

Corporate social responsibility as a determinant of corporate reputation in the airline industry

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ABSTRACT

This study explores activities in corporate social responsibility (CSR) and their effects on corporate reputation in the airline service industry. It also proposes two factors of customer attitude and satisfaction, as moderators between corporate reputation and CSR. Using data of 967 airline service users and structural equation modeling, the study finds that higher degree of economic responsibility results in improved customer attitude and satisfaction. Moreover, while environmental responsibility has notable effects on customer attitude and satisfaction, corporate reputation is significantly determined by customer attitude and satisfaction. The study presents limitations and suggestions based on its findings and implications.

1. Introduction

Within the recognition of corporate social responsibility (CSR) as a key issue in corporate management activities (Baumgartner, 2014), many studies explored its effects on the outcomes of corporations engaged in services or manufacturing and on consumer perceptions (Dutta and Singh, 2013). This indicates that the effects of CSR on customer attitude and perspectives have become one of the hottest research topics in related research areas (Costa and Menichini, 2013).

Of the various aspects of customer attitude and perspectives, perceived corporate reputation is one of the most significant antecedents for firm success in competitive markets (Keh and Xie, 2009), including various service areas. Therefore, numerous scholars have explored the motivations and hindrances significantly associated with corporate reputation in services such as airlines (Dijkmans et al., 2015), telecommunication (Srivastava and Sharma, 2013), banking (Bouvain et al., 2013), and retailing (Nguyen and Leblanc, 2001).

Many scholars have explored the key factors of corporate reputation in airline services (Chong, 2007). Among potential factors, they have extensively investigated customer attitude, satisfaction, and relationship with corporate reputation (Park et al., 2005). However, CSR activities are not considered a significant motivation for success in airline services. This indicates the lack of careful examination of the impacts of CSR plans and practices on corporate reputation in the airline industry, and that few empirical approaches have examined the significance of the relationship between corporate reputation, customer attitude and satisfaction, and CSR initiative.

Thus, this study examines the concepts of CSR, customer attitude

and satisfaction as core antecedents of corporate reputation in airline services. It investigates the impacts of CSR on corporate reputation through customer attitude and satisfaction in airline services. In brief, while the elements of CSR initiative affect customer attitude and satisfaction, customer attitude and satisfaction in turn affect corporate reputation. Thus, customer satisfaction and attitude play mediate the connection between CSR and corporate reputation. Thus, the current study addresses the following research question (RQ).

RQ: What are the impacts of CSR on corporate reputation through customer attitude and satisfaction?

In order to address this research question, Section 2 shows a literature review of corporate reputation, customer satisfaction and attitude, and CSR, with related hypotheses. Section 3 presents a summary of the study methodology. Section 4 examines the results. Lastly, Section 5 summarizes the research model, and presents the findings and implications.

2. Literature review

The airline industry is a primary means of transport, providing various benefits to the travel industry, business, and society, such as job creation, volunteering activities, or investment in facilities for destitute and neglected individuals (Su et al., 2017). Currently, the airline industry has significant effects on social, economic, and natural environments (Hofer et al., 2010; Rubin and Joy, 2005). For instance, air and noise pollution are two representative negative issues in society (Janic, 2003). Although Daley et al. (2008) found that less than 5% of greenhouse gas is attributable to the airline industry, the effects of this

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industry on climate change will be critical, as air transport is expected to grow in future (Button, 2007).

Considering the effects of its growth and impact, service providers in the airline industry not only try to reduce their negative contributions to climate change but also enhance their positive image in society (Cowper-Smith and de Grosbois, 2011). Therefore, many airline service providers have been interested in the concept of CSR, contributing to their social behavior.

Several studies have examined the CSR practices of the airline industry through their environmental contributions in various areas in Europe (Chan and Mak, 2005), and Asia-Pacific regions (Mak and Chan, 2006). These studies have shown that the majority of airline service providers have realized the importance of their environmental, social, and economic contributions, as well as their financial and management reporting activities, for success in the competitive market (Aksoy et al., 2003; Miller and Chen, 1994).

