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# A comprehensive relationship marketing model between airlines and travel agencies: The case of Taiwan



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#### ABSTRACT

This study aims to examine how airlines' relationship selling, relational benefits, and relationship quality affect voluntary performance of travel agencies. Hypotheses on the relationship among these constructs were created based on relevant literature and validation using structural equation modeling was carried out. A questionnaire survey was conducted using stratified sampling on comprehensive travel agencies and Class A travel agencies in Taiwan. Among the 1000 copies of the questionnaire, 169 valid copies were collected and used to perform data analysis. Empirical results show that relational benefits and relationship selling can influence voluntary performance of travel agencies through the mediation of relationship quality, although neither has a direct effect on the latter, whereas, relationship quality has a significant and positive impact on voluntary performance of travel agencies towards airlines. It is evident that relationship quality plays an indispensable role in the connection between relationship marketing constructs (relationship selling and relational benefits) and voluntary performance. Results of this study may provide some insights for airlines in developing relationship management strategies towards travel agencies.

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## 1. Introduction

Boeing has predicted that Asia-Pacific air travel traffic will grow from a 32% global market share in 2009 to 41% in 2028 (Boeing, 2009). Statistics from Taiwan's Tourism Bureau showed that the number of Taiwanese and foreigners traveling to Taiwan has grown from 12.31 million in 2008 to 17.55 million in 2012, an average increase of about 11% per year (Tourism Bureau, 2013). Despite the enormous demands and significant growth in the airline ticketing market, limited seating capacity still causes supply—demand imbalances in peak and off-peak seasons. To deal with this problem, airlines often cooperate with travel agencies by asking them to sell certain passenger seat quotas in the off-peak season, consequently

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giving them more seats in the peak season. This close relationship, called a 'strategic alliance,' often exists between airlines and travel agencies. Porter and Fuller (1986) deemed strategic alliances to be the most effective solution for enterprises when faced with an uncertain environment. Through inter-corporate connections, airlines can reduce operational costs and risks and obtain complementary resources while contributing to their entry into target markets. Therefore, travel agencies serve as a bridge between airlines and travelers, and their mediating role is an important position in the tourism marketing systems. How airlines drive positive interactions with travel agencies through effective relationship strategies that enhance trust, commitment, and loyalty is a vital issue for airlines.

Past studies have shown that acquiring new customers is five times more expensive than keeping existing customers (Heskett et al., 1989). Reichheld and Sasser (1990) emphasized that, in order to improve customer loyalty and reduce customer defection, it is necessary to build, develop, and maintain good relationships with customers. This method of actively developing

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long-term relationships with specific customers helps maintain competitive advantages, especially when companies rely more on information provided by each other and seek to improve customer satisfaction through effective communication. The relationships between companies and customers will be long-lasting if such relationships satisfy both parties (Berry, 1995; Sheth and Parvatiyar, 1995). For travel agencies, the relationship management strategies adopted by airlines may provide different benefits. Such positive interactions may enhance travel agencies' trust in and commitment to airlines, and ultimately improve their loyalty.

A main purpose of relationship marketing theory is to identify the key drivers that influence vital business results and provide further insights into the causality between the drivers and the outcome variables (Hennig-Thurau et al., 2002). Most of the previous assessment methods have focused on single drivers, such as relational benefits (referred to as RB) (e.g. Gwinner et al., 1998), relationship selling (referred to as RS) (e.g. Crosby et al., 1990), and relationship quality (referred to as RQ) (e.g. Dorsch et al., 1998) instead of developing multivariable models and theories. Hennig-Thurau et al. (2002) claimed that outcome variables (e.g. loyalty, word of mouth) may be the outcomes of interactions among several relationship marketing structures (e.g. RB, RQ) and require a more comprehensive approach to assessment. Towards that end, they created a more comprehensive relationship marketing model that combines two drivers (RB and RQ) to assess and predict two outcome variables (loyalty and word of mouth). Some researchers have identified that either RB or RS may improve RO (e.g. Crosby et al., 1990), but few have investigated whether RB and RS simultaneously affect RQ.

As suggested by Berry (1995), customer behavioral intentions, such as loyalty and positive word of mouth, are often directly linked to corporate profitability. Past studies have typically regarded these behavioral intentions as the outcome variables in relationship marketing, and few have examined voluntary performance (referred to as VP) as an outcome variable. Customer VP, introduced by Bettencourt (1997), is conceptually different from traditional behavioral intentions and has greater scope than single constructs, such as loyalty or word of mouth. It represents a rich concept that covers both loyalty and word of mouth and can provide more comprehensive explanations of the outcomes of relationship marketing (Bettencourt, 1997). For the purpose of analyzing a relationship marketing process in which VP occurs, it is necessary to have a correct understanding of the process and mechanisms by which relationship marketing structures interact. Thus, the present study examines the variable interactions and their effects on VP by using improved relationship marketing structures (i.e., RS, RB, and RO) as antecedents.

Also, relationship marketing was typically applied to businessto-customer (B2C) (e.g., Gwinner et al., 1998; Hennig-Thurau et al., 2002; Liu et al., 2011). A few of studies have applied the theory of relationship marketing on business-to-business (B2B) (e.g., Čater and Čater, 2010; Chang et al., 2012), especially on supply chain management (e.g., Morgan and Hunt, 1994; Morris and Carter, 2005; Theodorakioglou et al., 2006; Roberts-Lombard, 2009). For instance, Morgan and Hunt (1994) regarded commitment and trust as key mediating variables to verify partner relationships between tire retailers and suppliers. Roberts-Lombard (2009) examined the supplier relationship marketing between travel agency industry and its various suppliers (airline, hotel and car rental industry). Those that examined the relationship marketing model between airlines and travel agencies proposed in this paper are rarer. Based on the arguments stated above, the present study aims to examine whether the relationship strategies adopted by airlines for driving the RS and RB for travel agencies can improve the RQ between airlines and travel agencies and enhance the VP of travel agencies towards airlines. The paper also focuses on how RB plays a mediating role between RS and RQ, and RQ plays a mediating role between RB and VP. To delve into the relationships among these variables, hypotheses are developed and tested for validation.

## 2. Theoretical background

A buyer—seller relationship can either be business-to-business, business-to-customer, or customer-to-customer. A buyer may be an enterprise or a customer (or client). Therefore, a travel agency is called a buyer or a customer, and an airline is called a seller or a supplier in the current study. The buyer-seller relationship marketing constructs are presented as follows.

# 2.1. The outcome of the relationship marketing constructs: Voluntary Performance (VP)

Zeithaml et al. (1996) suggested that VP can be measured by the presence or absence of customer recommendations. Bettencourt (1997) proposed the theory of customer VP, which is regarded as voluntary customer behavior that assists an organization, such as customers acting as partial employees, promoting the organization through word of mouth, and cooperating with employees. Rosenbaum and Messiah (2007) claimed customer VP means that customer behavior can help to improve an organization's service quality and performance. The VP was typically divided into three constructs: loyalty, cooperation, and participation (Bettencourt, 1997) (see Appendix A for details).

