

Longitudinal Analysis of Perceived and Objective Airline Performance Quality

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Abstract

Commercial air carrier performance is a multivariable function, uniquely and substantially impacted by passenger's perception of negative employee behavior. High industry visibility, coupled with exponential social media growth, has provided the incredible potential to either widen or narrow the perception-performance gap. The present research conducts a rare longitudinal evaluation of objective airline performance quality in contrast with consumer perceptions of perceived airline performance and the dynamic changes occurring therein. Additionally, the implications regarding air carriers facing both objective and perceived performance challenges, as well as implications for the industry as a whole, are discussed. Utilizing nearly 30 years of objective airline performance data gathered by the annual Airline Quality Rating, integrated with a decade of passenger perception and behavioral research from the Airline Passenger Survey, a longitudinal model of disparity is created analyzing performance perceptions versus reality through the identification of relational patterns in the data sets. The change in the degree of disparity, between actual and perceived performance, as it relates to the dissemination of highly visible performance events (both positive and negative) are assessed. The objective and perceived performance gap has the potential to widen over time and is likely to continue to expand in the near future. The development of this longitudinal model provides an improved understanding of passenger perceptions and behaviors relating to negative employee behavior, which, previously a micro-level experience, now has the ability to be disseminated to a global consumer audience, potentially resulting in far-reaching consequences.

Longitudinal Analysis of Perceived and Objective Airline Performance Quality

In the current age of new and improving technology, the airline industry faces uncharted challenges regarding performance and overall quality, and the consumer perceptions thereof. With social media growing exponentially both globally and domestically, many sectors are now enormously impacted by much greater consumer visibility. The ease of posting company reviews on the internet for a global audience has not just changed company-customer interaction, but it has also impacted customer expectations. A simple search on a review forum conducted in less than five minutes can impact a consumer's decision to fly on a particular airline. Similarly, a consumer who experienced a less than friendly airline agent could leave a review before even leaving the terminal. High industry visibility, coupled with intensely perceptive consumers, has propelled customer service to the forefront, making it more transparent than ever.

Previous research into air-traveling consumer's perceptions has struggled to provide little more than a brief glimpse of the average air traveler. This research, however, is uniquely capable of providing not just a detailed analysis of air-traveling consumers' perceptions, but also an examination of the perception-performance gap. This research will utilize nearly 30 years of objective airline performance data gathered in the annual Airline Quality Rating report, and a decade's worth of passenger perceptions of airline performance collected in the annual Airline Passenger Survey. The resulting study will produce a longitudinal evaluation of the disparity between objective performance results and subjective performance perceptions. From this research, an improved understanding between passenger perceptions and customer-service-related airline performance will emerge.

Methodology

The present research conducts a rare longitudinal evaluation of objective airline performance data in contrast with perceived airline performance as reported by consumers. Objective airline performance data, extracted from the Department of Transportation's Air Travel Consumer Report, has been utilized for the last 29 years in the annual Airline Quality Rating report. The AQR's multi-factor weighted average approach provides a consistent and effective means for assessing airline quality. By contrast, the decade's worth of Airline Passenger Survey research and the most recent 2018 APS results provide a subjective look at the average air traveler's perceptions regarding the airline industry's performance and provide insights into passenger/consumer behavior. Together, with the integration of both objective and subjective results from the AQR and APS, a longitudinal model is created, exemplifying any disparities between perceived industry performance and reality.

I. Annual Airline Quality Rating

The annual Airline Quality Rating (AQR), developed and announced in 1991, is an objective method for assessing overall airline performance and quality. With the inception of the AQR, a multi-factor, weighted average approach utilizing published, publicly available data from the Department of Transportation's Air Travel Consumer Report, became available that had not been accessible before in the airline industry. The AQR, which comprises of combined multiple performance criteria, sets the industry standard for assessing airline quality. Quality elements that considered for inclusion in the 1991 AQR needed to meet two basic criteria; 1) an element must be obtainable from published data sources for each airline; and 2) an element must have relevance to consumer concerns regarding airline quality (Bowen & Headley,

2018). The resulting four categories that met these criteria included on-time arrivals, mishandled baggage, involuntary denied boardings, and consumer complaints (Table 1).

Each of the four categories is assigned a weight. AQR weighting was initially established by surveying 65 airline industry experts regarding their opinion on what an average air traveler would consider essential (on a scale of 0 to 10) in judging airline quality (Bowen & Headley, 2018). Each combined element and weight are also assigned a positive or negative symbol indicating the nature of impact for that criterion on a consumer's perception of quality (Table 1). For example, the on-time arrival criterion is assigned a positive sign because that element is viewed as a positive aspect by the consumer. It is reported in terms of successes and a higher number considered more desirable. Consumers consider this aspect of high importance, and therefore the element is weighted higher (Bowen & Headley, 2018).

Conversely, the criteria of mishandled baggage are assigned a negative sign because that element is viewed negatively in the eyes of the consumer. This element is reported in terms of mishandled bags per 1000 passengers served, suggesting that a higher number is unfavorable to consumers (Bowen & Headley, 2018). While weights reflect the importance or value of the criteria and impact symbols indicate the consumers' general opinion, both weights and impacts are independent of each other.

This weighted average method utilized in the AQR produces both individual and industry scores resulting in a rating system with interval scale properties that is comparable across airlines and across time periods (Bowen & Headley, 2018). The AQR allows researchers to observe industry transformations and deviations between airlines easily. Additionally, individual airline fluctuations can be compared against industry averages and trends of both current and past years.

From a consumer perspective, the annual AQR research provides air travelers with an accessible and straightforward report detailing which airlines statistically out-performed others.

*Table 1
Airline Quality Rating Criteria, Weight, and Impact*

Criteria		Weight		Impact
OT	On-Time	8.63	+	Positive
DB	Denied Boardings	8.03	-	Negative
MB	Mishandled Baggage	7.92	-	Negative
CC	Consumer Complaints	7.17	-	Negative
	Flight Problems			
	Over sales			
	Reservations, Ticketing, and Boarding			
	Fares			
	Refunds			
	Baggage			
	Customer Service			
	Disability			
	Advertising			
	Discrimination			
	Animals			
	Other			

Data for all criteria is drawn from the U.S. Department of Transportation's monthly *Air Travel Consumer Report*.