However, few empirical studies examine the connection between CSR activities and management achievements. As firms undertake various CSR activities and contributions, previous studies note the difficulty in systematically examining the impacts of all activities and contributions (Gebel, 2004). Therefore, this study investigates whether the CSR activities of the airline service providers have significant effects.

2.1. CSR in the airline industry

With significant growth in the airline industry, companies and organizations in the industry have been required to minimize their negative effects, and increase their positive effects on society. This trend has prompted an increase in CSR activities by airline companies and organizations (Chen et al., 2012). The academic and industry literature indicates that a large number of airline companies are starting to conduct CSR activities and promoting them to the public, including their potential customers (Hooper and Greenall, 2005). Moreover, prior studies reviewed, discussed, and presented the practices and effects of CSR activities by airlines (Lynes and Andrachuk, 2008; Kuo et al., 2016). The majority of these studies indicated that the companies focus their CSR activities on not only environmental responsibility, but also social and economic responsibilities (Kuo et al., 2016).

However, few studies examine CSR activities and commitment in the airline industry (Tsai and Hsu, 2008). Moreover, the influences of CSR activities and commitment on customer perceptions and other significant values are still unclear. It may be that the majority of prior studies on CSR practices in the airline industry are case studies with regional and circumstantial limitations (Ilkhanizadeh and Karatepe, 2017).

Remarkable research on CSR activities in the airline industry has been conducted at the regional rather than the global level, or comparative viewpoints (Chan and Mak, 2005; Mak and Chan, 2007). These studies employed a conceptual framework developed by several environmental studies on the UN announcements (Adams, 1998). Moreover, the majority of prior studies on CSR practices in the airline industry focused on environmental improvements (Tsai and Hsu, 2008). However, because organizations and companies in the airline industry are often of a certain size, it is necessary for them to assume social and economic responsibilities, in addition to environmental responsibility. This means that the social and economic aspects of CSR activities and practices are also considered when investigating the effects of CSR practices in the airline industry. Recent studies on the airline industry tend to focus on all dimensions of CSR (Hooper and Greenall, 2005).

These recent studies report the difficulty in evaluating the effects of CSR activities and management on sustainable growth and performance (Mak and Chan, 2006; Gebel, 2004). Thus, this study takes note of customers, who are one of the most notable decision makers in the success of service companies. Therefore, this study investigates the relationships between CSR, corporate reputation, attitude, and

satisfaction, which are projected by customer viewpoints in the airline service industry.

2.2. Corporate social responsibility

Recently, CSR has become a momentous social obligation in various business fields. Therefore, a number of prior studies have investigated the influences of CSR on corporate management and performance (Wang et al., 2016). From the management perspective, CSR activities are a significant duty for the sustainable and strategic survival of firms (Kolk, 2016).

Many studies explore the benefits of CSR from the customer perspectives toward service providers (Mejri and Bhatli, 2014; Choi and La, 2013; Poolthong and Mandhachitara, 2009; Mantovani et al., 2017). For instance, CSR initiatives by providers lead to positive customer responses, such as higher degrees of customer loyalty (Cha et al., 2016), intention to use (Park et al., 2015), or word of mouth (Chung and Jiang, 2017).

In addition, several studies have shown that customer satisfaction should be considered as a key element in influencing the market value, profitability, and success of corporations (Anderson et al., 1994; Luo and Bhattacharya, 2006; Oppewal et al., 2006; Rust and Zahorik, 1993). Although few studies have examined the connection between CSR and customer satisfaction, several empirical studies have presented a positive CSR initiative influence on customer satisfaction in services (Park et al., 2017). For instance, Pérez and Del Bosque (2015) found CSR to be a key determinant of customer satisfaction from the user data of banking services. Chung et al. (2015) presented the role of CSR in customer satisfaction as a corporate image, considering 276 validated responses in China. In the airline industry, Park et al. (2015) found a direct link between the detailed CSR factors and customer satisfaction, from data of 1189 samples collected from international airports in South Korea.

