2022 Post-Festival Survey Analysis

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EXECUTIVE SUMMARY

The Greater Pittsburgh Festival of Books (GPFB) was held on May 14, 2022 at different venues in the East Liberty neighborhood of Pittsburgh. Approximately 130 festival attendees completed a post-festival survey which generated scaled satisfaction responses subsequently used to statistically evaluate relationships among various festival aspects.

Overall satisfaction with the GPFB was high, and most festival experiences also were rated highly. Additionally, overall satisfaction was highly correlated with these other aspects of the festival experience. By these metrics, the inaugural GPFB was a success.

Gender and age were not associated with variation in satisfaction levels, and the Food Truck and Single Day format aspects of the GPFB show data patterns that suggest these in particular need further study if their satisfaction ratings are to improve in future years.

All 56 individual events were attended as evidenced by completed surveys, and data indicate the Duolingo venue had the highest satisfaction level of all the 9 total festival venues. Specific characteristics of this venue might serve as a model for other venues.

Finally, the spillover effects of the GPFB into the East Liberty neighborhood were minimal.

INTRODUCTION

The purpose of this report is to summarize and interpret the quantitative components of the 2022 Greater Pittsburgh Festival of Books (GPFB) post-festival survey. The festival was held on May 14, 2022, and the online survey was available for festival attendees for several weeks after that. The survey was completed by approximately 130 respondents, and covered numerous aspects of the GPFB experience. These quantitative components of these festival aspects will be assessed here.

The survey also included comment sections (qualitative data) throughout, and many respondents offered practical insights and suggestions. Though beyond the scope of this analysis, any thorough assessment of the 2022 GPFB will incorporate these comments in order to provide a greater understanding of the festival strengths and weaknesses, as well as to aid in the planning of subsequent festivals.

SURVEY DEMOGRAPHICS

Gender. The survey respondents lean heavily female: 74% vs. 26% male. (Note: 4 respondents indicated 'other').

Education. Survey respondents are highly educated: 70.4% have an advanced degree, while 22.4% have a bachelor's degree, and 7% indicated 'some college'. There were no statistical differences in the male/female education ratios.

Age. The mean (average) age of respondents is 57 yrs. The median age[1] is 62, indicating that there is a wider distribution of festival attendees in the younger age brackets. The mean age for females is 56; for males it is 62. They are not statistically different.

Table 1 shows the GPFB age distribution by decade along with cumulative percentages, and Figure 1 graphs these frequencies. As stated above, the younger age groups are more evenly distributed, but their frequencies are much lower than the older age brackets.[2]

Over half of survey respondents are in their 50's and 60's. This suggests that while these individuals represent a solid core of enthusiasts, future outreach efforts might pursue programs that specifically and actively target younger readers/writers.

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[1] The median is the middle value in an ordered distribution of data – half the values are below this value, and half are above. It is often a less biased indicator.

[2] It is estimated (Marshall Cohen, personal communication) that perhaps as many as 3,000 individuals attended the festival. Obviously the current analysis is based upon responses of only those who completed the survey, and it is likely that, in future years, procedures will be implemented to increase the ability to capture a larger and more inclusive sample.

