Exploring the Relationship between Allotment and Commitment Contracts and the Performance of Hotels and Tour Operators in Egypt

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Abstract
Hospitality and travel compose the world's largest industry and contribute greatly to global economic development. Tour operators and hotels are playing the most important and critical role in the tourism sector. Their social and economic performance contribute this role and show the importance of understanding the technical and financial relationship between tour operators and hotels, which help to develop and solve problems of tourism industry. The aim of this study is to explore the relationships between two types of hotels/tour operators' contracts (allotment and commitment) and performance. Survey data using self-administrated questionnaire have been collected from 300 general managers of luxury hotels and class A tour operators in Egypt. Exploratory factor analysis and structural equation modelling were conducted to achieve the research objectives. The results indicate that commitment contract gives tour operators a very high technical and operational power inside hotel, but it put high financial pressures on tour operators, and make them work on risks especially during unstable economic and political periods. The findings of the current study can be used by academics, hotel managers, and tour operator'smanagers to completely understand the nature of the impacts of the two types of contracts (allotment and commitment) on the company performance.
KeyWords: Tour Operators, Hotels, Allotment, Commitment.

Introduction
Tourism is the largest industry in the world and it is one of the most dynamic and vibrant sectors of the world economy, as it continues to develop throughout the world (Devaraja and Deepak, 2014).The direct contribution of global travel and tourism to GDP was USD 2,229.8 bn as 3.0% of world total GDP in 2015, and is forecast to rise by 4.2% pa, from 2016-2026 to USD 3,469.1 bn as 3.4% of world total GDP in 2026(WTTC, 2016), and current global travel and tourism direct employment is over 100 million jobs(WTTC, 2015). The World Tourism Organization has stated the key stakeholders in tourism industry, which include tourists, tour operators, accommodation services providers, tourism attraction organization, tourism service providers, local community, national and local public administration (Devaraja and Deepak, 2014). Tour operators and hotels are the backbone of tourism industry, tour operators and travel agents offer a myriad of organized travel itineraries to meet consumer trends and demands (Mulec and Wise, 2012), hotels provide all customers' needs, which related to food and accommodation, and consider as the main part of travel packages (Chan and Mackenzie, 2013).

Although, tour operators and hotels are representing the most important relationship in tourism industry, there is shortage of literature reviews (Arabic and English research paper) about this relationship, and a lack of previous studies about contracts between hotels and tour operators, which control and manage the operational relationship between the two parties. This study may be one of the first studies that explore the relationship between allotment and commitment contracts and the performance of hotels and tour operators in Egypt.

Literature review
Role of tour operators in the tourism industry
Tour operators are considered a central link between the elements of the services offered on the supply side of the business with the consumption side of the business (Nkonoki,

2012), so tour operators purchase requested tourism elements such as hotel rooms, airline tickets, transfers and activities in a large scale and combine them together, market them as a combined all-inclusive package through brochures and other advertising media (USAID, 2007; Cooper, 2012). The tour operators have been classified into different categories but the most popular classification is the one which is based on the scope of the company's operations as domestic, outbound and inbound tour operators (Nkonoki, 2012).

Egypt has 2310 licensed tourism companies, 422 companies of them, are authorized to practice all tourism related activities, which are domestic, outbound and inbound tourism (ETAA, 2016). The total contribution of Egyptian travel and tourism to GDP was EGP259.7bnas11.4% of GDP in 2015 and is forecast to rise by 4.3% pa to EGP401.1bn in 2026. Also, it generated 1,110,500 jobs directly in 2015, which represents 4.4% of total employment (WTTC, 2016).

