



BRAVEN

Braven - Stupski Report #4
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IMPLEMENTATION REPORTING

1. What is the status of the project as it relates to the proposed activities?

- Quantitative workstream: We've completed data collection (pre survey and post survey) from a group of 461 Braven Fellows and 332 comparison group members total over the past two years, of which 128 Fellows and 104 comparison group members were from Spring 2019. In September, we also re-surveyed all Fellows and comparison group members from Year 1 of the study (222 Fellows and 124 comparison group members). The comparison group was comprised of SJSU students who signed up to express interest in Braven, but ended up not enrolling in Braven. The initial analysis of quantitative data has been completed and yielded some promising results.
- Qualitative workstream: In total, over the past two years Anthony and Antonio and his team of researchers have conducted 27 Fellow interviews, 7 Leadership Coach interviews, and 5 Learning Lab observations. We last shared an interim report based on Y1 findings in September 2018, and we are now excited to share the final report based on data collected across both years of the study.
- University Implementation workstream: Sue Farruggia conducted interviews with the three key administrators involved with Braven at SJSU to better understand the specific implementation challenges universities and administrators need to overcome when implementing Braven or programs similar to it. She finished analyzing and synthesizing this data during Year 2, and we are now excited to share her final report about implementation challenges and strategies. This report has already been enormously valuable to Braven internally, and has served as the foundation of an internal "playbook" we use nationally to guide how we build shared value partnerships with universities.

2. What milestones have you reached with the project thus far?

- Data collection and analysis for all three workstreams has been completed.
- Final reports for the qualitative and implementation workstreams are finished, and have been shared and discussed among Braven team members internally to help drive learnings.

3. What implementation successes and challenges have you experienced?

- Quantitative workstream:
 - i. In Year 1 of the study, we struggled with recruitment and retention of our comparison group (in Year 1 we retained 78% of 124 comparison group participants), but with improved strategies we saw significant improvement in this domain (in Year 2 we retained 92% of 226 comparison group participants). These strategies included the following: 1) increased the incentive offered from \$30 to \$80 per participant, 2) implemented text message reminders for the post survey for comparison group reminders (in addition to the email reminders), 3) asked comparison group members to commit to completing the post-course

survey at the beginning of the semester, to ensure they knew it was coming and felt obligated to complete it. With all of the semester-level data now aggregated, our overall response rates are higher than the recommended response rate by the National Center for Educational Statistics, and the differential response rate between the comparison group and Fellow group has narrowed to 4%, which is below the tolerable risk of potential bias under cautious assumptions according to the limits established by the What Works Clearinghouse (see WWC Standards Manual, p. 13;

https://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc_standards_handbook_v4.pdf).

- ii. Unfortunately, despite the progress we made with the Year 2 cohorts, our data collection challenges in Year 1 followed us into Year 2, since that was the group of students who were surveyed in the Year 2 follow up. Because it was a small number of students and we hadn't yet introduced the protocol of collecting phone numbers in Year 1, we ended up with a relatively small sample for our Year 2 follow up analysis, which reduced the statistical power of our analysis.
 - Qualitative workstream: We experience some challenges during both years with getting Fellows to be able to fit interviews into their schedule. In Year 2, we addressed this problem by 1) conducting all interviews over zoom videoconference to reduce logistical and commute difficulties, 2) increased the incentive for interview participation to \$45 for the 45-minute commitment, 3) loosened the selection criteria so that we were able to select fellow profiles (e.g. transfer student) without worrying about them all having the same Leadership Coach, the latter of which was less relevant to our learning goals. Ultimately we were able to collect the data needed, and found Year 2 to be slightly easier with our increased incentives and improved strategies.
 - Implementation workstream: The timeline for data collection for this project was ultimately extended since one of our interview subjects was on FMLA during the planned data collection period, but we were able to modify the timeline and still complete data collection within our target dates.
- 4. How are you monitoring the implementation of the project (e.g., what data are you tracking, what course corrections are being made, etc.)?**
- At this point in time with all data collected and analyzed we're not currently monitoring anything; although the main focus for us throughout the two year study was around data collection goals for the quantitative and qualitative workstreams.

