Airline Quality Research: a Student's Perspective

Brent D. Bowen  
*Embry-Riddle Aeronautical University*, bowenb6@erau.edu

Erin Bowen  
*Embry-Riddle Aeronautical University*, erin.bowen@erau.edu

Dean E. Headley  
*Wichita State University*

Mary Fink  
*Embry-Riddle Aeronautical University*, finkm3@erau.edu

Madeline S. Kuhn  
*Embry-Riddle Aeronautical University*

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Airline Quality Research: a Student’s Perspective

Bowen, B.D.; Bowen, E.E.; Headley, D.E.; Fink, M.M.; & Kuhn, M.S.
Embry-Riddle Aeronautical University - Prescott, Arizona
Wichita State University - Wichita, Kansas

Abstract
This study examines the relationship between the Airline Quality Rating (AQR) and the Airline Passenger Survey (APS) from an undergraduate student’s perspective, as well as how conducting undergraduate research has influenced the student researcher. Operational performance of the U.S. airline industry has been monitored for the past 27 years by a quantitative model of metrics known as the Airline Quality Rating. These metrics include on-time flights, denied boardings, mishandled baggage, and customer complaints. As the nation’s most comprehensive study of airline performance and quality, the National Airline Quality Rating (http://airlinequalityrating.com) sets an industry standard, providing consumers and aviation industry professionals a means to compare performance quality among U.S. airlines using objective, performance-based data. No other airline study in the country is based on performance measures.

Criteria & Weights

On-Time (OT) Weight: 8.63
Denied Boarding (DB) Weight: 8.03
Mishandled Baggage (MB) Weight: 7.92
Customer Complaints (CC) Weight: 7.17

(Flight Problems, Oversales, Fares, Ticketing, Refunds, etc.)

AQR= (+8.63*OT)+(-8.03*DB)+(+7.92*MB)+(-7.17*CC)

Airline Quality Rating Scores

Airline Quality Rating 2015

Virgin America
JetBlue
Delta
Hawaiian
Alaska
Southwest
SkyWest
United
ExpressJet
American
Frontier
Envoy Air
Spirit

Consumer Preferences 2015

Southwest
Delta
United
American
Alaska
JetBlue
Virgin America
Hawaiian
Frontier
SkyWest
Envoy
ExpressJet
Spirit

Method

- The data for the Airline Quality Rating for all criteria is drawn from the U.S. Department of Transportation’s monthly Air Travel Consumer Report (http://dot.gov/airconsumer/).
- Weights were established by surveying 65 airline industry experts regarding their opinion as to what consumers would rate as important (on a scale of 0 to 10) in judging airline quality.
- Weights reflect importance of the criteria in consumer decision-making, while signs reflect the direction of impact.
- The Airline Passenger Survey (APS) was added as a new feature of the AQR in 2008 following increased interest in the relationship between consumer perceptions and objective airline industry performance. The student researcher has gained skills related to communication and collaboration with mentors, trend and data analysis within the aviation industry, as well as gave the student valuable experience to bring to research later on in their graduate career. Results were retrieved from the April 2016 Airline Quality Rating Report and the 2016 Airline Passenger Survey.

Criteria included in the Airline Quality Rating (AQR) report are screened to meet two basic elements: (1) they must be readily obtainable from published data sources for each airline, and (2) they must be important to consumers regarding airline quality. The APS was added as a new feature of the AQR in 2008, following increased interest in the relationship between consumer perceptions and objective airline industry performance. The student researcher has gained skills related to communication and collaboration with mentors, trend and data analysis within the aviation industry, as well as gave the student valuable experience to bring to research later on in their graduate career. Results were retrieved from the April 2016 Airline Quality Rating Report and the 2016 Airline Passenger Survey.

Conclusions

- The research allowed the undergraduate student to apply communication and collaboration skills with her mentors that can be applied to her career field post-graduation.
- The student has gained skills related to trend and data analysis within the airline industry.
- The undergraduate researcher gained valuable presentation skills after attending numerous poster sessions on behalf of the university.
- Research skills that can be applied to a graduate program later in her career were also gained through this research.

References