The formula for calculating the AQR score is:

$$AQR = \frac{(+8.63 \times OT) + (-8.03 \times DB) + (-7.92 \times MB) + (-7.17 \times CC)}{(8.63 + 8.03 + 7.92 + 7.17)}$$

I. Airline Quality Rating Consumer Complaint Categories

The AQR Consumer Complaint criterion is further comprised of 12 subcategories, as reported by the Department of Transportation in the Air Travel Consumer Report (ATCR). These 12 complaint subcategories include (1) flight problems, (2) over-sales, (3) reservations, ticketing, and boarding (4) fares, (5) refund, (6) baggage, (7) customer service, (8) disability, (9) advertising, (10) discrimination, (11) animals, and (12) other (Bowen & Headley, 2018).

Specific examination of the data pertaining to the 12 Consumer Complaint categories, as reported in both the AQR and the ATCR, provides a rich analysis of objective airline performance that is based on consumer experience. The publicly available Air Travel Consumer Report details the number of accrued complaints, specifically by airline and category, while the Airline Quality Rating totals the cumulative complaints by month for each airline. The AQR then proceeds to use the annual average for each of the four criteria, including total annual complaints, pertaining to each airline, and mathematically arrives at an overall airline and industry score.

II. Airline Passenger Survey

The Airline Passenger Survey (APS), created by Professor of Aviation, Dr. Brent Bowen over a decade ago at the request of a United States House Subcommittee to interview and assess passenger perceptions of the U.S. airline industry, is still utilized today for collegiate research. The survey, which has been maintained over the years by Dr. Bowen, provides a continuous longitudinal data set of passenger perceptions of U.S. airlines. Utilizing APS data for this research will provide insight into consumer opinions of different quality and performance aspects pertaining to the airline industry.

Results and Discussion

Airline Quality Rating Reports and 2019 Results

The most recent Airline Quality Rating, which was released on April 8, 2019, details the airline industry performance and individual airline's performance for the 2018 calendar year. The airline industry score improved for the fourth year in a row (2015, 2016, 2017, 2018), from -0.79 in 2017 to -0.66 for 2018. The improved performance was viewed in three of the four areas. The improved categories include mishandled baggage, which decreased from 2.46 to 2.43 (per 1,000 passengers), involuntary denied boardings, which improved from 0.34 to 0.14 (per 10,000 passengers), and consumer complaint rate, which declined across the industry from 1.35 to 1.04 (per 100,000 passengers). The fourth unimproved category, on-time arrivals, decreased from 80.2% to 79.6% in 2018. (Bowen and Headley, 2018).

The 2019 AQR included the following airlines: Alaska Airlines, American Airlines, Delta Air Lines, Frontier Airlines, Hawaiian Airlines, JetBlue, Southwest Airlines, Spirit Airlines, and United Airlines. Of the nine airlines included in the 2019 AQR report, six airlines improved from the 2018 report. These six airlines include Delta, Hawaiian, JetBlue, Southwest, Spirit, and United. The remaining three airlines which experienced a decline in their AQR scores from the 2018 report include Alaska, American, and Frontier. Table 2 depicts the official 2019 AQR rankings released.

Table 2. Airline Quality Rating 2019 Official Rankings

Airlines	Ranking	Score	Improved/Declined
Delta Air Lines	1st	-0.36	Improved
JetBlue Airlines	2nd	-0.48	Improved
Southwest Airlines	3rd	-0.62	Improved
Alaska Airlines	4th	-0.63	Declined
Hawaiian Airlines	5th	-0.65	Improved
United Airlines	6th	-0.72	Improved
Spirit Airlines	7th	-1.00	Improved
American Airlines	8th	-1.10	Declined
Frontier Airlines	9th	-1.53	Declined
Industry	-----	-0.66	Improved

The annually published AQR reports provide a unique opportunity to examine the longitudinal performance of the airline industry by utilizing its nearly three decades worth of data. Figure 1 illustrates the AQR industry averages over the last 29 years. From this data alone, specific observations can be made regarding industry highs and lows. Identifiable peak periods occurred in the early 1990s, 2003, 2011, and 2017, while specific low periods were observed in 2000, 2007 and less severely in 2014.

