
A CORRELATIONAL STUDY OF HOW AIRLINE CUSTOMER SERVICE AND CONSUMER PERCEPTION OF AIRLINE CUSTOMER SERVICE AFFECT THE AIR RAGE PHENOMENON

Joyce A. Hunter
Saint Xavier University
Chicago, Illinois

ABSTRACT

Between 1995 and 2000, customer service declined throughout the airline industry, as reported in February 2001 by the U.S. Department of Transportation (2001). One of the biggest problems today within the airline industry is the constant complaining from customers regarding the deterioration of service (McCullough, Berry, & Yadav, 2000). Since 1995, unfortunately no airline has been immune from service deterioration, as reported by the Airline Quality Rating, an annual report by two airline industry experts who analyzed Department of Transportation statistics (Harrison & Kleinsasser, 1999). The airlines' refusal to recognize the issue of customer service has perpetuated an environment that has become dangerous and detrimental to the traveling public as well as to airline employees, which in turn has fueled a new phenomenon, now referred to as "air rage."

Dr. Joyce A. Hunter is a full-time faculty member at Saint Xavier University in Chicago, Illinois. As an Assistant Professor in the Graham School of Management, she teaches courses in marketing, hospitality management, advertising and promotional strategies. During the summer of 2006, Dr. Hunter presented papers on the "air rage" phenomenon at conferences in Nagoya, Japan and Budapest, Hungary. Dr. Hunter has over 30 years of experience working in the airline industry. She retired from Delta Air Lines, Inc. in December 2000. During her career, she held a variety of positions related to marketing, including working as a Corporate Account Manager and an Association Account Manager. During her tenure with Delta Air Lines, her accounts included Standard Oil Company, Leo Burnett, Wrigley Company, Archer Daniel Midland, Price Waterhouse, Arthur Anderson, Johnson Publishing, the American Medical Association, American Dental Association, American Marketing Association, National Restaurant Association, National Realtors Association, and American Hospital Association. Dr. Hunter earned her doctorate degree in business administration from Argosy University in Year 2004. Her dissertation, which focused on air rage – a phenomenon that has drawn considerable media attention since 9/11 – is currently being adapted for publication. She continues to do research on the causes and prevention of the "air rage" phenomenon.

INTRODUCTION

The phenomenon has been increasing, but little is known about the role customer service may play in the genesis of air rage. In recent years, aberrant and abusive behavior by passengers on commercial airlines has become an increasingly common problem (Anonymous & Thomas, 2001). This behavior, popularly known as air rage, is by far the greatest threat to the safety and security of the 1.5 billion passengers who travel by air each year (Anonymous & Thomas, 2001).

This research study will present an empirical investigation of why airline customers perceive an erosion of airline customer service over the last few years. Has the decline in customer service contributed to the air rage phenomenon? It is believed that the perception of customer service deterioration can be reversed with the changes in customer orientation of service providers (Brady & Cronin, 2001). Will the air rage phenomenon decline?

HAVE THE HIGH LEVELS OF SERVICE DECREASED?

There is an overall perception from the general public that there has been erosion in airline customer service since 1999 (McCullough, Berry, & Yadav, 2000). The traveling public has seen a growing gap between the level of service expectations of some passengers, who see luxury in the advertisements, and what they actually experience on the aircraft and in the airport (University of Nebraska at Omaha, 2002). What passengers see in terms of what is advertised to them about comfort and service they can expect usually does not match reality, especially in coach class (Wang, 2001).

WHY AIRLINE CUSTOMERS PERCEIVE EROSION IN AIRLINE CUSTOMER SERVICE

The way airlines advertise air travel to the general public is not very realistic in today's society. A discrepancy in passenger expectations exists between the level of service that can actually be provided onboard and what the passenger actually receives (Wang, 2001). After viewing airline ads and commercials, customers arrive at airports with very unrealistic expectations for service.

Airline advertisements usually feature a smiling, satisfied customer, normally in a semi-reclined position, enjoying a glass of French champagne (Luckey, 2000). The passenger is pictured gazing over an epicurean delight of some type, nestled on a fine china plate presented on a linen table cover (Luckey, 2000). The reality of an average airline passenger's personal

experience is a lot less tasteful (Luckey, 2000). In the 21st century, air travelers are frequently crammed into narrow, high-density seats, surrounded by carry-on-luggage, grasping tiny bags of pretzels while trying to quench a powerful thirst from a 3-ounce glass that also contains two ice cubes (Luckey, 2000). Welcome to the real world of travel today.

The quality of airline service has declined since deregulation due in part to the emergence of many airlines from near bankruptcy. Customer expectations have followed this downward-spiraling effect. Delays, poor communication protocol, policies of slashing services, over-crowdedness and what can be perceived as an abysmal commitment to customer satisfaction cause airline passengers to no longer expect quality services. They simply opt to more often choose no-frill carriers that have clearly understood policies and more affordable rates in those services in economy class that remain less than desirable (D'Agostino, 2006).

Patricia Friend, president of the Association of Flight Attendants, the country's largest flight attendant union with 43,000 members, believes airlines deserve at least some of the blame for the growing number of disgruntled, and often violent, passengers (Hester, 1999). "Airline advertising unrealistically raises expectations," she says. Because of the unrealistic advertising among airlines, passengers tend to believe the advertisements and expect a pleasurable experience, however, in today's environment this is not the case. Passengers are now subjected to long check-in lines, invasive passenger search, tight airline seats, no food, and poor customer service. In addition, passengers are now faced with the possibility of a terrorist attack.

Customer service on the airlines is not what it used to be, primarily due to the growth of the travel industry (Anonymous & Thomas, 2001). Customers constantly complain about the quality of airline services. Certainly the body of literature in this area is not lacking for media reports of ongoing service failures (Schoenfeld, 2002). According to the U.S. Department of Transportation (2001), last year one of every four flights was delayed, cancelled or diverted with impact on 163 million passengers. In a recent poll, 57% of travelers said they think the experience of flying has gotten worse over the past five years (Bryant, 2001). Amenities have been on the decline for years. The events of 9/11 have given airlines the excuse to do away with them further, by justifying these actions as economically necessary in the wake of the tragedy (Schoenfeld, 2002). Delayed flights, cancellations, mishandled baggage, and poor customer relations lead the list of travelers' complaints (Taylor, 2001). Another source of customer frustration may result from the security screening process. One study indicates that "the implementation of new technologies may exacerbate the incidence of security related errors" (Turney, Bishop, & Fitzgerald, 2004, p. 60).

Relative to customer relations are studies of airline personnel treatment by management, and the impact of that treatment of customers. Management's treatment of employees affects morale and also affects the treatment of customers. This was inferred in the best-selling customer-service book, *It's Not My Department* authored by Peter Glenn (as cited in Spector & McCarthy, (1995). Customer relations and perceived treatment are also closely related to the airport and the way it is operated. One study indicated that airports experience problems because of inadequate testing of various operational systems and personnel not "property trained to manage the operations or handle the problems that did arise" (Quilty, 2003, p. 7). Problems within the airport may be transmitted by customer behavior to the airlines. "For customer service oriented airports, both education and training are necessary" (Quilty, 2003, p. 5).