EVALUATION

1. What is the status of the project's overall effectiveness so far?

- Quantitative workstream: The results of our cumulative analysis two full years of data collection supported our previous research on how Braven positively impacts Fellows' non-cognitive growth.
- Qualitative workstream: The insights from the final qualitative report were particularly exciting from a formative evaluation perspective, since this is the first qualitative research we've been able to do on the Accelerator course. We have held internal discussions to review the report with our program design and implementation teams and discussed implications on our program model and execution.
- Implementation workstream: This research has been enormously helpful to us as it provided insight into best practices around forming and managing partnerships with large state universities. In particular, Braven was cultivating and launching a brand new site right around the time Dr. Farruggia completed her report, and her findings helped us codify our approach to these partnerships.

2. In addition to the targets and metrics you identified in the proposal, are there others you've been tracking?

- Yes, we've continued to track employment outcomes for our post-Accelerator Fellows. We are working towards one key outcome: Fellows graduate from college and secure a full-time job worthy of their Bachelor's degree or enroll full-time in graduate school. Braven Fellows outpace the national average for strong job attainment. Within six months of graduation, 69% of Fellows secured quality full-time jobs worthy of their bachelor's degree or enrolled in graduate school compared to 54% of *all* students and 46% of their peers (Black & Latinx students at public universities). We also continue to measure internship attainment, as a key indicator on the pathway to a strong first job. 71% of Braven college graduates have completed at least one internship during college, compared with 49% of first-generation seniors at large state universities. Additionally, 95% of our Fellows are persisting in or have graduated from college.

3. What outcome results, including intermediate as well as annual outcomes, can you share?

- Qualitative Workstream:
 - i. The qualitative collected in Year 2 was largely aligned with what we found in Year 1, giving us more confidence in our findings. The development of confidence and a sense of empowerment to achieve career goals were both highly cited by Fellows and Coaches as benefits of participating in Braven. Of the workplace competencies the Braven course is centered around, across both years, Working in Teams and Networking and Communicating were most often cited by Fellows as the areas in which they grew most. The full report ([attached](#) provides more detailed findings as well as programmatic recommendations based on the researchers' findings).
- Implementation Report:
 - i. The major finding from the implementation report was that SJSU administrators felt that Braven's mission was well-aligned to the mission of SJSU, and that it was this mission alignment, as well as important outcomes for students such as increased retention, that was critical to obtaining buy-in within the university for the Braven program and enabling positive outcomes for SJSU students. Tactically, identifying an SJSU liaison was essential to engage key stakeholders, including prospective students, faculty and administrators, and staff at important campus units such as the Career Center. The only concern raised during the administrator interviews was to consider how to continue to scale the program to provide services to a larger number of students, given the large number of students at SJSU who could benefit from a program like Braven. The full report ([attached](#) provides more detailed findings as well as recommendations based on the researchers' findings).
- Quantitative Workstream:
 - i. Final semester analysis of non-cognitive growth:

We are excited that after aggregating survey data across all four semesters, Braven Fellows showed statistically significant growth over the comparison group in many of our measured constructs (Sense of Social and Academic Fit, Career Related Self Efficacy, Job Search Self Efficacy, Grit, Learning Preferences and Career, Academic Self Efficacy, and Study Habits), especially the areas where we had seen previous positive impact from prior research on Braven's model. We also see statistically significant growth for Braven Fellows when isolating just the most recent cohort, Spring 2019. Our hypothesis entering this project was that Braven is most likely to impact Fellows in the first three

construct areas (“Sense of Community and Belonging,” “Non-cognitive Skills,” and “Clarity of How Academic Pursuits and Degree Connect to Career Aspirations”), and the results largely matched our expectations. The tables in Appendix A illustrate the aggregate non-cognitive growth for both groups for all measured constructs and indicate the impact of Braven, and whether it’s significant.

ii. Year 2 Follow up analysis [non-cognitive growth]:

We were interested in exploring whether the increases Braven Fellows see in our measured non-cognitive constructs persist well after they complete the Braven course. To test this, we surveyed all of the Year 1 Fellows and comparison group participants again on the same measures.