Figure 1. Airline Quality Rating 29-Year Industry Averages

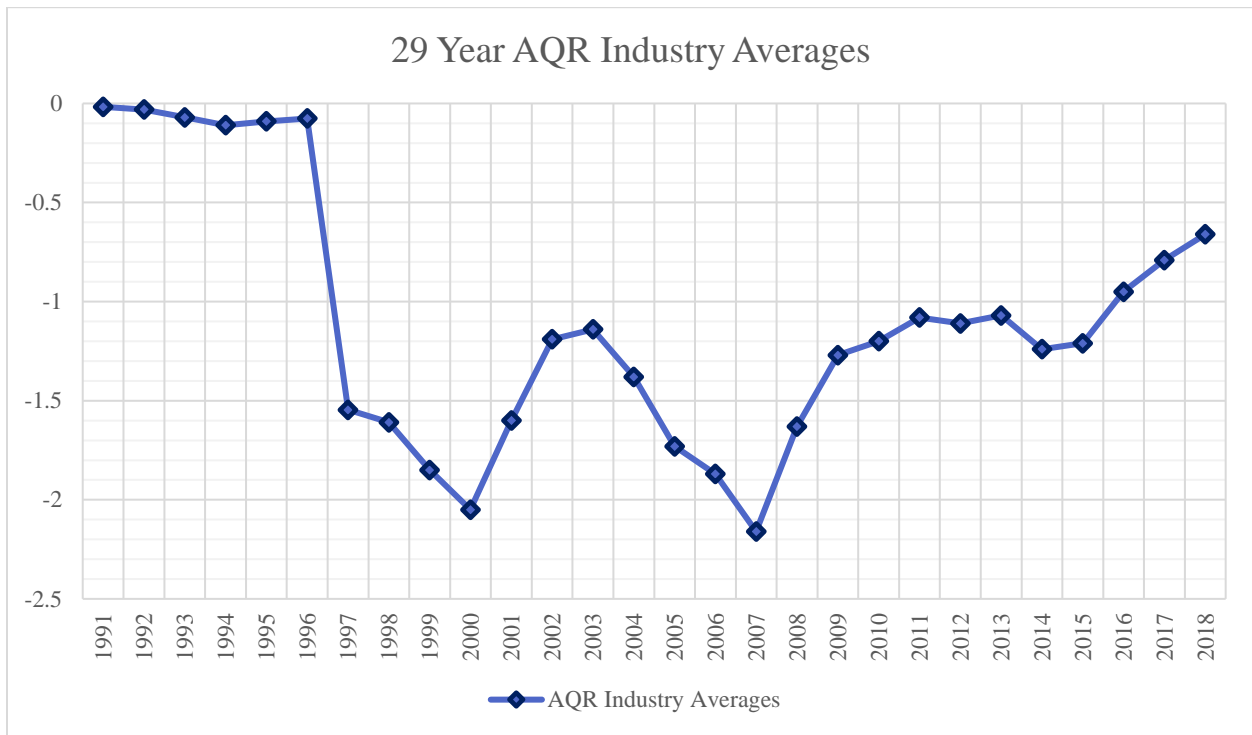


Figure 2. Airline Quality Rating 10-Year Industry Average and Trend

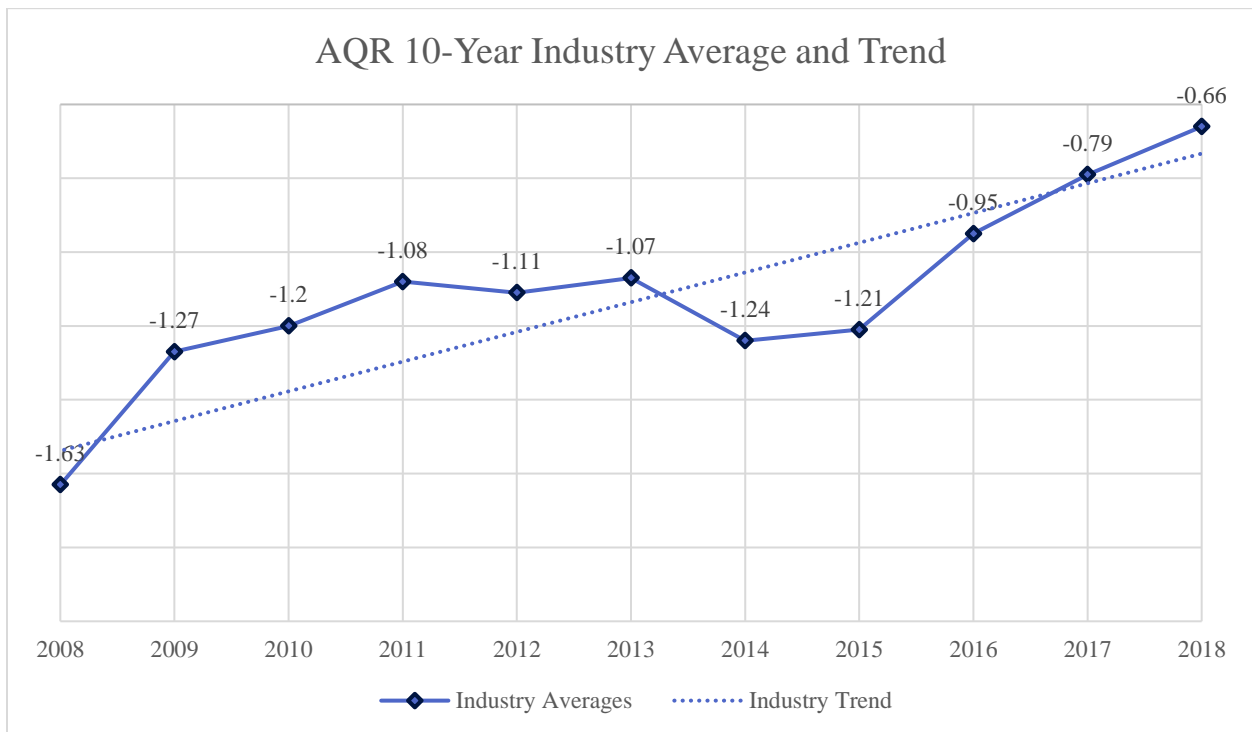


Figure 3. Airline Quality Rating Consumer Complaint Rate 1995-2018

-The Airline Quality Rating first began reporting and detailing CC Rate in the 1996 report