Some studies have measured loyalty through repeat purchases or repurchase intention (e.g. Parasuraman et al., 1991), while some consider word of mouth or customer recommendation as the criteria for measuring loyalty (e.g. Hennig-Thurau et al., 2002; Zeithaml et al., 1996). Loyal customers or partners can increase enterprise profits, thereby driving competitive advantage (Rauyruen and Miller, 2007). In the current study, loyalty is defined as 'travel agencies maintain good relationships with airlines when they have frequent dealings, spread positive word of mouth and recommend these airlines to their counterparts.'

Cooperation means that customers are regarded as human resources by companies (Kelley et al., 1992) and also that customers have good levels of interaction with companies or other customers (Martin and Pranter, 1989). Anderson and Narus (1990) indicated cooperation means that stakeholders work together towards common goals. Morgan and Hunt (1994) suggested that cooperation is proactive and drives successful relationship marketing. In the current study, cooperation is defined as 'travel agencies recognize airlines' operational rules and procedures, and such recognition facilitates smooth service delivery'.

Participation is viewed as customers serving as consultants for companies and giving advice that helps improve companies' services (Schneider and Bowen, 1995). Participation is regarded as cooperation between partners on planning and goal setting (Jeon and Choi, 2012). Since customers directly participate in services, their complaints and suggestions provide the best opportunity for companies to resolve existing problems (Plymire, 1991). In the current study, participation is defined as 'travel agencies giving advice that helps airlines to improve their service rules or operations'.

#### 2.2. Determinants of relationship marketing outcomes

# 2.2.1. Relationship Selling (RS)

Some scholars (e.g., Crosby et al., 1990) referred to increased interactions and information exchanges with customers as 'RS,' and defined it as 'behavior taken by salespeople in order to maintain and enhance the trading relationship with customers'. Crosby et al. (1990) proposed interaction intensity, mutual disclosure, and cooperative intentions as measurable constructs of RS (see Appendix A for details).

Interaction intensity refers to the frequency which salespeople communicate with customers for personal or business purposes (Crosby et al., 1990). Lagace et al., (1991) suggested that buyer-seller interaction is for the purpose of providing information and strengthening mutual cooperation through frequent interactions. In the current study, interaction intensity is defined as 'travel agencies and airlines having mutual contact for the purpose of providing each other with information, thereby strengthening their mutual cooperation'.

Mutual disclosure means that both parties in a transaction disclose internal information that is not open (Crosby et al., 1990). Derlega et al. (1987) suggested that mutual disclosure is one of the key factors that helps build and maintain interpersonal relationships. It can be a mutually beneficial behavior but if both sides of the transaction are unwilling to disclose confidential information, mutual trust will decline. In the present study, mutual disclosure is defined as 'airlines' and travel agencies' willingness to share internal information that is not publicly disclosed, such as the planning of new routes, numbers of seats, unannounced flight schedules, etc.'

Cooperative intentions mean salespeople's willingness to offer services to customers even though they will not gain any benefits from the transaction process (Crosby et al., 1990). McCutcheon and Stuart (2000) suggested that both parties in a transaction tend to cooperate under conditions that are mutually favorable after having considered the possible risks based on trust. In the present study, cooperative intentions are defined as 'airlines' willingness to offer various services in exchange for possible cooperation with travel agencies'.

RS is different from relationship marketing. While the latter deals with every aspect of marketing, the former focuses on the characteristics of the interactions between parties on both sides of a transaction (Lee et al., 2005). Some evidence shows that RS may be an important antecedent that influences RB, RQ and VP (e.g., Crosby et al., 1990; Morgan and Hunt, 1994), which is why it is incorporated into the model developed in the present study.

# 2.2.2. Relational Benefits (RB)

Morgan and Hunt (1994) suggested that RB refers to the superior benefits that firms can get from their partnership relative to other options. A prerequisite for companies to maintain good relationships with their partners is to convince them that other companies are unable to provide better benefits and, therefore, it is a wise and beneficial decision to maintain existing relationships. Gwinner et al. (1998) figured out that customers can gain extra benefits besides core services after building long-term cooperative relationships with companies. They proposed three types of RB: confidence benefits, social benefits, and special treatment benefits (see Appendix A for details).

Gwinner et al. (1998) claimed that confidence benefits are often considered the most important among the three types of RB, playing a key role in long-term relationships. When customers perceive that a company or product is trustworthy, they will regard it with long-lasting trust (Crosby et al., 1990). Moorman et al., (1992) mentioned that trust should be mutual and demonstrates

that firms are confident in their relational partners. Thus, trust and confidence are regarded as similar concepts and are categorized as the same concept for discussion (Hennig-Thurau and Klee, 1997; Gwinner et al., 1998). In the present study, confidence benefits are defined as 'travel agencies choose an airline which can provide the best services and products, feel confident and are thereby convinced it is trustworthy.'

Berry (1995) claimed that social benefits include familiarity, personal recognition, friendship, rapport, and social support. Thus, social benefits refer to the friendly familiarity that service staff and customers share in their interactions (Gwinner et al., 1998). Social benefits are the result of positive long-term relationships that service staff maintains with customers (Gwinner et al., 1998). In the present study, social benefits are defined as 'the rapport that travel agencies develop with an airline's staff after a relationship has been established'.

Zeithaml (1981) reported that customers gain the 'best satisfaction' by maintaining a good relationship with service staff and, after becoming frequent customers, can obtain even better treatment, which is called 'special treatment benefits'. Peterson (1995) suggested that favorable prices may be one of the key motivators that encourage customers to make transactions. Gwinner et al. (1998) mentioned that customers may be willing to maintain long-term relationships with firms in order to get special subsidies on prices or special treatment that includes economic and customized benefits. In the present study, special treatment benefits are defined as 'travel agencies consider the special or additional treatment or services provided by airlines in peak and off-peak seasons'.

## 2.2.3. Relationship Quality (RQ)

Hennig-Thurau and Klee (1997) suggested that RQ is conceptually the same as product quality and can be used to measure how well any customer relationship needs are met. Crosby et al. (1990) showed that RQ is a key factor that determines whether the relationship between both parties in a transaction can be long-lasting. They indicated that RO can be regarded as a high-level construct and should include at least two dimensions, trust and satisfaction. Morgan and Hunt (1994) claimed that trust and commitment are essential for maintaining good relationships, but most researchers use satisfaction, trust, and commitment as the constructs of RQ (e.g. Chang et al., 2012; Crosby et al., 1990; Dorsch et al., 1998). Hennig-Thurau et al. (2002) mentioned that, since confidence in RB is conceptually similar to trust, it is not advisable to have trust as both the cause and effect while examining the connection between RB and RQ. Therefore, satisfaction and commitment are used as measurable constructs of RQ (see Appendix A for details).

