McIntire
& Company

MERCURY

A Pop-Up Restaurant in C'Ville

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Prepared for:
Ann Wells

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McIntire
& Company

Ms. Ann Wells
1776 Patriot Avenue
Charlottesville, VA 22903

Dear Ms. Wells,

As requested, McIntire & Company Consulting spent the last two months conducting extensive market research and data analysis to assess the viability of a pop-up restaurant on the Corner at the University of Virginia (UVA). For our analysis, we carried out multiple one-on-one interviews, focus groups, secondary research and online survey questionnaire during the process.

The attached report details our research, findings, and supplemental recommendations. At a high level, we have concluded that opening a pop-up restaurant on the Corner would likely be a profitable venture given student preferences and probable market gaps. Such a restaurant would be well positioned to pivot as demand shifts and satisfy the potentially mercurial tastes of UVA students. Our analysis has found a set of price points that would enable to restauranteur to offer a variety of foods. This business would also be able to thrive without engaging in the high-risk "bar" culture that pervades the undergraduate social scene.

We would like to thank Professor Baglioni, Marketing Research Techniques professor at the McIntire School of Commerce, who has been very valuable in preparing this report and the people who volunteered their time to be interviewed/recorded for our research

Thank you for the opportunity to let our team be a part of this valuable project. We hope that this report aids you in making critical decision regarding your new business at Charlottesville, VA. If you have any questions, please feel free to reach us via management@Mcintire.com. We enjoyed the challenge and look forward to hearing your feedback.

Sincerely,

McIntire & Company Consulting
Rob Hicks
Dong Kim
Lena Lin
Mitchell Maison
Andrew Shannon

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Executive Summary

Ms. Wells hired McIntire & Co. to conduct market research on this issue and present a thorough analysis of the Charlottesville market to see if there is sufficient demand to support a pop-up restaurant in the community that caters to undergraduate students. After analyzing our data, we recommend that Ann Wells pursue this venture on the Corner to serve both UVA undergraduates and the broader Charlottesville populace.

Backward market research helped to align researcher and client objectives

In order to present a comprehensive report, our team first employed backward market research techniques. This procedure enabled us to align our research objectives with Ms. Wells' desires. She expected (1) a detailed analysis of the current market landscape, (2) a survey of amenities students desire, (3) variations in behavior across class and gender, and (4) a conclusion regarding the inclusion of alcoholic beverages on the menu. The following report includes these, as well as several other factors a restauranteur would need to consider.

Primary and secondary research provided insights into the Charlottesville landscape

To better understand which issues hold significant mindshare amongst UVA undergraduates, we conducted multiple one-on-one interviews, focus groups, and questionnaires. Insights derived from these helped to shape a survey we distributed to students at large. Facebook was the primary tool used to share the survey, targeting class pages and private groups; this generated 125 responses in total. Our secondary research emphasized exploring the development of pop-up restaurants in the United States. It also served to address some hypotheses and ideas which we could not confidently resolve based on primary research alone.

Ms. Wells should open a pop-up restaurant in Charlottesville

Our research and analyses drove the conclusion that Ms. Wells should open a pop-up restaurant on or near the Corner in Charlottesville. To meet the budgetary constraints of students, the average meal should cost $10 to $17 depending on the time of day. To communicate the regularly changing cuisine at the restaurant, we propose that she name the restaurant "Mercury." We intend this to allude to the fluid metal used in thermometers that expands and contracts in response to the temperature of its environment. Locating this restaurant on the Corner would expose it to one of the most highly trafficked parts of town, reducing the need to advertise and entice students without consistent access to personal automobiles. These savings, in addition to the inclusion of high margin products on the menu will help to offset the high rent costs of the property.

Introduction

Ann Wells, an alumna of the McIntire School of Commerce, has returned to Charlottesville, VA to open a new business that caters primarily to the University of Virginia undergraduate students. Ms. Wells is considering opening a pop-up restaurant hosting venue, or incubator, to capitalize on the fluid and diverse food preferences of University students. This business model centers around either inviting or accepting an application from a chef interested in serving their cuisine in a new geography. This can be a new chef or one who does not yet have a permanent location in a particular locale. There are several advantages to opening the restaurant herself which include that it doesn't require any culinary talent, allows for adaptability, and is better equipped to combat the statistics surrounding new restaurant failures.

Students benefit because they get to experience new cuisines as often as chefs rotate. The proprietor would be able to ride fads and fall back to safe mainstays to keep pace with this demand. Ms. Wells contracted McIntire & Co. to advise her on key questions that must be answered before possibly opening this business. Our assessment of the project's viability comes from several analyses of a diverse cross-section of the UVA student population and serves as a baseline by which we may estimate the demand for a pop-up restaurant incubator.

With this mission in mind, it is viable that we ask questions covering the maximum area of the business problems. Key questions to answer included:

1. Should Ann open a pop-up restaurant incubator in Charlottesville targeting UVA undergraduates?

2. Will there be sufficient demand for this restaurant?
3. Where should she locate this restaurant?
4. What kinds of food should the visiting chefs prepare?
5. How should Ann price the food at this restaurant?

To answer these questions, McIntire & Co. conducted extensive market research. Our research includes one-on-one interviews, focus groups, secondary research, and a survey questionnaire. We strongly believes that our analysis and conclusion following the backwards marketing research technique will provide Ms. Wells with actionable recommendations as to whether or not it is wise to pursue this venture.

Methodology

In order to better understand the demand for the pop-up restaurant business in Charlottesville, our team primarily conducted a mix of exploratory and descriptive research. However, it is worth noting that we emphasize exploratory results given the novelty of the issue at hand. To reduce the uncertainty in deploying this business model, the first of its kind in Charlottesville, we first mined secondary data and performed one-on-one interviews and focus groups. Additionally, we used an online survey as a part of the descriptive process to understand current student demographics and their impacts on market demand. Our team identified several key unknowns that guided our research design. These unknowns centered around:

1. Overall demand for the pop-up restaurant
2. Demographics of the target market
3. Market preferences for location, pricing and other amenities

Secondary research revealed the rising popularity of pop-up restaurants

Our team's secondary research mostly consists of articles published by individuals with current and previous experience in the restaurant industry. Many of these experts are prominent bloggers with expertise in corners of the food-service industry, such as quick service restaurants (QSRs), traditional dining, and food trucks. Additionally, our team conducted detailed research to gauge demand for pop-up restaurants. We found that pop-up restaurants are trending as the 6th most popular idea amongst Americans, evidenced by random surveying over 700 participants. In this National Restaurant Association, 55% of respondents expressed a willingness to dine in pop-up

restaurants.[1] Though the respondents mostly reside in major metropolitan areas such as New York City and San Francisco, our proprietary research later revealed that the same trend also appears in both suburban and rural areas such as Charlottesville.

Existing data provides valuable insights into key business decisions

Mining secondary sources have served to offer credible perspectives regarding several cost-benefit comparisons for our pop-up business model. Below we summarize the key takeaways from this research:[2]

1. Lower startup cost
2. Ability to test different pricing methods
3. Ability to test various restaurant concepts or menu without permanent investment risks

In general, the main advantage of opening up a pop-up restaurant would be enjoying the flexibility of operating hours, food and beverage offerings, and holistic themes from this creative business model.[3] However, several other considerations that we must evaluate when trying out this business model would include[4]:

[1] "Test New Ideas with Pop-up Restaurants." *National Restaurant Association*, 16 Mar. 2018, restaurant.org/Articles/Operations/Test-new-ideas-with-pop-up-restaurants.
[2] Ulla, Gabe. "Chefs Weigh In: The Pros and Cons of Pop-Up Restaurants." *Eater*, Eater, 14 Sept. 2012, www.eater.com/2012/9/14/6545583/chefs-weigh-in-the-pros-and-cons-of-pop-up-restaurants.
[3] www.thebalancesmb.com/pop-up-restaurants-2888299.
[4] Ulla, Gabe. "Chefs Weigh In: The Pros and Cons of Pop-Up Restaurants." *Eater*, Eater, 14 Sept. 2012, www.eater.com/2012/9/14/6545583/chefs-weigh-in-the-pros-and-cons-of-pop-up-restaurants.