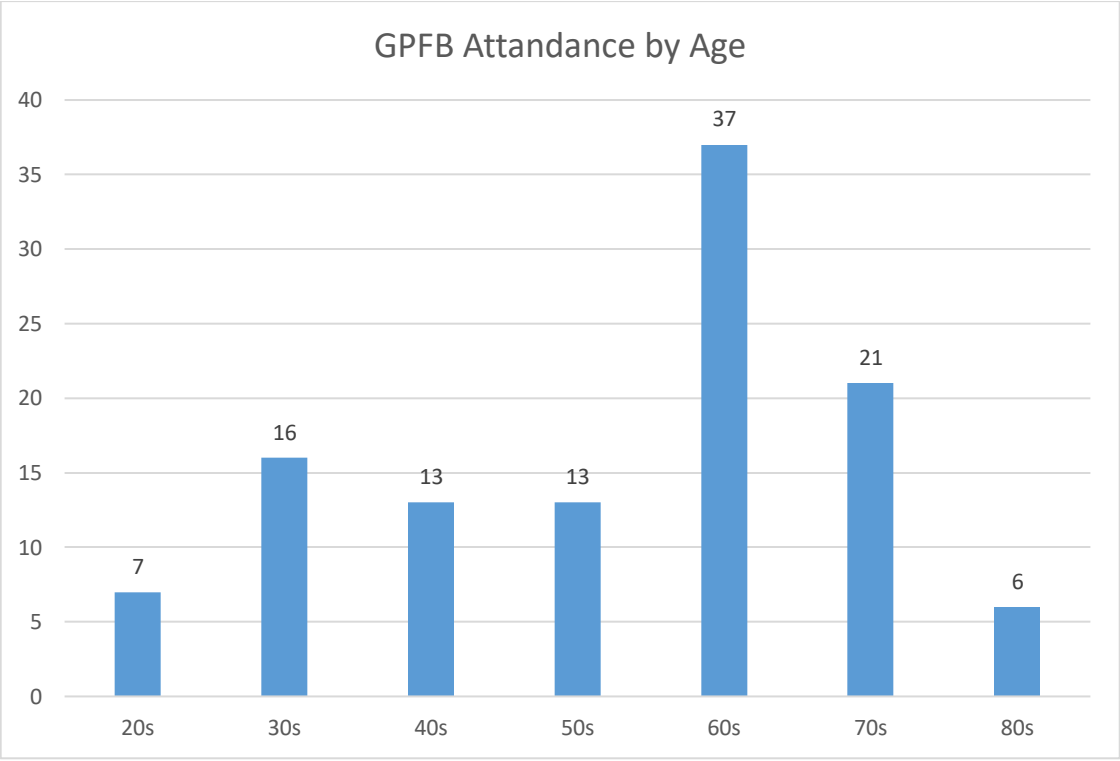
Table 1

GPFB Age Distribution

Age Range	Frequency *	Percent	Cumulative Percent
20s	7	6%	6.0%
30s	16	14%	20.4%
40s	13	12%	31.9%
50s	13	12%	43.4%
60s	37	33%	76.1%
70s	21	19%	94.7%
80s	6	5%	100.0%
Total	113		