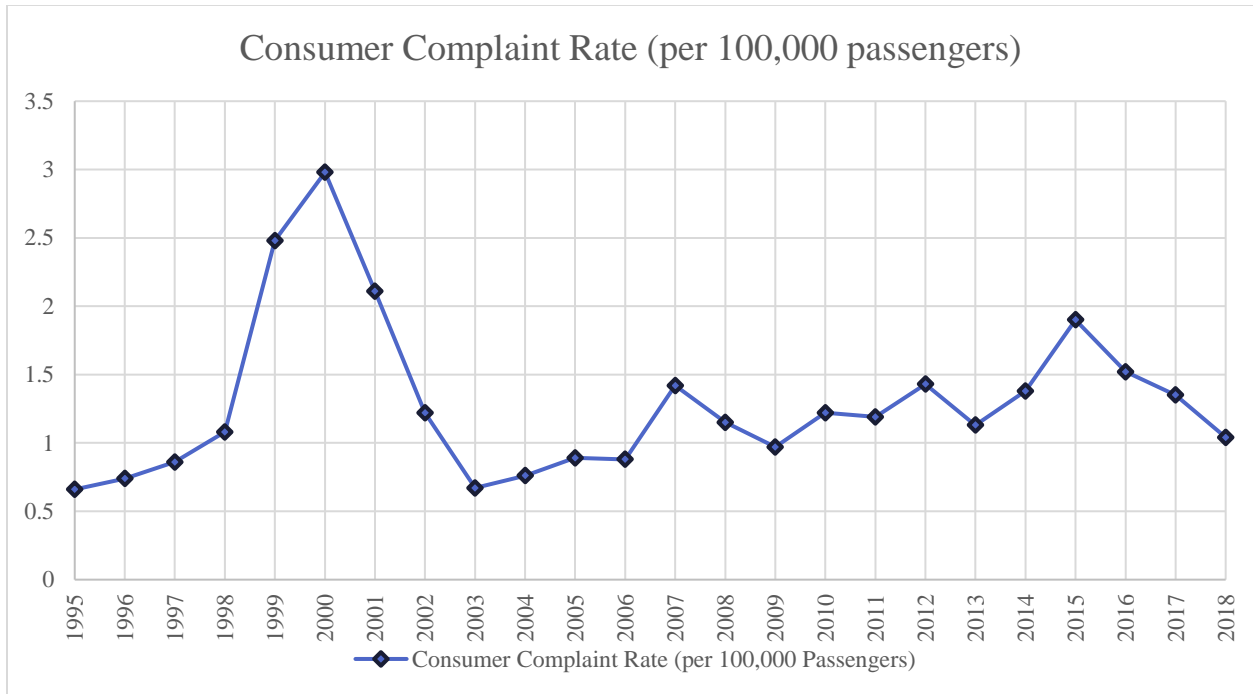
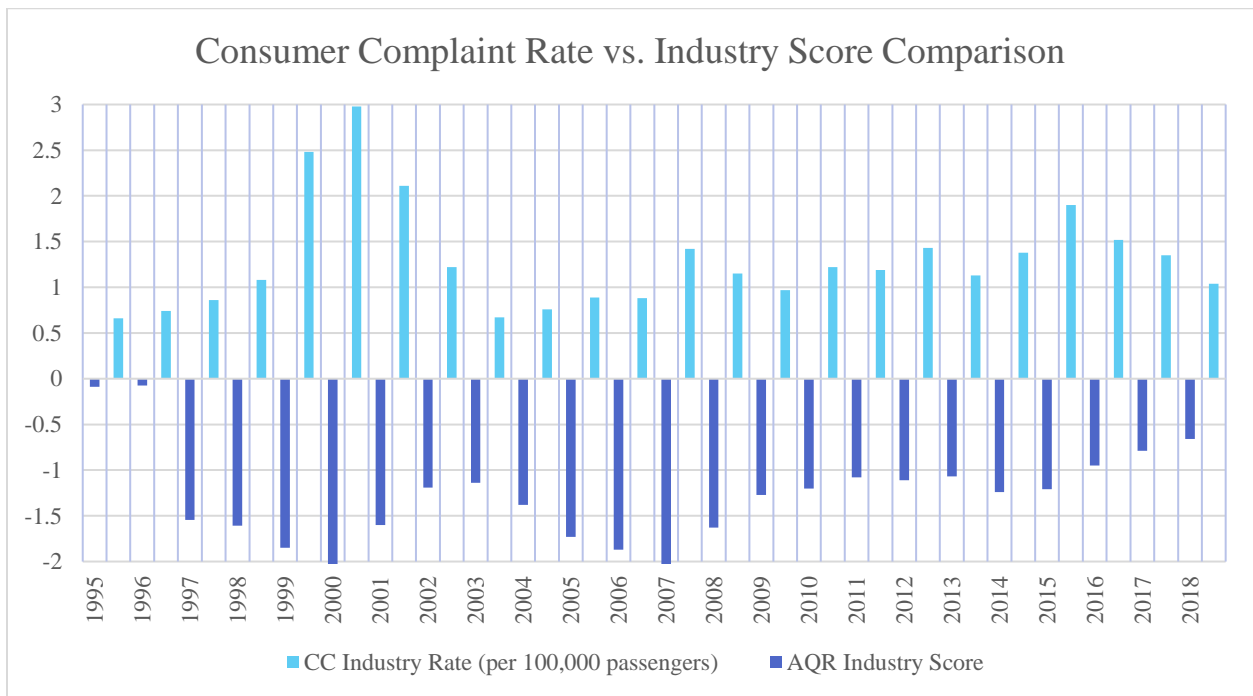


Figure 4. Comparative Analysis of Consumer Complaint Rate and AQR Industry Scores

-For 1996 AQR Report to 2019 AQR Report (years 1995-2018)



I. Early 2000's Depression

The first significant depression in industry average scores occurred in the year 2000 (2001 AQR Report). The initial decline began just after 1996, steadily diminishing until reaching the low peak point in 2000. The year 2000 contained the highest rate of consumer complaints ever recorded at 2.98 complaints per 100,000 passengers. This extreme rate is indicative of the accumulation of the previous year's steady increases in consumer complaints from 1995 to 1998. A noticeable increase in complaints occurred between 1998 and 1999, where the complaint rate jumped from 1.08 per 100,000 passengers to 2.48 per 100,000 passengers (Figure 3). This sudden and extreme surge represents a 130% increase in complaints. A smaller, yet still notable surge in complaints was experienced just after 1999, where an additional 24.5% increase in complaints peaked the highest complaint rate and the second-lowest score for the airline industry in the year 2000 (Bowen & Headley, 2001). This drastic increase in consumer complaints during this period reflects consumer frustration with the industry and the government (Bowen & Headley, 2000). In the of 2000, researchers Bowen and Headley reflected on the previous year being reported (1999), and asserted that "The many anti-consumer oriented rules developed recently to enhance perceived productivity at the expense of consumer comfort, and convenience has resulted in consumer retaliation, as evidenced by increasing complaints to the department of transportation" (Bowen and Headley, 2000). Bowen and Headley went on to predict that soon consumer focus will be driven by price and schedule, and airline loyalty will take a back seat. Later in 2001 Bowen and Headley, reflecting on the peak consumer complaint rate during the year 2000 and the then lowest ever AQR Industry Score asserted a similar foresight. "The many anti-consumer-oriented rules developed recently to enhance perceived productivity at the expense of consumer comfort and convenience have resulted in consumer retaliation, as

evidenced by increasing complaints to the Department of Transportation” (Bowen and Headley, 2001).