1. Potential challenges with customer retention
2. Simultaneously satisfying dynamic chef, customer, and other stakeholder concerns
3. Supply chain and capital asset management in the face of changing needs

Our team quickly realized that frequently changing cuisines and high turnover rates with staff may make customers uncertain about the desirability and expected experience at pop-up restaurants. However, this can prove to be a double-edged sword as the business can leverage social media to boost brand recognition and sales as well.[5] Our research revealed that this type of restaurant relies heavily on public relations campaigns, including establishing brand equity through delivering consistently strong results. Importantly, "hype culture" is central to the performance of these restaurants, as much of the advertising is performed through social networks.[6]

Interviews show that affordability is top of mind for UVA students when dining out

Our team first collected five one-on-one interviews to understand some elementary themes that underlie student opinions. We made a conscious effort to reach out to every undergraduate grade level to minimize the biases that often come with age, gathering feedback from 1st, 2nd, 3rd, and 4th-year students. This feedback was critical to generating preliminary insights regarding the current student demand and establishing a baseline for focus groups and online surveys. All interviews were conducted in a comfortable, informal setting and lasted between 15 and 30

[5] Tetreault, Allison. "What Is a Pop-Up Restaurant? 20+ Tips, Strategies, and Examples." *Toast POS*, Toast, Inc., 27 Feb. 2019, pos.toasttab.com/blog/pop-up-restaurants.
[6] Mueller, Christina. "20 Restaurants Using Social Media Successfully ." *Lunch Rush*, 5 Apr. 2018, www.ezcater.com/lunchrush/restaurant/20-restaurants-using-social-media-successfully/.

minutes to encourage interviewees to share their opinions of Charlottesville restaurants freely. We began by introducing the concept of Mercury Pop-up restaurant, then proceeded to ask questions regarding current food offerings in Charlottesville to triangulate Mercury's likely competitive position. We concluded each interview by asking for feedback regarding the survey being developed in parallel.

All individual interviews shared one key detail: students are very price sensitive when it comes to dining out. All of the individual interviewees set a maximum price ceiling in their willingness to spend between $15 and $30. This is not surprising since most college students have tight budgets for their living expenses -- many being concurrently burdened with student loans and organization dues, the effects of which this analysis did not seek to address. Our quantitative analysis sought to confirm these findings, asking explicit questions about respondents' spending preferences and family income.

Focus groups participants expressed no particular need for alcoholic options

Our team determined that the two focus groups from significantly different segments of the UVA community were sufficiently representative of the scope of possible ideas for this analysis. However, moving forward, we recommend further research through focus groups as the breadth of offerings in the Charlottesville area suggests heterogeneity of tastes that we failed to map fully with these groups. Both focus groups lasted between 30-40 minutes in relaxed settings, with effective probing efforts exerted throughout the process. They confirmed ideas first raised during

individual interviews and helped to refine the survey, as well as gather additional insights regarding consumer interest in pop-up restaurants.

Each focus group was either predominantly female or male groups with five to six individuals per each group. All members of each group were in the same year with similar backgrounds to ensure purposive and homogenous sampling. All of our focus groups were essentially "friendship circles" to encourage honest feedback during the process whilst maintaining an informal and comfortable environment.[7]

Of note is that both focus groups placed little to no emphasis on alcoholic offerings. Neither group expressed excitement when introduced to the idea of the restaurant converting into a nightclub after hours. Instead, they expressed the belief that the bar scene in Charlottesville is already fully saturated. This is unsurprising as students already have many alternatives since restaurant bars such as "Trinity Irish Pub" and "Boylan Heights" are very popular with well-established reputations among UVA students.[8] Additionally, downtown has many bar options for older students and Charlottesville residents such as "Commonwealth and Sky bar". Since the concept of pop-up restaurant is introducing new cuisines, few were interested in spending extra money on alcohol when confronted with the alternative of collocated familiar bars.

[7] "Frank Talks About Diapers and Condoms", *Tony Baglioni, UVA Commerce Blackboard*.
[8] "Charlottesville Nightlife: Bars: Clubs: Visit Charlottesville." *Charlottesville Albemarle, Virginia*, www.visitcharlottesville.org/things-to-do/nightlife/.

Focus groups introduced perspectives not considered in primary ideation

In addition to the alcoholic preference discovery, one of the groups also recommended that the restaurant bring in local chefs as opposed to seeking random chefs from around the country. The value in this is that both Mercury and the local chef could expand their customer bases and name recognition. Not only would it be more cost-effective and convenient for Ms.Wells to source talent, but the idea of local chefs would create a sense of pride for local residents and UVA students similar to the pride sparked from local dining openings in Charlottesville.[9] Being locally based, popular chefs would also be able to return to Charlottesville more readily than their less geographically convenient counterparts.

We explored an interesting addition to the restaurant in our primary research which is live background music. The idea of local music and food being brought together has proven successful for many restaurants/food vendors. Interestingly, one of the focus groups was not receptive to the idea of playing background music in the restaurant. They stated that the purpose of dining at a pop-up, for them, would be to enjoy the atmosphere and cuisine. They felt that it would be a social experience with good conversation; and music would detract from their experience in the form of imposing and unnecessary noise that impedes conversation. Two participants from the latter group also stated that they usually wear headphones when dining out alone. Another group was less averse to live music and noted that a pleasing tune at a lower volume would be appropriate.

[9] Nancy Bauer, et al. "New to You: A Flurry of Restaurant Openings Spices up the Local Dining Scene - C-VILLE Weekly." *C*, 16 Oct. 2019, www. c-ville.com/ New-to-you-a-flurry-of-restaurant-openings-spices-up-the-local- dining-scene/.

From these opinions, our team was able to note that the removal of live background music would help the business reduce costs as well. These focus group insights further assisted us in editing our survey questionnaire to ensure our team the reception of informative responses; as this is vital in the precision and interpretation of survey data. Given this feedback, the hypothesis that our team developed from these focus groups is that UVA students do not index heavily on the availability of alcohol or presence of live music for casual dining options.

Surveys must be pretested for flaws to ensure better quality data and even completion

Before distributing our final questionnaires on social media platforms, our team first pretested it with a small sample of ten students after explaining to them the purpose of the research and consulted with Professor Baglioni to get iterative and expert feedback regarding the relevance and appropriate presentation of each question. The purpose of this procedure was to remove questions irrelevant to our research and to clarify potentially confusing phrasing. This procedure resulted in several changes to our survey. As noted in the first draft, we mistakenly included a question asking whether each respondent would be willing to participate in a one-on-one interview or a focus group. This was later removed. We also revised the demographic question reading, "Do you have a job on Grounds?" to "Do you have a part-time job?" as this aids in preventing the exclusivity of exclude students who are not employed by the University (**Appendix A**).

Online survey responses gathered through stratified sampling

After gathering exploratory insights from one-on-one interviews, we constructed a survey using Qualtrics to mine responses from a broader cross-section of the UVA student body. Our sampling population is defined as the UVA undergraduate student population in order to meet the needs of our client. We did this by distributing surveys to Facebook groups from the class of 2020, 2021, 2022, and 2023. Our team also distributed the survey via other social media platforms. Among these were GroupMe and Wechat platforms composing a mix of all undergraduate UVa students.