Therefore, following these previous studies employing CSR as a key determinant of customer satisfaction in the airline industry (Park et al., 2015; Gupta and Pirsch, 2008), this study employs three aspects of CSR (triple bottom line concept), environmental, economic, and social capital (Dahlsrud, 2008; Park et al., 2016; Panwar et al., 2006), as the motivations for customer satisfaction and attitude in airline services. Thus, the following hypothesis is presented and tested:

- H1.** Economic responsibility has significant effects on customer attitude.
- H2.** Economic responsibility has significant effects on customer satisfaction.
- H3.** Social responsibility has significant effects on customer attitude.
- H4.** Social responsibility has significant effects on customer satisfaction.
- H5.** Environmental responsibility has significant effects on customer attitude.
- H6.** Environmental responsibility has significant effects on customer satisfaction.

2.3. Customer satisfaction, customer attitude, and corporate reputation

Customer attitude and satisfaction are notable mediating factors between corporate reputation and CSR (Loureiro and Kastenholz, 2011). Both attitude and satisfaction are considered when examining the behavior and perspectives of customers toward a specific service and product (Kang et al., 2015). Both factors stimulate service providers to attract customers and win them over with high degrees of service loyalty (Currás-Pérez et al., 2013). As the relationship between customers and the credibility of service providers are formulated by

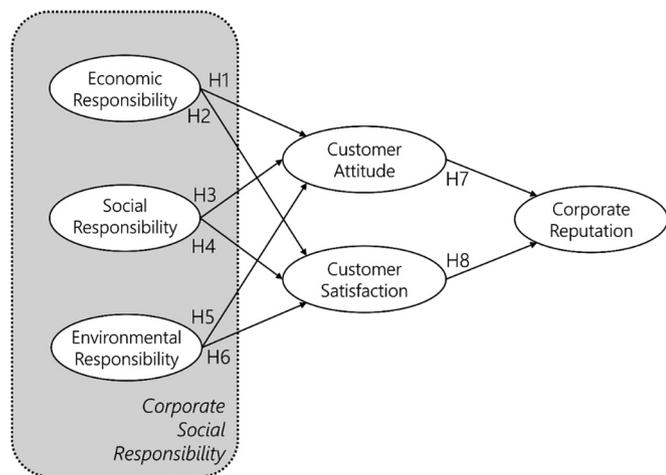


Fig. 1. The research model.

customer attitude toward all aspects of service providers, focusing the positive attitude of customers toward a particular service and its providers leads to favorable consequences (Nguyen and Leblanc, 2001). Therefore, one of the most important issues in the strategic management of service providers is to be considered reliable by customers (Skjølvik et al., 2017). Thus, service providers should focus on delivering reliable services for positive response from customers (Van Raaij and Pruyn, 1998).

Once customers have a positive perspective toward service providers, a key measure for validating corporate effort is corporate reputation (Park et al., 2014). Corporate reputation is not only a strategically important factor, but also a core advantage for success in competitive markets (Herbig and Milewicz, 1995). Therefore, service providers with excellent reputations look forward to not only continuous use of their services but also attracting potential customers.

Prior studies have indicated that customer satisfaction and attitude tend to have positive impacts on corporate reputation (Saeidi et al.,

Table 1
Questionnaire items.