Our analysis revealed that Braven Fellows maintained higher scores in some of the measured constructs where they saw a boost in Year 1 (career self-efficacy, job search self efficacy, academic self efficacy), but not in all the areas of initial growth (sense of social and academic fit, grit, propensity to avoid help seeking were all non-significant or negative in Y2). This suggests that some of the gains experienced from program participation are enduring, yet others might not persist over time. This is consistent with broader research around skill attrition: we know that there is a level of attrition we expect to see, but some skills may gain momentum over time and become even stronger. The Year 2 follow up analysis indicates that Braven Fellows see the greatest long-term gains in some of the areas most closely tied to our program model and theory of change: job search self efficacy and career related self efficacy. See Appendix B for tables showing the difference between Braven Fellows and the comparison group one year after treatment.

iii. Year 2 Follow up analysis [non-cognitives and persistence]:

We were also interested in gaining a better understanding of whether and how the non-cognitive skills that Braven influences are tied to college persistence (and ultimately, graduation). To explore this, we pulled data from the National Student Clearinghouse to track year over year persistence for all Year 1 Fellows and comparison group participants. Our major findings from this data were as follows:

- Unfortunately, our sample size was not large enough to detect a significant impact in terms of overall persistence rates between the Fellow and comparison groups. Braven Fellows saw a small (~2% increase) in the number of students with any enrollment after the treatment period, however we would likely need an additional sample of around 2000 students in order to reach statistical significance with this effect size.
- Next, survey data was pooled across the two groups and we looked at whether there is any association between the non-cognitive constructs and persistence rates. Unsurprisingly, by far the most impactful factors for persistence were the items around financial standing. This is not one of the areas where we see Braven program participation having an impact, but it does support learnings we’ve gathered qualitatively around financial challenges being one of the largest barriers to college persistence for the student population Braven works with. After the financial items, the factors that were both strongly positively

correlated with persistence and statistically significant were job search self efficacy, career related self efficacy, sense of social and academic fit, academic self efficacy, and learning preferences. While the small sample limits our ability to draw strong conclusions, we are optimistic about these constructs being levers of persistence for first-generation low income college students, especially since these findings are generally aligned with external research.

4. What data collection and evaluation successes and challenges have you experienced?

- See above for our discussion of data collection challenges and the solutions we implemented.

5. What level of survey participation did you receive from the Fellows? What did they think of the process?

- Our survey completion rate remained high among Fellows in the Accelerator course (94% in Spring 2019, up slightly from 91% in Fall 2018). We didn't actively solicit feedback on the survey process from Accelerator Fellows, but did not receive any complaints. Fellows are also given the option to opt-out of taking the surveys, and none chose to take that option, which is also consistent with previous years.
- Our Year 2 follow up survey for Fellow and comparison group participants from Year 1 was more challenging. We achieved a 59% response rate among Fellows and 65% among comparison group members and this required up to 5 follow up emails and text messages per respondent in some cases. We have always had challenges compelling Fellows to respond to surveys once they are no longer in the Braven course (our annual Fellow survey requires a lot of follow up and typically lands at ~70% response rate). We faced additional challenges with the comparison group given they had little to no connection with the Braven program, and we were less likely to have their updated contact information so we saw a higher rate of failed text messages and emails. However, the Fellow survey was longer (since it was tacked onto our usual annual survey), so we think we lost respondents there. Both the Fellow and comparison groups were offered an incentive (\$15 Starbucks gift card) for completing the follow up survey.

LESSONS LEARNED

1. What insights and learnings have surfaced in your project implementation so far?

- Quantitative workstream: The results of this study largely support prior research by Monica Higgins' Harvard GSE Team indicating that participation in Braven promotes Fellow growth in key non-cognitive areas. We were also pleasantly surprised to see Fellows' growth in Academic Self-Efficacy, as that is not an area we've measured before and the Braven course is not focused explicitly on academic skills and confidence, although it addresses these items as they relate to achieving career goals. The Year 2 analysis gave us increased confidence in the connection these constructs have to college persistence, as well as reinforcing for us the large role that financial barriers play in college persistence.
- Qualitative workstream: It was very interesting – and encouraging – to learn that Fellows and Coaches reported that participation in Braven led to the attainment of job search skills, workplace competencies, and confidence in their career goals. It was interesting to note which of Braven's learning outcomes were most often discussed by Fellows

