

Investigating the Effects of Using Simulation Training on Hotel Front-Office Employees' Performance

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Abstract

Human performance in hospitality organizations is affected by various elements; one of these elements is employees training. One method of preparing employees to business world complexity could be incorporating simulation training into their training. Simulation training is defined as a micro world where employees can participate through experiments, testing strategies, and doing their best for achieving the better understanding of the aspects of the real world. This paper aims to investigate the effects of using simulation training on hotel front-office employees' performance through using data gathered from five-star hotels. The study employed a self-administered questionnaire consisted of 30 items. The items are divided into seven groups. These groups are categorized for seven variables: knowledge application (KA), employees experience (EE), teamwork (TW), employees interest (EI), problem-solving (PS), decision making (DM) and job performance (JP). The second section asked employees for profiling information (e.g., gender and age). Confirmatory factor analysis (CFA) and structural equation modeling (SEM) were applied to test a hypothesized model. Findings reflected that simulation training has positive effects on employee performance in five-star hotels.

Keywords Simulation training, types of simulation training, pros and cons of simulation training, employee job performance.

Introduction

The hospitality industry is highly labor intensive with the performance of its human resource being a significant and determining factor in its sustainability. Consequently, this reliance on human resources for its proper functioning and growth, demands both effective and efficient workforce practices in order to employees to perform at optimum levels, thereby enabling the industry to remain viable in a rapidly changing, and fiercely competitive, global environment (Ogbeide and Harrington, 2011). Many hotels have become increasingly aware that mismanagement of resources can lead to their demise; they have focused on cost minimization while

simultaneously maintaining quality and gaining competitive advantage (Birdir, 2002).

Developing high-level competencies among hotel employees is a challenging task. Employees must improve a wide range of higher order thinking, problem solving, and cognitive skills to be effective at their work. The universal economy is changing swiftly; the ability to be skillful, flexible, and adaptable is a requirement to be successful. However, the various methods and tools generally used for training business skills at hospitality establishments become insufficient to cope with the complexity of organizations and unsteady conditions of today's market. Consequently, it is an inevitable necessity to use other training types to be able to fulfill the market requirements (Baker and O'Neil, 2002; Lehtinen, 2002; Siewiorik, 2012).

One method of preparing employees to business world complexity could be incorporating simulation training into their training. The simulation environments could help trainee practice leading, managing unexpected situations, and solving problems. Preceding studies have pointed that for the purpose of training 'real life' company operations complex training environments are required (Zack, 1998; Sterman, 2001; Siewiorik 2012). Many authors revealed that simulation training could submerge a trainee in a simulated environment where he or she can practice tasks and increase understanding, and useful experience. Moreover, trainees perform some functions as creating a production strategy, defending an investment plan to aboard of directors, and resolving unexpected events in the business context (Vescoukis et al., 2009).

Literature Review

Simulation Training

Several authors (Hays and Singer, 1989; Gröbler, 2004; Kanner, 2007; Anderson and Lawton, 2009) made a distinction between simulation and simulators. a simulator is a complex device that provides a highly realistic simulation of the operational situation and provides a situation adequate for practicing and maintaining previously acquired skills. Whereas, simulation is the act of immersing the trainee in the simulator. Romme (2003, p. 53) defined simulation training as "simulation is a micro world in which people can participate by running experiments, testing different strategies, and building a better understanding of the aspects of the real world". Therefore, micro world can compress time, space, enable experimenting, and training when the consequences of some decisions and actions can be seen only over time. It is also worthwhile to focus on the definition of Gilgeous and D'Cruz

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(1996, p. 34) for simulation training where defined as “an activity carried out by cooperating or competing decision-makers trying to achieve within the rules, their objectives”.

According to Clarke (2009, p. 448) “trainees learn by managing a simulated firm, most often with a competitive industry or environment. Trainees make decisions usually, but not exclusively by allocating resources. The simulations can focus on the firm’s internal mechanisms/dynamics, its interaction with its environment, or both. In some training, decisions focus on a particular business function or analysis or span many business functional areas”. Whereas, Day and Reibstein (1997, p.33) defined simulation training as, “a facsimile of reality” which is intended to display what would transpire if the assumed conditions were to occur in reality. Simulation training offered a more effective way in understanding issues than the extrapolation of trend lines, forecasting and brainstorming.