The three years following the peak decline in 2000 signified significant improvement. The consumer complaint rate steadily declines into 2003, where the rate of 0.67 per 100,000 passengers was reached; The lowest rate since 1995 (Figure 3). Thereafter, a slight increase began and persisted, and the consumer complaint rate has never reached that low level again. Comparatively, as the complaint rate steadily dropped during those three years, Industry Scores steadily recovered, indicating a 44% improvement from 2000-2003 (Figure 1, 3). Interestingly enough, the 2004 AQR report stated the Consumer Complaint category was the only area to not decay in 2003, and the 45% decrease in the rate of complaints from 2002 to 2003 was singularly responsible for the small industry improvement (Bowen and Headley, 2004).

II. 2007-2008 Depression

After a brief period of improvement lead up to and including 2003, the industry experienced another rapid and severe decline. Beginning in 2004 the industry performance average dropped significantly in a 21% decline while a corresponding, albeit small 13% increase in consumer complaints was experienced. This decline continued from the end of 2003 to 2007, accumulating a total drop in performance of 89% since 2003. 2007, marking the worst industry performance in the 29-year history of the Airline Quality Rating, was likely influenced by the national recession occurring at the time (Bennett et al., n.d.). The consumer complaint rate, however, did not increase quite as rapidly as industry performance dropped, until 2007, when complaints skyrocketed 63%. Total complaint accumulation for the four-year period of 2004-2007 increased a total of 112% from the last markedly low complaint-rate year of 2003.

The severe performance depression of the industry in 2007 was parallel by poor performance in all four areas tracked; Increased Consumer Complaints, Fewer on-time arrivals, Increase in Denied Boardings, and an Increased Number of Mishandled Baggage (Bowen & Headley, 2008). The overall decline was viewed as multifaceted and indicative of overall industry performance with 12 of the 16 airlines represented in the 2008 report decline in performance from the previous year. Industry performance thereafter, however, steadily improved toward the present year with only two specific and consecutive years experiencing a noticeable drop.

III. 2018 Peak

To contrast the period leading up to and including the worst industry performance year in AQR history, the last 10-year period has been characterized by significant improvement with just two years, indicating notable drops in performance. Moving on from 2007, the industry significantly improved 41% in just a two-year period, while complaints declined in a slower, yet similar fashion. However, during 2010, the consumer complaint category was not indicative of the overall industry, is the single category to worsen while the remaining three areas and overall industry score improved.

The three-year period of 2011-2013 marked minimal change. Improvement and regression both occurred, but measurable changes were only between several low percentages. The consumer complaint rate in 2012 did rise a slight 20% before dropping back down 27%. The two-year period of 2014 to 2015 marked the last significant decline in the airline industry's overall performance. The consumer complaint rate steeply rose 68% from 2013, indicating significant consumer disapproval with the industry performance. 2015 marked the year of the highest consumer complaint rate since the decline in 2001 and the highest overall peak in 2000.

The industry score, however, was not as significantly impacted, declining just 16% despite consumer frustrations.

Onward from 2015, the industry has continued a four consecutive year improvement (2015, 2016, 2017, 2018). Over the past four years, the consumer complaint rate has reliably and consistently dropped 45% from the last major peak of 2015. Paralleling the decrease in consumer complaints, the average AQR industry score improved by 45% since the last notable depression in 2015. The most recent 2018 score maintains the highest industry average score since 1996 (Figure 1). This overall positive trend can be amplified by shortening the time frame illustrated in Figure 1 to a 10-year period from (2008-2018) illustrated in Figure 2.

In considering whether consumers have recognized this continuous four-year improvement in overall industry performance, passenger perceptions can be analyzed by specifically examining the Consumer Complaint category. The last four years' worth of reported data indicated that while overall industry scores improved, industry consumer complaint rate has only improved for the last three consecutive years (2018, 2017, 2016). While industry performance improved in 2014 and has sustained that improvement, AQR data suggests that consumer perceptions did not immediately recognize this improvement. After a year later, however, a sudden drop which continued for a three-year decrease in the rate of consumer complaints filed suggests that the flying public has noticed improved performance in areas that are important to the consumer. After analyzing this longitudinal data, this observation can loosely be applied to the last 24-years (1996 AQR report began including complaint rate averages for 1995). While some specific years are outliers, the majority of the consumer perceptions as observed through complaint rates lag just slightly behind industry performance. Consumer complaints reported to the DOT tend to continue after other markers of the industry

performance have improved. While complaints may continue after improvement is measured, overall consumer perceptions as observed through the AQR, though not precisely accurate, still typically mimic overall industry performance.