Satisfaction is mainly an affective assessment based on consumer experiences, and reflects a perception of consistency between expected and actual results (Oliver, 1981). Fornell (1992) suggested that satisfaction refers to the overall feelings that customers have from directly assessing products or services based on their ideal criteria. Ellinger et al., (1999) found that there are significant positive relationships between customer (or buyer) satisfaction and meeting frequency with the vendor in their supply chain research. In the present study, satisfaction is defined as 'how airline services meet or exceed travel agency expectations'.

Morgan and Hunt (1994) suggested that commitment means that transaction partners believe in the importance of ongoing relationships with others and do their utmost to maintain such relationships. Hennig-Thurau and Klee (1997) revealed that commitment directs customers to long-term maintenance of relationships, whether the reason lies in the emotional connection to such relationships or the belief that maintaining

relationships can yield greater benefits. In the present study, commitment is defined as 'travel agencies have an unwavering intention to maintain long-term relationships with airlines, which reflects the important, reliable, and stable value of such relationships'.

# 3. Hypotheses and conceptual framework

The present study mainly investigates causality among RS, RB, and RQ in airlines, and how these affect VP by travel agencies in Taiwan. The research model of the present study is shown in Fig. 1 and the development of the hypotheses is described in detail below.

#### 3.1. Consequences of RS

Pugh (2001) suggested that customers generate positive emotions when they maintain good relationships with salespeople, and that such positive emotions can improve customer satisfaction and shorten the psychological distance from customers (Varca, 2004; Hennig-Thurau et al., 2006), thereby causing customers to have confidence in the salespeople. Morgan and Hunt (1994) claimed that good levels of interaction can improve understanding and trust between parties. The resultant intimacy shortens the distance between them, thereby contributing to mutual understanding (Neuber and Fiske, 1987), which also improves interpersonal relationships (Burnett and Moriarty, 1998). Consequently, salespeople offer more comprehensive services or special treatment in return. This way of treating customers with customized services and favorable prices also increases customers' cooperation intentions and maintains long-term partnerships. Based on the foregoing arguments, the following inference is made:

# **H1**. The RS offered by airlines has a positive impact on RB.

Crosby et al. (1990) revealed that RS is an antecedent variable that influences RQ and, in their RQ model, indicated that opportunities for future interactions between salespeople and customers depend on how customers perceive the RQ, Jolson (1997) also mentioned that RS may strengthen the commitment of existing customers. Ellinger et al. (1999), in their supply chain study, suggested that a company can have a better understanding of their customers' needs and satisfy them through frequent interaction. Chow et al. (2004) revealed that interaction intensity and mutual disclosure of information have a positive impact, respectively, on customer satisfaction and trust in the relationship quality model of the life insurance industry. Lin (2012) discovered that interaction intensity and mutual disclosure of information between the banking industry and customers have a positive impact on customer satisfaction and trust. Both parties in the transactions can effectively solve problems and improve mutual satisfaction and trust by helping each other and building close relationships (Liu et al., 2012; Voldnes et al., 2012). Therefore, frequent interaction will increase the agencies' confidence in the transactional

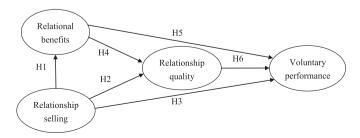


Fig. 1. Research model.

relationship and cooperative intentions can also improve the agencies' satisfaction. Similarly, during the transaction process, an airline's disclosure of information to agencies will help win their confidence. RS becomes a key factor for companies to enjoy quality relationships with their customers. Based on the foregoing arguments, the following inference is made:

#### **H2**. The RS offered by airlines has a positive impact on RQ.

When a company has frequent interactions with customers in order to provide commodities or services, customers will have deeper trust in the company (Lagace et al., 1991; Terho et al., 2012). In addition, service staff makes disclosures to customers in order to gain recognition so that customers feel their relationship with the salespeople is not merely transactional, but can be elevated to the level of friendship. In this way, customers begin to recognize the service staff and such recognition will narrow the psychological distance between the two parties and trigger VP by the customers (Bettencourt, 1997). When the service staff of a company meets customer expectations, customers have a deeper trust in them and reward the company by promoting its commodities and services (Bowers et al., 1990) or giving advice to the company (Jeon and Choi, 2012; Plymire, 1991). Therefore, the following inference is made:

**H3.** The RS offered by airlines has a positive impact on travel agencies' VP.

#### 3.2. Consequences of RB

Crosby et al. (1990) claimed that, as RB increase, confidence benefits and customer commitment show concomitant increases. Morgan and Hunt (1994) suggested that confidence benefits have a positive impact on both commitment and cooperation. Andaleeb (1996) investigated business executives and mentioned that client confidence has a positive impact not only on client satisfaction but also client commitment to the supplier in marketing channel study. Many researchers have discovered that social benefits are one of the factors that influence customers' commitment (e.g. Cheng, 2011; Hennig-Thurau et al., 2002). When service staff instills their customers with the feelings of familiarity and affability, customers are more satisfied with the company (Li, 2011) and will not easily change transaction partners, even if there are better options. Additionally, when a company gives its customers special treatment, they will become even more loyal and committed to the company (Selnes, 1993). Based on the foregoing arguments, the following inference is made:

# **H4**. The RB offered by airlines has a positive impact on RQ.

Bitner (1995) suggested that customers become more loval to a company when it offers them greater benefits. Customers build confidence or trust based on their past positive interactions with a company and thus become loyal to it (Hennig-Thurau et al., 2002). Many studies also confirm that customers showing trust in a company enhances their cooperation with that company (Anderson and Narus, 1990; Kim et al., 2012). This encourages the customers to contribute to the development and management of the company (Grissemann and Stokburger-Sauer, 2012). Customers become more satisfied when they feel familiarity and friendliness in their interactions with the company (Reynolds and Beatty, 1999) and do not easily change their transactional partner. Some researchers have revealed that social benefits have a direct impact on loyalty (e.g., Hennig-Thurau et al., 2002). A company that offers customers more special treatment benefits also impresses customers (Kelley et al., 1992) and enhances customer loyalty (Fornell, 1992). Therefore, the following inference is made:

**H5.** The RB offered by airlines has a positive impact on travel agencies' VP.

#### 3.3. Consequences of RQ

Many studies have shown there is a very significant positive correlation between customer satisfaction and loyalty (e.g., Cater and Čater, 2010; Jones and Sasser, 1995). Some studies also revealed that increased customer satisfaction contributes to enhanced cooperation between customers and a company (Abdul-Rahman and Kamarulzaman, 2012; Dai, 2002; Park et al., 2012). Bettencourt (1997) and Dai (2002) confirmed that satisfaction has a positive impact on participation. In addition, customers tend to give companies suggestions for improvement when it is beneficial to maintain quality relationships (Kelley et al., 1992; Zeithaml et al., 1996). Customers have a high level of VP when they are more committed to a company because they recognize the company (Chonko, 1986). Boles et al. (1997) indicated that consumers display a higher level of VP, such as intentions to remain a customer and give recommendations, when they have a better relationship with service staff. Based on the foregoing arguments, the following inference is made:

**H6**. The RQ between airlines and travel agencies has a positive impact on travel agencies' VP.

#### 4. Research methods

#### 4.1. Operational definitions and measurement of variables

Appendix A provides the operational definitions and literature sources for all the original variables in the present study. Regarding RS, seven items including mutual disclosure (3 items), strength of interaction (2 items), and propensity to collaborate (2 items) are adopted from Crosby et al. (1990) and revised for the measurement of RS. Regarding RB, eight items including confidence (3 items), sociability (3 items), and special treatment (2 items) are adopted from Gwinner et al. (1998) and Hennig-Thurau et al. (2002) and revised for the measurement of RB. Regarding RQ, six items including satisfaction (3 items) and commitment (3 items) are adopted from Bettencourt (1997) and Hennig-Thurau et al. (2002) and revised for the measurement of RQ. Regarding VP, seven items including loyalty (3 items), cooperation (2 items), and participation (2 items) are adopted from Bettencourt (1997) and Dai (2002) and revised for the measurement of VP.

# 4.2. Research subjects and sampling methods

The present study identifies the interactions between travel agencies and airlines and the scope of the research covers comprehensive travel agencies and Class A travel agencies<sup>1</sup> that have more frequent contact with airlines. Since the management of a travel agency is more involved in and aware of decision-making and results, the research subjects are managers or senior business staff in travel agencies. According to the directory of registered

travel agencies compiled by the Tourism Bureau in May, 2012, there are 2508 comprehensive travel agencies and Class A travel agencies in Taiwan (Tourism Bureau, 2013). It is impractical to collect samples from all of these travel agencies. In order to maximize the multiplicity and depth of information from the samples, the present study conducted a stratified sampling method to collect samples from 1000 travel agencies pro rata to the percentage of comprehensive travel agencies and Class A travel agencies in each city or county.

In light of wide distribution of research subjects across Taiwan and limited funding available for acquiring the data, the mailing of a paper questionnaire was adopted to collect samples. The other reasons for using a postal questionnaire are presented as below. The original population data for the study comes from a directory of registered travel agencies in Taiwan. All of travel agencies provided correspondence addresses but some did not provide email addresses. The email addresses provided are not usually those of the directors and, therefore, it is difficult to circulate a comprehensive and effective email (or online) questionnaire. Due to the possible differences in the return rate and the respondent representativeness of online, email and paper questionnaires, a stratified random sampling plan may be more complicated and difficult to carry out. Additionally, as advertising emails and questionnaire emails are rampant today, paper copies are easier for respondents to complete than electronic ones, have less risk of being categorized as spam and discarded, and have a higher chance of being handed to the relevant or named managers. Based on these reasons, the present study adopted a mailed paper questionnaire as a way of increasing sample validity.

## 4.3. Questionnaire design and survey

The questionnaire design involved modifications of the operational definition and measurement method of each variable according to the relevant literature, studied scenarios, expert reviews, and pretesting. Before the questionnaire was formally carried out, the present study invited eight directors from well-known travel agencies and airline companies (four from each), all of whom have more than 10 years of experience in the tourism industry, to conduct a review and pilot study of the draft questionnaire in order to ensure the accuracy and completeness of the questions. Following this, minor wording changes were made and revised suggestions provided when the experts found any response difficulties or lack of clarity. As a result, the draft questionnaire was finalized and was expected to achieve a high level of expert validity. The questionnaire included respondent profile items (job title, years of service), characteristics of the travel agency (line of business, years in business, number of employees, ratio of group tickets to total number of tickets sold, sales routes of group tickets, type of agency, number of transacting airlines, airline with most transactions), and questions for each variable (RS, RB, RQ, and VP). Except for the respondent profile and travel agency characteristics, respondents were asked to rate the items on a five-point Likert scale, anchored 1 = "strongly disagree" and 5 = "strong agree". Since all the variables were adopted from related literature and all the items had been tested following expert reviews and appropriately modified according to studied scenarios, the scales used in the questionnaire were considered to be content-valid.

Surveys were performed around the same period in order to increase the external result validity. Three trained graduate students conducted the questionnaire survey from May 10 to June 31, 2012. The respondents were advised that their responses were anonymous. Separate self-addressed, reply-paid envelopes were provided for the respondents to enclose their survey and return the completed questionnaires when finished. The survey was designed

<sup>&</sup>lt;sup>1</sup> According to the travel agency management regulations in Taiwan, the socalled 'comprehensive travel agencies' refers to those travel agencies that have capital of not less than NT\$30 million (an additional NT \$1.5 million for each new branch) and cash deposits of NT \$10 million. Class A travel agencies are travel agencies that have capital of not less than NT\$6 million (an additional NT\$ one million with each new branch) and cash deposits of NT \$ 1.5 million.

to incur minimal costs in time and money for the respondents. Among the 178 questionnaires collected, 9 incomplete copies were eliminated with 169 valid copies remaining. The valid response rate was 16.9%. Although the sample size is not very large, it covered every administrative region in Taiwan. In addition, Anderson and Gerbing (1988) stated that a suitable sample size is important for appropriately performing SEM and that the minimum acceptable sample size is between 100 and 150 samples. Therefore, this sample is suitable for performing SEM and acceptable in size.