(Teamwork and Networking & Communication), and this is making us think about how we may want to incorporate more focus on the remaining three competencies (Self-driven Leading, Operating & Managing, Strategic Problem-Solving) to ensure they are adequately addressed in the course. The qualitative report also generated a handful of considerations for programmatic changes, all of which we are discussing internally with our program implementation and design teams. Encouragingly, the considerations that the qualitative research team found through their inquiry generally mirror feedback we've heard from Fellows in the past, so these findings largely helped further define and illuminate areas that we have been thinking about internally at Braven.

- Implementation study: As mentioned above, the findings in the implementation study have been instrumental in helping us codify tactics for engaging with University Partners. This insight comes at a critical juncture for Braven as we consider scaling to additional sites.

2. Overall, what are you learning about Braven's work and its impact?

- Quantitative workstream: Overall, these results have helped us confirm and clarify which "soft skills" Braven has a significant impact on, which we believe is a core part of Braven's work, and have some limited evidence around how some of these impacts endure over time and are connected to long-term outcomes such as college graduation and post-graduate job attainment. We hope to continue this investigation and build a stronger evidence base to build our understanding here. For example, since we almost doubled the number of Fellow and comparison group participants in Year 2 of this study, we are considering running a follow up analysis next year with the Year 2 participants, since we anticipate the larger sample size will generate more definitive findings.
- Qualitative workstream: As discussed above, the initial report helped us better understand how Fellows and Coaches experience the Braven course, and how we may want to iterate on the course to make it more impactful. The report also confirmed our hypotheses around some of the ways Braven positively impacts Fellows, such as increased confidence in job search and career, and improved mastery of teamwork and communication skills.
- Implementation study: This report has given us a better understanding of some of the key strategies and conditions that need to be met in order for Braven to be implemented successfully.

3. With respect to the five dimensions that you believe are critical to college persistence, what have you learned? Which of these components seems to affect persistence more? Directly/indirectly?

- As discussed above, by far the most impactful dimension was financial challenges; which resonates with what we've seen among our Fellows and in other literature. The other dimensions that were associated with persistence were sense of community and belonging, non-cognitive skills, and some of the academic success items. This study provides evidence that Braven impacts constructs in all three of these dimensions, and has an enduring impact on constructs within the non-cognitive skills and academic success dimensions.

4. What are the repercussions of these insights for Braven's work? What are the cost implications of these findings for Braven's service delivery model? Will they result in cost reductions/greater scale/etc.? (Year 2)

- The learnings around which dimensions are associated with higher persistence are encouraging as we continue to explore Braven's impact on persistence, since this study has built a strong evidence base for the impact participation in Braven has on the areas of sense of community and belonging, non-cognitive skills, and academic success. We also have more clarity now than ever on the significant impact of financial barriers, and

will think about how to best support Fellows in this area knowing that it isn't a challenge we are addressing directly through Braven's program model.

5. What aspects of the findings are applicable to work by organizations other than Braven? How? In which sector (e.g. mentoring organizations)? (Year 2)

- We think the findings around which dimensions are most strongly associated with increased persistence would be valuable to other organizations and even University Partners. Better understanding of the nature and magnitude of the financial barriers first generation low income students face is essential to effectively supporting them to and through college. In addition, other practitioners in the college space could measure and track the other dimensions identified in this study and use that to more effectively identify students for additional support, and better differentiate that support to meet students' needs.

6. From a qualitative perspective, what have you learned about the factors influencing the survey outcomes? What causal and/or correlational relationships were you able to establish between Braven's work and persistence outcomes?

- The findings in the qualitative report clearly support and explain the growth we see in Fellows' job search self-efficacy and career related self-efficacy, as both Fellows and Coaches focused on increased confidence in career and job search as major outcomes of the course and remember those components of the course most vividly.