The variety of questions in the survey kept the respondents engaged

The survey, consisting of 17 questions, covered questions in areas such as demographic information, spending and social habits, and food preferences. **Appendix B** provides a copy of the final survey. It was designed with the goal of allowing respondents to completely communicate their opinions while still retaining a structure controlled enough to perform analysis with minimal data cleaning. To analyze the responses from the survey, we performed cross-tabulations, analyses of variances, t-tests for differences in means, and generated general descriptive statistics when appropriate to characterize our responses.

Results

Our survey had a total of 125 responses at the time of this report. While there is no way of knowing exactly how many people actually saw the survey, it was posted in social media groups that have over 15,000 aggregate members. This means that the response rate could be as low as 0.8% assuming that every member of the social media groups routinely checks the groups for new postings. The risk of nonresponse bias is considerable here, but expected as it is one of the most significant issues facing market research.

First-years are extremely underrepresented in our survey, having only 8 of the 125 responses; at least 30 individuals from each of the other years responded. This may weaken the conclusions drawn from our survey as the sample does not accurately represent the student body. On a qualitative note, there are several possible reasons that first years specifically had the lowest response rate and this lack of response provides insight after all. For instance, it could be said that first years are having too many new experiences to care about improving their general daily excitement in all subject matters, including food. We could also draw on the fact that they may not feel comfortable filling out a survey to improve something on/near grounds as they may feel that they lack the knowledge.

However, the data gathered is still sufficient to conduct several statistical analyses. We also have a large discrepancy between male and female respondents; about two-thirds of our respondents are female. We believe the insights gathered from our focus groups and one on one interviews will help mitigate the effects of having underrepresented classes these categories. For the sake of

our analysis and statistical tests, we separated our respondents by sex, year, family income, and whether or not the student has a part-time job.

As previously stated, the goal of our research was to answer the following five questions for Ann Wells:

1. Should Ann open a pop-up restaurant incubator in Charlottesville targeting UVA undergraduates?
2. Will there be sufficient demand for this restaurant?
3. Where should she locate this restaurant?
4. What kinds of food should the visiting chefs prepare?
5. How should Ann price the food at this restaurant?

Survey results show sufficient demand with support from all years and genders

Overall, when asked whether or not they would eat at this pop-up restaurant, the average respondent had a 6.88 likelihood on a 10 point Likert scale, with a 95% confidence interval between 6.35 and 7.4 (**Exhibit 1**). This indicates that many people would try this style of restaurant, an idea supported by the rest of our research.

Support for a pop-up restaurant was broken down by year, with the four averages being 6, 6.7, 6.9, and 7.2 for first, second, third, and fourth-year students, respectively (**Exhibit 2**). We ignored graduate students, finding them irrelevant to our sample due to the small percentage of maximum possible market share that they could consume. A one-factor ANOVA comparing these means found that there is no statistically significant difference between these means. All of

the means are very close together, which shows that all years have similarly high level of support for the pop-up restaurant.

Another one-factor ANOVA comparing the differences in the means for men and women revealed that men and women both have mean scores of 6.9 (**Exhibit 3**). There was no significant difference between men's and women's likelihood of trying this restaurant, showing that the support for this restaurant is not skewed by one gender.

Finally, we ran a third one-factor ANOVA that tested for differing means between each of the levels of family income (**Exhibit 4**). We found that there is a significant difference, as the p-value was well below the .05 threshold. There is at least one difference in the interest in going to a pop-up restaurant at the Corner among five income brackets. The examination of the post-hoc analysis yields the following results: the interest to go to a pop-up restaurant with $50 - $125K, $125k - 250K, $250K+, and Prefer not to answer are significantly higher than the students with a family income of $0 - 50K. There are no significant differences among $125K - 250K and $250K+ or $50 - $125K and $250K+.

The Corner is the optimal location due to its centrality and proximity to housing

From our survey question about what is most important to students when deciding which restaurant to go to, 60% of students said that location was "very important." (**Exhibit 5**). This suggests that location is not something that can be an afterthought, and premium locations cannot be ignored simply because they are more expensive. I.e., a cost-benefit analysis would show cash inflows out weighing the outflows.

Furthermore, survey question five revealed that the most common form of transportation around Charlottesville for undergraduate students is walking (**Exhibit 6**). With this in mind, it is important to find a location to which most students would be able to walk. From our interviews, focus groups, and knowledge of UVA's Grounds, it is clear that the Corner is the only place to which students could easily travel without adjustments to their available transportation methods.

American style food is the most popular, but other styles have sufficient support

A question in our survey asked which kinds of food students would like to have in the restaurant. Given that the chefs and types of food would rotate relatively frequently, it is valuable to know the kinds of chefs people would be most receptive to trying. Based on Question 7, American food is clearly the most requested cuisine (**Exhibit 7**). Still, there are many others that are also in demand, including Mexican, Chinese, Thai, and Italian, among others. This shows that there is a demand for a wide variety of food options, which will help keep the restaurant feeling fresh and exciting as food styles cycle.

Meals should typically be in the $10 to $17 range so students can afford it

The average price students are willing to pay for lunch is $11.78, with a 95% confidence interval between $11.01 and $12.55. The average maximum for dinner is $16.26, with a 95% confidence interval between $15.25 and $17.26 **(Exhibit 8**). These should serve as the average maximum menu price in order to keep the menu accessible for the majority of students. These numbers also coalign with the $15 to $20 max cap from the one-on-one interviews and focus groups. In order to better understand pricing options, we conducted additional analyses of willingness to pay to

see if it varies with other factors. These additional tests check for differences among students in their willingness to pay for lunch and dinner based on their gender, family income and whether or not they have a job.

While hypothesis testing did not show a significant increase in the amount spent for lunch or dinner for those with jobs against those without jobs, the means for each were slightly higher for those with jobs (**Exhibit 9).** The p-values for each were above .05 but were relatively low, so there may be a very weak relationship between having a job and willingness to pay, but not a statistically significant one.

The crosstab between gender and willingness to spend on dinner by brackets shows there is no association (**Exhibit 10**). With the range of willingness to spend on dinner starts from $0 to $35, we separate it into quintiles to see if there is an association between these two factors. The test indicates the chi-square of 1.7, 4 degrees of freedom, and the p-value of 0.7915. There is no indication of an association between gender and willingness to spend in any of the three meals.

The average UVA student goes to a bar about once per week

The descriptive statistics analysis of Question 10 - "How many times per week do you go out to a bar?" reveals that the average UVA student goes to a bar .87 ± .17 times per week (**Exhibit 11**). While it seems low, this can also be interpreted as "UVA students go to a bar at least once nearly 90% of the weeks in a given term." The question does not, however, address the interest in purchasing an alcoholic beverage with a typical meal. For this, we must rely on the focus group responses which indicate a lack of interest in the restaurant as late night bar but do not

discourage including alcoholic options on the drinks menu. The combination of these facts suggest that a UVA student's preference for a restaurant would neither be negatively or positively influenced by the presence of alcoholic beverages but it may be harmed by the lack thereof.

To address this issue, we recommend that Ann Wells sell alcoholic beverages, but not as a focal point of the pop-up experience. The bar scene at UVA, bar here referring to nightclub-esque venues such as Boylan Heights, is saturated and would not benefit from a new entrant. Alcoholic beverages, especially cocktails, however are too high margin not to be included on the menu[10]. While selling alcohol in the restaurant will require a permit from the Virginia Alcoholic Beverage Control, the potential lost revenue by electing to avoid this expense is considerable as the average restaurant draws roughly 30% of its revenue from alcohol sales. Storing the beverages is also very affordable as most do not require refrigeration.