## 5. Results and discussion

#### 5.1. Sample analysis and descriptive statistics

#### 5.1.1. Sample analysis

Sample analysis reveals that individuals in the positions of deputy general manager or higher accounted for the top 24.9% of respondents and those in positions of section chief/director or higher accounted for 57.5%. Since the respondents in positions of section chief/director or higher have a better understanding of the internal operations of travel agencies, the representativeness of the sample data has certain credibility. Since 34.5% of the respondents had worked in the field for 10 years or longer, it was evident that many of them had a certain level of experience and the information provided by them reflects current practices. The main business lines of the surveyed travel agencies included group travel, ticket sales, and wholesale overseas group travel packages, which represented 60.1%, 43.5% and 39.3%, respectively. This indicates close business interactions between these travel agencies and airlines. The surveyed travel agencies that had been in business for 11-20 years and over 31 years represent 26.6% and 21.3%, respectively. 27.2% of the surveyed travel agencies have 11-55 employees followed by 26.6% having more than 100 employees. The foregoing two results show that the sampled travel agencies have achieved a high level of performance and have plenty of industry-related experience. Those offering Group Inclusive Tours (GITs), which account for less than 10% of total ticket sales, represent 20.1%. Of the routes on which GITs are sold, most are bound for China (including Hong Kong and Macau) and account for 54.4%. Those bound for Northeast Asia and Southeast Asia represent 29.6% and 29.0%, respectively. This shows that routes on which group tickets are sold in Taiwan mainly remain within the bounds of Asia. Types of agencies who include ticketing through other agencies were 43.2%, followed by wholesaling for airlines at 40.8%. This result is not far from current practices. The surveyed travel agencies mainly transact with 4-5 airlines, which accounts for 35.5% of sales. The GIT business of surveyed travel agencies transact mostly with China Airlines, EVA, Cathay Pacific and Uni Air, which each accounts for more than 20% of ticket sales. The results clearly show that the samples match current practices and should be representative.

# 5.1.2. Descriptive statistics

The results of the descriptive statistics for items in each construct are shown in Table 1. For RS, the top three scorers are mainly concerned with interaction intensity (please refer to Appendix A). The lowest three scorers are mainly concerned with cooperative intentions. Among these, the level of agreement whereby 'The airline's staff disclose private information about other travel agencies to your agency' scores less than 3 and clearly shows that airlines seldom disclose a competitor's information to the travel agencies, who consequently think that airlines are not strongly inclined to cooperate. Overall, travel agencies are not strongly conscious of airlines' RS. The reason may be that airlines as suppliers are in an advantageous position in their interaction with travel agencies and, therefore, pay less attention to RS. For RB, the

**Table 1**Descriptive statistics results

Measurable variables	Mean	S.D.	Rank
Relationship Selling (RS)	3.264	0.973	4
RS22	3.497	0.987	1
RS21	3.482	0.951	2
RS12	3.343	0.933	3
RS11	3.314	0.946	4
RS31	3.302	0.993	5
RS32	3.030	0.997	6
RS13	2.882	1.005	7
Relational Benefits (RB)	3.502	0.921	2
RB12	3.781	0.702	1
RB22	3.734	0.942	2
RB11	3.716	0.839	3
RB23	3.714	0.853	4
RB21	3.592	0.820	5
RB13	3.178	1.177	6
RB32	3.172	0.964	7
RB31	3.130	0.991	8
Relationship quality (RQ)	3.391	0.893	3
RQ23	3.651	0.832	1
RQ22	3.562	0.892	2
RQ13	3.458	0.851	3
RQ12	3.357	0.882	4
RQ11	3.225	0.924	5
RQ21	3.095	0.971	6
Voluntary Performance (VP)	3.618	0.785	1
VP22	3.817	0.713	1
VP32	3.722	0.732	2
VP31	3.704	0.753	3
VP21	3.601	0.773	4
VP11	3.509	0.853	5
VP13	3.497	0.839	6
VP12	3.476	0.823	7

Note: Please refer to Appendix A to identify the detailed content of the "Measurable variables".

top three scorers are mainly concerned with confidence while the lowest three are concerned about special treatment. This shows that travel agencies recognize and trust airlines' brands and services, but are less aware of any special treatment offered by airlines.

The top scorer in RQ is 'The cooperation between your agency and the airline merits your greatest effort to maintain' while the lowest score is 'Your agency will still choose the airline even if it offers higher ticket prices than others'. This shows that travel agencies endeavor to maintain good relationships with airlines and may continue to cooperate with their partner airlines if other airlines offer greater benefits or lower ticket prices, which means that the strength of the relationships with airlines as viewed by travel agencies tends to be average. Most scores for VP have an average of 3.5 or higher. The highest and lowest scorers are 'Your agency follows the airline's rules and operating procedures' and 'Your agency will recommend the airline to other agencies'. This shows that travel agencies tend to agree with airlines' rules and advice. To avoid fighting with their competitors for tickets, they tend to disagree about recommending airlines to other travel agencies. Overall, travel agencies' VP towards airlines tends to lean more towards cooperation and participation than displays of loyalty.

# 5.2. Confirmatory factor analysis

Related studies suggested confirmatory factor analysis of each construct (i.e., the measurement model) for examining scale reliability and validity (Anderson and Gerbing, 1988) and validation of the entire casual model (Lusch and Brown, 1996) for confirming the goodness of fit of the model when a more complex structural equation modeling (referred to as SEM) is used.

**Table 2**Assessment of the measurement model

Measurable variable	Factor loading	SMC	Cronbach's α	Average variance extracted	Composite reliability	Model fit indices
Relationship Selling (RS)	)					$\chi^2 = 11.077$
RS11	0.871	0.759	0.900	0.840	0.940	$\chi^2/df = 1.846$
RS12	0.812	0.659				GFI = 0.978
RS21	0.848	0.719				AGFI = 0.924
RS22	0.856	0.732				RMSEA = 0.071
RS31	0.884	0.781				p = 0.086
RS32	0.718	0.516				
Relational Benefits (RB)						$\chi^2 = 7.319$
RB11	0.923	0.851	0.844	0.627	0.830	$\chi^2/df = 1.220$
RB12	0.727	0.529				GFI = 0.986
RB22	0.957	0.916				AGFI = 0.949
RB23	0.843	0.710				RMSEA = 0.036
RB31	0.739	0.546				p = 0.292
RB32	0.811	0.658				
Relationship Quality (RQ	<b>D</b> )					$\chi^2 = 2.101$
RQ11	0.724	0.524	0.880	0.770	0.870	$\chi^2/df = 2.101$
RQ13	0.952	0.905				GFI = 0.972
RQ22	0.878	0.771				AGFI = 0.916
RQ23	0.951	0.904				RMSEA = 0.087
						p = 0.076
Voluntary Performance	(VP)					$\chi^2 = 33.996$
VP11	0.749	0.560	0.904	0.833	0.937	$\chi^2/df = 3.091$
VP12	0.821	0.674				GFI = 0.948
VP13	0.849	0.721				AGFI = 0.868
VP21	0.802	0.643				RMSEA = 0.112
VP22	0.755	0.570				p = 0.002
VP31	0.856	0.733				
VP32	0.872	0.761				

Results of the confirmatory factor analysis of the measurement model are shown in Table 2. All unsuitable variables, such as RS13, RB13, RB21, and RQ21, were removed from each of the constructs. The model fit indices in Table 2 show the goodness-of-fit indices of all the constructs after corrections. In VP, all the variables have a factor loading greater than 0.7, but the initial model has a poor fit. The matrix of the standardized residuals indicates that none of the residuals between the variables are greater than 1.96, which may be due to the sample size being too large. To clarify the situation, Bollen and Stine (1992) suggested using the Bollen-Stine bootstrap p-value for correction. Out of the 1000 times the bootstrapping was performed, 946 resulted in a good model fit and only 54 showed a poor fit. Accordingly, the probability that the model has a poor fit is only 5.4%. This means that an overly large sample size results in a poor model fit. Consequently, no corrections are required.