7. What priority areas and next steps have you identified?

- Some of the key next steps these learnings have generated are:
 - i. Begin internal conversations around the impact of financial barriers on student persistence. What role can or should Braven play to mitigate these challenges? How can we partner with Universities to better meet student need?
 - ii. We are considering re-running the follow up analysis next year to build a larger sample and hopefully draw more conclusive learnings around Braven's impact on persistence.
 - iii. In a similar vein, we are thinking about how to best operationalize and report on the persistence/graduation of Braven Fellows more broadly: across all sites and over time. Since we serve students at different points in their college career, we want to be cautious about claiming impact on students whom we serve late in college.
 - iv. We are thinking about what the next iteration of non-cognitive constructs we want to track might be. We plan to continue measuring the ones we believe Braven impacts (including new ones demonstrated by this study, such as academic self efficacy), but this study also illuminated for us areas where Braven isn't having an impact, such as growth mindset and intrinsic motivation for academics, so now we can move forward and explore a refined set of constructs.

APPENDIX A: POOLED RESULTS ACROSS ALL FOUR SEMESTERS

Table 1. Impact of Braven on Academic Fit

| | Academic Fit |
|---|--------------------|
| Impact of Braven | 0.222*** (0.05) |
| Baseline differential for Braven Students | -0.077* (0.04) |
| Average gain for control students | -0.017 (0.04) |
| Control Mean | 0.669*** (0.03) |
| N | 1669 |

std errors in parentheses

=** p<0.05

** p<0.01

*** p<0.001"

Based on 17 questions on academic fit with a scale between -3 and 3.

Table 2. Impact of Non-cognitive Skill Development

| | Career Self Efficacy | Job Self Efficacy | Growth Mindset | Grit |
|---|----------------------|--------------------|--------------------|--------------------|
| Impact of Braven | 0.362*** (0.10) | 0.494*** (0.12) | 0.058 (0.12) | 0.201** (0.07) |
| Baseline differential for Braven Students | 0.106 (0.07) | -0.042 (0.09) | -0.253** (0.08) | -0.022 (0.05) |
| Average gain for control students | 0.023 (0.08) | 0.127 (0.09) | -0.009 (0.09) | -0.027 (0.05) |
| Control Mean | 1.402*** (0.06) | 0.851*** (0.08) | 2.721*** (0.08) | 3.508*** (0.05) |
| N | 1672 | 1676 | 1668 | 1668 |

std errors in parentheses

=** p<0.05

** p<0.01

*** p<0.001"

Career and Job self efficacy are on 7 point scales centered around zero. More is better.

Growth mindset and grit are on 6-point and 5-point scales respectively. More is better.

Table 3. Impact on Clarity of Relationship Between School and Career

| | Intrinsic Motivation for Academics | Learning Preferences and Career |
|---|------------------------------------|---------------------------------|
| Impact of Braven | 0.057 (0.08) | 0.161* (0.08) |
| Baseline differential for Braven Students | -0.042 (0.06) | -0.061 (0.05) |
| Average gain for control students | -0.065 (0.06) | 0.035 (0.06) |
| Control Mean | 3.973*** (0.05) | 3.792*** (0.05) |
| N | 1668 | 1668 |

std errors in parentheses

=** p<0.05

** p<0.01

*** p<0.001"

Both are on five point scales (1-5) where more is better.

Table 4. Impact on Financial Outlook

| | View of Financial Security | Completed FAFSA | Perception of Finances Relative to Others |
|--|----------------------------|--------------------|--|
| Impact of Braven | 0.011 (0.04) | -0.044 (0.05) | 0.032 (0.08) |
| Baseline differential for Braven Students | 0.056 (0.03) | -0.026 (0.03) | 0.09 (0.05) |
| Average gain for control students | -0.057 (0.03) | -0.015 (0.04) | 0.052 (0.06) |
| Control Mean | 0.285*** (0.03) | 0.781*** (0.03) | -0.217** (0.07) |
| N | 1668 | 1713 | 1219 |

std errors in parentheses
 =** p<0.05 ** p<0.01 *** p<0.001"

*FAFSA completion is a 1 (complete) or zero (not completed) variable.
 Financial security and Perception of Finances are on three point scale where higher means more confidence.*