* only those respondents who answered are counted

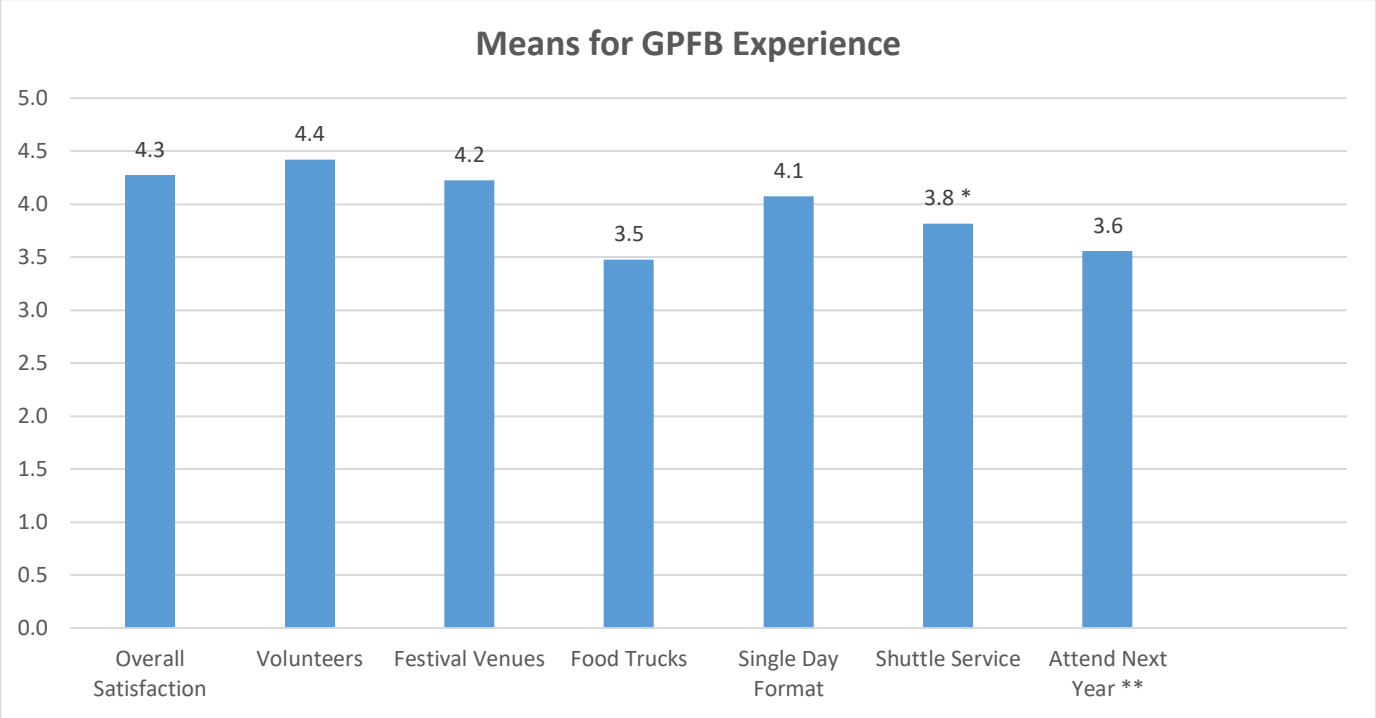
Figure 1



Survey participants indicated their feelings on several aspects of the festival. Responses were largely based on a 5-point scale (*Extremely dissatisfied; somewhat dissatisfied; Neither satisfied nor dissatisfied; Somewhat satisfied; Extremely satisfied*), and these were coded from 1 – 5 respectively.

Figure 2 presents the sample means (numeric averages) for the GPFB experiences. The overall satisfaction level of the sample respondents is 4.3. Data therefore suggest that the GPFB was a successful undertaking in its inaugural year.

Figure 2



* due to the very small sample size for Shuttle Service (n = 11), no further analysis can be meaningfully performed

** Response scale = 1 - 5, except for "Attend Next Year": 1 - 4

Additionally, respondents' mean scores on festival volunteers, festival venues and the single-day format all exceed 4.0 on the response scale, indicating consistency with the overall level of satisfaction. The sample mean of 3.8 for the 'attend next year' question is scaled from 1 – 4, implying a high very level of satisfaction with the GPFB, and a corresponding strong desire to return for future events.

As Figure 2 shows, data for satisfaction with the Shuttle Service is extremely limited, suggesting that it was not utilized enough to be relevant. This may or may not be important for future festivals, and the survey comments do offer some relevant observations. That said, no additional analyses using Shuttle Service were performed.

The mean satisfaction level for the Food Trucks was significantly lower compared to all other experiences (again, not including Shuttle Service).[3]

Table 2 breaks down the survey responses by response category. For overall satisfaction, 83% of the responses are in the 'extremely satisfied' and 'somewhat satisfied' categories. Only 8% are in the dissatisfied response categories. Likewise, volunteers, festival venues and single-day format have high combined percentages in the satisfaction response categories.

Table 2

Satisfaction Response Percentage Distribution

Response option	Overall	Volunteers	Festival Venues	Food Trucks	Single Day Format	Attend * Next Year?	Response option
Extremely satisfied - 5	53.2%	62.30%	56.1%	16.7%	48.8%	58.5%	Definitely will - 4
Somewhat satisfied - 4	29.8%	18.85%	22.0%	21.8%	28.8%	37.4%	Probably will - 3
Neither - 3	8.9%	17.21%	12.2%	55.1%	9.6%	4.1%	Probably won't - 2
Somewhat dissatisfied - 2	7.3%	1.64%	8.1%	5.1%	6.4%	0%	Definitely won't - 1
Extremely dissatisfied - 1	0.8%	0%	1.6%	1.3%	6.4%		
Pct. 4 + 5	**83.1%**	**81.1%**	**78.0%**	**38.5%**	**77.6%**	**95.9%**	**Pct. 3 + 4**
Pct. 1 + 2	8.1%	1.64%	9.76%	6.41%	12.80%	**4.1%**	Pct. 1 + 2

* scale = 1 to 4

Perhaps among the most important findings in Table 2, 96% of survey respondents indicate they intend to definitely or probably return for the next book festival. This attests to the positive sentiment of this years' overall experience, and provides a core segment of interested individuals who could be engaged strategically in promoting next year's festival.

The percentage distribution of Food Truck satisfaction responses reveals why they show differences with the other GPFB experience ratings. By far the largest category here is 'neither satisfied nor dissatisfied', at 55%. Comments indicate that the food trucks weren't patronized. The relatively low percent of negative responses suggest that those who did patronize the food trucks liked them, but the

[3] Analysis of Variance (simultaneous test of means) confirms that collectively, the sample means do differ significantly from one another. Subsequent testing of each pair of means indicates that the Food Trucks mean does differ statistically from the others. A few of the other pairs are different statistically, but the practical differences are minimal.

data indicate that more advanced planning will be necessary if the quality of the food truck experience is to parallel the others.