Airline Quality Rating Consumer Complaints

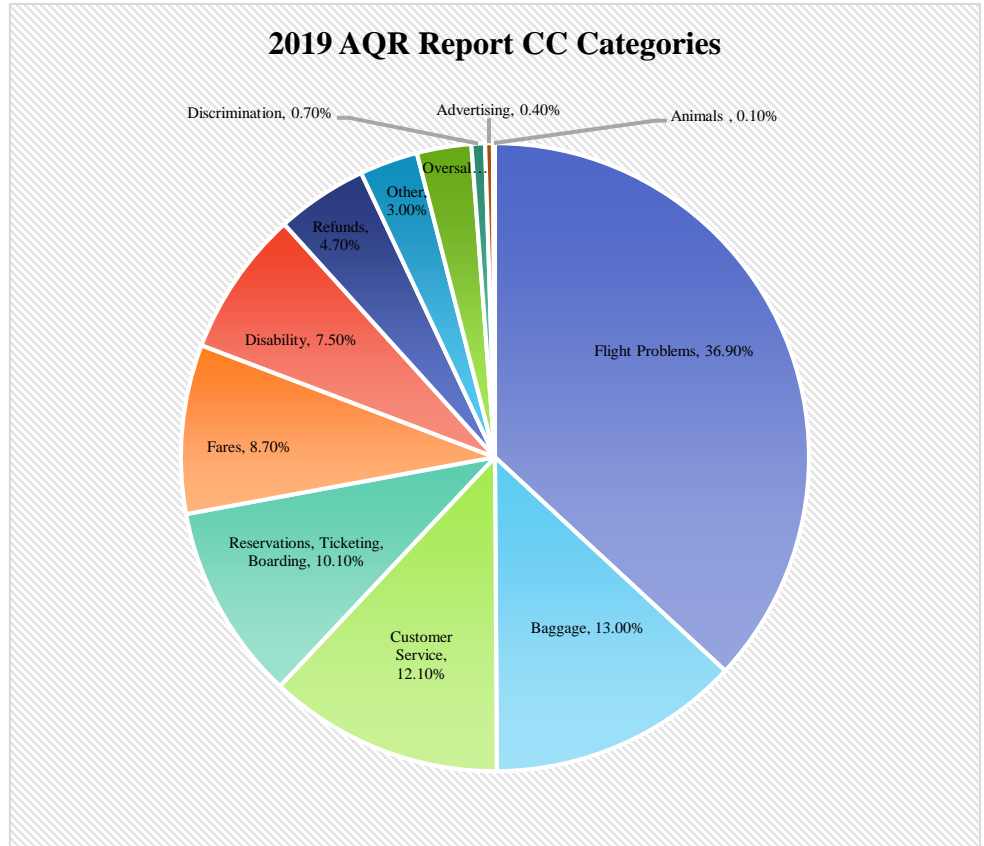
The AQR offers a particularly unique look at consumer perceptions. While most measurements for consumer perceptions offer subjective results, the AQR reports objective performance results in one category that reflects consumer perceptions of airline quality. The consumer complaint category is uniquely capable of providing a direct look at air traveler opinions. Because complaints of any kind are viewed as an unfavorable attribute, this indicator does not offer insight on positive consumer perceptions.

I. Complaints Received

Of the 12 Consumer Complaint categories, the Flight Problems category accounted for 39.6% of all complaints filed for All United States Domestic Airlines in the calendar year of 2018. The second highest complaint category for 2018 was baggage, which accounted for 13% of all filed complaints. The third highest complaint category for 2018 was Customer Service, which accounted for 12.1% of all complaints filed. Interestingly, this trend of the top three customer complaint categories also occurred in 2014 before briefly being disrupted in 2015 and 2016, during which time the Reservations, Ticketing, and Boarding category overtook baggage for the third-place position. For the past three years, however, (2016, 2017, 2018) the top three complaint categories have remained Flight Problems, Customer Service, and Baggage, respectively. Figure 5 below depicts the 12 consumer complaint categories and respective percentages, and Table 3 lists the corresponding number of complaints.

Table 3 and Figure 5. 2019 AQR Report Consumer Complaints by Category

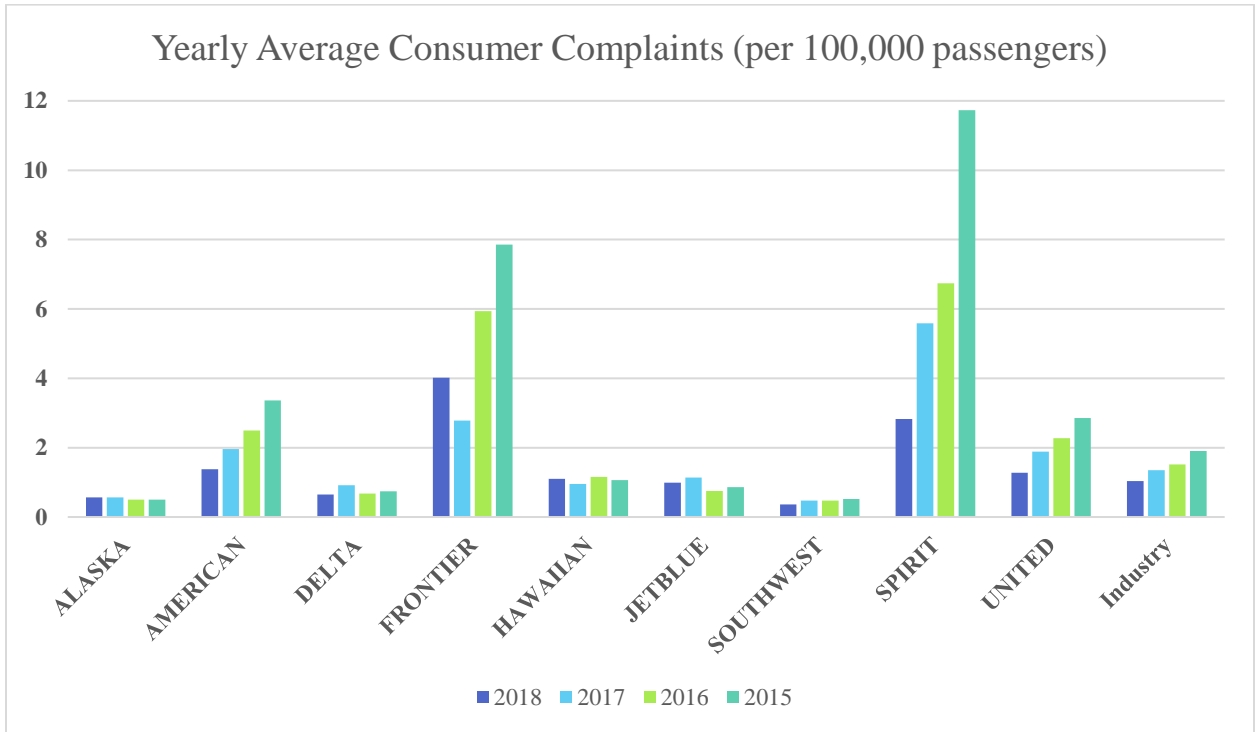
Complaint Category	Total Complaints
Flight Problem	3,271
Baggage	1,156
Cust. Service	1,073
Res, Tic, Board	895
Fares	773
Disability	665
Refunds	419
Other	270
Oversales	247
Discrimination	80
Advertising	26
Animals	1
Total	8,876



Overall, the rate of consumer complaints has steadily improved over the last four years.