Role of hotels in the tourism industry

Hospitality has been defined as the act of kindness in welcoming and looking after the basic needs of customers, mainly in relation to accommodation, food, and drink. The contemporary explanation of Hospitality industry refers to the relationship between a customer and a host. When we talk about the hospitality industry, we are referring to any companies, which provide accommodation services and/or food and/or drink to people who are away from home (Chon & Maier, 2012).
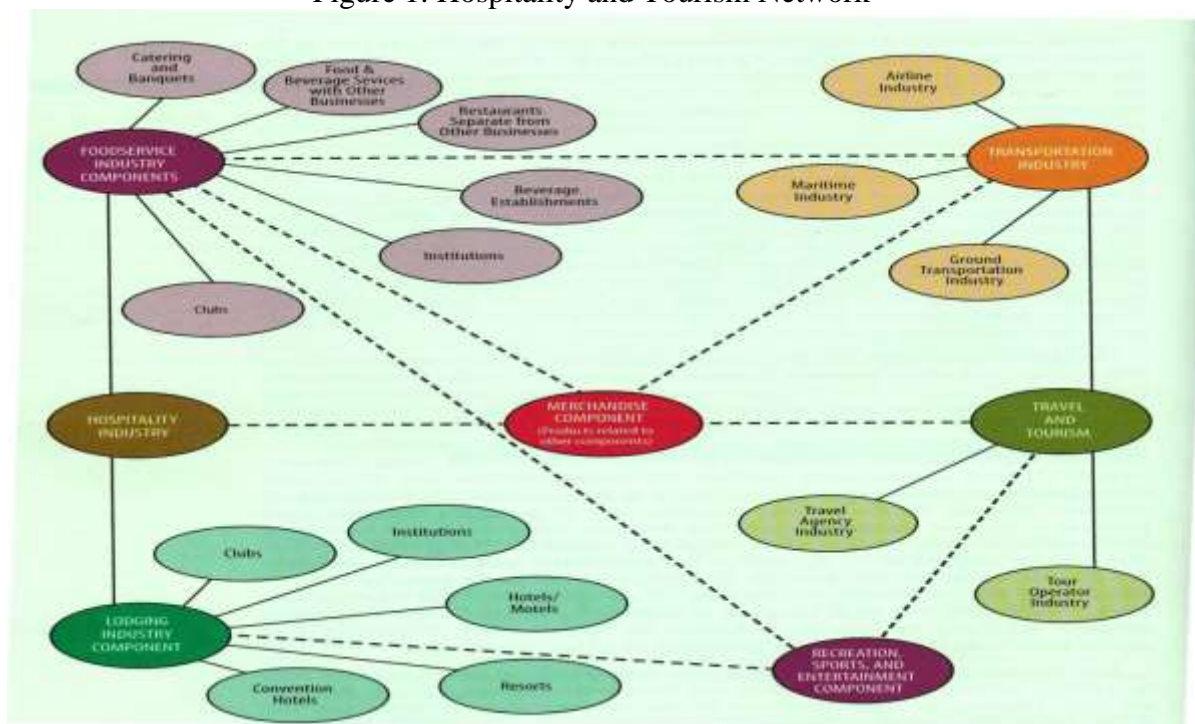
Hotel supply in Egypt has 178,799 rooms (EHA, 2016), Internationally branded hotels in Egypt represent over 55,000 rooms, 54% of which are five-stars. Egyptian hotel supply is expected to increase by 9,862 rooms across 30 properties within the short to medium term 2015-2019 (Filippo and Eein, 2014).

Relationship between tour operators and hotels

Hospitality companies are closely interlinked with other businesses in the travel and tourism industry.Tourism and the hospitality industry so strongly affected on each other, that some tourism and the hospitality associations and industry leaders consider the combined industries of hospitality and tourism as one large industry. This group of industries is called Hospitality and Tourism Network, which shows all direct and indirect relations between all components of this large industry (Chon and Maier, 2012). See Figure 1.

Tour operators are businesses that combine two or more travel services, such as accommodation, transport, sightseeing, catering and entertainmentand sell them through travel agencies or directly to final consumers as a single product (Devaraja and Deepak 2014). Tour operators and hotels are playing the most important and critical role in tourism operation business, tour operator book rooms from hotels based on two types of contracts, which are allotment and commitment contracts (Devaraja and Deepak, 2014).