Responses for volunteers were also mostly in the higher response categories. And, the negative ratings were the lowest by far. Yet 17% of survey respondents were neither satisfied nor dissatisfied with their volunteer interaction. None of the comments indicated a negative experience with the volunteers themselves, but some did note a lack of volunteer preparedness. This suggests that the right people were serving as festival volunteers, but that organizational procedures need to be reviewed.

CORRELATIONS

Correlation analysis provides additional insight into the strength of relationship among the aspects (variables) of the GPFB. Table 3 shows the correlations between each pair of variables.

Table 3

Correlation Coefficients

GFPB Survey Responses

	Individual Event	Volunteers	Food Trucks	Festival Venues	Single Day	Overall	Next Year
Individual Event	1						
Volunteers	0.184	1.000					
Food Trucks	0.194	-0.082	1.000				
Festival Venues	0.265	0.262	0.203	1.000			
Single day	0.089	0.166	0.115	0.214	1.000		
Overall	0.322	0.504	-0.012	0.515	0.361	1.000	
Next year	0.171	0.300	0.167	0.490	0.227	0.562	1

Highlighted values are highly significant

A key finding in the overall satisfaction level is significantly correlated with all other variables *except* for food trucks (which is not correlated with any other variable). Also, the correlation between overall satisfaction and likelihood of attending next year's festival is the highest among all relationships. In other words, the fact that one enjoyed this year's festival is directly related to his/her desire to return next year.

While it may be no surprise that the overall satisfaction level is correlated with the other variables, recall that the combined percentage of 'extremely satisfied' and 'somewhat satisfied', at 83%, is higher than any other experience category (except 'attend next year' which uses a different scale). It can only be stated as an hypothesis at this point, but it appears plausible that the higher positive 'overall satisfaction' responses represent more than merely the sum of the individual experiences.

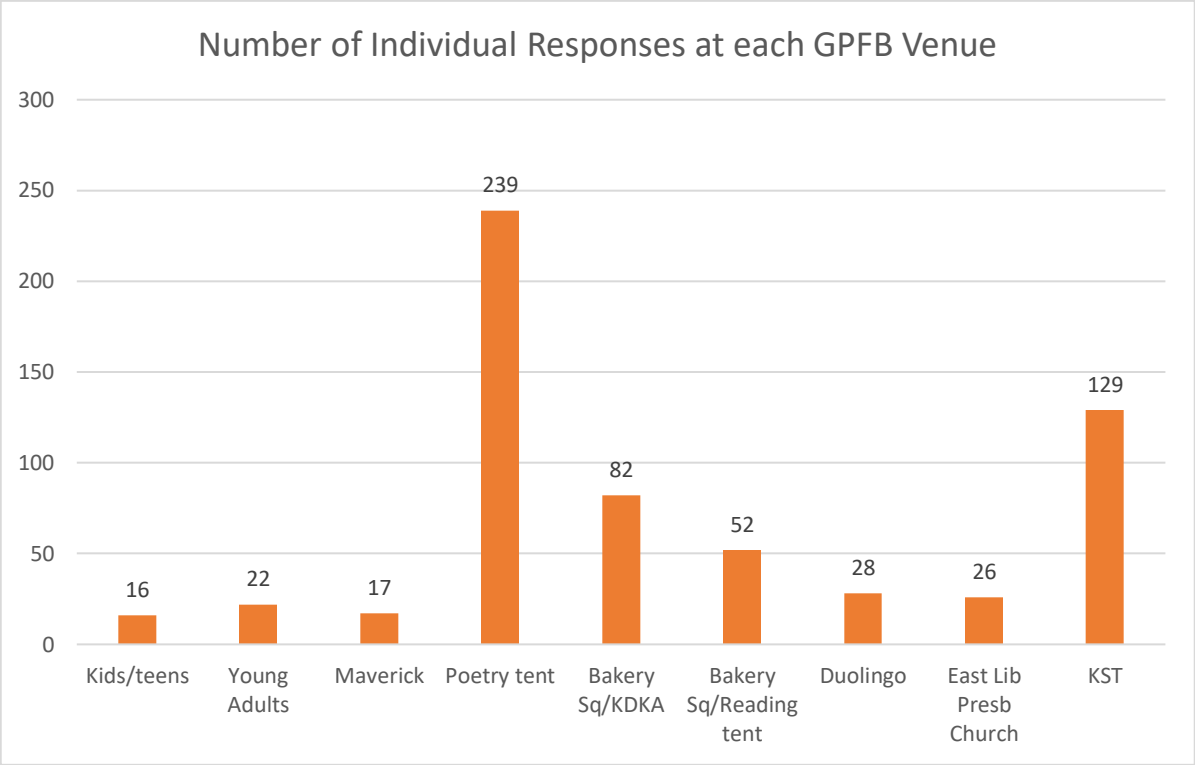
Correlation tests were also performed on all variables with age, and none were statistically significant, indicating no relationship. Age is therefore not a factor here.[4]

VENUES

There were 56 individual literary events at the GPFB which took place at 9 separate venues. It is noteworthy that every individual event was attended by at least a few survey respondents. However, because each individual event often had only a few respondents, data were aggregated by venue, which is the unit of analysis here.

