## CS147

# POVs and Experience Prototypes

### Introduction

Meet our team



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We are a group of Stanford undergrads designing solutions around the domain of mental health. From our interviews, we observed that the main forces that contribute to an individual's mental wellbeing are organization, stress management, and daily routine. We decided to go back into the field and gain more perspective in these areas.

## **Preliminary POV**

We met Ben, a student from Palo Alto High School. We were amazed to learn that Ben used to run daily to destress but stopped once he got sick. It would be gamechanging if we could design a solution that gave people a way to destress that fit with their current lifestyles.

## Additional Needfinding Results

After noting this POV, we decided to go into the field and test it out with three more interviews:



We spoke with John Barton, a West Flo RF who formerly served on the school board of Gunn High School and had a child who attended the school for four years. In his experience, most of the students John has worked with didn't come into college with mental health problems; they came from privileged backgrounds that never taught them the resiliency to deal with the unanticipated failures of adulthood. He attributes the pressure these students feel to succeed to their parents, who see that the sole reason to learn is to get into college.



We also met with Dr. Julie Sutcliffe, a sports Psychologist at Stanford. She too commented on the prevalence of developing mental health issues between the ages of 18-25. She spoke about the beneficial and detrimental approaches she sees students take towards their stress. One thing she wished students were better at was the ability to say "no" to their peers, whether it be to an obligation or going out with their friends.



Finally, we spoke with Matthew, a high school swimmer and senior from Seattle, Washington. Matthew comments that he is happiest at night when he is unwinding, and he sets time aside each night to think about things outside of school. For him, the greatest distraction in his routine is technology. He looks at his phone often while studying, which causes him to lose focus and builds up his stress because he is unable to effectively finish his work.

### Revised POVs and HMWs

#### POV<sub>1</sub>

We met Caroline, a Bridge peer counselor. We were amazed to realize that not all students fit into the Bridge's step-by-step program. It would be game-changing to give each student a plan that worked for them.

#### **HMWs**

#### How might we...

- Make the plan continuous?
- Expand the definition of a plan?
- Make a plan that is circular rather than linear?
- Have talking to your counselor like talking to your best friend?
- Know what the students need before they come to the counselor?
- Not fitting into the plan a good thing?
- Make counseling less one-on-one and more community-based?
- Predict the plan will not work for them?

#### POV 2

We met John Barton, a level-headed RF in West Flo. We were surprised to learn that in his experience, most of the students with mental health crises didn't have previous issues, but instead came from privileged backgrounds and had never learned resiliency. It would

be game-changing to teach people resiliency without having to undergo trying experiences.

#### **HMWs**

#### How might we...

- Understand someone else's experiences?
- Teach resiliency through good experiences?
- Better challenge top students?
- Make grades the least important part of success?
- Work resiliency into the classroom curriculum?
- Make learning resiliency like a board game?
- Make taking on tough experiences exciting?
- Take on challenges as a community rather than as an individual?

#### POV 3

We met Jules, a high school student from Paly. We were amazed to realize that technology played a big role in organizing her life but also caused a lot of stress. It would be gamechanging to find a way to keep her organized without her phone.

#### How might we...

- Get rid of organizing altogether?
- Up the stakes for procrastinating?
- Make screens hurt to use?
- Make organizing the best part of the day?
- Make organizing like cooking from a recipe?
- Remember things without alerts?
- Create a schedule without taking up any time?
- Get other people to remind her about what to do?
- Get rid of the distracting apps on her phone?

### From these HMWs, we came up with three that we liked the most:

- How might we make procrastination productive? (Jules's POV)
- How might we teach resiliency through good experiences? (John's POV)
- How might we understand someone else's experiences? (John's POV)

## Solutions and Prototypes

With these HMWs in mind, we brainstormed solutions to these questions. These are the three solutions we found to be the most interesting:

- 1. Switch bodies with another person
- 2. Genie that gives you productive task when you're procrastinating
- 3. Reward people when they undertake challenging experiences

### Prototype 1





Through this prototype, we wanted to test the assumption that it's hard to understand an experience unless you undergo it yourself. In addition, we wanted to test if people learn more effectively from doing rather than observing.

This prototype required two people, participant A and participant B. The organizer conducted the tests on A and B separately. In the first test, the organizer plays a card game with A. First, they hold up two playing cards for participant A. They choose a card and are told by the organizer if they are correct or incorrect, but they are not given any additional feedback. After many repetitions, they are forced to try to figure out the pattern that causes the correct card to be chosen. The organizer knows the pattern is simply alternating between choosing the right card and left card. Person A took nine tries and made two incorrect guesses.