Table 5. Impact on Academic Success

| | Academic Self Efficacy | Propensity to Avoid Seeking Help | Study Habits |
|--|------------------------|-------------------------------------|--------------------|
| Impact of Braven | 0.310*** (0.09) | -0.05 (0.09) | 0.217* (0.11) |
| Baseline differential for Braven Students | -0.06 (0.06) | -0.179** (0.06) | -0.149* (0.07) |
| Average gain for control students | 0.101 (0.07) | 0.014 (0.07) | -0.016 (0.08) |
| Control Mean | 3.156*** (0.05) | 1.985*** (0.06) | 3.063*** (0.07) |
| N | 1668 | 1668 | 1668 |

std errors in parentheses
 =** p<0.05 ** p<0.01 *** p<0.001"

*Self Efficacy and Study Habits are on 1-5 scale where higher is better.
 Propensity to Avoid is on 5 point scale (-2 to 2) where lower is better.*

APPENDIX B: NON-COGNITIVE FOLLOW-UP ANALYSIS

Table 1. Impact of Braven on Academic Fit

| | Academic Fit |
|------------------|--------------------|
| Impact of Braven | -0.04 (0.10) |
| Control Mean | 0.751*** (0.08) |
| N | 229 |

std errors in parentheses
 =** p<0.05 ** p<0.01 *** p<0.001"

Based on 17 questions on academic fit with a scale between -3 and 3.

Table 2. Impact of Non-cognitive Skill Development

| | Career Self Efficacy | Job Self Efficacy | Fixed Mindset | Grit |
|------------------|----------------------|--------------------|--------------------|--------------------|
| Impact of Braven | 0.650*** (0.16) | 0.800*** (0.17) | -0.451** (0.17) | 0.154 (0.11) |
| Control Mean | 1.265*** (0.12) | 0.882*** (0.13) | 2.865*** (0.13) | 3.550*** (0.08) |
| N | 229 | 229 | 229 | 229 |

std errors in parentheses

=** p<0.05

** p<0.01

*** p<0.001"

Career and Job self efficacy are on 7 point scales centered around zero. More is better.

Growth mindset and grit are on 6-point and 5-point scales respectively. More is better for grit but not mindset.

Table 3. Impact on Clarity of Relationship Between School and Career

| | Intrinsic Motivation for Academics | Learning Preferences and Career |
|------------------|------------------------------------|---------------------------------|
| Impact of Braven | 0.045 (0.13) | 0.06 (0.11) |
| Control Mean | 3.757*** (0.10) | 3.792*** (0.08) |
| N | 229 | 229 |

std errors in parentheses

=** p<0.05

** p<0.01

*** p<0.001"

Both are on five point scales (1-5) where more is better.

Table 4. Impact on Financial Outlook

| | View of Financial Security | Completed FAFSA | Perception of Finances Relative to Others |
|------------------|----------------------------|--------------------|---|
| Impact of Braven | 0.007 (0.06) | -0.059 (0.07) | -0.034 (0.09) |
| Control Mean | 0.271*** (0.04) | 0.510*** (0.05) | -0.042 (0.07) |
| N | 229 | 229 | 229 |

std errors in parentheses

=** p<0.05

** p<0.01

*** p<0.001"

FAFSA completion is a 1 (complete) or zero (not completed) variable.

Financial security and Perception of Finances are on three point scale where higher means more confidence.

Table 5. Impact on Academic Success

| | Confidence in Academic Abilities | Propensity to Avoid Seeking Help | Study Habits |
|------------------|----------------------------------|----------------------------------|--------------------|
| Impact of Braven | 0.341** (0.12) | -0.568*** (0.13) | 0.04 (0.14) |
| Control Mean | 3.403*** (0.09) | 2.257*** (0.10) | 3.236*** (0.11) |
| N | 229 | 229 | 229 |

std errors in parentheses

= "*" p<0.05

** p<0.01

*** p<0.001"

Confidence and Study Habits are on 1-5 scale where higher is better.

Propensity to Avoid is on 5 point scale (-2 to 2) where lower is better.