Airline companies are continuing to fight for every possible customer, yet many are not investing in customer service improvement. Continental Airlines is the exception (D'Agostino, 2006). Travel industry professionals would be unrealistic to believe that most consumers and customers seek or expect error-free services 100% percent of the time. Most consumers and customers conceivably will expect to experience some of what is known as service failure, as they would also expect airlines to always strive to boost service efficiency.

Service failure can be defined as any transaction resulting in a problem and service falling short of the customer's expectation of the level of service. Taking this argument one step further, some customers may have recovery expectations and some customers may have failure expectations. For instance, many customers recognize that consumption entails some potential for dissatisfaction (Murray & Schlacter, 1990). Therefore, to determine what will be done in the event of a failure, they inquire about warranties, exchange and refund policies (McCullough, Berry, & Yadav, 2000). Research has indicated that service failure and recovery is a critical issue for both service managers and researchers (McCullough, Berry, & Yadav, 2000). In research, service failure has been understood in terms of a "pushing determinate" that drives customer-switching behavior. Successful recovery from service failure can mean the difference between customer retention and defection (McCullough, Berry, & Yadav 2000). In turn, customer retention is critical to profitability (Stauss & Friege, 1999). Edvardsson and Strandvik (2000) emphasize that it is paramount that data on different perspectives of customer service incidents be collected for analysis purposes.

Factors which seem unrelated to the customer, such as adherence to ISO14001, the environmental quality standards can also impact the customer. One study links the potential benefits of ISO14001 to "improved customer satisfaction," improved image and reputation, and "increased

domestic market share” among other benefits (Korul, 2005, p. 54). While this study does not address or propose any direct linkages between air rage and airport and the airline environmental quality, it does suggest an area for further inquiry. In an airline industry study on managing service quality, conducted by Edvardsson and Strandvik (2000), some emphasis was placed on airport environment or serviscape. “Interpersonal interactions are key in triggering customer dissatisfaction but likewise is the significance of the place or environment where the service is delivered, the serviscape” (p. 89).

CAN THE PERCEPTION OF POOR CUSTOMER SERVICE BE REVERSED?

Little evidence exists to support the idea that lowered expectations of services impact the incidence of air rage. Southwest Airlines’ record is no different from that of other carriers who tout high levels of service and strive to meet these criteria (Zellner, 2001). However, further research may reveal that Southwest Airlines’ customers are willing to put up with lower levels of service. Customers constantly complain about the quality of service provided by the airlines, and their perceptions are that it is deteriorating at a significant rate (McCollough, Berry, & Yadav, 2000). The perception is that the increase in air rage incidents arises from the increase in poor service (Brady & Cronin, 2001).

DO AIRLINE EMPLOYEES’ POOR ATTITUDES CONTRIBUTE TO AIR RAGE?

Hartland and Ferrell (1996) defined front-line airline employees (FLEs) as “typically underpaid, under-trained, overworked, and highly stressed” due to factors such as customer abuse and unreasonableness, and not being able to meet company performance standards and deadlines. FLEs report that working under extreme pressures and living behind a mask of pleasantries while having to take insults and verbal abuse on a daily basis is very stressful. FLEs stated that they have to deal with external factors, like disgruntled customers, and must also learn to deal with internal factors, such as management, and work within the company’s guidelines. The FLEs complain of being expected to express positive emotions as they are interacting with customers and act in such a way as to build trust, demonstrate promptness and reliability, and give a sense of personal attention to each passenger (Hochschild, 1983). The FLEs state that this is hard to do when moments earlier they were verbally abused by a customer. Even after being verbally or physically abused by a customer, these FLEs said that their airline managers discouraged them from pressing charges or reporting the incident. “International aviation organizations, deeply anxious about maintaining the integrity of their industry, become understandably

upset when they hear how air rage negatively influences the public's perception of air travel" (Anonymous & Thomas, 2001, p. 102). In turn, a high-quality performance is shown to enhance customer satisfaction and loyalty (Singh, 2000).

Very little has changed since Bateson's (1985) analysis of the frontline jobs as a "three-cornered fight" in which the customer and the organization are each at one end of the spectrum and the frontline employee is "caught in the middle" (Singh, 2000). The negative job performance exhibited by FLEs could definitely affect the ways these employees respond to airline customers. One of the biggest problems that exists today within the airline industry is the constant complaint from customers regarding the deterioration of service (McCollough, Berry, & Yadav, 2000). An employee's behavior is critical and can be directly correlated to shaping the perception of the organization's image, the customer's expectations of service, and possibly a reaction to perceived lack of service.

Sheth, Sisodia, and Sharma (2000) propose that the confluence of demographic and technological factors will lead to the widespread adoption of customer-centric marketing in place of product and segment-centric marketing as a way to effectively and efficiently serve customers and consumers in this century. The focus, according to these researchers, is now shifting from merely selling to customers, to servicing customers effectively. Being customer-oriented allows firms to acquire and assimilate the information necessary to design and execute marketing strategies that result in more favorable customer outcomes. Even if consumers may not have the expectation of 100% error-free service all of the time, customers do expect the airlines to implement procedures to keep them abreast of various current irregularities and to minimize service failure. In an industry plagued by bad press regarding declining customer service, the implementation recommendations presented here would greatly influence one's overall customer satisfaction outcomes and requirements.

Airline customers resent the ways in which FLEs respond to questions, give information, and express negative attitudes. These behaviors probably reflect the employees' unhappiness with work conditions. New research points to rudeness and bad behavior as major sources of stress and aggravation for both the passengers and transportation workers (Public Agenda, 2003). This customer perception of the airline employees sends customers into an air rage episode (Singh, 2000).

1. Sixty-five percent of passengers say rudeness is a serious problem in travel these days, and 52% of travelers say rudeness is a major cause of stress. Fifty-four percent of travel employees say passenger rudeness is a top cause of their on-the-job stress and tension.
2. Nearly half (49%) of travel workers say they have personally seen a situation where disrespectful behavior threatened to escalate into

physical confrontation. An additional 19% say disrespect has led to a situation actually getting physical.