| Constructs | Descriptions | Sources |
|------------------------------|---|--|
| Environmental responsibility | ENR1: This airline makes an effort to participate in environmental campaigns. ENR2: This airline makes an effort to reduce waste and use environmentally friendly products. ENR3: This airline uses energy and resources efficiently. | Park et al. (2015), Zhu et al. (2013) |
| Social responsibility | SR1: This airline encourages its employees to participate in volunteer activities in local communities. SR2: This airline makes an effort to raise funds for social causes. SR3: This airline supports sporting and cultural events. | Park et al. (2015), Zhu et al. (2013) |
| Economic responsibility | ECR1: This airline makes an effort to contribute to society and the economy by investing and generating profits. ECR2: This airline makes an effort to create new jobs. ECR3: This airline makes an effort to contribute to national economic development by creating more value. | Park et al. (2015), Zhu et al. (2013) |
| Customer attitude | CA1: I have positive feelings toward this airline in general. CA2: I think that this airline makes my life more convenient. CA3: Using this airline is a wise idea. | Davis (1989), Park et al. (2015), Park and del Pobil (2013) |
| Customer satisfaction | CS1: I feel happy after flying with this airline. CS2: My choice to fly with this airline is a wise one. CS3: I feel satisfied after using this airline. CS4: This airline entirely fulfills my needs. CS5: I recommend this airline to others who intend to fly. | Kim and Kim (2017), Akamavi et al. (2015), Park and Kim (2014) |
| Corporate reputation | CR1: This airline is highly regarded. CR2: This airline is very successful. CR3: This airline is well established. | Kim and Kim (2017) |

Table 2
Demographic information.

| | n (%) | Prior experience | n (%) |
|----------------------|-------------|-----------------------------|-------------|
| Age | | 10–20 times | 314 (32.5%) |
| 20–30 | 231 (23.9%) | 21–30 times | 322 (33.3%) |
| 31–40 | 294 (30.4%) | 31–40 times | 230 (23.8%) |
| 41–50 | 184 (19.0%) | Over 40 times | 101 (10.4%) |
| 51–60 | 147 (15.2%) | | |
| Over 60 | 111 (11.5%) | | |
| Main purpose | | Prior experience (per year) | |
| Travel | 506 (52.3%) | 1–3 times | 192 (19.9%) |
| Business | 294 (30.4%) | 3–5 times | 483 (49.9%) |
| Visit | 127 (13.1%) | 5–10 times | 195 (20.2%) |
| Others | 40 (4.1%) | Over 10 times | 97 (10.0%) |
| Education | | Gender | |
| High school or below | 295 (30.5%) | Male | 509 (52.6%) |
| College | 470 (48.6%) | Female | 458 (47.4%) |
| Graduate or above | 202 (20.9%) | | |

2015). Furthermore, customers evaluate their overall experience of a particular service and its providers based on their general attitude and satisfaction (Kim et al., 2013). Therefore, customer attitude and satisfaction should be given foremost consideration in improving corporate reputation (Walsh et al., 2009). This indicates that corporate reputation can be enhanced by customer perceptions of service providers, including customer satisfaction and attitude. Thus, this study introduces the following hypotheses:

H7. Customer attitude has notable influences on corporate reputation.

H8. Customer satisfaction has notable influences on corporate reputation.

2.4. Research model

The research model which is organized by the introduced hypotheses is presented (Fig. 1).

Table 3
Descriptive statistics.

| Constructs | Mean (standard deviation) | Constructs | Mean (standard deviation) |
|------------------------------|---------------------------|-----------------------|---------------------------|
| Economic responsibility | 5.13 (1.25) | Customer attitude | 5.07 (1.13) |
| Social responsibility | 4.86 (1.28) | Customer satisfaction | 5.09 (1.20) |
| Environmental responsibility | 4.72 (1.24) | Corporate reputation | 4.75 (1.34) |

Table 4
Internal reliability.

| Constructs | Economic responsibility | Social responsibility | Environmental responsibility | Customer attitude | Customer satisfaction | Corporate reputation |
|------------------|-------------------------|-----------------------|------------------------------|-------------------|-----------------------|----------------------|
| Cronbach's alpha | 0.917 | 0.841 | 0.858 | 0.889 | 0.947 | 0.896 |

Table 5
Convergent reliability.

