would you go about sharing these opportunities among students and within your own personal network (friends, family, etc.)?

**Rayna Tilly**, Diversity & Inclusion chair of Phi Sigma Rho. Phi Sigma Rho is a group of women engineers committed to empowering women in STEM fields.

Interviewer: Aarushi Bhatnagar

- Discussed how Phi Sigma Rho continuously supports diversity and inclusion efforts and celebrates sisters with diverse and different backgrounds
- Has **quarterly requirements for members to volunteer with diversity organizations** (pre-existing partnerships)
- Never considered research diversity as a potential diversity issue, but after learning about the cause she understands the importance of representation
- Willing to partner with Diverstudy and encourage members to support by participating
  - Can also **accept participation as part of the quarterly member requirements**

**Ana De Las Alas**, IUGA Officer. IUGA is the Informatics Undergraduate Student Association – it communicates between the Informatics student body, faculty, and administration of the University of Washington Information School.

Interviewer: Aarushi Bhatnagar

- She has participated in Psych research studies (is a Psych major), but she **does not like the way the research studies are conducted**
  - She supports research and would definitely participate again (though she spends most of her time researching herself)
- She notes that **students only participate for extra credit** so the results are often not representative of the general student body
- For her lab, she has noted one of the **main incentives for student participation is money** (she believes that extra credit only incentivizes students in the last week & doesn't bring forth as many participants as money)
- She would definitely support Diverstudy and share the information with other members of IUGA and Informatics

- Though she emphasizes that there must be a strong incentive such as money for students to really be motivated to participate

**Kathy Nguyen**, Leadership Board of Vietnamese Student Association

Interviewer: Haneul Ryou

- Trying to get diversity in research is a good idea – would be willing to promote our service in their club meetings
  - Implementation of a club that takes cares of day-to-day activity might be a good idea
- May be **difficult to reach out to members to participate in research while online**
  - Could promote survey in meetings, not as effective via email to promote participation -- people have been participating in general club meetings but there has been a limit to reach due to online format
  - Monetary incentives would work if initial survey is short + doesn't require follow up
  - If follow-up was required, should not require extensive surveys/activities in person unless **monetary compensation matches extent of participation**

**Sunny Ye**, Leadership Position in Hong Kong Student Association

Interviewer: Haneul Ryou

- Personally not very interested in participating in research
  - Many research opportunities in the medical building are clinical studies that require sharing blood samples, extensive check-ups, etc
  - Would be interested in **participating in paid research if online** (during COVID) or was a less regular / one-time participation in a behavioral interview, etc.
- Many people in club interested in diversity but unsure about interest in research outside of those pursuing careers in related fields
  - Would need to incentivize with something other than end goal of 'increasing diversity' → **needs to be something tangible**
  - Would be easy to incentivize students to take a short 2-3 minutes survey with potential to win gift cards or food, especially if no immediate requirement to follow up
- Willing to set aside time during meeting to share our website/survey

**Clarisse Lee**, Executive Board Leader in Synapse, a brain-injury support RSO

Interviewer: Haneul Ryou

- Has personally participated in research before
  - Was either because of a **course requirement, grade-boost incentivization, or monetary compensation**
  - Would not be willing to engage in research that requires multiple sessions
- Notes that oftentimes, students participating in research conducted on campus are from the department of said research (ie. students taking Psychology courses are most represented in Psychology-based research studies, with no diversity in academic background)

- Supports our goals of branching out and potentially fostering diversity in research participation
  - Would be willing to host an event/meeting discussing our solution
  - Believes that in RSOs interested in/hoping to promote diversity, our **solution could be brought up while engaging in general conversation about diversity**
- Many students of science-driven academic backgrounds would be interested in Diversstudy -- could gauge their interests to expand our solution
  - Not just Synapse, but all other pre-health / medical RSOs on campus, especially ones centered around minority or underrepresented students