3. Sixty-two percent of travel personnel say they sometimes or often see their fellow workers being rude, and another 50% admit that they have lost patience and been impolite to passengers themselves. But when this happens, 56% say it is typically because employees were provoked and treated badly by passengers. While most passengers give travel personnel high marks for overall courtesy, 67% say that when they have a run-in with rude travel employees, they are likely to be rude in return.
4. Nevertheless, 62% of transportation employees say rude and disrespectful behavior is “mostly limited to a few people,” and 45% say they are often treated with courtesy and respect. (Public Agenda, 2003, para. 4)

According to Public Agenda President Ruth Wooden:

Incivility is not just a minor daily irritant. . . . We found that 79% of Americans say lack of respect and courtesy is a serious problem. And where do we see some of the worst behavior in everyday life? Where do we see good people go bad? Too often—we see it or cause it ourselves—when we travel. Bad manners and rude behavior can make modern travel a trying and sometimes unpleasant experience. (Public Agenda, 2003, para. 8)

Numerous contemporaneous reports of actual incidents exist, with observers and those directly involved invariably recounting overall or episodic service failures as the precipitating cause of air rage. The role of customer expectations and the provision of good service in marketing success are unquestionable. The delivery of quality service is considered an essential strategy for success and survival in the industry (Dawkins & Reicheld, 1990; Zeithaml, Berry, & Parasuraman, 1985, 1988, 1996; Reicheld & Sasser, 1990). Zeithaml, Berry, & Parasuraman (1996) state without exception that poor service in the airline industry results in a customer’s change in carriers, or in diminished use of the unsatisfactory line. Interestingly, a number of behaviors are listed as characteristic of customers who are dissatisfied to the point where service is minimized and often discontinued when perceived as unacceptable. Strenuous complaints are among the behaviors listed and one wonders if this behavioral characteristic might also sometimes approach the level of rage (Zeithaml, Berry, & Parasuraman, 1996).

The criticality of customer service to profitability has been analyzed and quantified by Zeithaml (2000), who refers to the monetary value of the single, average customer who is attracted to a carrier and who remains loyal

to the line (Shimp, 2000). He refers to this as the Customer Lifetime Value, using the new customer as a unit (which he calls the net present value or NPV) on which to project that potential lifetime value. Customer Lifetime Value is considerably diminished by the loss of the customer's loyalty, and the value of retention has been quantified in general by Reicheld and Sasser (1990), who say that a carrier boosts its profits by nearly 100%, with a mere 5% increase in customer retention. Customer retention is critical to profitability (Stauss & Friege, 1999).

How do airlines determine what customers want in service, and whether their expectations are being met? How do airlines improve customer service which has been deemed unsatisfactory by customers? Measurement criteria include customer feedback by way of complaints and compliments received by customer service personnel and via surveys (McCollough, Berry, & Yadav, 2000), records of compliance with industry and federal mandates such as on-time departure rates, and those developed by quality process consultants (Zeithaml, Berry, & Parasuraman, 1996). The criteria have been informative and helpful to the airlines.

WILL THE AIR RAGE PHENOMENON DECLINE?

In 1999, to prevent new regulations, most of the nation's airlines promised in a letter to Congress to improve customer service. However, additional federal standards may be forthcoming. Congressional passage of the Passenger Bill of Rights will set standards for service performance and impose penalties for non-compliance ("Congress Considers," 2000). Below are the major points of the bill (Airline Passenger's Bill of Rights, 2000):

The Airline Passenger Fairness Act is not only designed to improve the customer service aspect of the airlines, but also to alleviate many small annoyances that the average air traveler may run into. Major points are: (a) inform a ticketed passenger whether or not his or her flight is overbooked; (b) permit a passenger holding a confirmed space on a flight to use only a portion of his or her ticket for any reason; (c) deliver a passenger's checked baggage within 24 hours of the flight the passenger was on, with minor exceptions; (d) provide the consumer with full access to all fares for that air carrier, regardless of the technology the consumer uses, based on the request of that consumer; (e) provide notice to each passenger holding a confirmed reserved space on a flight with reasonable prior notice when a scheduled flight will be delayed for any reason (other than reasons of national security); (f) inform passengers accurately and truthfully of the reason for the delay, cancellation, or diversion of a flight and refund the full purchase price of an unused ticket if the passenger requests a refund within 48 hours after the ticket is purchased; (g) disclose to consumers information that would

enable them to make informed decisions about the comparative value of frequent flyer programs among airlines. (para. 3)

The institution of incentives, such as frequent-flyer miles and deluxe accommodations for frequent flyers, is one method used by carriers to improve at least the perception of service (Shimp, 2000). "It is not the absolute benefits [of frequent flyer program] but the relative gains compared to that of the other carriers that matter to individual travelers" (Chin, 2002, p. 56). However, ongoing excellence in service and service upgrades are more attractive to customers than such incentives, and the managerial goal of a carrier must be to establish an organization that fosters employee behavior that improves customer service (Brady & Cronin, 2001). These relationships are borne out by a Northwest Airlines study that tracked specific service improvements with its "preference index," (i.e., the consumer's expression that Northwest was his or her first choice among carriers). The correlation, they found, was direct (Zeithaml, Berry, & Parasuraman, 1996). "A carrier's complete commitment to gauging, evaluating and meeting customer expectations, and the extent to which that commitment permeates every personnel layer in the organization, is universally seen as key in customer service maintenance and improvement" (Reilly, 1996, p. 39).

The paradigm for total commitment to service quality, and the belief that profit and growth will follow and not drive that commitment, is the conviction of the head executives at Nordstrom Department Stores. The executives contend that the Nordstrom philosophy is its commitment 100% to customer service. They say they are not committed to financial markets, real estate markets, or to a certain amount of profit. Rather they are only committed to customer service (Spector & McCarthy, 1995).

Application of this principle to the airline industry was seen by Sheth, Sisodia and Sharma (2000). The entire focus of efforts toward profitability needs to shift from sales to service. How does an organization ensure that this attitude pervades its entire structure? The reworking of job performance standards and job performance evaluation at every level of personnel is essential (Reilly, 1996). Reilly believes that since the relationship of service to marketing success is measured in customer attraction and retention, the service performance of every employee can be measured regarding the extent to which that employee contributes to a measurable element of customer satisfaction. Since that is the case, an essential element in each employee's performance evaluation (affecting raises, promotions, etc.) should be a rise or fall in profit (Reilly, 1996).

What if service expectations are unreasonably high and the reaction to its lack of provision is extreme? Much research shows that meeting a customer's reasonable expectations is better in the eyes of the consumers than responding to failure with superior recovery. In other words, the job

should be done right the first time. Education and training of airline and airport employees are required for improved customer service and, potentially, a reduction in air rage. Quilty (2003) addresses this issue as follows:

Education and training are often viewed as one and the same. However, scholars will point out a distinction between the two. Training is a response to a need and should stem from gap in knowledge or performance. Training is performed as a short-term focused response to organizational and individual job needs. A training need will exist when an employee's performance differs from what the situation or task requires. More specifically, a training need exists when a current employee's knowledge, skills, or attitudes should be changed to help bring about desired performance. In general, training prepares individuals to do their current jobs. In contrast to training, education provides a broader, more generalized acquisition of knowledge and development that prepares an individual for a future job or position. Education also enhances the ability of an individual to understand and appreciate the larger perspective of how things work in their organization and in the world. (pp. 4-5)

METHODOLOGY

The goal of this study was to examine the correlations between airline customers' expectations of service and attitudes toward and propensity toward air rage, as well as the correlations between airline customers' perception of airline customer service and attitudes toward and propensity toward air rage. In addition, regression analyses were performed. The Air Passenger Survey (APS; see Appendix), designed by this author, consisted of 55 questions and was distributed to 244 men and women at four major airports: Chicago, Atlanta, Washington, D.C., and New York. The four survey scales were representative of four domains of air rage and airline customer service that have been constructed based on the literature: Customer Expectation of Service, Consumer Perception of Service, Attitude Toward Air Rage and Feelings About (Propensity to Commit) Air Rage.