| Constructs | Items | Factor loading | Composite reliability | Average variance extracted |
|------------------------------|-------|----------------|-----------------------|----------------------------|
| Economic responsibility | ECR1 | 0.934 | 0.945 | 0.858 |
| | ECR2 | 0.953 | | |
| | ECR3 | 0.891 | | |
| Social responsibility | SR1 | 0.908 | 0.915 | 0.782 |
| | SR2 | 0.849 | | |
| | SR3 | 0.895 | | |
| Environmental responsibility | ENR1 | 0.772 | 0.916 | 0.785 |
| | ENR2 | 0.943 | | |
| | ENR3 | 0.932 | | |
| Customer attitude | CA1 | 0.876 | 0.959 | 0.825 |
| | CA2 | 0.894 | | |
| | CA3 | 0.931 | | |
| | CA4 | 0.932 | | |
| | CA5 | 0.906 | | |
| Customer satisfaction | CS1 | 0.886 | 0.931 | 0.819 |
| | CS2 | 0.922 | | |
| | CS3 | 0.906 | | |
| Corporate reputation | CR1 | 0.883 | 0.936 | 0.830 |
| | CR2 | 0.942 | | |
| | CR3 | 0.907 | | |

Table 6
Discriminant reliability.

| Constructs | A | B | C | D | E | F |
|---------------------------------|-------|-------|-------|-------|-------|-------|
| A. Economic responsibility | 0.926 | | | | | |
| B. Social responsibility | 0.323 | 0.884 | | | | |
| C. Environmental responsibility | 0.363 | 0.313 | 0.886 | | | |
| D. Customer attitude | 0.433 | 0.260 | 0.436 | 0.908 | | |
| E. Customer satisfaction | 0.407 | 0.181 | 0.111 | 0.518 | 0.905 | |
| F. Corporate reputation | 0.473 | 0.261 | 0.222 | 0.224 | 0.242 | 0.911 |

3. Method

3.1. Questionnaire design

This study collected 26 questionnaire items from previous studies. After two translators carefully translated the items from English to Korean, two researchers from the communication and management departments reviewed and revised them. Subsequently, two rounds of a pilot survey were conducted to examine the reliability of the items, and after computing Cronbach's alpha values (all values were higher than 0.80), 20 questionnaire items were finally selected and included.

Table 1 presents all the items in the main survey.

This study used the convenient sampling method, which is based on a non-probabilistic and self-participation sampling method (Hair et al., 2006). The general procedure of the sampling method in this study followed the guidelines of Tarhini et al. (2016). A South Korean professional survey agency conducted the main survey online. The agency contacted about 2100 potential respondents over 50 days, and collected data from 1056 customers (50.3% response rate). Each customer who took the survey had experienced one of the selected airlines' services more than ten times. All respondents were required to answer the questionnaire items based on a 7-point Likert scale. After excluding the outlier and incomplete samples, 967 validated samples were used (Table 2).

4. Results

Table 3 presents the summary of the descriptive statistics.

4.1. Validity tests

To validate the employed constructs and items, Cronbach's alpha values (satisfactory level: over 0.7; Santos, 1999), factor loadings (satisfactory level: over 0.7), composite reliability (satisfactory level: over 0.5), and average variance extracted (AVE, satisfactory level: over 0.5) are computed (Geldhof et al., 2014; O'Leary-Kelly and Vokurka, 1998). Moreover, a discriminant test is conducted (satisfactory condition: correlation between two specific factors have to be lower than the square root level of the AVE; Cable and DeRue, 2002). As Tables 4–6 show, this study passes the validity tests.

4.2. Fit indices

Fit indices are computed to find the models' suitability. As Table 7 shows, the fit indices of the models are universally satisfied.

4.3. Hypothesis tests

Fig. 2 and Table 8 present the summary of the proposed research model. Although the results do not support the connection between social responsibility and customer satisfaction (H4, $\beta = -0.049$, $SE = 0.035$, $CR = -1.554$, $p > 0.1$), they validate the other hypotheses. Customer satisfaction ($R^2 = 0.512$) is significantly determined by two factors of CSR initiative, economic responsibility (H2, $\beta = 0.544$, $SE = 0.042$, $CR = 14.683$, $p < 0.001$) and environmental responsibility (H6, $\beta = 0.303$, $SE = 0.048$, $CR = 9.184$, $p < 0.001$).