Simulation training can remove the gap between front-office employees and the real world by providing experience with complex problems, make the content more understandable, and provide information about employees’ problem-solving strategies (Gredler, 2004). Fripp (1997) referred to what extent the simulation provided different advantages and emphasized the following advantages: (1) motivation, users reported that simulation training is stimulating and enjoyable, a clear prerequisite of learning which cause motivation; (2) teamwork, simulation training is a base for developing team working skills; (3) risk-free environment, this advantage appeared through the ability to take business decisions which would not be possible in reality for fear of failure; (4) variety, simulation training provided a type of training which complements with other methods of training such as: case studies or lectures; and (5) experiential training, simulation training allowed people to see the consequences of their decisions in experiential environment.

Types of Simulation Training

Chilcott (1996) discussed that there are two types of simulation: (1) role playing simulation training, this type focuses on “learning by doing” which provides employees an opportunity to train through a real-life situation, they solve problems and make decisions. It allows them to know the results of these actions and the impact regarding applying in the real world; and (2) system dynamics simulation training, which based upon model that numerically describe the situation. Chilcott stated also that system dynamics simulation training is not as important as role playing simulation training.

On the other hand, Hall (2011) explained that simulation training included five forms as follows: (1) Total enterprise simulation, this simulation involves most business functions (marketing, finance, and operations) and are often described under the blanket category of "total enterprise" simulations; (2) Functional simulation, focuses on a specified functional areas such as sales, marketing, and operations; (3) Concept simulation, focuses on specific business issues and concepts, and this might be the launch of a new product (Product Launch simulation), the operation of a simple factory unit or basic statistical concepts; (4) Planning simulation, involves the preparation of a business plan. For example, long-range market diversification plan or the development of an annual budget; and (5) Process simulation, involves the practical use of mathematical techniques such as statistical forecasting, inventory planning, analysis of sales performance.

Simulation training allows employees to study the problem aspects effectively. Previous studies identified three main types of simulation: based training role-play, non-computer based, and computer simulation. Each is different in composition and utility. In a role-playing training, it is divided into interactive and non interactive. On one hand, interactive means each participant plays a role of a character in a situation following specified rules and interacting with other role players. Non-interactive, on the other hand, in the case of presentations where participants adopt a character role. Regarding to non-computer-based, the key elements entail interaction within a predetermined context, often involving forms of competition, cooperation, conflict or collusion with a set of rules. Finally, computer-based simulation aims to replicate system characteristics using simple object representations (Feinstein et al., 2002; Lean et al., 2006).

The Study Hypotheses

John et al. (2012) mentioned that simulation training generally had some factors: knowledge application, employees experience, teamwork, employees interest, problem solving, job performance, and decision making.

Avramenko (2012) agreed with Adobor and Daneshfar (2006) that simulation training realism impacted directly on knowledge enhancement and knowledge application confirmed the work. Whereas, Tan and Laswad (2008) maintained that a positive relationship between simulation training and knowledge enhancement and knowledge application which leads to ability enhancement. Therefore, this study hypothesizes that:

Hypothesis 1: knowledge application of simulation training has a positive impact on employees' job performance.

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Simulation training engaged and motivated rather than other training methods which increase employees' work experience through gaining complex skills (Garris et al., 2002; Salas et al., 2009). The absence of real risk in simulation training increases employees' confidence level in a less stressful ,but still motivating environment (Alinier, 2003). Thus, this study hypothesizes that:

Hypothesis 2: Employees experience of simulation training has a positive impact on employees' job performance.

Anderson (2003) stated that employee's cohesion and independence affected by their expectation of using simulation. While, Iqbal et al., (2014) noted that although simulation training is costly ,but it payback more than its costs for employees' interest and organization interest. Iqbal added also that the simulation training design should be extracted from employees and organization needs to get better results. Hence, this study hypothesizes that:

Hypothesis 3: Employees interest of simulation training has a positive impact on employees job performance.