Figure 3 shows the distribution of total responses at each venue. The frequencies are reflective of the different number of individual events held at each venue. For example, there 12 events at the Poetry venue, but only 2 at the Maverick.

Figure 3

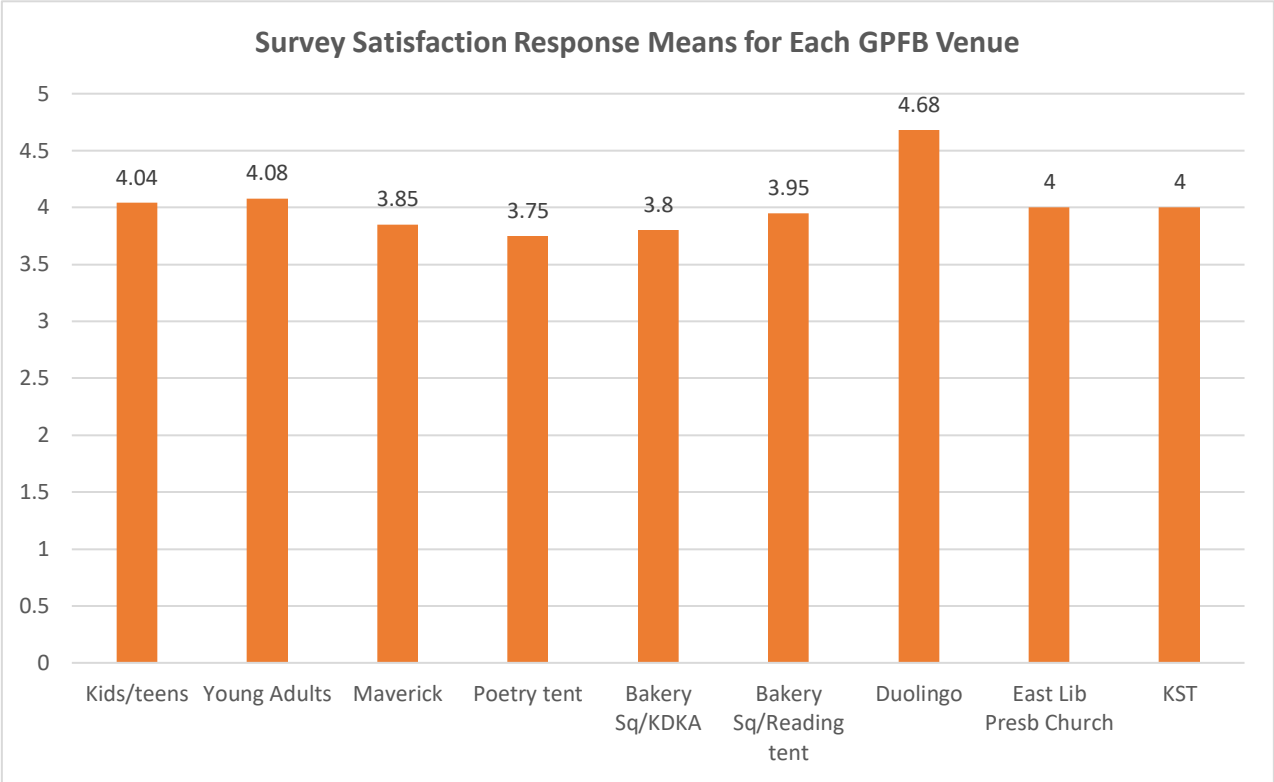


Note: Many individuals attended multiple events within, and at different venues. So the number of survey responses are not equivalent to the number of festival attendees.

[4] In a related analysis, t-tests (difference of means) were performed using gender as the control variable with each of the GPFB experience aspects, or variables. In each case, no results were statistically significant, indicating gender was not related to any systematic differences in survey responses.

Figure 4 shows the mean satisfaction scores for the 9 venues. The mean satisfaction score of all venues taken together is 4.02. This is similar to the 4.2 satisfaction score calculated directly from the GPFB experience question for 'festival venues' taken as a whole.