RESULTS

Demographic variables (gender, age, race, place of residence, level of educational completion, marital status, reason for flying, what airlines the passenger refuses to fly, type of airline flown and number of years flying) demonstrated that the range of customers surveyed was representative of the flying public. ANOVAs were performed to detect any significant correlations between categorical demographic variables and the two scales Attitude toward Air Rage and Feelings about Air Rage. One demographic

variable, ethnicity (Caucasian vs. all other ethnicities), was found to be significantly correlated with Customer Attitude toward Air Rage. Two demographic variables, frequency of flying (once a week or more often vs. less frequent flying) and whether the customer refuses to fly certain airlines (yes or no), were significantly correlated with Customer Feelings about Air Rage.

Hypothesis 1

Hypothesis 1 stated that as customers perceive service to be better (as Customer Perception of Service increases), their attitude toward air rage becomes more disapproving (Customer Attitude toward Air Rage decreases). In other words, as Customer Perception of Service increases, Customer Attitude toward Air Rage will decrease, that is, there exists a negative correlation between Customer Perception of Service and Customer Attitude toward Air Rage. As can be seen in Table 1, the test found a non-significant positive correlation between Customer Perception of Service and Customer Attitude toward Air Rage ($r = .030, p > .05$). Therefore, the null hypothesis was upheld. (A non-significant correlation can be considered as zero.)

Table 1. Correlation between Customer Perception of Services and Customer Attitude toward Air Rage

Expected Result According to Hypothesis	Direction of Correlation Expected	Actual Correlation	Null Hypothesis Rejected?
As customers perceive service to be better, their attitude toward air rage becomes more disapproving.	Negative	0.030 ($p > .05$)	No

Possible explanation of results

Customers could approve of air rage if even after they received good service, bad service is provided, which causes a change in thought. In other words, it is possible that bad service was provided to a customer and as a result, an air rage incident occurred, which caused those customers to become more approving of air rage. Furthermore, a customer could disapprove of air rage for other reasons besides good customer service. For instance, customers may believe that air rage is totally unacceptable regardless of how someone has been treated; a customer, regardless of the service they have received, should still not act out or cause disruptive behavior.

Another possible thought on the part of customers is that if a customer was to act out, he or she could cause thousands of people to be hurt or lose their lives. Therefore, it may be that regardless of how customers perceive

service, they still disapprove of air rage because of the notion that air rage is not tolerated and by acting out there are many consequences. This theory is in line with the results of this study, which suggest that customers disapprove of air rage.

Hypothesis 2

Hypothesis 2 stated that as customers perceive service to be better (as Customer Perception of Service increases), they have less of a propensity toward air rage (Customer Feeling about Air Rage increases). In other words, as Customer Perception of Service increases, Customer Feeling about Air Rage will increase, that is, there exists a positive correlation between Customer Perception of Service and Customer Feeling about Air Rage. As can be seen in Table 2, the test found a moderate, significant positive correlation between Customer Perception of Service and Customer Feeling about Air Rage ($r = .425$, $p < .01$). Therefore, the null hypothesis was rejected.

Table 2. Correlations between Customer Perception of Service and Customer Feeling about Air Rage

Expected Result According to Hypothesis	Direction of Correlation Expected	Actual Correlation	Null Hypothesis Rejected?
As customers perceive service to be better, they have less of a propensity toward air rage.	Positive	0.425 ($p < .01$)	Yes

Possible explanation of results

Customers who perceive service to be better were found to have less of a propensity toward air rage. This may be further supported by Dahlberg (2001), who suggests that when customer needs are not attended to, the result would be negative interactions between customers and staff. In addition, if the airlines eliminated delayed flights, cancelled flights, rude service by airline staff, lack of correct information given to customers, seat assignment mix-ups, and many other situations prior to boarding an aircraft, then air rage might be less likely to occur.

Hypothesis 3

Hypothesis 3 stated that as customers' expectations for bad service increase (as Customer Expectation of Service increases), their attitude toward air rage becomes more approving (Customer Attitude toward Air Rage increases). In other words, as Customer Expectation of Service increases, Customer Attitude toward Air Rage increases, that is, there exists

a positive correlation between Customer Expectation of Service and Customer Attitude toward Air Rage. As can be seen in Table 3, the test found a moderate, significant positive correlation between Customer Expectation of Service and Customer Attitude toward Air Rage ($r = .279$, $p < .01$). Therefore, the null hypothesis was rejected.

Table 3. Correlation between Customer Expectation of Service and Customer Attitude toward Air Rage

Expected Result According to Hypothesis	Direction of Correlation Expected	Actual Correlation	Null Hypothesis Rejected?
As customers' expectations for bad service increase, their attitude toward air rage becomes more approving.	Positive	0.279 ($p < .01$)	Yes

Possible explanation of results

When the airlines do not provide good service, the customers may become more approving of air rage. With the lack until now of empirical research on attitudes on air rage and customer service, this is a significant finding for airlines and should be investigated further.

Hypothesis 4

Hypothesis 4 stated that as customers' expectations for bad service increase (as Customer Expectation of Service increases), they have greater propensity toward air rage (Customer Feeling about Air Rage decreases). In other words, as Customer Expectation of Service increases, Customer Feeling about Air Rage decreases, that is, there exists a negative correlation between Customer Expectation of Service and Customer Feeling about Air Rage. As can be seen in Table 4, the test found a non-significant, positive correlation between Customer Expectation of Service and Customer Feeling about Air Rage ($r = .074$, $p > .05$). Therefore, the null hypothesis was upheld.

Table 4. Correlation between Customers' Expectation of Service and Customer Feeling about Air Rage

Expected Result According to Hypothesis	Direction of Correlation Expected	Actual Correlation	Null Hypothesis Rejected?
As customers' expectations for bad service increase, their feeling about air rage becomes for disapproving.	Negative	0.074 ($p > .05$)	No

Possible explanation of results

Just because customers expect bad service does not mean they will have a greater propensity toward air rage. Other factors such as physiological (e.g., psychiatric disorders) or physical (e.g., diseases, substance abuse), could provide reasons as to why individuals who expect bad service do not have a greater propensity toward air rage. As stated earlier, airlines have no control over such physiological and physical factors, and thus an individual could perceive service as bad and still not have a greater propensity to air rage. Also, even if individuals do not expect bad service, their propensity to air rage could result from underlying factors such as the fact that they are always the type to engage in aggressive behaviors, show signs of anger, frustration, irritability, hostility, rudeness, etc.

Another reason the null hypothesis was upheld could be that customers' expectations for high levels of service have decreased. Many people may realize that flight delays, overbooking, and lost baggage are more likely to occur than ever these days. If this is true, then customers go about their travel experience with these expectations in mind. Therefore, the chance of air rage occurring is suppressed.