Simulation training helped in developing necessary interpersonal and communication skills by creating teamwork as a base of training development (Edelheim and Ueda, 2007). Simulation team members enhanced the skills, knowledge and abilities while working in teams (Froebel and Marchington, 2005). In addition, it required employees interdependent in the task and share responsibility for the outcomes. Teams enabled employee to cooperate, enhance individual skills and provide constructive feedback without any conflict between individuals (Jones et al., 2007). Therefore, this study hypothesizes that:

Hypothesis 4: Teamwork of simulation training has a positive impact on employees job performance.

Simulation training is one of the best training methods which allows employees to gain the feature of strategic decision and behavioral skills (Tompson and Dass, 2000). In addition, Machuca (2000) and Zantow et al. (2005) highlighted that it is valuable tool which creates employees' master complex decision making skills. Hence, this study hypothesizes that:

Hypothesis 5: Decision making of simulation training has a positive impact on employees job performance.

Astleitner (2002) explained that critical thinking increases when employee train through simulation. For instance; Problem analyzing, reflecting on judgments, and evaluating results are key elements of both critical thinking and simulation. Furthermore, simulation training provides a discussion

environment for strategies and techniques for individual and problem-solving improvement. Through simulation training, employees can gain the skill of solve one problem with various strategies which leads to higher quality solution (Li et al., 2007). Therefore, this study hypothesizes that:

Hypothesis 6: problem solving skills of simulation training has a positive impact on employees' job performance.

The given hypotheses are expressed in the proposed research model shown in Figure (1) as follow:

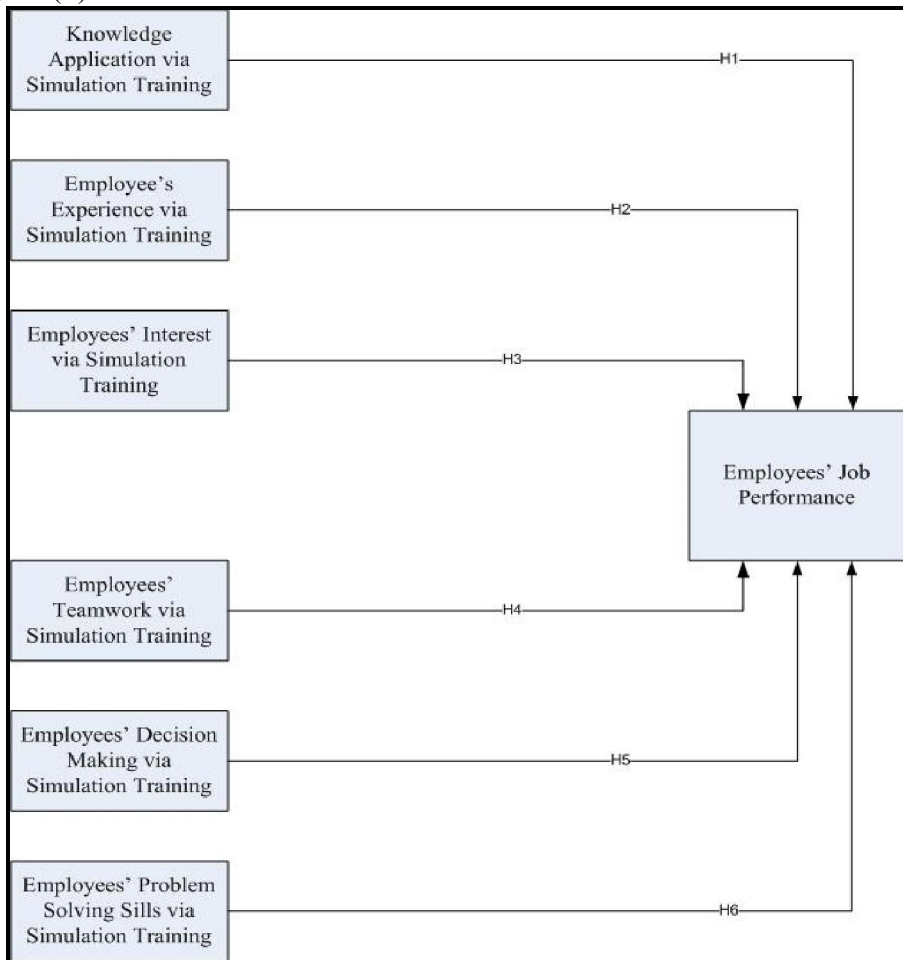


Fig. 1: The proposed research model

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Methodology

Testing hypotheses against the proposed model has been applied using surveying approach. Data were collected via a self-administrated questionnaire. Front-office employees in five-star hotels in Greater Cairo were the target population for this research. In terms of research sample, in this study, convenience sampling technique was used to select the employees who participated in questionnaire . Eleven five-star hotels out of thirty-three hotels was selected for this study (Egyptian Hotel Association, 2013). 280 questionnaires distributed, two hundred and seven (n 207) valid questionnaires were completed and returned, thus achieving a response rate of 73.92 percent.

Survey Instrument

The final version of the questionnaire was divided into two sections. In the first section, employees were asked to rate 30 items on a five-point Likert type scale: 'strongly disagree'; 'disagree'; 'neither agree nor disagree'; 'agree'; and 'strongly agree'. The 30 items are categorized for seven variables: knowledge application (7 items), employees experience (4 items), teamwork (4 items), employees interest (3 items), problem-solving (3 items), decision making (4 items) and job performance (5 items). The second section asked employees for profiling information (e.g., gender and age). Table 1: illustrates a descriptive analysis of simulation training-performance scale (30-item).

Table 1 : A descriptive analysis of simulation training-performance scale (30-item)

Construct	Item's label	Items	Mean	Standard deviation	Rank
Knowledge application	KA1	Simulation training is helpful in applying concepts that are taught in my discipline.	3.79	1.029	6
	KA2	Simulation is effective in creating a training context that makes me willing to open my mind.	3.76	.924	7
	KA3	Simulation training is effective in getting me to apply what I learned in training.	3.82	.888	5
	KA4	Simulation makes training more enjoyable.	3.89	.888	2

(Continued)

Table 1 (Cont.) : A descriptive analysis of simulation training-performance scale (30-item)

Construct	Item's label	Items	Mean	Standard deviation	Rank
Employees' experience	KA5	Simulation makes the material in my training easier to understand.	3.96	.913	1
	KA6	Simulation provides an educational experience where I can learn about inter-functional coordination	3.88	.879	3
	KA7	Simulation training enables employees to experience competition within a marketplace.	3.86	.907	4
	EE1	Simulation training provides an opportunity for me to apply theory in real-world situations.	3.86	.947	2
	EE2	Simulation training helps to improve my work performance.	3.85	.946	3
	EE3	Simulation training provides me with the experience of running my work effectively.	3.85	.953	4
	EE4	Simulation training helps me to analyze the strategic decisions effectively.	3.97	.900	1
	Team work	TW1	Simulation training allows me to work within a group.	3.95	.860
TW2		Simulation training forces me to manage my time wisely.	3.91	.906	2
TW3		Simulation training is an effective tool that helps me to organize my efforts to take the decisions.	3.90	.854	4
TW4		Simulation training effectively improves my team-building skills.	3.91	.922	3
Employees' interest	EI1	I feel simulation training is exciting.	3.95	.910	1
	EI2	Simulation training provides more fun than participating in traditional lecture.	3.87	.933	3
	EI3	Overall, simulation games are effective training tools.	3.91	.885	2
Problem-solving	PS1	Using simulations provides me an opportunity to improve my problem-solving skills.	3.98	.833	1
	PS2	Simulations present problems which I have to solve.	3.94	.857	2

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(Continued)

Table 1 (Cont.) : A descriptive analysis of simulation training-performance scale (30-item)