All squared multiple correlations (SMC) are significant and greater than 0.5, meeting the criterion. All component reliability (CR) values fall into the range of 0.830–0.940, meeting the suggested value of 0.7 (Bagozzi and Yi, 1988; Hair et al., 2009). All average variance extracted (AVE) values fall into the range of 0.627–0.840, greater than 0.5, and all factor loadings are greater than 0.7 (Bagozzi and Yi, 1988; Hair et al., 2009). Therefore, the scales have good convergent and construct validity. In the reliability

**Table 3** Discriminate validity.

Constructs	RS	RB	RQ	VP
RS	0.917			
RB	0.608*	0.792		
RQ	0.504*	0.507*	0.878	
VP	0.528*	0.493*	0.548*	0.913

Note: 1. The diagonal elements (in bold) represent the square roots of average variance extracted (AVE) and should be greater than the off-diagonal correlation coefficients. 2. \*denotes p < 0.05.

analysis, each construct has a Cronbach's  $\alpha$  value greater than 0.7, indicating that the scales have great reliability (Hair et al., 2009). Table 3 also shows that the square roots of all the AVE values are greater than the correlation coefficients between the constructs, indicating the scales have reasonable discriminate validity (Hair et al., 2009).

# 5.3. Validation of the theoretical model

Before the formal validation using SEM, it is necessary to test the normality and outliers of the sample data. Both skewness and kurtosis coefficients have absolute values no greater than 3.0 and 8.0, respectively, indicating no violations of the assumptions of normal distribution (Kline, 2011). The analysis results also revealed no significant outliers. The sample data was, therefore, suitable for SEM validation.

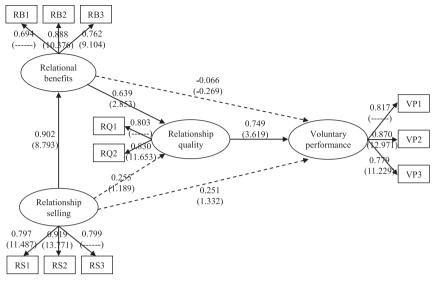
## 5.3.1. Validation of the entire model

When validating a theoretical model using SEM, it is necessary to consider whether the model has a good fit (Byrne, 2010). By referring to the insights provided by past researchers (Jackson et al., 2009), the present study used  $\chi^2/df$ , GFI, AGFI, CFI, RMR, and RMSEA as measures to determine the pros and cons of the entire model.

The research model has  $\chi^2$ /df of 2.659 (less than 3) indicating the model has a good fit (Kline, 2011). The other measures are as follows: GFI = 0.905, AGFI = 0.834, RMR = 0.026, SRMR = 0.041 and RMSEA = 0.099. MacCallum and Hong (1997) suggested that GFI and AGFI are acceptable when they are greater than 0.8. Bollen (1989) considered RMR, SRMR and RMSEA acceptable when they are less than 0.1. All values are in the acceptable range, indicating that the goodness of fit of the entire model is acceptable.

#### 5.3.2. Coefficient estimates in the measurement model

Fig. 2 reveals all the standardized factor loadings in the



Notes: Values in parentheses are t-values and the dotted line indicates no significant correlation.

Fig. 2. Path coefficients of SEM.

measurement model reached a significant level (t > 1.96), indicating that all the coefficient estimates are reasonable. For RS, 'interaction intensity' has the greatest standardized factor loading at 0.919, indicating the greatest explanatory power. For RB, 'social benefits' has the greatest standardized factor loading at 0.888, indicating the greatest explanatory power. For RQ, 'commitment' has the greatest standardized factor loading at 0.830, indicating the greatest explanatory power. For VP, 'cooperation' has the greatest standardized factor loading at 0.870, indicating the greatest explanatory power.

# 5.3.3. Hypothesis testing using SEM

The path coefficients in the SEM are shown in Fig. 2 and the results of the hypothesis testing are summarized in Table 4. As shown in Table 4, the path coefficient between RS and RB is 0.902 (p < 0.001), which is a significant positive correlation, indicating that when travel agencies are more aware of RS from airlines, their awareness of RB from the airlines increases, thus H1 is supported. The path coefficient between RS and RQ is 0.255 (p > 0.05), which is a positive but not significant correlation, indicating that RS has no significant positive impact on RQ. This confirms that H2 is not supported. The path coefficient between RS and VP is 0.251 (p > 0.05), which is a positive but not significant correlation, indicating that RS has no significant positive impact on VP and, therefore, H3 is also not supported.

The path coefficient between RB and RQ is 0.639 (p < 0.01), which is a significant positive correlation, indicating that when

travel agencies are more aware of RB from airlines, their awareness of RQ from the airlines increases, which supports hypothesis H4. The path coefficient between RB and VP is 0.066~(p>0.05), which is a negative non-significant correlation, indicating that RB has no significant impact on VP, thus H5 is not supported. The path coefficient between RQ and VP is 0.749~(p<0.001), which is a significant positive correlation, indicating that when travel agencies are more aware of the RQ from airlines, their VP increases. H6 is, therefore, supported.

# 5.3.4. Examining the mediating effects

An independent variable that significantly affects a dependent variable through another variable is called a mediating variable. Statistical methods, such as hierarchical regression analysis and SEM, can be used to test mediating effects (Baron and Kenny, 1986). Many researchers employ a four-condition testing process proposed by Baron and Kenny (1986) to test mediating effects (e.g., Chou and Yeh, 2013). We also followed this testing process for mediating effects. Two paths of the mediating effects were tested in Table 5 and presented as below.

(1) RS 
$$\rightarrow$$
 RB  $\rightarrow$  RQ

The testing next examined RB mediating the effect of RS on RQ. When RS is an independent variable and RQ is a dependent variable in the regression analysis, the regression coefficient is 0.835 ( $\alpha$ 1). When RS is an independent variable and RB is a dependent variable

**Table 4** Test results of the hypotheses.

Hypothesis	SPC	t value	Test results
H1: Relationship selling → Relational benefits	0.902***	8.793	Supported
H2: Relationship selling → Relationship quality	0.255	1.189	Not Supported
H3: Relationship selling → Voluntary performance	0.251	1.322	Not Supported
H4: Relational benefits → Relationship quality	0.639**	2.853	Supported
H5: Relational benefits → Voluntary performance	-0.066	-0.269	Not Supported
H6: Relationship quality → Voluntary performance	0.749***	3.619	Supported

Note: \*\* denotes p < 0.01; \*\*\* denotes p < 0.001; SPC: Standardized path coefficients.