Figure 1: Hospitality and Tourism Network

Source: Chone et al., (2012:10)

Allotment and commitment contracts
A commitment contract is an agreement between tour operators and hotels to block hotel rooms, which upon acceptance of the agreement, rooms will be removed from hotel's inventory, and the fulfilment of blocked rooms is the tour operator's responsibility, with % 100 non-refundable payments. Allotment contract is an agreement between tour operators and hotels to reserve hotel rooms with release time, and materialization percentage, the fulfilment of reserved rooms is the tour operator's responsibility, with under settlement deposit (Devaraja and Deepak, 2014). It's worth noting her that, no empirical studies have been found (to the author knowledge) to explore the relationship between allotment and commitment contracts and the performance of hotels, a gap, this study aims to fill.

Research methods
Measures of the study construct
The aim of this study is to explore the relationships between two types of hotels/tour operators' contracts (allotment and commitment) and performance. An official allotment and commitment contracts were intensively reviewed by the authors and categorized into two main sections: Seven technical conditions (i.e. : Every two months, the contract may be adjusted, and reduced according to the actual Materialization; The hotel won't be responsible for any guest complaint after check –out; and If hotel fail to accommodate a confirmed booking, the hotel may place the group at the nearest equivalent hotel) and five financial conditions(i.e. Materialization calculation will be every two months; All payment should be in USD, and Early check-in and late check-out will be charged 50% of the contracted rates). See Table 1. The performance was measured according to the Materialization rate.

Sampling and data analysis techniques
A census sampling method (the entire targeted population is small to select a sample) was employed to collect data from surveying all general managers in five and four-star hotels

located in Sharm El Sheikh and the Red Sea regions (270 hotels). A random sample method was employed to collect data from general managers / Inbound managers in tour operators companies category A located in Cairo/Sharm El Sheikh and Hurghada. Cairo/Sharm El Sheikh and Red sea regions were selected because the majority of hotels and tour operated located in these regions are familiar with and/or practicing the allotment and commitment contracts. General Managers were selected to be our target sample as they have the authority and knowledge to answer the study questionnaire. A total of 500 questionnaire were distributed (270 four and five star hotels, 230 tour operators category A). A total of 350 responses were obtained. Fifty uncompleted questionnaires were eliminated leaving 300 usable questionnaires (150 from five-and four star hotels and 150 from tour operator companies) with a response rate of 60%. Seven Likert scale was employed where 1 indicates strongly disagree and 7 refer to strongly agree.

The variables' reliability was analysed by the internal consistency method (Cronbach's alpha method);scale clarification, purification, and the dimensional structure was tested using exploratory factor analysis (EFA), and finally, structural equation modelling (SEM) was employed to test the interrelationships between the research variables.

Results and discussion
Descriptive analysis

All hotels' managers are males, of which 20% are Egyptians and 80% are expatriates, the age groups arranged from 35-54 (66%) and 55 and more (34%). All managers of tour operators are Egyptian, of which 80% are males while 20% are females. The age group ranged from 35-54 (70%) and 55 and more (30%). See Table 1.

Table 1: Respondents' characteristics

	Male /female		Egyptian/ expatriates		Age group	
	Male	Female	Egyptian	Expatriates	35-54	55 and more
Hotels	150 (100%)	000	30(20%)	120(80%)	99 (66%)	51 (34%)
Tour operators	120 (80%)	30 (20%)	150 (100%)	0000	105 (70%)	45 (30)%

Test of dimensionality and reliability

The purpose of exploratory factor analysis (EFA) in this paper was to refine and minimize the data. Our data satisfy the requirements to be tested by factor analysis. Bartlett's assessment of sphericity is significant which gives an evidence of the factorability of our data set and indicates the presence of anon-zero association between the variables and a high degree of homogeneity between items (Field, 2006). Bartlett's test of sphericityshows an approximate Chi-square of 4066.364with 66df and significance 0.000. The overall measure of sampling adequacy (KMO) is 0.845, this value ismore than the cut-off point of 0.6 as suggested by Field (2006) and Hair et al. (2006). Overall, these data meets the requirements for factor analysis (Hair et al., 2006).

Table 2:Statistical summary: Factor analysis (with the Principal component as an extraction method), and reliability analysis for the study constructs.