Construct	Item's label	Items	Mean	Standard deviation	Rank
Decision making	PS3	The simulation helped me learn about my opinions on problem-solving.	3.92	.900	3
	DM1	Simulations help me learn about management decision making.	3.95	.893	2
	DM2	Simulations provide an opportunity to analyze the outcome of my decisions.	3.88	.938	4
	DM3	Using simulations develops my decision-making skills.	3.96	.852	1
	DM4	Simulation training provides me with decision-making experience.	3.92	.900	3
Job performance	JP1	Simulation training helps me to understand duties and responsibilities of the work and complete the task with the level of proficiency required.	3.89	.855	5
	JP2	Simulation training helps me to follow the established procedures in order to accomplish my work as scheduled.	3.92	.897	4
	JP3	Simulation training helps me to be self-directed, efficient, and creative in my work.	4.01	.815	2
	JP4	Simulation training helps me to fulfill my job responsibility accurately and efficiently.	3.98	.887	3
	JP5	Simulation training promotes the cooperation with my supervisors, peers and others.	4.04	.869	1

Data Analysis

For data analysis, Renner and Powell-Taylor (2003) discussed some steps for analyzing the data that were adopted in this study as follows: (1) getting to know your data, focus the analysis; (2) categorizing information; (3)

identifying patterns and connections within and between categories and interpretation or bringing altogether.

For the descriptive analysis, SPSS version 22 was used to analyze the employees' simulation training-performance scale (30 items) descriptively. Furthermore, the Mann-Whitney U test was used in this study to compare the scores of employees' gender in five-star hotels. The Kruskal-Wallis test was used in this study to compare the results among age, education, and years of experience in the tested hotels to determine if there is a significant difference among them. Moreover, AMOS version 23 was used for data analysis. A two-step approach for structural equation modeling (SEM): In the first step, confirmatory factor analysis (CFA) was used to test the measurement model. In the second step, maximum likelihood was used to estimate the structural model and to explore the causal relationship among all variables. Composite reliability (CR) and Cronbach's α for each latent variable will be used to test the construct reliability, and average variance extracted (AVE) will be used to test the construct convergent and discriminant validity (Hair et al., 2010).

Results

Table 2: presents the profile of the sample of front-office employees in the investigated hotels. Particularly, 207 employees were selected from five-star hotels. The majority of employees' position in hotels was receptionist and those employees composed of 54.6% females and 45.4% males. Almost half of employees' age is less than 30 years old with achieved percentage 48.3%. The majority is held a university degree. With regarding to experience in the hotel industry, almost half of employees 50.2 % had experience from 1 up to 5 years. Further, the large category of employees attended less than five times simulation training.

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Table 2: Profile of respondents (N=207)

Variables	Frequency	percentage
Gender		
Female	113	54.6
Male	94	45.4
Age		
Less than 30	100	48.3
30 up to 40	86	41.5
41 up to 50	19	9.2
51 or older	2	1.0
Education		
Secondary school	5	2.4
University degree	137	66.2
Postgraduate (MBA, MSc, PhD)	64	30.9
Others	1	.5
Years of experience		
Less than 1 year	35	16.9
From 1 up to 5	104	50.2
6 up to 10 years	49	23.7
11 up to 15 years	16	7.7
16 or more	3	1.4
Experience in current hotel		
Less than 5 years	128	61.8
5 up to 10 years	66	31.9
11 up to 15 years	22	5.3
16 or more	2.0	1.0

(Continued)

Table 2 (Cont.): Profile of respondents (N=207)

Variables	Frequency	percentage
Times of attending simulation training		
Less than 5 times	95	45.9
From 5 up to 10	70	33.8
From 11 up to 15	31	15.0
16 times or more	11	5.3
Current position		
Receptionist	73	35.5
Reservation	41	19.8
Guest relation	32	15.5
Concierge	30	14.5
Telephone operator	31	15

Structural Equation Modelling

Confirmatory factor analysis (CFA)

In the current research, testing the scales reliability of the data collected from the front-office employees applied through Confirmatory factor analysis (CFA). CFA was used to measure the structure fit of the hypothesized model for five-star hotels (see Figure 2). Composite reliability and Cronbach's α over the value of 0.7 were used to ensure the best reliability level (Hair *et al.*, 2010). The lowest composite reliability and Cronbach's α is .90 which exceeds the minimum acceptable value and reflects a good level of reliability. At the same context, to ensure good convergent validity, all values of average variance extracted (AVE) of scales should exceed the value of 0.5 (Hair *et al.*, 2010) as presented in Table 3. Additionally, ensuring the best discriminant validity required that the AVE value of each scale being greater than the squared correlation for each pair of scales as shown in Table 4.