Two regressions were performed, one with Customer Attitude Toward Air Rage as the dependent variable and one with Customer Feeling About Air Rage as the dependent variable. In both regressions, Customer Expectation of Service and Customer Perception of Service were the independent variables, and demographic variables significantly correlated with the dependent variable were treated as covariates. Thus, in the regression on Customer Attitude Toward Air Rage, ethnicity (Caucasian vs. all other ethnicities) was treated as a covariate, and in the regression on Customer Feeling About Air Rage, frequency of flying (once a week or more often vs. less frequent flying) and whether the customer refuses to fly certain airlines were treated as covariates.

Correlations among the independent and dependent variables are presented in Table 5. In the regression on Customer Feeling About Air Rage (see Table 6), Customer Perception of Service was found to have a

significant positive effect on Customer Feeling About Air Rage ($\beta = .47$; $p < .001$), and Customer Expectation of Service was not found to affect Customer Feeling About Air Rage ($\beta = -.05$, *Ns.*). In other words, as customers perceive service to be better, they have less of a propensity toward air rage, but their expectation of service does not affect their propensity toward air rage.

Table 5. Correlations among Customer Expectation and Perception of Service and Customer Attitude and Feeling about Air Rage (N = 232)

	Customer Expectation of Service	Customer Perception of Service	Customer Attitude Toward Air Rage	Customer Feeling About Air Rage	Mean \pm <i>SD</i>
Customer Expectation of Service	---				1.93 \pm .53
Customer Perception of Service	.27***	---			2.60 \pm .56
Customer Attitude Toward Air Rage	.28**	.03	---		2.10 \pm .54
Customer Feeling About Air Rage	.07	.43**	-.07	---	3.52 \pm .71

Note. * $p < .05$. ** $p < .01$. *** $p < .001$, two-tailed

In the regression on Customer Attitude toward Air Rage (see Table 7), Customer Expectation of Service was found to have a significant positive effect on Customer Attitude Toward Air Rage ($\beta = .32$; $p < .001$). In other words, as customers' expectations of poor service increase, their attitude toward air rage becomes more approving. Customer Perception of Service was not found to have a significant main effect on Customer Attitude toward Air Rage ($\beta = -.01$ *Ns.*). In addition, an interaction effect was found ($\beta = .03$; $p < .05$; see Figure 1). The interaction can be interpreted as follows: When customers expect good service, their perception of service does not affect their attitude toward air rage. When customers both expect and perceive poor service, they are more approving toward air rage than when they expect poor service and perceive that they are being served well.

Table 6. Regression Analysis of Customer Feeling about Air Rage

Independent Variables	R	R ²	ΔR^2	Overall F	F Change	df	T	Standardized β
Step 1	.16	.02		2.60		2		
Frequency of flying							.21	.01, <i>Ns.</i>
Refusal to fly certain airlines							1.67	.10, <i>Ns.</i>
Step 2	.48	.23	.20	12.07***	17.96***	3		
Customer expectation of service							-.74	-.05, <i>Ns.</i>
Customer perception of service							7.32	.47***
Customer expectation of service \times Customer perception of service							.51	.03, <i>Ns.</i>

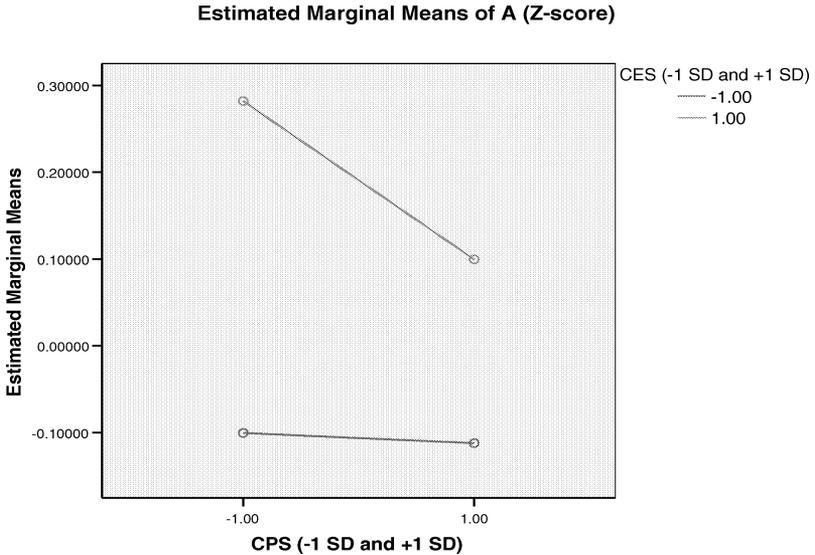
Note. * $p < .05$. ** $p < .01$. *** $p < .001$, two-tailed

Table 7. Regression Analysis of Customer Attitude toward Air Rage

Independent Variables	R	R ²	ΔR^2	Overall F	F Change	df	T	Standardized β
Step 1	.26	.06		14.4***	14.4***	1		
Ethnicity (Caucasian vs. other ethnicities)							-4.40	-.27***
Step 2	.42	.18	.12	12.0***	10.6***	3		
Customer expectation of service							5.13	.32***
Customer perception of service							-.13	-.01, <i>Ns.</i>
Customer expectation of service \times Customer perception of service							2.06	.13*

Note. * $p < .05$. ** $p < .01$. *** $p < .001$, two-tailed

Figure 1. The Relationship between High and Low Levels of Customer Perception of Service and Customer Attitude toward Air Rage and High and Low Levels of Customer Expectation of Service



Note. CES = Customer Expectation of Service; CPS = Customer Perception of Service
A = Customer Attitude toward Air Rage; -1 SD = high levels; 1 SD = low levels

DISCUSSION

Survey results showed that the null hypothesis was accepted for Hypothesis 1. In other words, customers who perceive service to be better may not necessarily disapprove of air rage. As a matter of fact, air rage behavior may be favored. One reason the null hypothesis was upheld could be that many airline customers often feel they are entitled to certain privileges. If these privileges are not granted, they engage in disruptive behavior to get their way. People want things—information, gratification—now (Harkey, 2003). Having to wait one or two minutes is sometimes considered an inconvenience.

A second reason the null hypothesis was upheld could be society's attitude toward accepting the increased level of violence in our society today. Violence in society is increasing (Harkey, 2003). Because airline passengers mirror society, they may be more aggressive in their responses to delays or problems encountered when traveling (Harkey, 2003). Hence, air rage behavior becomes the norm and not the exception.

A third reason the null hypothesis was upheld for Hypothesis 1 could be that, as the literature suggests, people may be less inhibited or perhaps fear retaliation or consequences less when the target of their aggression is someone they do not know and who does not know them (Harkey, 2003). People now feel free to get into other people's faces in a way that they did not 20 years ago (Harkey, 2003). This supports the theory that customers still exist that are simply looking for a fight even if they perceive service to be better.