**Bianca Bonsol**, Board Member of Students of Color for Public Health and UW Community Aid  
Interviewer: Lucy Jiang

- Outreach via **RSOs / student leadership is most accessible and trustworthy** for diverse ethnic and cultural communities
  - Researchers must be explicit about the benefits of their work to build trust with these communities
  - Many minoritized students **struggle with finding resources and opportunities**, so sharing these opportunities and raising awareness makes it easier for them
  - Some specific communities that might benefit from additional opportunities would include **undocumented students / first-gen college students**
- Avoid being **performative and self-serving** when increasing inclusion
  - Researchers must understand the **long-term, real-world implications** on these communities; otherwise, they **risk exploiting their subjects**
- UW Community Aid was **inspired by similar community aid platforms** on Instagram, such as WWU's mutual aid account and COVID-19 mutual aid accounts
  - **Instagram is the most effective platform** for reaching out to the community, especially because there are already similar initiatives on this platform
  - At the start of the summer when the account was created, the requests were filled extremely quickly
    - Now requests are taking longer, so they are working on expanding community reach and engagement
  - Prioritize fairness and trust when posting these requests
    - No questions asked, anonymous to the public, decided to not prioritize which requests were posted first based on urgency

**Mariam Mayanja**, Chair of **Minorities in Tech** (MiT) in the Allen School for Computer Science and Engineering

Interviewer: Lucy Jiang

- Has participated in paid research before, and has **experience with running user research in industry** (Microsoft)
  - **Selects to not participate in unpaid research studies** anymore
  - Uses paid research as an opportunity to earn additional money for extra spending beyond a strict budget

- If a study asks for a large amount of personal information, the compensation should be higher (some studies aren't worth the **tradeoff of cash for privacy**)
- Cautious of the information that she volunteers to studies, as **Black women are historically exploited in user research**
  - They are harder to recruit for this reason
- Others in her community / RSO would be interested in participating in paid research because most undergraduates / graduate students need extra money
  - Would feel comfortable sharing these studies on a **case by case basis** and would prefer to **avoid exploitative or offensive studies**
    - Would share these via Facebook, texts, Instagram, mailing lists, etc.
- Specific prototype feedback
  - Would share this website but compensation (**is it guaranteed and what is the range of compensation?**) should be made clear
  - Should also **go into more detail about why this research is impactful** for people in the pool
  - Compensation is usually just for study participation, not for signing up for the pool
  - Having additional incentives for signing up for the pool would not hurt as long as the terms for those are clear

**Aerin Malana**, Chair of **GEN1** (first-generation college students) in the Allen School for Computer Science and Engineering

Interviewer: Lucy Jiang

- Has never participated paid or unpaid research, but knows people who have
  - Would want to participate in paid research (and payment impacts her decision to do so) but it depends on the time and social commitment
    - **Compensation must match the amount of effort**
    - Monetary compensation is the best incentive for students
  - Trustworthiness of a study is based on **what is being studied and who is doing the study**
    - Wary of studies on a community that are not being conducted by the people in the community, as this often indicates exploitation
- For first-gen college students, the **primary barrier right now is a lack of awareness**
  - Would be interested in sharing paid research opportunities with her community, but would need more information about what the studies are about
    - Would share these via mailing lists, forwarding emails, social media outreach, and word of mouth
- Participant pool model might make it easier for researchers and participants to communicate clearly
  - She would be interested in sharing some specific studies if they are applicable to her community

## Exhibit 3: Main Insights from Other Interviews

### Primary Interview Questions:

- How familiar are you with the outreach? Business partners?
- What do you think has worked well in reaching out to minority businesses? What is a common struggle?
  - How could we translate this / draw parallels to our project?
- Purely hypothetically, but if it were possible, do you think your center would be interested in partnering with our idea?

**Khatsini Simani**, Assistant Director at the Consulting & Business Development Center (Foster)  
Additional Background: Has also conducted research before, started a Ph.D but halted her pursuit of it because she felt the timing was not correct with her personal development goals.