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Table 3: Factor loadings, validity analysis, and reliability test of the measurement models

Latent/ Measured variable	Factor loading	CR	AVE	α
KA		.940	.690	.938
KA1	1.00			
KA2	.96			
KA3	.91			
KA4	.92			
KA5	.92			
KA6	.86			
KA7	.81			
EE		.918	.737	.917
EE1	1.00			
EE2	1.12			
EE3	1.09			
EE4	.97			
TW		.918	.736	.917
TW1	1.00			
TW2	1.10			
TW3	1.03			
TW4	1.08			
EI		.917	.788	.919
EI1	1.00			
EI2	.96			
EI3	.87			
PS		.906	.763	.905
PS1	1.00			
PS2	1.09			
PS3	1.07			
DM		.914	.727	.914
DM1	1.00			
DM2	1.11			
DM3	.96			
DM4	1.01			
JP		.920	.699	.919
JP1	1.00			
JP2	1.14			
JP3	1.07			
JP4	1.21			
JP5	1.11			

Note: All factor loadings were significant at $\leq .001$; CR = Composite reliability; α = Alpha reliability

Table 4: Discriminant validity of the measurement model							
Construct	KA	EE	TW	EI	PS	DM	JP
KA	.690						
EE	.60	.737					
TW	.47	.60	.736				
EI	.37	.40	.42	.788			
PS	.42	.38	.40	.67	.763		
DM	.39	.44	.44	.51	.67	.727	
JP	.37	.46	.42	.46	.54	.57	.699

Note: The bold values along the diagonal line are the AVE values for the constructs, and the other values are the squared correlations for each pair of constructs; KA= Knowledge application; EE= Employees experience; TW= Teamwork; EI= Employee's interest; PS= Problem solving; DM= Decision making.

Structural Models and Hypotheses Testing

Standardized path coefficients (β) and the significance of the hypothesized relationships were utilized to test the proposed hypotheses in a causal diagrammatic form (see Figure 2). The results in Table 5 reflect no relationship between knowledge application and job performance, rejected H1 ($\beta = -0.033$, $p < 0.001$). The findings reveal relationship between employees' experience and service job performance, supported H2 ($\beta = 0.238$, $p < 0.001$). Moreover, the findings reveal relationship between teamwork and job performance, supported H3 ($\beta = 0.055$, $p < 0.001$). The findings state relationship between employees' interest and service job performance, supported H4 ($\beta = 0.089$, $p < 0.001$). The findings reveal relationship between problem-solving and job performance, supported H5 ($\beta = .218$, $p < 0.001$). The results also show relationship between decision making and job performance, supported H6 ($\beta = .346$, $p < 0.001$).

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Table 5: Summary of the structural models estimates

Hypotheses	Path	β	t -value	Results
H1	KA \rightarrow JP	-.033	-.474	Rejected
H2	EE \rightarrow JP	.238	3.007	Supported
H3	TW \rightarrow JP	.055	.778	supported
H4	EI \rightarrow JP	.089	1.166	Supported
H5	PS \rightarrow JP	.218	2.411	Supported
H6	DM \rightarrow JP	.346	4.443	Supported

Note: KA= Knowledge application; EE= Employees experience; TW= Teamwork; EI= Employee's interest; PS= Problem solving; DM= Decision making; β = Standardized path coefficient; *Absolute t -value > 1.96, $p < 0.05$; **Absolute t -value > 3.29, $p < 0.001$.