Live background music is not recommended for initial opening

Since there is no further survey conducted on music preferences in pop-up restaurants, our team went to garner more insights through secondary research methods[11]. We evaluated many articles to see the responses from different people across all demographics in the country and came to the conclusion that live background music is not recommended as a priority for our initial restaurant opening[12]. Secondary research showed that most people are averse to live music in restaurants,

[10] Morley, Miranda. "Revenue That Comes With Selling Alcohol." *Small Business - Chron.com*, Chron.com, 21 Nov. 2017, smallbusiness.chron.com/revenue-comes-selling-alcohol-34021.html.
[11] "r/Atlanta - What Is Your Opinion on Live Music at Bars & Restaurants?" *Reddit*, www.reddit.com/r/Atlanta/comments/bj6f2o/what_is_your_opinion_on_live_music_at_bars/.
[12] *How Do You Feel about Live Music in Restaurants? [Archive] - Straight Dope Message Board*, boards.straightdope.com/sdmb/archive/index.php/t-779061.html.

which resulted as the same response from our focus groups[13]. Although the result is quite surprising for our team, further primary research would have to be conducted in order to decide on whether it is worth the cost to recruit live musicians for our business model in the long run.

[13] "Serious Eats: The Destination for Delicious." *Serious Eats: The Destination for Delicious*, https://www.seriouseats.com/2013/10/dear-restaurants-please-stop-playing-live-music.html.

Limitations

Our team faced several limitations when conducting our surveys due to both time and budget constraints. As mentioned previously, we spread our surveys solely online which lead us to receive response biases and convenience sampling. Although we tried to combat these by stratifying our samples into four separate graduating class groups of 2020, 2021, 2022, and 2023 respectively, we still received uneven disparity in our survey results in gender and graduating class year. Additionally, the 125 responses from a pool of over 15,000 members is a small sample size that has limited our team from extracting a true random sample. We will further discuss these limitations below.

Underlying convenience sampling bias may skew data results

In addition to posting surveys via Facebook, our team has also gathered data through mutual friends, social groups, and people we know. This expanded our convenience sampling further leading to response biases. Posting the survey to a Facebook group would also only encourage students that browse the platform to take the survey. In turn, this would lead to non-response biases from students who failed to see our survey and Facebook users that didn't participate. The same bias applies to respondents that took the survey through mutual connections. Since we are also collecting surveys from the people we know, it may not be representative of the holistic student body and may skew our survey data results.

The female respondent majority created biased responses

Our survey result composed of an overwhelming 70-80% female respondents (**Exhibit 3**). Due to this uneven gender response rates, it would limit our team to make accurate conclusions from the result. For an example, most male college students, especially those that are members of fraternities, are heavy consumers of alcohol. But since only 20-30% responses are from male respondents, our survey data indicates little preferences on alcohol options at restaurants. This result may be skewed due to the un-balanced responses from both genders.

Response rates are not evenly distributed

Although our team strives to achieve stratified sampling, we had to accept the bargain of reality due to our limitation in marketing out our surveys. Therefore, the difficulty in getting an equal percentage of responses from each class level has resulted in an unevenly distributed sample. Out of 125 respondents, first years are only comprised of 8 respondents or 6.4%. However, we have also included categories of "grad students" and "non-students" to make our demographics more inclusive. These two groups make up 7.26% or nine participants. Fortunately, all other class levels have a more evenly distributed size of around 25 to 37%. We would like to acknowledge that due to the small sample responses from first year students, grad students and alumni, our survey data may also be skewed to disadvantage for underrepresented groups.

Conclusions

Based on the evidence gathered from our primary and secondary research, we recommend that Ann Wells pursue a pop-up restaurant, Mercury, on the corner in Charlottesville, VA, that offers alcoholic options with moderately priced American style food and other ethic style food rotations to serve all UVA undergraduate students. Our research results have answered all of our original guiding questions which will be explained below:

1. With sufficient evidence, our team believe that Ann Wells should open a pop-up restaurant in Charlottesville targeting to all UVA undergraduates.
2. Data results has shown that there will be sufficient demand for this conceptual business model.
3. The ideal location for this pop-up restaurant would be on or near the Corner due to students' restricted transportation options.
4. Visiting chefs is welcomed to introduce a variety of cuisines with primary focus on American styles.
5. Acceptable price range is between $10 to $17 for this pop-up incubator due to affordability concerns for most university students.

Target both gender and grade level for Mercury

To generate hype and win market share, we believe that Ms. Wells should target and advertise *Mercury*, a pop-up restaurant, to both males and females of all UVA undergraduates regardless

of their graduation year. We recommend that Ms. Wells use the two fold-path advertising strategy to attract UVA students. The first path focuses on the uses of traditional marketing tactics like flyers and posters in UVA on-ground buildings and nearby residential areas to spread physical awareness. The second path focuses on the uses of the internet and social media marketing tactics to provide seamless information to new and returning students about *Mercury* and its current rotation. We particularly suggest putting extra emphasis on students with high family income brackets through tailored online advertisement services since the students from upper family income bracket of $125K or higher are most likely to try out a pop-up restaurant.

Open a pop-up restaurant at the heart of UVA grounds, the corner

There are several methods of transportation that UVa students use to move around Charlottesville. Our analysis (**Exhibit 6**) tells us that walking is the primary source of transportation. The use of buses ranking in third on the list conclude that the majority of UVA students are limited to a relatively narrow geographical range. In addition, 60% of participants indicated that the location was "very important" when it came to selecting a restaurant (**Exhibit 5**). To serve UVA undergraduate communities, we recommend that Ms. Wells should open *Mercury* on the corner.

American style food as the core, but introducing other ethnic style food in the rotation

Through our sample data, our team has found that UVA undergraduates tends to have a preference for American style cuisines; and this is followed by Mexican and Chinese respectively (**Exhibit 7**). However, considering that the sample size is not truly representative of

the holistic Charlottesville population, we recommend a more conservative approach by welcoming a variety of local chefs who are seasoned professionals and have experience in an abundance of authentic dishes; which, is vital in serving customers with different cuisine preferences, and captivating the general essence of the business model. In addition to prioritizing American style cuisines, this pop-up restaurant should also offer menu selections with alcoholic beverage options as another means of increasing sales revenues; such as local brews, and attention-grabbing mixed drinks in terms of aesthetics, flavor, and composition that are also reasonably priced.

Offer mostly inexpensive and moderately priced selections

As demonstrated by individual empathy interviews and survey results, students are extremely price sensitive when it comes to selecting dining options (**Exhibit 5).** Through explicit price scaling, we asked students how much they usually spend on average per person for breakfast, lunch and dinner which showed us a mean of below $20 on any given meals (**Exhibit 8**). For these reasons, our team suggests the business follow the same pricing model from the data results to avoid any competitive disadvantage from nearby restaurants; also keeping in mind that the nature of Mercury's business model allows for flexibility in the experimentation of prices.