Customer attitude ($R^2 = 0.374$) is affected by economic responsibility (considerably, H1, $\beta = 0.447$, $SE = 0.040$, $CR = 12.065$, $p < 0.001$), environmental responsibility, and social responsibility (marginally, H5, $\beta = 0.175$, $SE = 0.044$, $CR = 5.398$, $p < 0.001$; H3, $\beta = 0.124$, $SE = 0.034$, $CR = 3.700$, $p < 0.001$). Both customer

Table 7
Fit indices.

| Fit indices | Measurement model | Research model | Recommendations | Sources |
|---|-------------------|----------------|-----------------|--|
| $\chi^2/d.f$ | 6.246 | 6.337 | < 8.000 | Anderson and Gerbing (1988), Bagozzi and Yi (1988), Fornell and Larcker (1981), Hu and Bentler (1998), Henseler and Sarstedt (2013), Yuan and Zhong (2013) |
| IFI (incremental fit index) | 0.918 | 0.911 | > 0.900 | |
| CFI (comparative fit index) | 0.918 | 0.912 | > 0.900 | |
| NFI (normed fit index) | 0.904 | 0.901 | > 0.900 | |
| SRMR (Standardized Root Mean Square Residual) | 0.075 | 0.075 | < 0.080 | |
| RMSEA (root mean square error of approximation) | 0.071 | 0.077 | < 0.080 | |

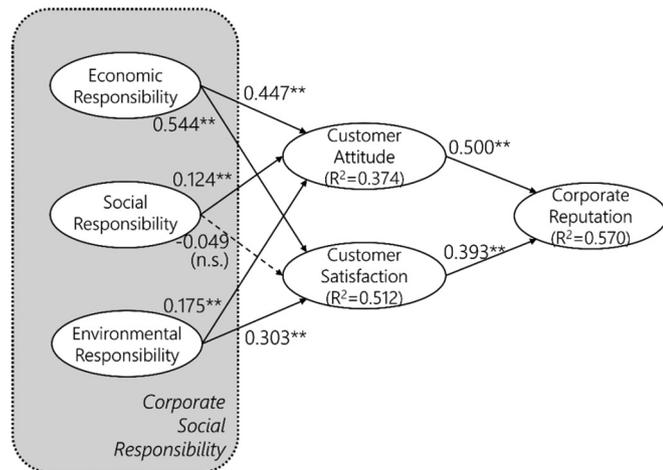


Fig. 2. Structural results of the introduced model (*p < 0.001).

attitude (H7, $\beta = 0.500$, $SE = 0.027$, $CR = 16.809$, $p < 0.001$) and customer satisfaction (H8, $\beta = 0.393$, $SE = 0.026$, $CR = 13.040$, $p < 0.001$) positively determine corporate reputation ($R^2 = 0.570$).

From the CSR initiative details (Fig. 3), the total standardized effects (direct + indirect) of economic responsibility (0.437) are greater than that of environmental responsibility (0.206), and social responsibility (0.043).

5. Discussion

This study investigates whether the CSR initiatives of airline service providers significantly affects corporate reputation through customer attitude and satisfaction. The findings of the research model enable an understanding of the significant connections between corporate reputation and CSR initiatives, with several academic and industrial implications. The results of the research model investigated through SEM and CFA analyses provide statistical evidence of structural formation from CSR to corporate reputation (economic responsibility + environmental responsibility → customer attitude and satisfaction → corporate reputation).

Table 8
Results of hypotheses (*p < 0.001).

| Results | Hypotheses | Coefficient (standardized) | SE | CR |
|---------------|--|----------------------------|-------|---------|
| Supported | H1. Economic responsibility > Customer attitude | 0.447* | 0.040 | 12.065 |
| Supported | H2. Economic responsibility > Customer satisfaction | 0.544* | 0.042 | 14.683 |
| Supported | H3. Social responsibility > Customer attitude | 0.124* | 0.034 | 3.700 |
| Not supported | H4. Social responsibility > Customer satisfaction | - 0.049 | 0.035 | - 1.554 |
| Supported | H5. Environmental responsibility > Customer attitude | 0.175* | 0.044 | 5.398 |
| Supported | H6. Environmental responsibility > Customer satisfaction | 0.303* | 0.048 | 9.184 |
| Supported | H7. Customer attitude > Corporate reputation | 0.500* | 0.027 | 16.809 |
| Supported | H8. Customer satisfaction > Corporate reputation | 0.393* | 0.026 | 13.040 |