In the second test, participant B watches a video of participant A playing the game. After watching the video, participant B is told the correct pattern.

After completing their specified task, each participant were asked the questions regarding the game. For participant B, the questions were framed about participant A. e.g. "Can you describe person A's thought process throughout the game?"

Participant A's responses were consistently more specific than participant B's. For instance, when asked the first question, A responded with "right, left, right, left" whereas B responded with "alternating hands." In addition, B tended to provide overarching commentary on A's performance. When asked question 3, they suggested that had A relaxed and stepped back from the game, they would have succeeded much sooner. On the other hand, A provided specific instances during the game where they could have performed better, citing that they got flustered during the middle of the game when they should have relaxed and "let the pattern stand out a bit more." B also rated the difficulty of the game much lower than A, giving a 5 in comparison to A's 2. This aligns with A's use of the word "stressful" to describe their experience, while B uses the word "confusing."

From this prototype, we learned undergoing a new experience firsthand allows an individual to more clearly comprehend the details of the process and encourages them to reflect on their personal relationship to the experience. We successfully showed that participant A gained an understanding of how they could personally perform better in the task in the future. Participant B, on the other hand, came away overconfident and ignorant of the nuances of the game. However, participant A did complain that the process was stressful, which may deter them from going through these experiences in the future. Overall, our assumption going in was validated. An assumption we may need to test going forward is whether bad experiences deter future risk-taking.

## Prototype 2

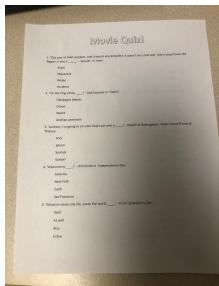
In this prototype, we wanted to test the assumption that there are productive ways of procrastinating. To do so, we created a task simulation with Sarah, a Stanford student who used to attend Paly. First, the organizer asked Sarah to copy the poem "I'm Nobody! Who Are You?" by Emily Dickinson ten times. After she was halfway through the task, the organizer gave her the choice of taking a five minute break to watch funny YouTube videos (the unproductive choice), or finish her homework and answer emails (the productive choice). She asked if she could watch the video and have a conversation with the organizer instead. After making her decision, the simulation ended.





It appears that this prototype failed, as Sarah did not decide to take the productive route. However, this may be the result of inadequate prototype design, as the productive choice was not necessarily alluring. As a result of this trial, a future assumption we want to test is whether productive tasks that fit an individual's interests may encourage them to take healthy breaks in between work.

## Prototype 3





The assumption we wanted to test with this prototype was that people are inclined to avoid suffering even if they'll be better off afterwards. The procedure we created to test

this assumption involved a participant and an organizer. Before the organizer met with the participant, the organizer created a study guide for a ten-question, multiple choice quiz. The study guide had three different themes within it, each containing ten questions, for a total of thirty questions in the study guide. The themes were US Presidents, Video Games, and Movie Quotes. The actual quiz would be on Movie Quotes only, but the participant would not know this beforehand.

Before administering the quiz to the participant, the organizer told the participant they would receive 50 cents for each correct answer. They could either take the quiz immediately, or be given the study guide before the quiz. However, if the participant was given the study guide, they would need to write down the question and answer to all thirty questions down on a piece of paper. The participant would not be able to look at the study guide during the quiz. While this would take a while and be boring, the person would fare far better on the quiz if they wrote down all these questions and answers beforehand.

When the participant was asked whether or not they would like to copy down the study guide on a piece of paper, the participant declined and decided to take the quiz immediately. The participant scored 5/10 on the test and was give 2 dollars and 50 cents.

This test confirmed our assumption that people are inclined to avoid suffering even if it means they will be better off afterwards. We learned that an intangible positive result in the future is not enough to encourage an individual to complete an undesirable task.

## Conclusions

From our results, we concluded that Prototype 1 was the most successful in testing our assumption. We observed that individuals become more detail-oriented and self-reflective when they undergo experiences firsthand, learning skills that improve their performance in the task in the future. In addition, we are interested in incorporating the results of Prototype 2, where we discovered individuals are willing to take healthy breaks when the task is something they want to do. Moving forward in the project, we want to explore how we can weave personalized skill-building and work breaks as a means of stress-management, as it appears that there is opportunity to capitalize on the breaks we already take in between work to engage with our minds and maintain our mental wellbeing.