Survey results rejected the null hypothesis for Hypothesis 2. As customers perceive service to be better, they have less of a propensity toward air rage. Dahlberg (2001) suggested that service failures experienced prior to boarding the aircraft can be antecedents to overt conflict in the passenger cabin, where cabin crews cannot meet passenger needs immediately because of safety tasks having priority over service tasks during critical phases of the operation. This is a prime example of the idea that if good service was provided from the beginning, then the incidence of air rage might be lessened. It would be interesting to put this theory into practice by examining whether advance notification to customers regarding delays or cancelled flights would decrease customers' propensity toward air rage. The caveat to this theory is that air rage incidents might have a number of antecedents and might occur not because the airline triggered a response in the passenger, but rather because the customer is acting out due to some other internal or external factor.

Survey results rejected the null hypothesis for Hypothesis 3. As customers expect worse service, their attitude toward air rage becomes more approving. This finding could have resulted from the fact that the customers have a good understanding of when an airline provides bad service that customers are more approving of air rage. Moreover, there are valid circumstances, caused by the airline, for customers to act out. However, careful consideration should be given to this finding. Just because as customers' expectations for bad service increase and their attitude toward air rage becomes more approving, this does not mean that they will have a greater propensity toward air rage as was the finding in Hypothesis 4. Moreover, the statistical finding for Hypothesis 3 yielded a weak correlation, meaning that not all customers with expectations for bad service will have more approving attitudes toward air rage. This could be because customers believe that one should do what is right despite what the airline does wrong. This is more important than reacting to bad service.

Over the years, customers have become less tolerant of the bad service provided by the airlines. In a recent poll, 57% of travelers said they think the experience of flying has gotten worse over the past five years (Bryant, 2001). Given this, many airlines can expect an increase in customers' attitudes towards air rage. Furthermore, given the perception that the increase in air

rage incidents arises from the increase in poor service, we as researchers can expect customers to be more approving of air rage in the future, unless the airlines provide strategies to help alleviate customers' perceptions of bad service.

One way to alleviate customers' perceptions of poor service and attitude toward air rage is by following the poor service with a positive act. If this is done, then the customers' perception of poor service could be moderated because the airline essentially made up for the bad service provided. A simple positive act by the airline can help a customer become less approving of air rage. Customers who experience positive acts by the airline following bad service may begin to change their attitude and think differently about air rage. For instance, customers could say to themselves that air rage should not be acceptable when the airline does everything possible to make up for the bad service.

Survey results showed that the null hypothesis was accepted for Hypothesis 4. As customers expect worse service, they have a greater propensity toward air rage. This finding might have resulted because customers who have experienced bad service do not necessarily have a greater propensity toward air rage. With all the hype about acting out on airplanes and the remnants of 9/11, many people today would not think about acting out simply because they have experienced bad service. People today might realize that acting out will not get anything accomplished and that doing so could lead to imprisonment, restraint from flying, or other sanctions the airline wishes to impose.

Moreover, the traits and characteristics of most people responding to the study might not be conducive to a great propensity toward air rage. For instance, even if a person who is elderly has an experience with bad service, they may not have the desire or strength to display air rage. Their propensity toward air rage is lessened because of their status. This may also be true for teens, people with cognitive impairment, introverts, and others with easy going temperaments. Some people are more passive and will not respond no matter how bad the service is that is experienced. In addition, people may also realize that bad service comes with the territory. Flight delays due to weather could be perceived as bad service, but in actuality, a flight delay is an issue outside of the airlines' control. A flight delay is very different than lost baggage, mixed-up seating, and personnel attitudes, to name a few. Therefore, it is imperative that future research looks at what defines bad service and the traits and characteristics of people with expectations for bad service. This paper did not evaluate cultural risk perceptions and service quality expectations. A recent paper provides an excellent perspective on the potential differences in customer risk perceptions across cultures (Cunningham, Young, & Lee, 2002). Airline Quality Rating 2006 is an objective method that assessed multiple monthly performance criteria during

2005, with scores based on four major areas: on time, denied boarding, mishandled baggage, and customer complaints. These kinds of reports are paramount to the improvement of airline customer services if utilized by members of the industry (Bowen & Headley, 2006).

CONCLUSIONS AND IMPLICATIONS FOR THE AIRLINE INDUSTRY

The study has significant implications for the airline industry, the transportation industry, and society in general, as well as for marketing and transportation scholars. One of the challenges presented herein was for airlines to find ways to assist personnel in dealing with customers and delivering impeccable customer service in an effort to deter air rage incidents. As the airline industry continues to make major changes to its operations, several items must be taken into consideration when trying to improve processes and lessen the number of air rage incidents. First, airlines must learn to recognize customers' behaviors that can lead to air rage before the customers are allowed to board the plane. If such behaviors are suppressed in the terminal, the likelihood that an incident will occur in the air is diminished. Airlines should train customer service agents regarding such behaviors and look for ways to eliminate negative behaviors or acts. For instance, they can develop profiles of individuals who have acted out in the past and use these profiles to train customer service agents what to look for. The current problem is that customer service agents are reactive to customer needs rather than being proactive, which causes poor customer satisfaction and possibly increases the number of air rage incidents.

Second, airlines must recognize that simply providing a response the customer wants to hear is not enough. Airlines must establish ground rules for customer behavior and adhere to those rules. Customers must be made aware of new regulations and policies regarding disruptive behavior. Customers must be warned as to the consequences for committing an air rage incident in the terminal or on board an aircraft. The warnings regarding disruptive behavior should differ from the standard regulations and policies provided to customers at the beginning of a flight, which mention that federal law prevents passengers from tampering with smoke detectors, carrying a gun onboard, etc. Rather, what is needed is information that makes clear that certain types of behaviors will not be tolerated on airplanes, and specifies the consequences for disruptive behaviors. A change in federal law may be necessary for the airlines to enact such new policy.

Third, in order for airlines to reduce air rage, airline personnel must rededicate efforts to creating customer satisfaction and lessening the negative attitudes toward airlines by reinforcing the marketing concept that an organization should make every effort to satisfy customer needs. In other

words, give customers exactly what they want. The one-size-fits-all solution to maintaining customer satisfaction is not the recommended approach.

Finally, airlines must recognize that communication is one of the major problems contributing to air rage. Quite often, airlines do not communicate the exact nature of the problem to customers in a timely manner. Many customers become totally frustrated with long lines, delayed flights, etc. When no information is given in a crisis, the problem is exacerbated. Airlines must be sensitive to the fact that customers are motivated to comply with policies for different reasons and that, in order for customers not to become irate, solutions must be provided based on individual customers needs and desires.

Airlines must recognize that many of the negative behaviors exhibited in a terminal or during a flight are not necessarily a direct result of something the airlines has done. Disruptive behavior on the part of customers might be due to reasons other than poor customer service delivered by the airlines and will decline or reverse itself with improved services. Airlines must ensure some method of suppressing any negative behavior and satisfying or pacifying the traveler. "People and processes, not peanuts and pillows make the difference," Powers wrote (2006). Therefore, airlines of all different classes and sizes should develop a uniform method of addressing air rage. Airlines must develop plans in collaboration and provide similar service. Customers perceiving consistency from one airline to another will become more satisfied with traveling. In turn, customers will be more likely to comply with rules, regulations, and policies. Hopefully, airline customers will become more receptive to flying and less likely to exhibit disruptive behavior.