Interviewer: Darren Huang

- “Our organization would definitely be a stakeholder in that conversation and would have a **vested interest** [if we were to partner with them for spreading awareness about our product].
  - The CDBC is trying to raise awareness about the long-term impact research and get more research done on minority-owned businesses
  - Lack of diversity in professors in academia
- **Primary method of outreach** is through **word of mouth**, specifically personal networks and relationships established with clients. Social media is used mostly to alert existing clients, and Khatsini admits they could do better on that front.
  - Use CRM systems to track communication and outreach
  - Rely on community and city/government organizations
- Think about ways to engage people outside of the university, UW is a predominantly white institution.
- Recommends to show students that participation in research benefits the community, and transparency is important to make a tangible connection.
  - Professors often seem disconnected from courses when doing research.
- **Engaging with students at a young age**, like through the UW Pipeline Project (K-12) **would be a great way to familiarize students with research** so that they are more comfortable both conducting and participating in research studies.

## Exhibit 4: Solution Space Analysis

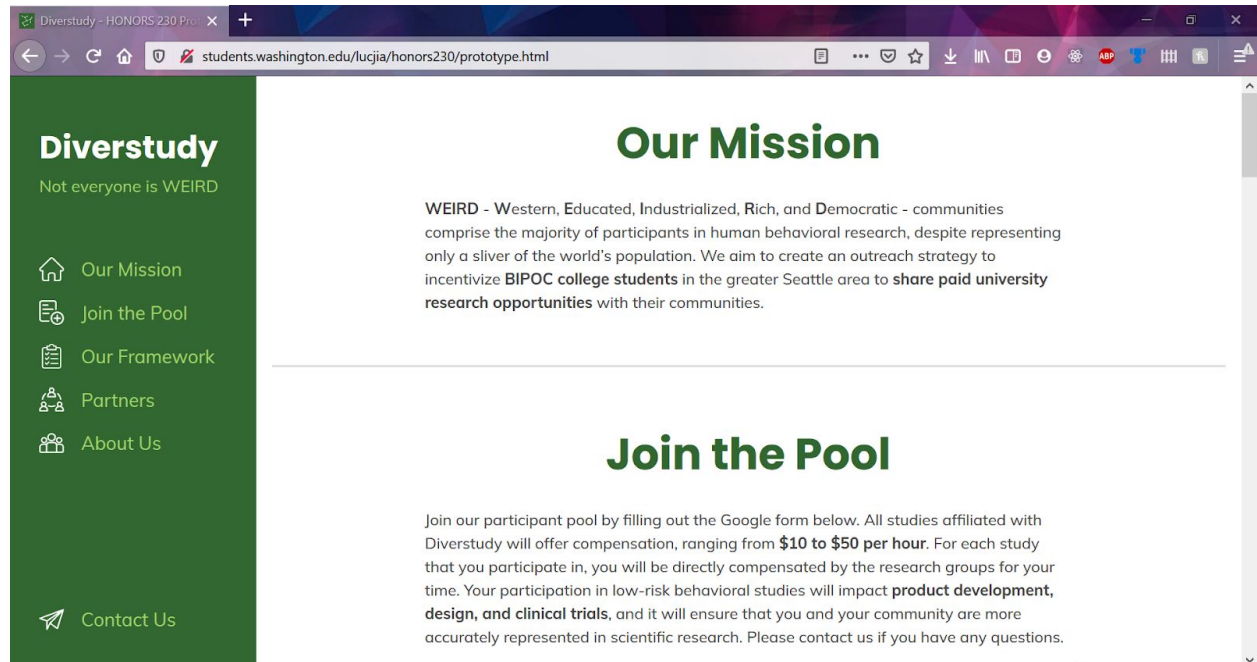
	Diversity	Resource/Time Commitment	Availability for In-person	Research Validity
Social Media	—	—	—	×
Crowdsourcing (MTurk)	✓	✓	×	—
▶ Local Participant Pools	×	×	✓	✓