Figure 4



The satisfaction mean for the Duolingo (4.68) is significantly higher that of every other venue. While the response sample size for this venue is fairly small (n = 28), this distinguishing characteristic suggests that whatever factors (physical, organizational, personnel) were present at Duolingo should be carefully examined to see if they can be replicated at future festival venues.

The Poetry venue mean significantly differed from the Young Adults' mean, but only slightly, and other pairs were not statistically significant. It is nonetheless recommended that since the Poetry venue mean was the lowest, a similar review of factors along with comments should be done. This is especially important as the response sample size here (n = 239) lends additional reliability to the rating.

GPFB EXPANSION

When asked if festival goers preferred a single day or multiple day format, about 39% of those responding indicated they would prefer a 1-day format, 58% preferred a 2-day format, and 9% preferred a 3 or more day format. Despite these stated preferences, recall from Table 2 that almost 78% of respondents were extremely or somewhat satisfied with the single day format. However, almost 13%

were either somewhat or extremely dissatisfied with the single day format, and this was the highest percentage of any GPFB experience.

These data highlight a perceptible level of cognitive dissonance among survey respondents, and the comments do suggest a degree of frustration with the single day format. Yet this is not because satisfaction with the festival events is low; rather it suggests (and the other experiential data confirms) that there was not enough time to fully attend and enjoy all the festival had to offer. As such there is credible evidence that a multi-day format would be welcomed by these and other potential festival goers.

THE EAST LIBERTY ECONOMIC IMPACT EXPERIENCE

The 2022 GPFB Survey included three questions about festival goers' interactions with the East Liberty area while they were attending the festival: did they eat at restaurants; did they shop at stores; and did they stay overnight. Table 4 summarizes these responses.

Table 4

Percent Distribution
GPFB East Liberty
Experience

	Eat?	Shop?	Stay? *
Yes	38	20	4
No	62	80	96

* anywhere in the local area

Most respondents did not engage with the East Liberty restaurants or businesses during their time at the festival. Of course, there were more festival attendees than survey respondents, so attempting to determine the economic impact of the GPFB is problematic. If, for example, a) 38% of respondents represents approximately 50 individuals; and b) each individual was estimated to spend $___ per (lunch) meal, then some figure could be calculated.[5] A complicating factor here is the presence of the food trucks which could be seen as competitors for East Liberty restaurants. Data would need to be obtained from food truck vendors to more accurately assess their economic impact.

SUMMARY AND CONCLUSIONS

1) Given an overall satisfaction mean survey response of 4.3 (out of 5), the 2022 GPFB can be viewed as a successful event in its inaugural year. Supporting this conclusion is the fact that virtually all respondents indicate they will definitely or probably attend a subsequent book festival.

[5] Given that actual festival attendance was perhaps as high as 3,000, further extrapolations could be made, but this is beyond the intent of the current study and would require access to external data sources.

2) Survey respondents are predominantly older, female, and highly educated individuals. However, age and gender are not factors in explaining levels of respondent satisfaction, which are fairly high across demographic categories. Future book festivals should seek to expand the sample size and presumably the composition of sample survey respondents.

3) Satisfaction levels for most aspects of the GPFB experience are also high and correlate positively with overall satisfaction. This finding offers support for the conclusion that most experiential aspects directly contribute to overall respondent satisfaction. Whatever management philosophy and operational procedures were implemented here can be confidently included as at least a starting point for future book festivals.

4) Certain aspects of the GPFB require additional study to ascertain their continued viability or at least seek improvements:

    a) The Food Truck experience was largely a limited exposure event. Response ratings lean toward no opinion, so their contribution to the GPFB is therefore largely undefined. Many considerations are at stake here, including the aforementioned possible conflict of interest with permanent business establishments depending on festival locations.

    b) The single day format response ratings were generally favorable, but a majority of survey respondents indicate a preference for a longer festival. As discussed above, respondents believe they missed a lot because everything was crammed into one day. While possible GPFB expansion will involve considerable strategic and logistical challenges, response data at least suggest that this option should be evaluated.

    c) Similar attention should be paid to the strengths and weaknesses of the individual event venues. The comments should be especially informative here, as they address very specific attendee experiences and concerns.

In sum, survey results suggest that the inaugural Greater Pittsburgh Festival of Books was a successful undertaking. Reported satisfaction levels for most aspects of the festival experience were high, and analysis highlights areas where systemic improvements can result in an enhanced festival next year and beyond.