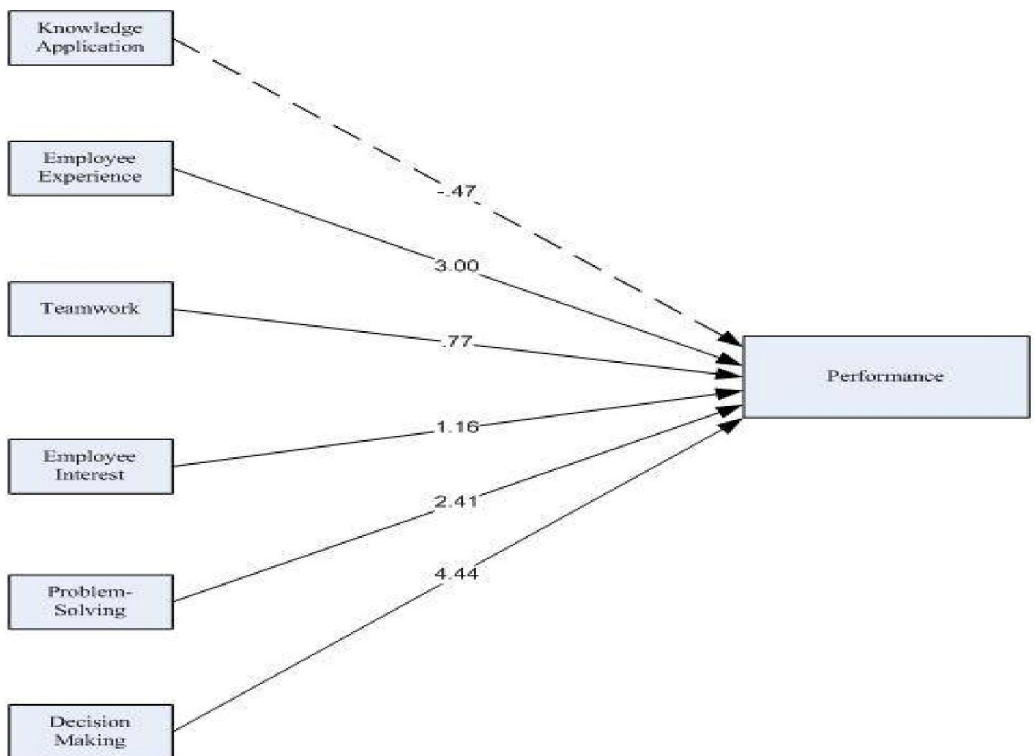


Figure 2: Final structure equation model and standardized estimates for the five-star hotel

Variance Analysis

The current study showed no statistical difference between employees' gender and simulation training impact on job performance. Further, the results also showed that there is no statistical difference between employees' age, education, experience, working in current hotel and current position and simulation training impact on job performance. On the other hand, this study showed statistical difference between times of attending simulation training and job performance.

Discussion and Implications

The current study reflected the effects of simulation training on employees' job performance by skill which gained in training. the study tested whether knowledge application skills which gained through simulation training have impacts on employees' job performance in Egyptian five-star hotels. Previous studies (Adobor and Daneshfar, 2006; Tan and Laswad, 2008; Avramenko, 2012) highlighted the simulation training that improves some employees' skills (i.e., KA, EE, TW, EI, PS, and, DM) which influence on their job performance. Inconsistent with these studies, this study showed a negative impact from *Knowledge Application* factor on employees' job performance.

A possible interpretation for this negative relationship lacks of managerial support for enhancing this point during training, a poor fit of content becoming a barrier for employees to apply their knowledge, the delivery methods of knowledge is very essential for firm's employees to confirm that they are able enough to apply it, knowledge management is the systematic management of an organization's knowledge assets for the purpose of creating value and meeting tactical and strategic requirements; it consists of the initiatives, processes, strategies, and systems that sustain and enhance the storage, assessment, sharing, refinement, and creation of knowledge. Sometimes, employees have some restrictions and discomfiture during their manager attendance.

In terms of other employees' skills (i.e., EE, TW, EI, PS, and, DM), it is growing consensus that simulation training has a positive influence on employees' skills. Consequently, these improved skills have a positive impact on employees' job performance. Consistent with prior studies (Machuca, 2000; Astleitner, 2002; Garris *et al.*, 2002; Anderson, 2003; Froebel and Marchington, 2005; Zantow *et al.*, 2005; Jager, 2007; Salas *et al.*, 2009; Van Der Zee and Slomp, 2009; Pasin and Giroux, 2011; Iqbal, 2014), the current study revealed that *Employee's Experience* has been increased within hotels because the received encouragement and motivation via simulation training that enables employees to tackle problems that confronted them at the workplace easily.