Factors and Variables	Factor Components &Loading		Reliability	
	1	*2*	CITC	a
Technical condition				.934
T-Hcm1:Every two months, the contract may be adjusted, and reduced according to the actual Materialization	.774		.691	
T-Hcm2:If tour operators sell the rates lower than contracted, the hotel reserve the right to cancel the contract	.894		.847	
T-Hcm3:If hotel fail to accommodate a confirmed booking, the hotel may place the group at the nearest equivalent hotel	.846		.778	
T-Hcm4:The hotel won't be responsible for any guest complaint after check –out	.939		.905	
T-Hcm5:Cairo courts will be competent to decide on any disputes arising out of this contract or in the connection therewith	.940		.908	
T-Hcm6: Force Majeure or exceptional circumstances are events beyond the control of the parties hereto, including acts of god, acts of war, terrorist attacks.	.769		.697	
T-Hcm7:Both parties agree on amending the obligation affected by Force Majeure or the exceptional circumstances in a reasonable manner and time.	.755		.682	
Financial conditions				.897
F-Hcm1: Materialization calculation will be every two months		.894	.825	
F-Hcm2: Early check-in and late check-out will be charged 50% of the contracted rates		.814	.694	
F-Hcm3: All payment should be in USD		.884	.787	
F-Hcm4: A floating deposit should be paid to be a certain time		.891	.809	
F-Hcm5: The hotel reserve the right to cancel the contract if the tour operator does not adhere to a clear payment schedule		.723	.599	
% of Cumulative variance	*42.014*	*71.838*		
Kaiser-Meyer-Olkin (KMO) Measure Sampling Adequacy = 0.845; Bartlett test of sphericity = 4066.364, with df66; Bartlett test, significance =0.000. Note: CITC = Corrected Item-Total correlations, α = Cronbach's Alpha				

The exploratory factor analysis extracted a two-factor solution. This solution is proposed by employing the standard of an eigenvalue more than 1 and the extracted two factors explain71.838% of the overall variance. Table 2 comprises a summary of the factor and

reliability analysis for the study dimensions. Factor loadings are all more than 0.6 of their identifiable factors as recommended by Hair et al., (2006). All the 12 items employed in the questionnaire to measure the study factors are retained and load extremely high on the anticipated factors (with no cross loading).

More specifically, the factor loadings for the retained items are as follows: technical conditions (0. 774, 0. 846,0. 940,0.769, and 0. 755 respectively), and financial conditions (0.84, 0. 894, 0.814, 0. 884, 0.891, and 0. 723 respectively), (See Table 2). Furthermore, composite Cronbach Alpha value scores for the two factors (0.934; 0.897) reflect satisfactory internal consistency for those items. The reliability scores (Cronbach Alpha or α) of each construct *exceed* 0.70 (see Table 2), which is above the usual cut-off level of 0.7 as recommended by Nunnally and Bernstein (1994) (See Table 2). Additionally, the Corrected Item- Total Correlation (CITC) was employed as one test of internal consistency among variables' items which reveals the level of correlation between each variable and the total score. CITC is used to assess whether all measures confirmed a dominant loading on the expected factor and did not have a significant cross-loadings. The results of CITC ranged from 0.901 to 0.599. These results are acceptable and are more than the threshold of 0.4.as suggested by Nunnally and Bernstein (1994).

The validity of the questionnaire items was established and revised through interviewing a group of general managers in hotels and tour operators, and academics to obtain their feedback regarding the simplicity of the questionnaire wording, appropriate use of specific questions, vagueness, consistency of the items, and the overall questionnaire layout and presentation.

SEM results and interpretations

Structural equation modeling was employed in this paper as the key data analysis technique. SEM can assess the causal associations between the research variables (Byrne, 2010). Furthermore, SEM is a technique to investigate multiple and interrelated relationships between the variables to build a model. Additionally, it is the only method that allowscomprehensive and simultaneous analysis of all relationships for the multidimensional model structure (Tabachnic and Fidell, 2007). Several goodness-of-fit (GOF) measures were used to assess model fit as shown in the table (2). All the models were specified and over identified; the data for the models was analysis by employing AMOS v18 and the ML estimation technique.