**Table 5** Testing of the mediation effects.

Procedure	Independent variable Dependent variable		Path coefficient	<i>t</i> -Value
$RS \rightarrow RB \rightarrow RQ$				
1	RS	RQ	$\alpha 1 = 0.835^{***}$	9.561
2	RS	RB	$\alpha 2 = 0.908^{***}$	8.794
3	RS	RQ	$\alpha 3 = 0.156$	0.689
	RB		$\alpha 4 = 0.739^{**}$	3.099
$RB \rightarrow RQ \rightarrow VP$				
1	RB	VP	$\alpha 1 = 0.812^{***}$	8.306
2	RB	RQ	$\alpha 2 = 0.873^{***}$	9.106
3	RB	VP	$\alpha 3 = 0.138$	0.762
	RQ		$\alpha 4 = 0.784^{***}$	3.984

Note: 1. \* denotes p < 0.05; \*\* denotes p < 0.01; \*\*\* denotes p < 0.001.

2. RS: Relationship selling; RB: Relational benefits; RQ: Relationship quality; VP: Voluntary performance.

in the regression analysis, the regression coefficient is 0.908 ( $\alpha 2$ ). When both RS and RB are the independent variables and RQ is a dependent variable in the multiple regression analysis, the regression coefficients are 0.156 ( $\alpha 3$ ) and 0.739 ( $\alpha 4$ ), respectively. The above results match the condition of  $\alpha 1 > \alpha 3$  and show that  $\alpha 1$ ,  $\alpha 2$  and  $\alpha 4$  are all significant while  $\alpha 3$  is not significant. Based on the theory developed by Baron and Kenny (1986), the mediating effect of RB represents full mediation.

(2) 
$$RB \rightarrow RQ \rightarrow VP$$

The testing next examined RQ mediating the effect of RB on VP. When RB is an independent variable and VP is a dependent variable in the regression analysis, the regression coefficient is 0.812 ( $\alpha$ 1). When RB is an independent variable and RQ is a dependent variable in the regression analysis, the regression coefficient is 0.873 ( $\alpha$ 2). When both RB and RQ are the independent variables and VP is a dependent variable in the multiple regression analysis, the regression coefficients are 0.138 ( $\alpha$ 3) and 0.784 ( $\alpha$ 4), respectively. The above results match the condition of  $\alpha$ 1 >  $\alpha$ 3 and show that  $\alpha$ 1,  $\alpha$ 2 and  $\alpha$ 4 are all significant while  $\alpha$ 3 is not significant. Based on the theory developed by Baron and Kenny (1986), the mediating effect of RQ represents full mediation.

# 6. Conclusions and managerial implications

# 6.1. Conclusions

# 6.1.1. Descriptive statistics

The studied constructs ranked by their average scores in descending order are VP, RB, RQ, and RS. This shows that travel agencies tend to agree that they follow airline rules and give advice in order to stay loyal to their partner airlines and giving this advice helps them maintain good levels of interaction with the airlines.

## 6.1.2. Results of the SEM-based analysis

In the present study, the implementation of the hypothesis testing is based on SEM and confirms the positive impacts, respectively, of RS on RB, RB on RQ, RQ on VP. It also shows that RB fully mediates the effect of RS on RQ, as well as RB fully mediates the effect of RQ on VP, respectively. They are presented as below.

# (1) RS and RB (H1)

Test results reveal that RS does have a significant positive impact on RB. This means that airlines enable travel agencies to sense significantly improved RB associated with their cooperation with those airlines if the airlines can strengthen their interactions with the travel agencies, for example, through frequent contact or disclosure of information such as market situations and development of new routes in the future. Intensive interaction between airlines and travel agencies can increase mutual confidence and understanding (Neuber and Fiske, 1987). In this way, airlines can strengthen their contact and information sharing with travel agencies, thereby improving the latter's cooperation intentions and enabling them to feel that airlines provide social and even special treatment benefits.

# (2) RS and RQ (H2)

Test results show that RS has no significant impact on RQ. Availability of information on the internet, easy access to market information, and the fact that airlines actively inform travel agencies of the development and allocation of new routes for promotional purposes prevent airlines from increasing the satisfaction or commitment of travel agencies by visiting these agencies or providing market information. Moreover, airline salespeople regularly visit only their key agents and do not frequently interact with non-crucial agents. This may also explain why RS has no significant impact on RQ.

## (3) RS and VP (H3)

Test results show that RS has no significant impact on VP. More specifically, airlines are unable to instill the loyalty of travel agencies simply through frequent interaction and mutual disclosure, which are essential for airlines to reach deals with their agents. Rather, it requires more than short-term interactions and sharing to encourage travel agencies to participate and cooperate with airlines. This means that airlines should pay attention to the added values brought by long-term interactions with travel agencies and enable them to perceive satisfactory services and friendly commitment to cooperation so these values and perceptions can induce the VP of the travel agencies.

# (4) RB and RQ (H4)

Test results show that RB has a significant positive impact on RQ. When airlines provide greater confidence benefits (e.g., airline brands or trustworthy services that can attract more travelers) or social benefits (e.g., close interactions and mutual rapport), travel agencies will be more satisfied and more committed to future relationships. In other words, when airlines offer brands and services that can reassure travel agencies, as well as personalized services,

travel agencies will be more satisfied with airlines and committed to cooperation in the longer term. This result is also supported by past studies (Andaleeb, 1996; Hennig-Thurau et al., 2002; Selnes, 1993).

# (5) RB and VP (H5)

Test results show that RB has no significant positive impact on VP. As shown in Table 2, travel agencies believe that the RB provided by airlines tend to be confidence or social benefits rather than special treatment benefits, such as higher commissions, than those received by others. Since confidence and social benefits provided by airlines are similar, it is difficult for travel agencies to associate such benefits with exclusive services. As a result, such benefits are unable to generate more loyalty from the travel agencies towards airlines and improve mutual participation and cooperation.

# (6) RQ and VP (H6)

Test results show that RQ does have a significant positive impact on VP. This means that airlines can improve loyalty, cooperation, and participation of travel agencies towards them by increasing their satisfaction and commitment. Travel agencies tend to be more loyal when they have better quality relationships with airlines (Beatty et al., 1996) and more cooperation intentions (Morgan and Hunt, 1994), which makes them more willing to give advice to airlines regarding their operations.