Figure 6 suggests a parallel between the four-year trend of overall industry performance improvement and the apparent decline of filed complaints over the past four years. This continuing decline implies that consumers have perceived an overall performance improvement; however, specific airlines, as indicated in Figure 6, still struggle with maintaining a low consumer complaint rate.

Figure 6. Annual Airline Average Consumer Complaints 2015-2018 (per 100,000 passengers)

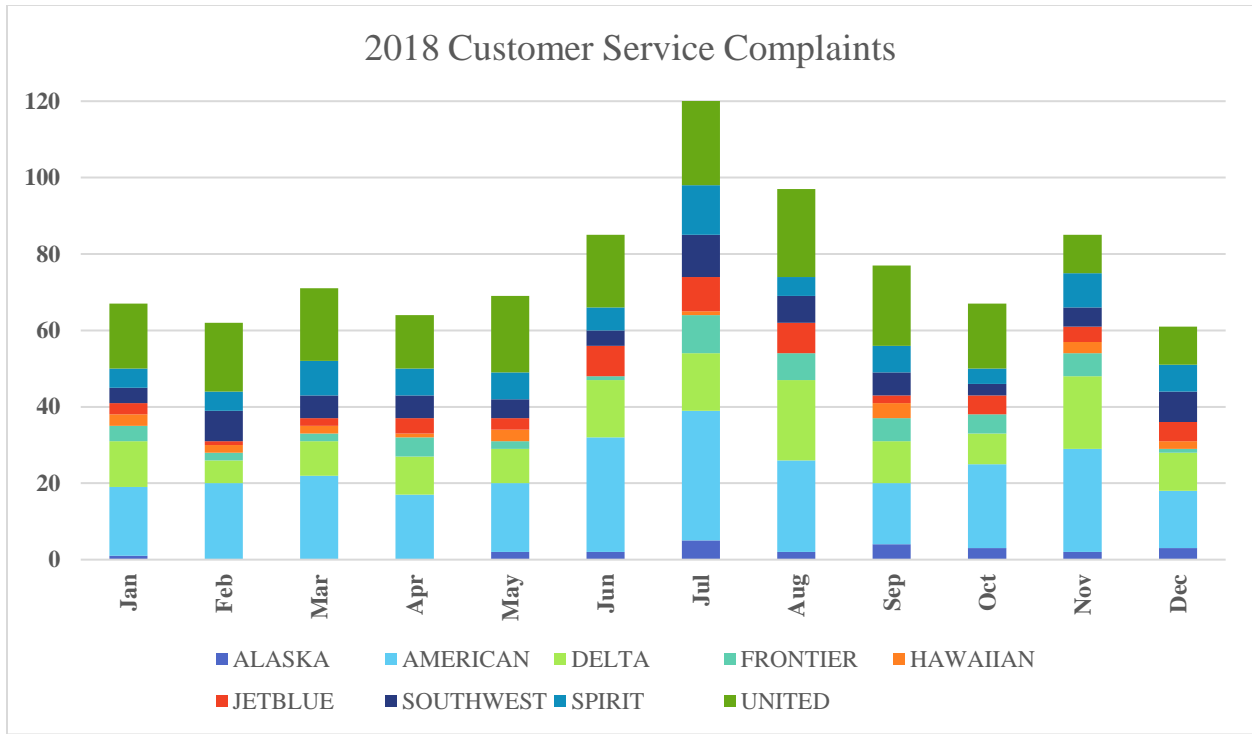


Customer Service Complaints by Airline

By utilizing customer complaint data available in the Air Travel Consumer Report, a graphical depiction of monthly airline complaints can be created. For this analysis, specific emphasis was placed on the Customer Service category of consumer complaints. Figure 7 depicts the total monthly customer service complaints filed against each of the nine airlines represented in the AQR. American Airlines, United Airlines, and Delta Air Lines are the top three airlines receiving the highest number of customer service complaints, while Alaska Airlines and Hawaiian Airlines received the lowest number of customer service complaints for 2018. Figure 7 also depicts apparent peak months for customer service complaints, indicating the least favorable passenger perceptions during the summer months of July and August.

Figure 7 Customer Service Consumer Complaints for 2018

-Data extracted from monthly Department of Transportation’s Air Travel Consumer Reports



Airline Passenger Survey 2018 Results

The following analysis includes the 2018 Airline Passenger Survey results collected from the APS Survey Monkey website. APS data pertaining to specific “preferred” and “passenger-friendly” airlines as well as data collected from consumers who highly value customer service can provide an accurate subjective snapshot at the latest perceived industry performance and allow for a comparison to the data collected from the recently released AQR.

I. Preliminary Analysis

Preliminary analysis of the January to December 2018 Airline Passenger Survey showed that 373 participants responded to the survey. Responses from the survey indicate that of the 368 participants that responded to the “Your gender is...” question, 69.84% are male, and 27.45% are female, while 2.72% selected prefer not to answer. Responses from the questions “The majority

of your flights each year are for..." indicated that of 366 participants who responded, 46.72% selected business, while 53.28% selected Leisure. The greatest number of participants who answered, "Your average number of flights each year is..." selected the 1-5 range at 35.5%. Of the remaining respondents, 1.08% chose 0, 25.75% chose 6-10, 13.55% chose 11-15, 9.76% chose 16-20, and 14.36% chose more than 20.

Analysis of the 2018 APS results involves examining four specific APS questions. The first question, "How has air travel in general been for you in the past year?" accumulated 371 responses (2 participants elected to skip the question). Of the 371 responses, 51.48% (191) selected "Stayed the Same," 35.31% (131) selected "Gotten Worse," and just 13.21% (49) selected "Gotten Better."

The second question examined is, "When thinking of your next air travel opportunity, which of the following do you consider as MOST important in making your airline selection?" A total of 370 participants responded while 3 participants elected to skip the question. The answer selected most frequently was "Confirmed seat on flight (not overbooked or 'bumped')," with 27.03% (100) preferring this option. By comparison, 25.41% (94) selected "Arriving on Time," 20.54% (76) selected "Customer Service," 18.65% (69) selected Other, and 8.38% (31) selected "Bags Arriving with Me."