Table 3: Summary of model fit indices for the proposed research models

	AFM absolute fit measures			IFM incremental fit measures			PFM parsimony fit measures	
	χ2/df	RMSEA	SRMR	CFI	IFI	TLI	PNFI	PCFI
Standard fit values	≤ 3	≤ 0.03; ≤ 0.08		≥0.90	≥0.90	≥0.90	> 0.5	> 0.5
Model 1: Hotels Commitment and performance	1.249	.035	.052	.992	.992	.991	.778	.802
Model 2: Hotels Allotment and performance	1.178	.041	.051	.995	.995	.993	.779	.803

Model 3: Tour operator Commitment and performance	.965	.030	.041	.996	.996	.994	.80	.813
Model 4: Tour operator Allotment and performance	1.178	.035	.051	.995	.995	.993	.779	.803

The goodness of fit indices (GOF), as shown in table (2), indicate that all the study models fit the data well. More specific, model 1: Normed $\chi 2$ = 1.249 (below the cut of point of 3), RMSEA=0.035 (below the cut of point of .05), SRMR= .052 (below the cut of point of .08), CFI= 0.992, NFI=0.991, IFI=0.992 (all above the cut of point of .90), PNFI=0.778, and PCFI=0.802 (both above the cut of point of .50) as recommended by Hair et., (2011) and Byrne (2010), (see table 2). Additionally, model 2 GOF show a good fit: Normed $\chi 2$ = 1.178, RMSEA=0.041, SRMR= .051, CFI= 0.995, NFI=0.993, IFI=0.995, PNFI=0.779 and PCFI=0.803. Moreover, model 3 has a good fit as well: Normed $\chi 2$ = .985, RMSEA=0.030, SRMR= .041, CFI= 0.994, NFI=0.993, IFI=0.996, PNFI=0.80 and PCFI=0.6813. Finally GOF of model 4 show that it fit the data well: Normed $\chi 2$ = 1.178, RMSEA=0.035, SRMR= .051, CFI= 0.995, NFI=0.993, IFI=0.995, PNFI=0.779 and PCFI=0.803.

After attaining satisfactory indices for the current study models, the research hypotheses were tested. Each path in the model as shown in figure 2 and 3 represents a specific hypothesis. Table 4 contains selected output from AMOSv18 showing the research hypotheses, Un-Standardized (Estimates) regression weights (Un-Stand. Est.) Standardized (Estimates) regression weights (Stand. Est.), Standard Error (S.E), the Critical Ratio (CR), and the P-value. In the first set of models (model 1 and 2) which test the impact of Commitment (Model 1) and Allotment (Model 2) contracts on hotel performance, the SEM results indicate thatboth technical conditions (i.e. Every two months, the contract may be adjusted, and reduced according to the actual Materialization; The hotel won't be responsible for any guest complaint after check –out; and If hotel fail to accommodate a confirmed booking, the hotel may place the group at the nearest equivalent hotel) and financial conditions (i.e. Materialization calculation will be every two months; All payment should be in USD, and Early check-in and late check-out will be charged 50% of the contracted rates) have a high positive and significant impact on hotel performance.

Table 4: AMOS output for all models: Regression Weights, standard error, critical ratio, and p-value

Study Relationships			Stand. Est.	UnStnd. Est.	S.E.	C.R.	P
Model 1: Hotel commitment							
Performance	<---	Technical conditions	0.44	0.436	0.053	8.237	***
Performance	<---	Financial conditions	0.51	0.488	0.062	7.907	***
Financial condition	<….>	Technical conditions	0.46	0.658	0.179	3.671	***
Model 2: Hotel allotment							

Performance	<---	Technical conditions	0.15	0.178	0.082	2.145	*
Performance	<---	Financial conditions	0.36	0.537	0.096	5.601	***
Financial condition	<….>	Technical conditions	0.46	0.657	0.180	3.660	***
Model 3: Tour operator commitment							
Performance	<---	Technical conditions	0.41	0.448	.076	5.912	***
Performance	<---	Financial conditions	.09	0.006	0.006	0.969	0.33
Financial condition	<….>	Technical conditions	0.46	0.657	0.180	3.660	***
Model 4: Tour operator allotment							
Performance	<---	Technical conditions	0.20	0.189	0.073	2.579	**
Performance	<---	Financial conditions	0.38	0.47	0.127	3.678	***
Financial condition	<….>	Technical conditions	0.46	0.657	0.180	3.660	***

More specific, the path coefficient between technical conditions of commitment contracts and hotel performances 0.44 with a high significance P-value (P<0.001).This highly significant (P<0.001) path coefficient indicates that technical conditions of commitment contract have a positive direct effect onhotel performance. Moreover, the path coefficient between financial conditionsof commitment contracts and performance was 0.51 with a high significance P-value (P<0.001).This high significant (P <0.01) path coefficient indicates thatfinancialconditionshave a positive direct effecton performance. Furthermore, there is a high significant covariance between financial and technical conditions of the commitment contracts (0.46, P<.001).

