



## Introduction

In recent years, live theatre has struggled to maintain audience retention, especially after the effects of COVID-19. Since March of 2020, 35 theaters in the US have permanently closed (as of July 2023), many citing financial issues as the main factor for their closure. These issues have been present before 2020, as ticket revenue has fallen 55% since 2018, along with audience attendance dropping 59%. With these issues being prevalent in live theatre, it is imperative that producers and theatrical companies select seasons that appeal to audiences. After a season is selected and performed, it is necessary to analyze profit margins and ticket sales, to ensure that the selected genres and themes perform adequately with local audiences. One such report highlights that flashier, well-known musicals perform better than plays in regards to ticket sales, which is one small aspect that may influence a theater's decision on which plays to produce.

The focus of this analysis is to measure the performances of the latest Main Street Theater productions in regards to audience attendance and ticket sales. While there have been previous reports that interpret the highest grossing productions on a larger scale, like Broadway for instance, there are few studies that showcase performance data of smaller scale regional theaters, and fewer ones that have analyzed the performance data of Houston-specific regional theaters, hence this research endeavor. This study focuses primarily on quantitative data that represents an audience's willingness to attend various productions based solely on genre and play structure. Based on previous reports from larger cases, an increased performance is expected from musicals, particularly ones that feature well-known characters and titles.

## Methodology

The dataset was gathered from previous Main Street Theater box office reports spanning from 2013 to 2023.

To prevent the possibility of skewed results, the 2020/2021 season was omitted from the data collection, due to the mass shutdown because of COVID-19. A few other decisions were made to hold the integrity of the analysis. Only public performances of shows were utilized for this data set, and both comp tickets and touring shows were excluded. After these stipulations were enacted, 92 Main Street Theater shows fit the criteria to be analyzed, and these productions were then labeled with what stage they were produced for (Youth or Mainstage) and any genres they fall into. For the sake of this study, subcategories were only counted if 5 or more productions fell into that specific sector, and any subcategories that were part of another were instead put into that category (For example, shows categorized as Melodramas were considered Dramas, and shows categorized as Dark Comedies were considered Comedies). After the data was categorized, the values of the desired data were then averaged into their respective tables. To take into account the different run times of each production (some shows had as little as 3 performances, and others had as many as 38), one table highlights the ratio of tickets to the total number of performances. To also take into account the different seating capacities of the Youth and Mainstage theaters, the capacity percentages (the percentage of seats that were filled for the entirety of a show's run) were displayed on another table.