REFERENCES

- Airline Passenger's Bill of Rights. (2000). Retrieved October 18, 2002, from <http://faculty.dwc.edu/fairbairn/dcsem00>
- Anonymous, & Thomas, A. R. (2001). *Air rage: Crisis in the skies*. Amherst, NY: Prometheus Books.
- Bateson, J. (1985). Perceived control and the service encounter. In J. A. Czepiel, M. R. Solomon, & C. A. Surprenant (Eds.), *The service encounter: Managing employee/customer interaction in service businesses* (pp. 67-82). Lexington, MA: Lexington Books.
- Bowen, B. D., & Headley, D. E. (2006). *Airline quality rating 2006*. Retrieved July 29, 2006, from <http://www.aqr.aero/aqrreports/AQR206final.pdf>
- Brady, M. K., & Cronin, J., Jr. (2001). Customer orientation: Effects on customer service—Perceptions and outcome behaviors. *Journal of Service Research*, 3(3), 241-251.

- Bryant, A. (2001, April 23). Why flying is hell. *Newsweek*, 137(17), 34-37.
- Chin, A. T. H. (2002). Impact of frequent flyer programs on the demand for air travel. *Journal of Air Transportation*, 7(2), 53-86.
- Congress Considers Passenger's Bill of Rights. (2000, March). *Columns: The University of Washington Alumni Magazine*. Retrieved October 19, 2002, from <http://www.washington.edu/alumni/columns/march00/anxiety1.html>
- Cunningham, L. F., Young, C. E., & Lee, M. (2002). Cross-cultural perspectives of service quality and risk in air transportation. *Journal of Air Transportation*, 7(1), 3-26).
- D'Agostino, D. (2006). *Case study: Continental Airline's tech strategy takes off*. New York: The Baseline Project Management Center.
- Dahlberg, A. (2001). *Air rage: The underestimated safety risk*. Hampshire, England: Ashgate Publishing Ltd.
- Dawkins, P., & Reicheld, F. (1990, Summer). Customer retention as a competitive weapon. *Directors and Boards*, 14, 42-47.
- Edvardsson, B., & Strandvik, T. (2000). Is a critical incident critical for a customer relationship? *Managing Service Quality*, 10(2), 82-91.
- Harkey, J. A. Y. (2003). Causes of and remedies for passenger misconduct. Flight Safety Foundation. Retrieved October 30, 2003, from <http://indymensa.tripod.com/julie02.htm>
- Hartland, M. D., & Ferrell, O. C. (1996). Management of customer-contact service employees: An empirical investigation. *Journal of Marketing*, 60, 52-70.
- Harrison, T., & Kleinsasser, J. (1999, April 19). Airline quality rating. Press release. Retrieved August 20, 2004, from <http://www.unomaha.edu/~unoai/aqr/aqr99press.html>
- Hester, E. (1999, September 7). Flying in the age of air rage. Retrieved January 3, 2004, from <http://www.salon.com/travel/diary/hest/1999/09/07/rage/index1.html>
- Hochschild, A. (1983). *The managed heart*. Berkeley, CA: University of California Press.
- Korul, V. (2005). Guide to the implementation of ISO 14001 at airports. *Journal of Air Transportation*, 10(2), 49-68.
- Luckey, S. (2000, September 18). Air rage. *Air Line Pilot*. Retrieved July 19, 2003, from <http://cf.alpa.org/internet/alp/2000/sept00p18.htm>
- McCollough, M. A., Berry, L. L., & Yadav, M. S. (2000). An empirical investigation of customer satisfaction after service failure and recovery. *Journal of Service Research*, 3(2), 121-137; 3(4), 49-62.

- Murray, K. B., & Schlacter, J. L. (1990, Winter). The impact of services versus goods on consumers' assessment of perceived risk and variability. *Journal of the Academy of Marketing Science*, 18, 51-65.
- Powers, P. D. (2006). 2006 North America Airline satisfaction study. *Aviation Week Report*. Retrieved July 29, 2006, from <http://www.jdpower.com/corporate/news/releases/pressrelease.asp?ID-2006102>
- Public Agenda (2003, December 17). Push comes to shove: Passengers and travel workers call rudeness a real problem. In *A Public Agenda Holiday Feature on Travel Civility*. Retrieved January 3, 2004 from <http://www.publicagenda.org>
- Quilty, S. M. (2003). Achieving recognition as a world class airport through education and training. *Journal of Air Transportation*, 8(1), 3-14.
- Reicheld, F., & Sasser, W. E., Jr. (1990, September/October). Zero defections: Quality comes to services [Electronic version]. *Harvard Business Review*, 68, 105-11.
- Reilly, T. P. (1996). *Value-added customer service: The employee's guide for creating satisfied customers*, Chicago: Contemporary Books, Inc.
- Schoenfeld, B. (2002, July/August). We're fed up! *Cigar Aficionado*. Retrieved August 20, 2002, from <http://www.cigaraficionado.com/Cigar/Aficionado/Archives/200208/fa802.html>
- Sheth, J. N., Sisodia, R. S., & Sharma, A. (2000). The antecedents and consequences of customer-centric marketing. *Journal of the Academy of Marketing Science*, 28(1), 55-66.
- Shimp, T. A. (2000). *Advertising, promotion and supplemental aspects of integrated marketing communications*. Orlando, FL: The Dryden Press.
- Singh, J. (2000). Performance productivity and quality of frontline employees in service organizations. *Journal of Marketing*, 64(2), 15-34.
- Spector, R., & McCarthy, P. D. (1995). *The Nordstrom way: The inside story of America's #1 customer service company*. New York: John Wiley & Sons, Inc.
- Stauss, B., & Friege, C. (1999, May). Regaining service customers. *Journal of Service Research*, 1, 347-361.
- Taylor, L. R. (2001). Miles to go, promises to keep. *Government Executive*, 33(4), 81-84.
- Turney, M. A., Bishop, J. C., & Fitzgerald, P. C. (2004). Measuring the importance of recent airport security interventions. *Journal of Air Transportation*, 9(3), 56-66.
- University of Nebraska at Omaha. (2002). Air rage. Retrieved May 16, 2003, from <http://www.unomaha.edu/~wwwpa/pa8090/ryberg/airrage.htm>
- U.S. Department of Transportation Office of the Inspector General. (2001, February 12). *Final report on airline customer service commitment*. (Report AV-2001-

- 020, February 12, 2001), Washington, DC: U.S. Department of Transportation. Retrieved August 21, 2004, from <http://www.house.gov/transportation/aviation/issues/service.pdf>
- Wang, Y. (2001, February 7). *Annotated bibliography on the age of rage: Rage topics on air rage, media rage, message rage, and office rage*. Retrieved December 21, 2003, from http://www.soc.hawaii.edu/leonj/409bs2001/wang/report_1.html
- Zeithaml, V. A. (2000). Service quality, profitability, and the economic worth of customers: What we know and what we need to learn. *Journal of the Academy of Marketing Science*, 28(1), 67-85.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1985, Fall). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1988). Servqual: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46.
- Zellner, W. (2001, April 2). Southwest: After Kelleher, more blue skies. *Business Week Online, News: Analysis & Commentary*. Retrieved October 11, 2001, from http://www.businessweek.com/print/magazine/content/01_14/b3726061.html