In model 2, the SEM results show that the path coefficient between technical conditions of allotment contract and hotel performancewas found to be lower than the same relation to the commitment contract (0.15, P<.05). This result indicates that the allotment contract doesn't have the same technically and operationally efficiency on hotel performance as same as the commitment contracts.

In the same context, the path coefficient between financial conditions of allotment contract and hotel performancewas found to be lower than the same relation to the commitment contract (0.36, P<.001). This result indicates that allotment contract doesn't have the same profitability on overall revenue of hotels as same as the commitment contracts.

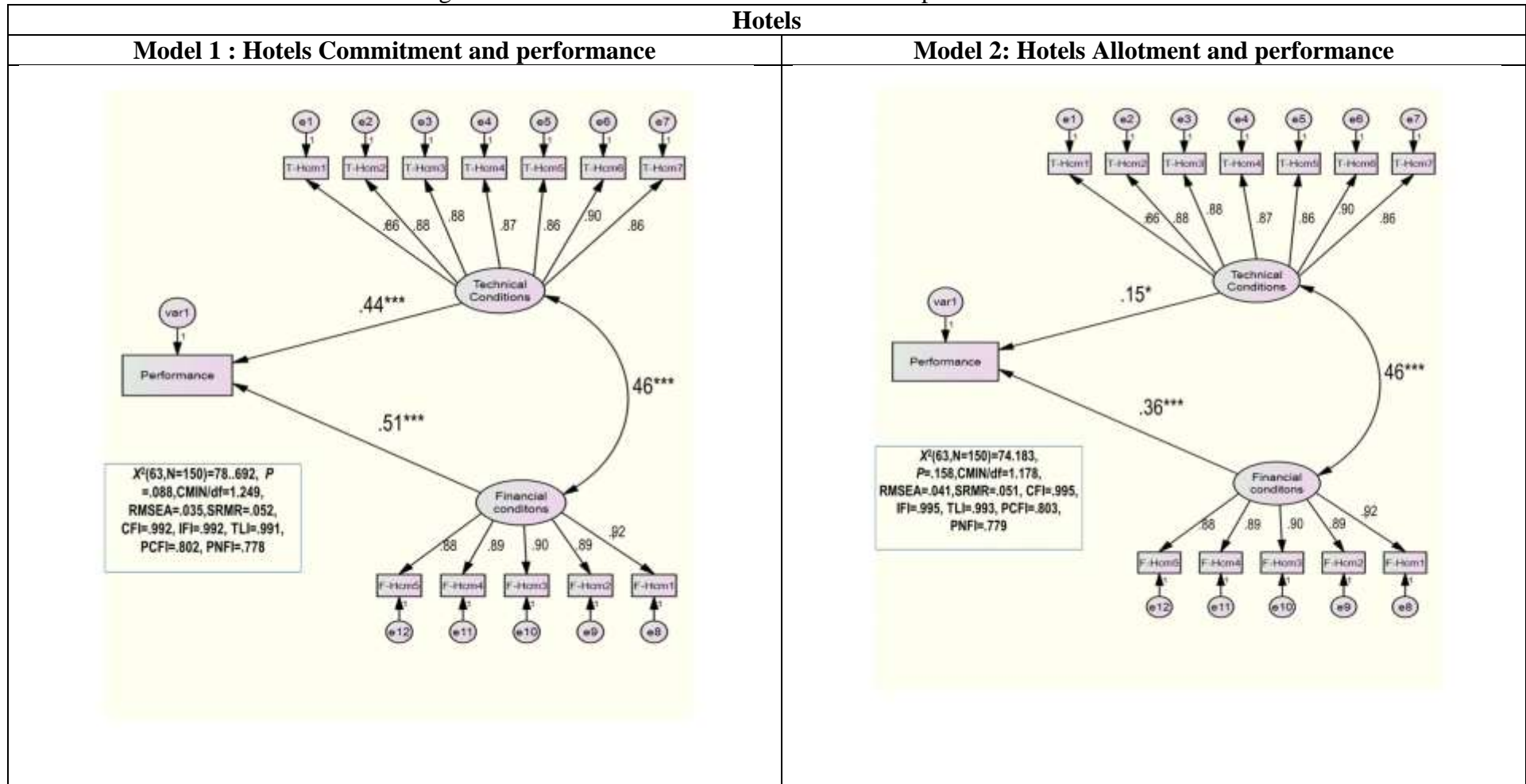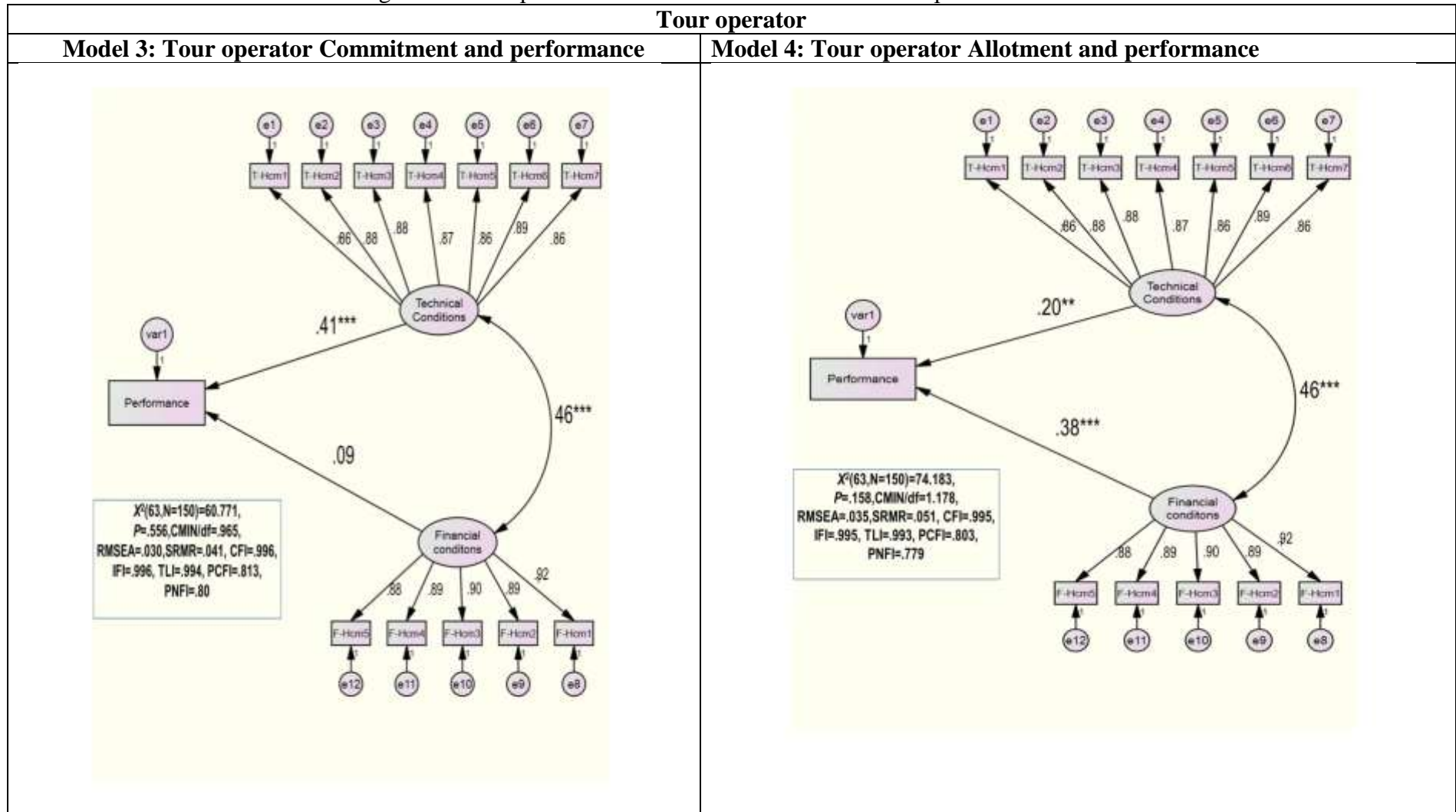Figure 2: Hotels commitment and allotment with performance models