Moreover, social responsibility is verified as a restricted motivator of customer attitude and satisfaction (H4), which may be associated with the current status of South Korean airline service providers. As the South Korean economy is facing one of the worst job crises in years, there is pressure on the majority of companies in South Korea to create more jobs. Therefore, economic responsibility is more important than social responsibility. In addition, as the economic contributions of companies are more visible than social and environmental contributions, both statistically and quantitatively, they can use economic contributions as primary CSR activities. The significance of environmental responsibility can be explained by one of the exclusive features of airline service providers. As significant greenhouse gas emissions, environmental pollution, and environmental damage are inevitable for transportation service providers, the service users regard environmental responsibility as the duty of these providers.

6. Conclusion

Corporate reputation has recently become one of the most competitive strategic components for success in competitive markets (Kim et al., 2018; Weigelt and Camerer, 1988). Moreover, as airline companies provide services across the world, the importance of corporate reputation has escalated (Ding et al., 2015). This study explores the influences of CSR on corporate reputation in the airline service industry and presents several academic and practical implications.

From an academic perspective, this study presents marginal contributions to the related field by exploring the connections between corporate reputation and CSR through customer attitude and satisfaction. Although each connection was tested and validated in several prior studies, few studies employed customer attitude and satisfaction as key mediators simultaneously. Moreover, the structural results also demonstrate that the roles of attitude and satisfaction are of considerable importance in forming corporate reputation. Future research should focus on theoretical structures organized by “the cause-and-effect” connections between corporate reputation and CSR, considering customer attitude and satisfaction in the airline service industry (Kim and Kim, 2017).

This study provides some pragmatic implications. First, airline service providers should establish systematic and well-structured plans and programs for corporate responsibility activities, considering its

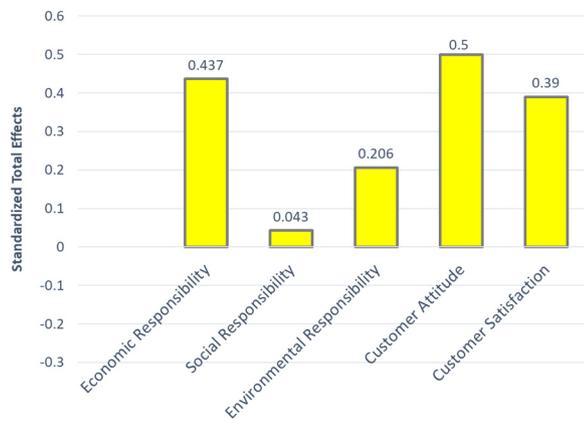


Fig. 3. Total standardized effects on corporate reputation.

effect on customer satisfaction and attitude. Thus, airline service providers should conduct corporate activities for economic and environmental responsibility to enhance customer attitude and satisfaction. Second, the impacts of customer satisfaction and attitude on corporate reputation suggest that airline service providers should not only focus on developing positive users but also well-designed services for cultivating higher perceived user satisfaction.

This study has several notable limitations. First, as the main survey was conducted in South Korea, it could be difficult to generalize the results and findings of the current study to other areas. There could be cultural and national effects on the results of the research model when the survey is conducted in other areas. Second, this study does not consider the types of airline services. Currently, several low-cost airline services operate in South Korea, while companies press for full-service carriers as one of the mainstream services in the South Korean airline industry. Previous studies have indicated significant differences in user experience between low-cost airline services and full-service carriers (Fourie and Lubbe, 2006; O'Connell and Williams, 2005). Therefore, future research can employ the findings of this study for a better understanding of CSR in airline services.

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