APPENDIX

**Air Passenger Survey
Demographics**

1. Gender: Male _____ Female _____
2. Age: _____
3. Race/Ethnicity:
 - a. White/Caucasian _____
 - b. African-American/Black/Negro _____
 - c. Latino/Hispanic _____
 - d. Asian/Pacific Islander _____
 - e. Native American _____
 - f. Other _____
4. Where do you currently reside (U.S. state or country)?
 - a. State: _____
 - b. Country: _____
5. Highest level of education completed:
 - a. Some High School _____
 - b. High School Diploma /GED _____
 - c. Some College _____
 - d. Associate Degree _____
 - e. Bachelor's Degree _____
 - f. Master's Degree _____
 - g. Professional Doctorate (M.D., J.D., Ed.D., D.B.A., Psy.D.) _____
 - h. Ph.D. _____
6. Marital Status:

a. Married _____	c. Divorced _____
b. Single _____	d. Widowed _____
7. What airline do you fly most often? _____

8. Do you refuse to fly any airline?
 a. Yes ____ No ____
 If Yes, which airline(s)?

9. Do you fly for:
 a. Business ____ b. Pleasure/Personal ____ c. Both ____
10. How often do you fly? _____
11. Do you usually fly:
 a. First Class ____ b. Business Class ____ c. Coach Class ____
12. How many years have you been flying? _____

Questionnaire

Please circle the response that represents your view.

13. **Airline customer service should be:**
 a. Poor b. Average c. High d. Very High
14. **As an airline customer, I expect to feel important in the eyes of the airline.**
 Strongly Agree Agree No Opinion Disagree Strongly Disagree
15. **I expect to receive efficient service from airline personnel.**
 Strongly Agree Agree No Opinion Disagree Strongly Disagree
16. **I expect the airline to provide me with comfort.**
 Strongly Agree Agree No Opinion Disagree Strongly Disagree

17. The airline believes that the passenger is always right.

Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
----------------	-------	------------	----------	-------------------

18. I expect airline personnel to behave toward me in a friendly manner.

Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
----------------	-------	------------	----------	-------------------

19. I feel the airlines are unconcerned about my ability to successfully make connecting flights.

Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
----------------	-------	------------	----------	-------------------

20. Decreased service in the airport terminal is a significant cause of disruptive behavior on the airplane.

Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
----------------	-------	------------	----------	-------------------

21. The service provided by the airlines is terrible.

Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
----------------	-------	------------	----------	-------------------

22. Poor customer services cause passengers to be dissatisfied.

Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
----------------	-------	------------	----------	-------------------

23. Poor customer service frustrates passengers.

Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
----------------	-------	------------	----------	-------------------

24. What is your status as it relates to smoking?

- a. Smoker
- b. Never Smoked
- c. Former Smoker

25. **My in-flight stress increases because I am not able to smoke during a flight.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

I Don't Smoke _____

26. **I get frustrated during a flight because I feel less than adequately attended to by the flight crew.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

27. **I feel that cabin crews are inadequately trained in providing quality service.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

28. **When I feel that the ticket agent has treated me rudely, I feel:**

Angry Disappointed Frustrated Demeaned Upset

29. **Airline personnel in the airport terminal are less responsive than personnel in other industries.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

30. **When I feel crowded on an airplane I become:**

Angry Frustrated Stressed Uncomfortable

31. **Have you ever witnessed an act of disruptive behavior on a flight?**

a. Yes b. No

32. **Was it started by:**

a. Airline Staff b. Passenger

33. **If so, were you personally affected by this act?**

- a. Yes b. No

34. **Do you know someone whose flight behavior has been disruptive?**

- a. Yes b. No

35. **Have you ever been involved other than as a witness in flight disruptive behavior?**

- a. Yes b. No

36. **I feel that flight disruptive behavior with physical contact should be treated as a criminal matter.**

- Strongly Agree Agree No Opinion Disagree Strongly Disagree

37. **Passengers have the right to act to prevent flight disruptive behavior.**

- Strongly Agree Agree No Opinion Disagree Strongly Disagree

38. **Airline employees have the right to act to prevent flight disruptive behavior.**

- Strongly Agree Agree No Opinion Disagree Strongly Disagree

39. **I think that airport personnel can help prevent flight disruptive behavior.**

- Strongly Agree Agree No Opinion Disagree Strongly Disagree

40. **I think that some acts of flight disruptive behavior are justifiable.**

- Strongly Agree Agree No Opinion Disagree Strongly Disagree

41. **No passenger should be allowed to get away with flight disruptive behavior.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

42. **I think that flight disruptive passenger behavior has increased since September 11, 2001.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

No Experience With This _____

43. **When the food on the airplane is bad, I get upset.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

No Experience With This _____

44. **When no food service is offered on the airplane and I did not know this in advance, I get upset during the flight.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

No Experience With This _____

45. **When no food service is offered on the airplane, even though I knew in advance that no food would be offered, I get upset during the flight.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

No Experience With This _____

46. When a mix-up occurs about my seat on the plane, I get upset.

Strongly Agree Agree No Opinion Disagree Strongly Disagree

No Experience With This _____

47. When I cannot find room to put away my carry-on bag on the plane, I get upset.

Strongly Agree Agree No Opinion Disagree Strongly Disagree

No Experience With This _____

48. I find the security screening at airports upsetting because it invades my privacy.

Strongly Agree Agree No Opinion Disagree Strongly Disagree

No Experience With This _____

49. I find the security screening at the airports upsetting because it takes too much time.

Strongly Agree Agree No Opinion Disagree Strongly Disagree

No Experience With This _____

50. When airline personnel refuse to serve me an alcoholic drink, I get upset.

Strongly Agree Agree No Opinion Disagree Strongly Disagree

I Don't Drink On Planes _____

I Am Always Served Drinks _____

51. **Decreased service on the airplane is a significant cause of disruptive passenger behavior on the airplane.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

52. **I get frustrated during a flight because I felt less than adequately attended to by airline personnel in the airport terminal.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

53. **I feel that airline personnel in the airport terminal are inadequately trained in providing quality service.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

54. **Flight crews are less responsive than personnel in other industries.**

Strongly Agree Agree No Opinion Disagree Strongly Disagree

55. **Please rank each of the following as to how annoying it is to you, with 1 representing not annoying at all and 5 representing extremely annoying.**

a. A flight delay	1	2	3	4	5
b. A cancelled flight	1	2	3	4	5
c. Rude personnel	1	2	3	4	5
d. Poor service	1	2	3	4	5
e. No food service	1	2	3	4	5
f. High fares	1	2	3	4	5
g. Lack of baggage space	1	2	3	4	5
h. Security check	1	2	3	4	5