Exhibits

Exhibit 1: Average interest level in a pop-up restaurant surpasses predetermined threshold

Descriptive statistics	
Q20:How likely would you be to go to a pop-up restaurant on the corner?	
count	124
mean	6.88
sample standard deviatior	2.99
sample variance	8.92
minimum	0
maximum	10
range	10
confidence interval 95.% l	6.35
confidence interval 95.% ı	7.40
margin of error	0.53
z	1.96
skewness	-0.83
kurtosis	-0.48
coefficient of variation (C\	43.42%

Exhibit 2: High interest for a pop-up restaurant exists across all years of UVA students

One factor ANOVA

Mean	n	Std. Dev	
6.0	8	3.70	FIRST
6.7	42	3.08	SECOND
6.9	34	2.97	THIRD
7.2	31	2.94	FOURTH
6.9	115	3.03	Total

ANOVA table

Source	SS	df	MS	F	p-value
Treatment	10.77	3	3.590	0.38	**.7643**
Error	1,036.27	111	9.336		
Total	1,047.04	114			

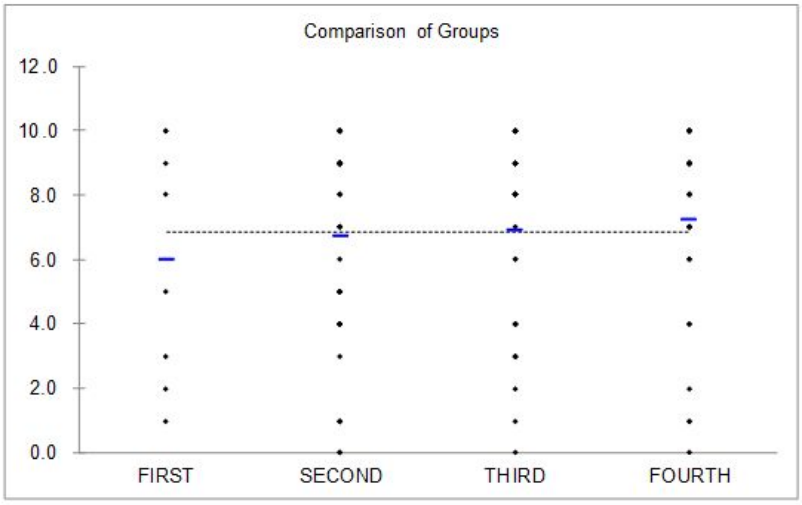


Exhibit 3: High interest for a pop-up restaurant exists across all gender

One factor ANOVA

Mean	n	Std. Dev	
6.9	83	2.96	FEMALE
6.9	39	3.14	MALE
6.9	122	3.00	Total

ANOVA table

Source	SS	df	MS	F	p-value
Treatment	0.08	1	0.082	0.01	**.9245**
Error	1,092.31	120	9.103		
Total	1,092.39	121			

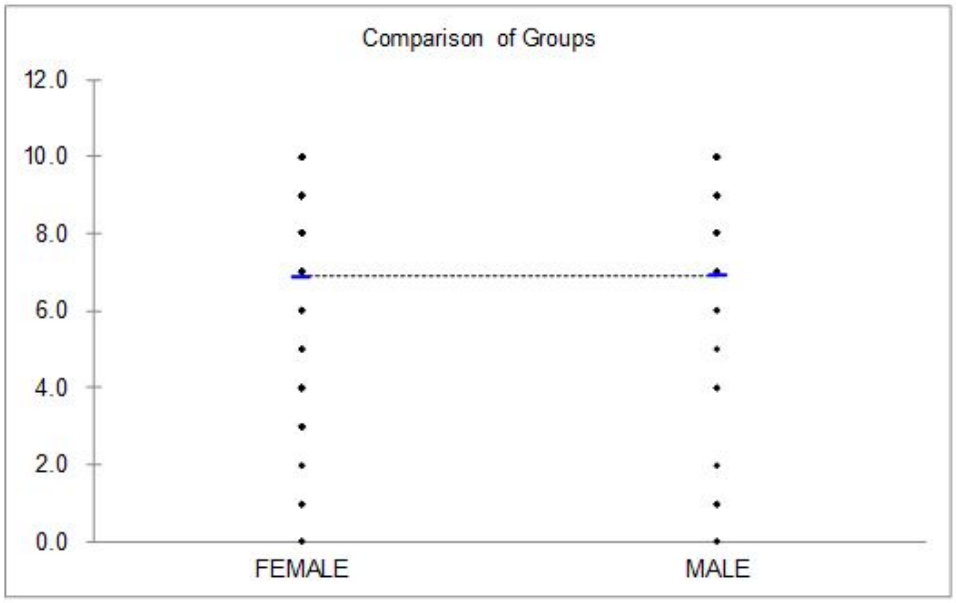


Exhibit 4: Significant difference in interest level from students with varying family income bracket

One factor ANOVA

Mean	n	Std. Dev	
3.5	22	2.65	$0 - $49,999
7.3	29	2.53	$50,000 - $124,999
8.9	26	1.29	$125,000 - $250,000
8.4	25	1.50	Over $250,000
5.5	22	3.16	Prefer not to answer
6.9	124	2.99	Total

ANOVA table

Source	SS	df	MS	F	p-value
Treatment	464.43	4	116.108	21.84	1.57E-13
Error	632.75	119	5.317		
Total	1,097.19	123			

Post hoc analysis
p-values for pairwise t-tests

		$0 - $49,999	Prefer not to answer	$50,000 - $124,999	Over $250,000	$125,000 - $250,000
		3.5	5.5	7.3	8.4	8.9
$0 - $49,999	3.5					
Prefer not to answer	5.5	.0039				
$50,000 - $124,999	7.3	5.80E-08	.0090			
Over $250,000	8.4	3.05E-11	3.60E-05	.0668		
$125,000 - $250,000	8.9	4.92E-13	1.57E-06	.0093	.4560	

Tukey simultaneous comparison t-values (d.f. = 119)

		$0 - $49,999	Prefer not to answer	$50,000 - $124,999	Over $250,000	$125,000 - $250,000
		3.5	5.5	7.3	8.4	8.9
$0 - $49,999	3.5					
Prefer not to answer	5.5	2.94				
$50,000 - $124,999	7.3	5.79	2.85			
Over $250,000	8.4	7.33	4.29	1.85		
$125,000 - $250,000	8.9	8.12	5.06	2.64	0.75	

critical values for experimentwise error rate:

0.05	2.77
0.01	3.33

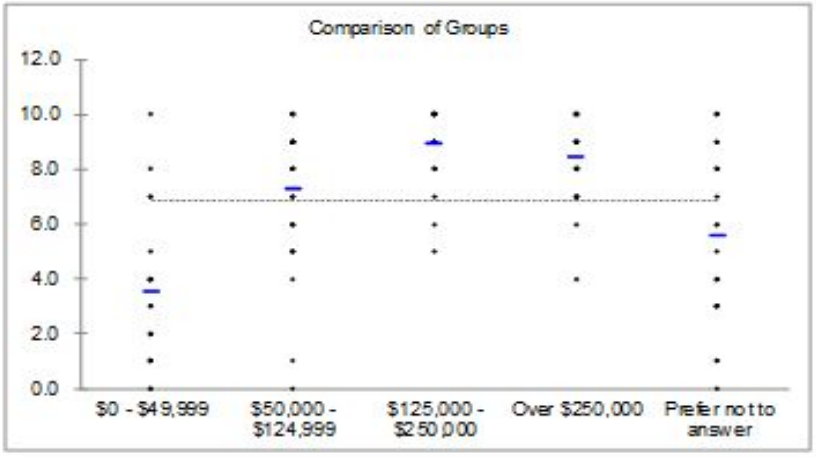


Exhibit 5: Ranking of important in selecting restaurant

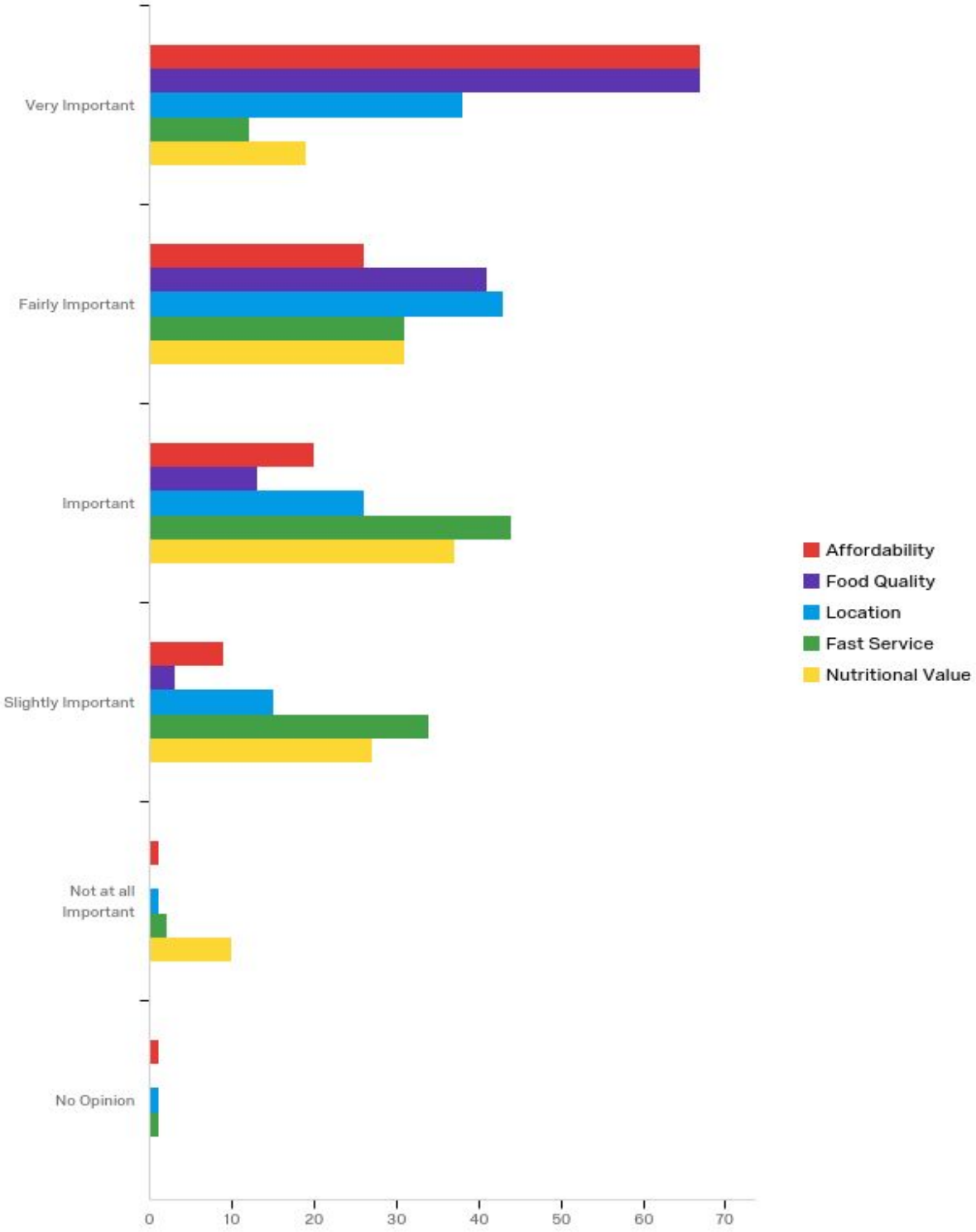


Exhibit 6: Most students 'walk' as the main source of transportation

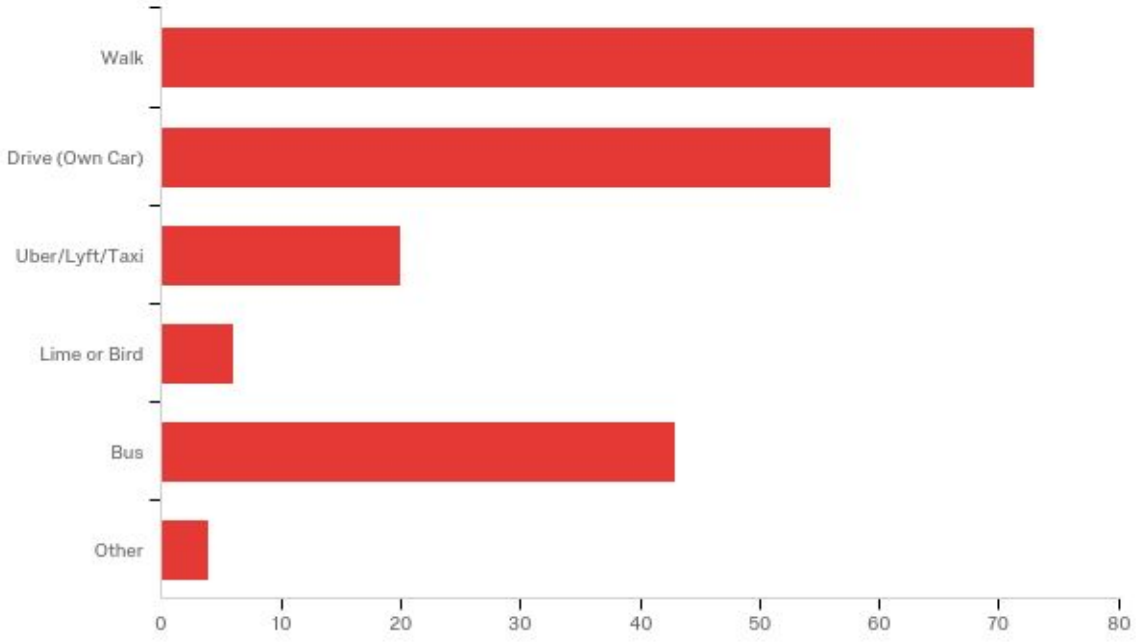


Exhibit 7: Highest interest was in American style food, but other styles received considerable amount of recognition