The third question examined is "What is your most preferred airline to fly?" and 362 participants responded to this question while 11 skipped. At 27.90% (101), participants most frequently selected Delta Airlines. Following Delta included: Southwest with 19.34% (70), American Airlines with 15.19% (55), United with 13.54% (49), Alaska with 9.12% (33), JetBlue with 8.84% (32), Virgin American with 3.31% (12), Spirit with 1.38% (5), Hawaiian with 0.38% (3) and SkyWest with 0.55% (2). There were no participants that selected Frontier or ExpressJet.

The fourth question examined was “Which airline do you think is most passenger-friendly?” and 350 respondents elected to answer, while 23 elected to skip. Majority of the participants selected Southwest at 35.14% (123). Delta, Alaska, JetBlue, and Virgin America followed behind with 20% (70), 14.29% (50), 11.43% (40), and 6.29% (22) respectively. United followed with 6% (21), American with 3.71%, Hawaiian with 1.71% (6), Frontier with 0.57% (2), SkyWest with 0.57% (2), and Spirit with 0.29% (1). No participants selected ExpressJet.

II. Primary Analysis

A more in-depth analysis of APS data involves comparing the results of the specific questions mentioned above in an attempt to discover interesting correlations. Filtering APS survey results allow for the isolation of a specific variable, which in this case is a particular question/answer set. This function permits a greater insight into trends of consumer perceptions. For example, isolating the specific responses of participants who indicated they most value customer service above any other performance indicator, allows a unique look at other consumer options from a customer service centered perspective

Of the 76 participants who indicated that they value customer service most, just 18.42% believed that air travel, in general, had gotten better in the past year. Majority of the participants who value customer service indicated that they believe air travel has either stayed the same or gotten worse. 42.11% (32) selected stayed the same while, 39.47% (30) selected gotten worse. These same participants indicated that 26.32% (20) most preferred to fly on Delta Air Lines and while Southwest and United both accrued 15.79% (12 votes each). Interestingly enough, when asked what airline they think is most passenger-friendly 35.25% (25) selected Southwest, while 19.18% (14) selected Delta Air Lines.

Using the same filtering function to isolate participants who selected “Gotten Worse” to the first question, “How has air travel in general been for you in the past year?” presented some interesting results. The top three airlines whom participants that believe air travel has generally gotten worse over the past year (131 respondents) prefer to fly on included Delta, American, and Southwest Airlines, respectively. 22.05% (28) prefer Delta Airlines, 18.90% (24) prefer American, and 18.11% (23) prefer Southwest. By contrast, majority of the same participants who believe air travel has generally gotten worse also believe that Southwest is the most passenger-friendly at 38.33% (46), while JetBlue comes in second with 18.33% (22), and Delta in third with just 15.83% (19).

Some particularly interesting correlations surfaced after filtering these results. A fairly even split of participants who value customer service believe that air travel has either gotten worse or stayed the same. Those same participants primarily prefer to fly Delta, yet the majority believe that Southwest is more passenger-friendly. Participants who indicated they believe air travel has generally gotten worse over the past year also selected Delta and American as the most preferred airlines; however, the majority indicated that Southwest is the most passenger-friendly.

Future Research

Future research in this area should consider taking into account other factors that this study did not. Each perception collected through the Airline Passenger Survey is unique to a specific passenger. In considering the multitude of reasons that could explain why perceptions tend to lag behind the performance reality, a more in-depth analysis into the results of the APS question, “Have you experienced any travel issues, concerns, or complaints?” should be conducted. This question, in particular, is an open-ended write-in response question allowing for the analysis of unique passenger perceptions. Though extensive, this perception-reality disparity

research study did not include a specific longitudinal exploration or identification of the events occurring in the U.S. that coincided with significant airline performance-perception peaks or declines. Future research into this area could greatly benefit from a potential study regarding the specific correlation between events occurring domestically or globally, and the subsequent consumer perceptions and airline performance. Additionally, future research in this area could build up global events such as international airline crashes and the possible effects of news and social media influencing passenger perceptions.

Conclusion

Initial analysis of the Airline Quality Rating and the Airline Passenger Survey produced seemingly paralleled results. The airline industry performance as a whole has continued on an upward trend improving each year for the past four years. Comparatively, three of the past four years showed a declined rate pertaining to the consumer complaint performance indicator. From this data, the implication can be made that while performance began to improve in 2015 significantly, consumer perception of that improvement lagged behind for a full year. Not only was this observation discovered in the more contemporary data, but this was detected several times in earlier AQR results. A multitude of factors could cause this performance-perception gap that appears throughout the airline industry. Different time periods with different resulting events, for example, the terrorist attack occurring on September 11, 2001, or the United States economic recession/ Global Financial Crisis of 2007-2008, could affect not only industry performance but also consumer perceptions. On any given day, a national event could happen that potentially affects the airline industry, and if not prepared, airline performance could suffer significantly.

The airline industry as a whole is subject to very high consumer expectations. Airlines that cannot meet consumer expectations to a great extent, generally fall behind in other

performance indicators as well. One interesting perception disparity that occurred in APS results indicated that passengers who value customer service over any other performance indicator, tend to prefer an airline different from the airline they believe to be most friendly. Additionally, passengers who indicated that they believed air travel has progressively gotten worse over the past year, also indicated that they most prefer to fly Delta Air Lines (the number one ranking 2019 airline), and they most value seat confirmation (not overbooked) over other performance indicators.

From these final indicators, this research can conclude that passenger perception and actual airline performance do not perfectly parallel the other. Consumer perceptions of the airline industry routinely plummet in the negative direction; however, despite the occasional lag, the perception trend still somewhat shadows overall industry performance. While the industry has just reached the highest score in 23-years and consumer complaints have dropped 23%, majority of consumers who participated in the APS indicated that they still believe air travel has primarily stayed the same (51%) or declined (35%). From these implications, we can conclude that while the performance-perception gap has likely improved over the years, consumers still perceive overall airline performance and quality as the same or worse. Should the airline industry have another significant year of improvement in 2019 (2020 AQR Report), it is probable we will witness the perception lag catch up to reality and better reflect actual industry performance.

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