Hotels	
Model 1 : Hotels Commitment and performance	**Model 2: Hotels Allotment and performance**

Figure 3: Tour operators' commitment and allotment with performance models

Tour operator	
Model 3: Tour operator Commitment and performance	**Model 4: Tour operator Allotment and performance**

In the next set of models in figure 2 (model 3 and 4), which test the impact of Commitment (Model 1) and Allotment (Model 2) contracts on tour operators' performance. An investigation of the path coefficient between technical conditions of commitment contract and tour operator's performance show a high significant positive relationship (0.41, P<.001), while the results also indicates that the same relationship (technical condition and performance) in the tour operator's allotment contract has a smaller positive and significant relationship (0.20, P<.05), this results gives an evidence that commitment contract gives tour operators a very high technical and operational power inside hotel, and helps tour operators to build their professional image in the international tourism market. Meanwhile the allotment contract gives tour operators good technical and operational power inside the hotel but not as same as the power of commitment contract, as with allotment contract hotel still, have some operational power above tour operator operational power.

Similarly, the path coefficient between financial conditions of commitment contract and tour operator's performance show a very small positive insignificant relationship (0.09, P=.33), while the results also indicate that the same relationship (financial condition and performance) in the tour operator's allotment contract has a high positive significant relationship (0.38, P<.001), this results gives an evidence that commitment contracts put high financial pressures on tour operators, and make them work on risks especially during unstable economic and political periods. In contrast, allotment contracts remove the financial pressure on tour operators and allow them to work in the more stable environment. Furthermore, in model 3 and 4, there is a high significant covariance between financial and technical conditions (0.46, P<.001).

Conclusion and recommendations

Tour operators and hotels are playing the most important and critical role in tourism operation business, tour operators book rooms from hotels based on two types of contracts, which are allotment and commitment contracts. The aim of this paper is to explore the relationships between two types of hotels/tour operators' contracts (allotment and commitment) and performance., there is a big shortage of literature reviews about the tour operators and hotels relationships, and a lack of previous studies about contracts between hotels and tour operators, which control and manage the operational relationship between the two parties. A gap this study aims to fill. A total of 350 responses were obtained from general managers in hotels and tour operators in Egypt. Fifty uncompleted questionnaires were eliminated leaving 300 usable questionnaires with a response rate of more than 85%. Structural equation modeling was employed as the main data analysis technique to test the causal relationships for four models investigating the relationships between allotment and commitments contracts with the financial performance of hotels and tour operators. The main results of these models show some theoretical and empirical implications for managers in hotels and tour operators as following:

- Commitment contract has a significant technically and operationally efficiency on hotel performance and is more profitable to the hotel than allotment contract.
- Commitment contract gives tour operators a very high technical and operational power inside the hotel, but it put high financial pressures on tour operators, and make them work on risks especially during unstable economic and political periods.
- Allotment contracts have no financial pressure on tour operators, and allow them to work in the more stable environment.
- Allotment contract has less profitability on overall revenue of hotels than the commitment contracts.

- Allotment contract is not the preferable type of contracts, as it gives technical and operational power for tour operators, without financial security for hotels.

Limitations and further research

Like all studies, the current study has suffered from some limitations. One of the limitations of this exploratory study is that it is conducted at a single point in time. A longitudinal study should be performed tounderstand the causal effects of allotment and commitment contracts on the performance of hotels and tour operators in Egypt. The current study can be replicated in another context (industry) and in another country to compare and confirm/reject the results of the current study. Moreover, some variables are estimated subjectively and reflect the personal opinion of a single respondent (general manager) in the organization (hotels/tour operators).

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