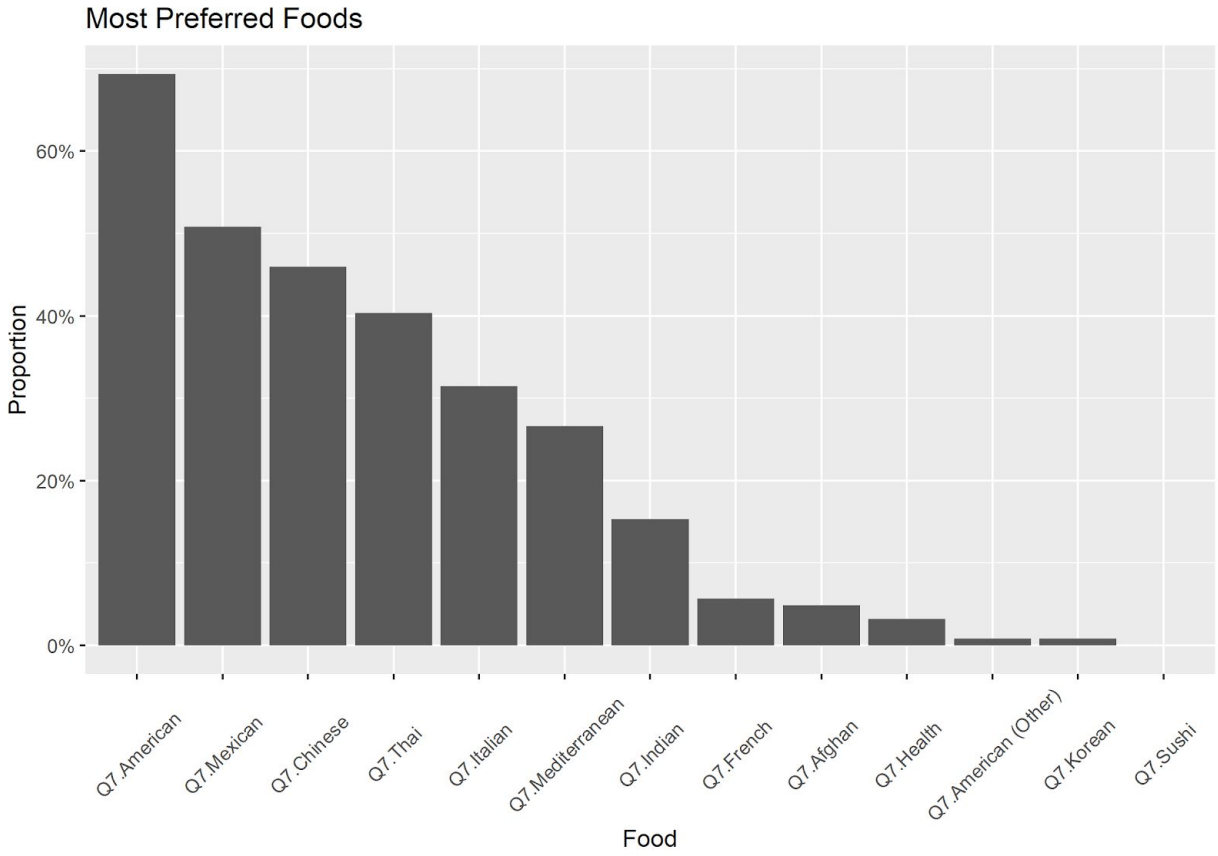


Exhibit 8: Average willingness to spend on breakfast/lunch/dinner meets predetermined threshold

Descriptive statistics

Q6_1 What do you pay on average for breakfast	
count	124
mean	**8.10**
sample standard deviation	4.87
sample variance	23.69
minimum	0
maximum	26
range	26
confidence interval 95.% lower	7.25
confidence interval 95.% upper	8.96
margin of error	0.86
z	1.96
skewness	1.44
kurtosis	3.29
coefficient of variation (CV)	60.05%

Descriptive statistics

Q6_2 What do you pay on average for lunch	
count	124
mean	**11.78**
sample standard deviation	4.38
sample variance	19.16
minimum	4
maximum	35
range	31
confidence interval 95.% lower	11.01
confidence interval 95.% upper	12.55
margin of error	0.77
z	1.96
skewness	2.21
kurtosis	7.22
coefficient of variation (CV)	37.15%

Descriptive statistics

Q6_3 What do you pay on average for dinner	
count	124
mean	**16.26**
sample standard deviation	5.70
sample variance	32.50
minimum	5
maximum	35
range	30
confidence interval 95.% lower	15.25
confidence interval 95.% upper	17.26
margin of error	1.00
z	1.96
skewness	0.71
kurtosis	0.68
coefficient of variation (CV)	35.07%

Exhibit 9: No significant difference in willingness to spend on breakfast, lunch, or dinner based on students who do not or have a part-time job

Hypothesis Test: Independent Groups (t-test, pooled variance) for Breakfast

Part-time:No	Part-time:Yes	
7.68	**8.76**	mean
4.44	5.44	std. dev.
75	49	n

122	df
-1.075	difference (Part-time:No - Part-time:Yes)
23.601	pooled variance
4.858	pooled std. dev.
0.892	standard error of difference
0	hypothesized difference
-1.205	t
.2306	p-value (two-tailed)

Hypothesis Test: Independent Groups (t-test, pooled variance) for Lunch

Part-time:No	Part-time:Yes	
11.44	**12.31**	mean
3.91	5.01	std. dev.
75	49	n

122	df
-0.866	difference (Part-time:No - Part-time:Yes)
19.138	pooled variance
4.375	pooled std. dev.
0.804	standard error of difference
0	hypothesized difference
-1.078	t
.2832	p-value (two-tailed)

Hypothesis Test: Independent Groups (t-test, pooled variance) for Dinner

Part-time:No	Part-time:Yes	
15.97	**16.69**	mean
5.47	6.07	std. dev.
75	49	n

122	df
-0.721	difference (Part-time:No - Part-time:Yes)
32.642	pooled variance
5.713	pooled std. dev.
1.049	standard error of difference
0	hypothesized difference
-0.687	t
.4937	p-value (two-tailed)

Exhibit 10: No significant difference in willingness to spend on breakfast, lunch, or dinner based on gender

Dinner	$1-7		$8-14		$15-21		$22-28		$29-35		
Male	**2**		**16**		**15**		**5**		**1**		
		1.28		14.07		17.9		4.8		0.96	39
Female	**2**		**28**		**41**		**10**		**2**		
		2.72		29.93		38.1		10.2		2.04	83
	4		44		56		15		3		**122**

Chi-Square	**1.7**
DF	4
P-Value	0.7915

Lunch	$1-7		$8-14		$15-21		$22-28		
Male	**4**		**27**		**5**		**3**		
		2.56		28.45		6.39		1.60	39
Female	**4**		**62**		**15**		**2**		
		5.44		60.55		13.61		3.40	83
	8		89		20		5		**122**

Chi-Square	**3.56**
DF	3
P-Value	0.3133

Exhibit 11: Average likelihood of going out to a bar surpasses predetermined threshold

Descriptive statistics

Q10: How many times per week do you go out to a bar?

count		124
mean		0.87
sample standard deviation		0.97
sample variance		0.94
minimum		0
maximum		4
range		4
confidence interval 95.% lower		0.70
confidence interval 95.% upper		1.04
margin of error		0.17
	z	1.96
skewness		0.86
kurtosis		-0.10
coefficient of variation (CV)		111.19%

Appendices

Appendix A: Initial draft of survey questionnaire

Questionnaire

Survey Name: Mercury Survey

Description:

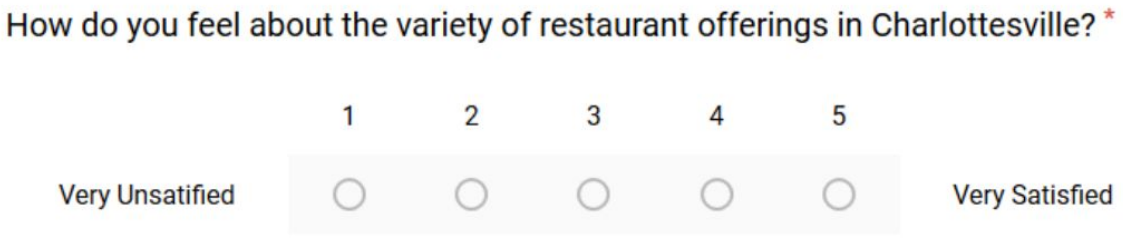
This survey is designed to gauge your interest in a pop-up restaurant space in Charlottesville, VA.

This restaurant would feature seasonal, themed, and specialty foods that vary periodically based on customer interest and time of year. After 9 pm, the space would transition to a live music venue with a full bar in the theme of the daytime restaurant and standard beverage offerings.

The survey should only take 5 minutes, and your responses and email are completely anonymous and will not be shared with anyone. Your email is collected to enter you in a raffle for XYZ.

Thank you, and press "Next" to begin

Questions



Reasoning: This is an important question to start with to measure current UVA student's demand for a new restaurant option.