# (7) The mediating effects of RB and RQ (RS $\rightarrow$ RB $\rightarrow$ RQ $\rightarrow$ VP)

Test results show that RS has no significant impact on RQ and VP, as well as RB has no significant impact on VP. However, the significant impact of RS on RQ through full mediation of RB (RS  $\rightarrow$  RB  $\rightarrow$  RQ) and the significant impact of RB on VP through full mediation of RQ (RB  $\rightarrow$  RQ  $\rightarrow$  VP) have been verified. Although RS does not directly affect VP, the current study discovered the significant connection relationship between all variables, RS, RB, RQ and VP (i.e., RS  $\rightarrow$  RB  $\rightarrow$  RQ  $\rightarrow$  VP) exists. That is, RS has indirect impact on VP through the mediation of RB and RQ. RB and RQ are two critical mediating factors. This is a significant finding in B2B relationship marketing model.

Based on aforementioned conclusions, this paper contributes to the academia and complements the shortage of B2B relationship marketing research in the tourism industry.

## 6.2. Managerial implications

Based on the above conclusions, the following suggestions are provided for businesses in practice management implications.

The marketing process focuses on 'transactions' and 'relationships'. Long-term relationships among organizations often depend on RQ, which is built on RB and RS. Although having no direct effects on VP, RB and RS, as discovered in the present study, there is an indirect impact on VP through RQ. In addition, RS has no direct impact on RQ, but has an indirect impact on RQ through full mediation of RB. They mean that RB plays a critical and fully mediating role when exploring the relationship between RS and RQ, as well as RQ plays an important and fully mediating role when exploring the relationship between RB (or RS) and VP. If relationship quality can be improved by increasing relationship benefits through good relationship selling, airlines can get better voluntary performance from travel agencies. For instance, the airlines should make frequent contact with travel agencies and disclose current market situations and future route plans to them (i.e. RS) so that travel agencies feel that they receive special treatment and in turn have more confidence on airlines (i.e. RB). The airlines can also increase the number of active contracts with travel agencies (i.e. RS) so as to achieve a more trust relationship (i.e. RB) between both parties according to the findings of Merkert and Hensher (2013). As a result, airlines can ensure that travel agencies are satisfied with the relationship of both parties and committed to continuous collaboration (i.e. RQ). Ultimately, travel agencies will help airlines promote their new routes and increase loyalty toward airlines (i.e. VP).

Therefore, airlines should actively maintain good levels of interaction with travel agencies. Rapid advances in information technology (e.g., email, Facebook, Twitter and website) have decreased the costs and increased the practicality of relationship marketing in the tourism industry, its potential benefits can become airlines' an effective tool in maintaining good levels of interaction with travel agencies. When travel agencies maintain long-term transactional relationships with airlines, the number of transactions between both sides will grow because secure ticket sources ensure the smooth operations of group travel offerings. It is suggested that airlines maintain positive long-term relations with travel agencies, forming interdependent relationships, thereby encouraging VP by the travel agencies. When travel agencies contract regular charter services/allocated seating with airlines, the relationships become symbiotic. Such relationships will drive the VP of travel agencies towards airlines by giving advice and suggestions for improvement, which bring advantages in operational management that airlines cannot achieve on their own.

## 6.3. Suggestions for further research and limitation of the study

Suggestions for further research regarding research participants and the direction of causality are provided below. The present study examined the relationships between travel agencies and airlines in terms of RB, RS, RQ, and VP by surveying travel agencies. Further research could survey airlines to investigate the differences in perception between both sides. Because the research objects of this paper focus on airlines and travel agencies in Taiwan, further research may survey travel agencies and airlines outside Taiwan to compare travel agencies and airlines inside and outside Taiwan. Thus, it can examine whether different cultures make a difference to RB, RS, RQ, and VP, and at the same time, it may be conducive to generalizing the research findings. In addition, the theoretical development of a RM model, as proposed in the present study, focuses on one direction of causality based on the research purposes and paper space. In fact, the causality of some of the constructs could be bi-directional (RB and RQ; and RB and VP). Therefore, future research may construct two causality models of different directions and compare their difference.

This is a cross-sectional study. With the collected data, it is impossible to understand what impact different temporal and spatial contexts or changes in the external business environment may have. It is suggested that further research may include follow-up surveys from travel agencies to increase the reference value of the research if time and budget allow. The randomness of the sample and the external validity of the study may be affected by sample size and sampling method. The representative and inference ability were limited. Increasing the sample size and optimizing the sampling methods may solve the above shortcomings in any future research. In addition, the research subjects were based in Taiwan. The research inference is limited.

# Appendix A. Operational definition and measurement of latent variables

Measurable variable Source literature Relationship Selling (RS) Crosby et al. (1990) Mutual disclosure (RS1) RS11 The airline discloses its future route plans to your agency RS12. The airline discloses the current market situation to your agency. RS13. The airline's staff disclose private information about other travel agencies to your agency. Strength of interaction (RS2) RS21. The airline makes frequent contact with your agency. RS22. The airline considers itself and your agency to be interdependent. Propensity to collaborate (RS3) RS31. The airline is willing to have your agency in charge of ticket sales for new routes. RS32. The airline adopts a flexible approach to dealing with your agency that depends on your financial situation. Relational Benefits (RB) Gwinner et al. (1998); Hennig-Thurau et al. (2002) Confidence (RB1) RB11. Your agency considers the airline's service to be trustworthy. RB12. Your agency believes that the airline's brand can attract more travelers. RB13. The airline takes into account your agency's interests before increasing or reducing its routes or flights. Sociability (RB2) RB21. Choosing the airline can expand your agency's social relationships. RB22. Your agency's staff has close contact with the airline's managers or salespeople. RB23. Your agency's staff has developed a rapport with the airline's managers or salespeople. Special treatment (RB3) RB31. The airline rewards your agency with better commission rates than those offered to your competitors. RB32. The airline offers customized services to your agency. Relationship quality (RQ) Bettencourt (1997): Hennig-Thurau et al. (2002) Satisfaction (RQ1) RQ11. Your agency is satisfied with the airline's response speed when providing seat allocation. RQ12. Your agency is satisfied with the airline's ability to provide relevant information and resources. RQ13. Your agency believes your cooperation with the airline is satisfactory. Commitment (RO2) RQ21. Your agency will still choose the airline even if it offers higher ticket prices than others. RQ22. The rapport between your agency and the airline is the main reason for continued cooperation. RQ23. Maintaining the cooperation between your agency and the airline merits your greatest effort. Bettencourt (1997); Dai (2002) **Voluntary Performance (VP)** Loyalty (VP1) VP11. Your agency has cooperated with the airline for a long time. VP12. Your agency will recommend the airline to other agencies. VP13. Your agency will stick with the airline even if another airline offers the same route. Cooperation (VP2) VP21. Your agency supports the airline in the promotion of new routes. VP22. Your agency follows the airline's rules and operating procedures.

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Participation (VP3)

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VP31. Your agency gives advice to the airline on how to provide better services.

VP32. Your agency actively provides market information for the airline's operational considerations.

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