✓ Preferred    — Adequate    × Lacking

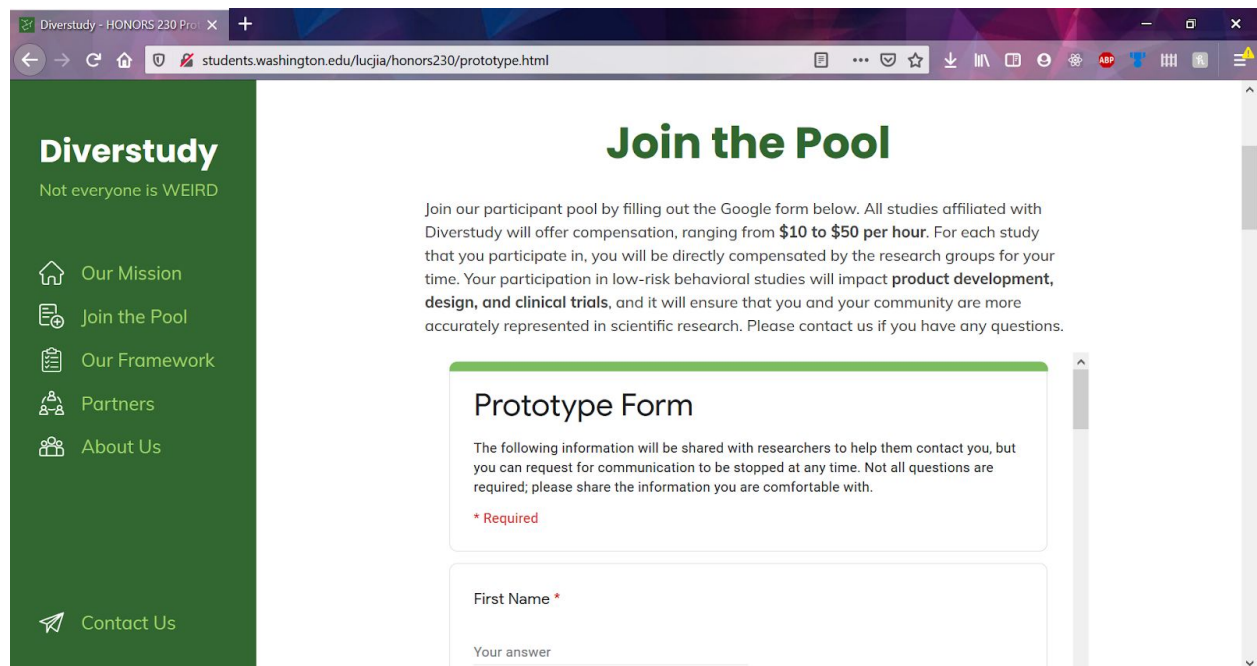
## Exhibit 5: Screenshots of the Prototype

Prototype link: <https://students.washington.edu/lucjia/honors230/prototype.html>