Reasoning: This is an important question to start with to measure current UVA student's demand for a new restaurant option.

2. What is most important to you when it comes to selecting a restaurant?

	Not at all important	Slightly Important	Important	Fairly Important	Very Important	No Opinion
Affordability	○	○	○	○	○	○
Food Quality	○	○	○	○	○	○
Location	○	○	○	○	○	○
Fast Service	○	○	○	○	○	○
Nutritional Value	○	○	○	○	○	○

Reasoning: This can help us evaluate the critical elements we need to consider when opening up the pop-up restaurant, may it be making the price lower for students or opening up in a closer location etc.

During the semester, how many times per month do you typically dine in or order takeout from a restaurant? *

- ○ 0-2 times
- ○ 3-4 times
- ○ 5-6 times
- ○ 7 times or more

*excluding meals purchased through meal swipes and plus dollars

Reasoning: This question can help us evaluate the current dine in demand for UVA student population. If demand is not high, we can then rent a smaller space (or target non-student population).

What is your main source of transportation in Charlottesville outside of attending classes? (Select all that apply, if other please specify) *

- [ ] Walk
- [ ] Drive (Own Car)
- [ ] Uber/Lyft/Taxi
- [ ] Lime or Bird
- [ ] Bus
- [ ] Other...

Reasoning: The method of transportation for UVA students is important for our decision to locate our pop-up restaurants. If students walk or rent service often, then it is better for us to move our location near the corner instead of Barracks or Downtown.

What do you pay *on average* when you eat out for breakfast, lunch and dinner? Regardless of the kind of restaurant (kind being fast food, fast casual, formal, etc).

Breakfast: _____

Lunch: _____

Dinner: _____

Reasoning: To get a gauge on what people pay *on average* when they go out to eat for the three different meals a day. This will help us set a price for our product.

What restaurant fare(s) do you most frequently dine at? (Select up to three)

- [ ] American Fast Food
- [ ] Chinese
- [ ] Thai
- [ ] Indian
- [ ] Afghan
- [ ] Mexican
- [ ] Italian
- [ ] Mediterranean
- [ ] French
- [ ] Other...

Reasoning: To get a gauge on the kind of chefs that we should rotate the most in our pop-up restaurant. Additionally, this question will allow us to determine if the typical student eats a variety of foods.

On average, how many people are in your company when you go out to eat?

Breakfast:

- 0
- 1-2
- 3-4
- 5+

Lunch:

- 0
- 1-2
- 3-4
- 5+

Dinner:

- 0
- 1-2
- 3-4
- 5+

Reasoning: We will use this to establish the design of our restaurant along with the kinds of food. I.e., whether we have more or less tables; and more or less casual food.

9. Which of the following are important to you when selecting a restaurant? (Select all that apply)

- ☐ Vegan Options
- ☐ Vegetarian Options
- ☐ Takes Reservations
- ☐ Delivery
- ☐ Accepts Credit Cards
- ☐ Accepts UVA Meal Exchange / Plus Money
- ☐ Car Parking
- ☐ Good for Kids
- ☐ Good for Groups
- ☐ Attire
- ☐ Ambience
- ☐ Noise Level
- ☐ Full Bar
- ☐ Good For Happy Hour
- ☐ Outdoor Seating
- ☐ Wi-Fi
- ☐ Has TVs
- ☐ Dogs Allowed
- ☐ Waiter Service
- ☐ Caters
- ☐ Gender Neutral Restrooms

Reasoning: This question will help us to identify specific details to focus on in the creation of the restaurant environment. Furthermore, it helps us to perform a comparable analysis with other restaurants in order to outline a skeleton for general amenities.

How many times per week do you go out to a bar?

Reasoning: To aid in determining whether or not to include a bar with our pop-up.

Demographic Questions:

What year are you?

1. First
2. Second
3. Third
4. Fourth
5. Grad Student
6. Not a student

How old are you?

Do you have a car on grounds?

1. Yes
2. No

Please select your sex?

1. Male
2. Female
3. Other
4. Prefer not to answer

What is your family income?

1. $0 - $49,999
2. $50,000 - $124,999
3. $125,000 - $250,000
4. Over $250,000
5. Prefer not to answer

Do you have a job on Grounds?

1. Yes
2. No

Are you involved in a social Greek organization?

1. Yes
2. No

Would you be willing to participate in a one-on-one interview or focus group in the upcoming weeks?

1. Yes
2. No

Reasoning: The demographics section is useful for characterizing respondents and checking the representativeness of our sample. Moreover, it is useful for location selection, pricing, and other marketing considerations.

Appendix B: Final version of Survey Questionnaire

This survey is designed to gauge your interest in a pop-up restaurant space in Charlottesville, VA. This restaurant would feature seasonal, themed, and specialty foods that vary periodically based on customer interest and time of year. After 9 pm, the space would transition to a live music venue with a full bar in the theme of the daytime restaurant and standard beverage offerings.

The survey should only take 5 minutes, and your responses and email are completely anonymous and will not be shared with anyone. Your email is collected to enter you in a raffle for $20 gift card. Thank you, and scroll down to begin.

How do you feel about the variety of restaurant offerings in Charlottesville, VA?

Very Unsatified — Very Satisfied

0	1	2	3	4	5	6	7	8	9	10

What is most important to you when it comes to selecting a restaurant?

	Not at all Important	Slightly Important	Important	Fairly Important	Very Important	No Opinion
Affordability	○	○	○	○	○	○
Food Quality	○	○	○	○	○	○
Location	○	○	○	○	○	○
Fast Service	○	○	○	○	○	○
Nutritional Value	○	○	○	○	○	○

During the semester, how many times per month do you typically dine-in or order takeout from a restaurant?

What is your main source of transportation in Charlottesville, VA outside of attending classes? (Select all that apply, if other please specify)

- Walk
- Drive (Own Car)
- Uber/Lyft/Taxi
- Lime or Bird
- Bus
- Other

What do you pay *on average* per person in U.S. dollars when you eat out for breakfast, lunch and dinner? Regardless of the kind of restaurant (kind being fast food, fast casual, formal, etc).

0 5 10 15 20 25 30 35 40 45 50

Breakfast

Lunch

Dinner

What restaurant fare(s) do you most frequently dine at? (Select up to three)

American Fast Food	Mexican
Chinese	Italian
Thai	Mediterranean
Indian	French
Afghan	Other

On average, how many people are in your company when you go out to eat?

	0	1-2	3-4	5+
Breakfast	○	○	○	○
Lunch	○	○	○	○
Dinner	○	○	○	○

Which of the following are important to you when selecting a restaurant? (Select all that apply)

Vegan Options	Full Bar
Delivery	Outdoor Seating
Accepts UVA Meal Exchange / Plus Money	Wi-Fi
Car Parking	Has TVs
Good for Groups	Waiter Service
Ambience	Other

How many times per week do you go out to a bar?

How likely would you be to go to the pop-up restaurant as described at the beginning of this survey on the corner?

Not at all likely										Extremely likely
0	1	2	3	4	5	6	7	8	9	10

How many times per month would you eat at/purchase food from the pop up restaurant described at the beginning of this survey?

What year are you?

- First
- Second
- Third
- Fourth
- Grad Student

Do you have a car on grounds?

Yes

No

Please select your sex.

Male

Female

Other

Prefer not to answer

What is your family income?

$0 - $49,999

$50,000 - $124,999

$125,000 - $250,000

Over $250,000

Prefer not to answer

Do you have a part-time job?

Yes

No

Enter your email for the chance to win a $20 Amazon gift card

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