## Results

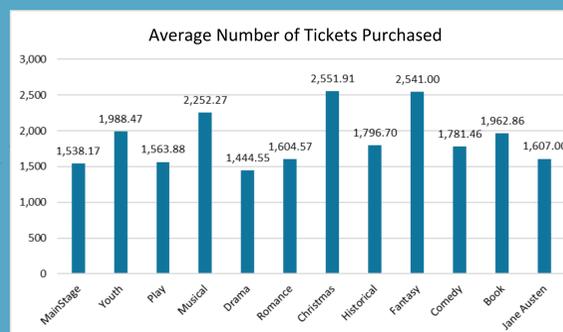


Figure 1

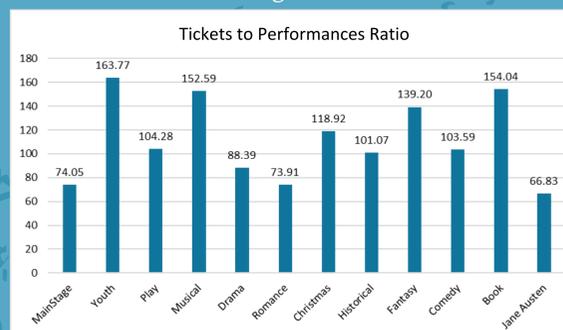


Figure 2

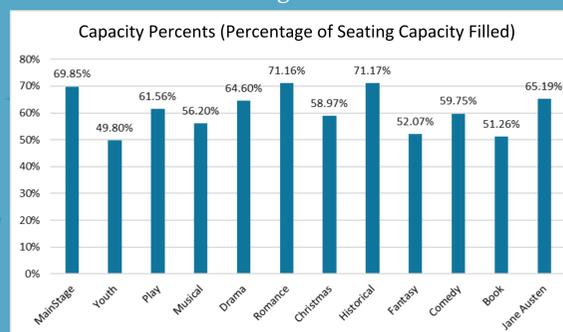


Figure 3

Num	Production Name	Stage	Type	Genre	Tickets Sold
1	Fancy Nancy Splendiferous Christmas	Youth	Play	Book, Christmas, Comedy	6861
2	Pinkalicious The Musical	Youth	Musical	Book	6001
3	Junie B. Jones: The Musical	Youth	Musical	Book, Comedy	5310
4	The Wizard of Oz	Youth	Musical	Book, Fantasy	5255
5	A Charlie Brown Christmas	Youth	Play	Book, Christmas	4373
6	Shrek the Musical	Youth	Musical	Book, Comedy, Fantasy	4332
7	The Best Christmas Pageant Ever	Youth	Play	Book, Christmas, Comedy	4042
8	Mr. Popper's Penguins	Youth	Musical	Book, Comedy	3468
9	Alexander and the Terrible, Horrible, No Good, Very Bad Day	Youth	Musical	Book, Comedy	3435
10	Wolf Hall	Mainstage	Play	Book, Dark Comedy, Melodrama	3252

Figure 4

## Findings

Looking at the results, it's clear that musicals outperformed plays (Figure 1). This stayed true for the ratio when considering performance runs (Figure 2), which was consistent with the original hypothesis. Interestingly though, when factoring in the differing seating capacities per each stage, Plays had a higher capacity percent than Musical (Figure 3). This phenomenon was also the same for Youth v. Mainstage, as Youth performances significantly outperformed Mainstage performances in regards to ticket sales (Figure 1 & 2), but flipped when the size of the theater is considered (Figure 3). Interestingly, though not surprising, shows categorized as Christmas sold the most tickets on average, topping at 2,551.91 (Figure 1). As a whole, the highest selling productions by a wide margin were those considered Youth, Musical, Christmas, Fantasy, or Book-based (Figure 2). When looking at Figure 4, which highlights the top 10 shows that have sold the most tickets, this divide is evident. The top 9 are all shows that were produced for the Youth stage, and all 10 were based on books in some way. 6 of the top 10 were musicals, and surprisingly, despite not being one of the top subcategories, 7 of the top 10 were Comedies. Corresponding with the highest selling genres, 3 of the top 10 were Christmas shows, despite there only being 11 Christmas Productions in the entirety of the dataset. All of this data serves to prove the original hypothesis. There seems to be an increase of tickets purchased for shows that are 'feel good' and entertaining, like Youth, Musical, and Christmas shows, and there is a wide margin of many people choosing to attend shows with familiar, pre established characters (Those categorized as Books) when looking at the top 10 shows based on ticket sales.

## Discussion

Going into this study, I expected to see that the majority of audiences preferred musicals, particularly those with familiar characters and titles, and for the most part, I was proven correct. There is drastic enough data to definitively conclude that in the Houston area, shows that are categorized as Youth, Musical, Christmas, Fantasy, and Book-based perform the best with audiences. There are a few limitations that may have affected my results. The biggest issue is the disparity of theater size between the Youth and Mainstage theaters. The Youth theater can fit about 330 audience members, while the Mainstage theater can only fit about 110. Two problems stem from this issue: performances at the Youth theater have a larger capacity of seats that can be filled, meaning they are able to sell more tickets per performances, but there may be difficulty filling every seat, meaning that a Youth show that sells the exact same amount of tickets as a Mainstage show will have a lower capacity percent. This might explain why the capacity percentages are opposite to what the first two figures demonstrate. In order to minimize this flaw in future research endeavors, it might be best to conduct the study in theaters of the same seating capacity.

With the results demonstrating a clear audience preference, I would urge Theaters in the Houston area who might be struggling with financial issues to consider leaning more to the better-performing subcategories. While it may not be a permanent fix, choosing to do shows that audiences seem to enjoy would be a good way to draw in additional revenue. More studies will need to be conducted to analyze the audience response in various areas.