### Our Mission (landing page)

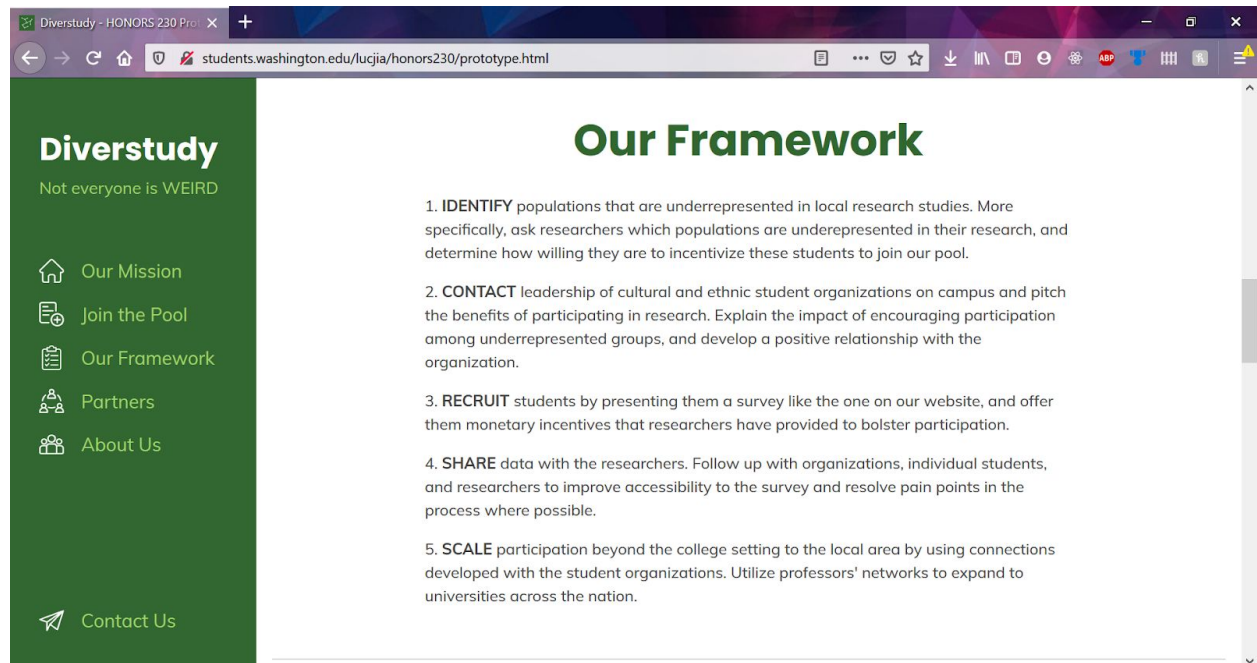


### Join the Pool

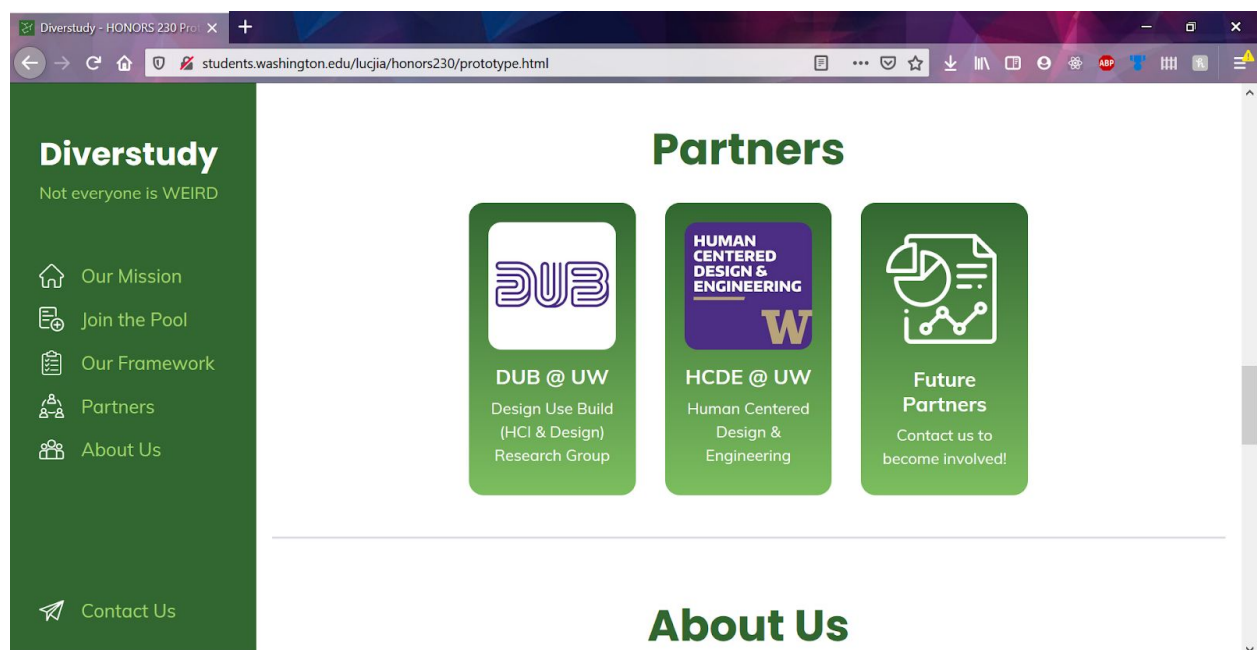




## Our Framework



## Partners



## Participant Survey (Google Form)

<https://forms.gle/8v9GPZSjdB6nTDho8>

## Exhibit 6: Analysis of Participant Pools at UW

For example, there are various participant pools at the department / lab-level that populate their pool in a manner that leads to WEIRD problem:

- Foster – samples undergrad intro management courses
- Psychology – samples undergrad into psych courses
- DUB research group – posts on social media, reaches out to previous participants, emails DUB mailing list