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A Teamwork skill also has been risen because of teams enabled employees to cooperate, enhance their skills and provide constructive feedback without any conflict between team members, sharing the sense of responsibility, and giving staff the opportunity to know each other which lead to team synergy and team cohesion. Hotel *Employee's Interest* has been positively affected due to the staff's sense of risk-free environment and they don't expect any punishments if they failed "because it is just a game". Tendencies to employees' *critical thinking and Problem-Solving* have been highly encouraged via simulation training. Problem analyzing, reflecting on judgments, and evaluating results are key elements of both critical thinking and simulation. Furthermore, simulation training provides a discussion environment for strategies and techniques for individual and problem-solving improvement. Through simulation training, employees can gain the skill of solve one problem with various strategies which leads to higher quality solution. For growing employees' Decision Making skills, employees have an open discussion with their teammates, sharing ideas, and getting meaningful feedback and identifying the risk of each decision they made to avoid risks in the next time.

One example of simulation training application in the investigated sample is Hilton chain. Employees form teams and create virtual or traditional simulation training environment where they must respond and decide regarding guest - related issues, problems and scenarios in a given time frame (e.g., answering the telephone, checking guests in and out, and general guest interaction in the front desk scenario). The level and speed as well as the appropriateness of their response directly affect the simulated guest's satisfaction while it also influences on their skill related to knowledge, problem-solving, decision making, teamwork, experience and make them feel interested to attend more sessions in this training.

Based on the theoretical and practical part, this study reflected the following recommendations that suggested promoting simulation training applying in hotels aiming to grow up employees' effort and performance at workplace. First, five-star hotels should adopt the notion of simulation training due to this kind of training has myriad benefits for both levels individually and organizationally. For employee level, employees' skills will increase via holding training sessions that aim to pose real situations or problems and attempt to tackle these problems to avoid the risk of temporary problem-solving and decisions making which may lead to material and moral losses (e.g., customer dissatisfaction, bad image, negative WOM). For organization

level, organizations endeavor to possess unique employees in terms of their mental and intellectual abilities.

Second, managers, especially in the five-star hotels, should pay attention for the content of modules that associated with simulation training sessions, the steps of applying these modules and answer employees' questions aiming utilize each employee skills in problem-analyzing, problem-solving and decisions making. Providing a fit content and covering all aspects of problem or issue for employees is required to help them apply their knowledge striving to solve problem and make best decisions.

Third, improving employees' skills in feed backing stage during session requires from trainer and manager to do constructive criticism, this will motivate them and prevent mistakes repetition next sessions. It will also remove their sense of foresting. Managers who attend the session should enhance employees with comfort ability and freedom to present their opinions.

Fourth, removing the sense of jealousy between employees is the trainer responsibility by persuading them that all team members are responsible for decision, respect all teams because the positive energy pushes out all negative energy and stopped comparing between each other.

Fifth, using a diverse simulation training types is required. The majority of Hotel leaders prefer to use computer-based, non-computerized, and role-playing. However, few hotel chains use fixed type of simulation training because of uncontrollable circumstances (e.g., lack resources). This study recommended hotels to use all types of simulation to achieve integration and idealism, and to save time and costs.

Finally, it is not necessary to arrange simulation training only when the managers of hotel cannot overcome on a specific real problem you can arrange it for employees' skills using refreshment and make them more active. Preparing simulation training sessions periodically will be useful because each hotel hires new employees who may be not exposed for such this training in other hotel. As the results of the current study showed; the more employees attend simulation the more increase in his performance.

Limitations and Future Research

Identification of hotel in Greater Cairo that applies simulation training was the major barrier in the current study that is why we made pilot study before beginning this study. The current study investigated and focused on the effects of using simulation training on hotel front-office employees' performance in Cairo five-star hotels. Hence, further researches could sample other destinations in Egypt such as Sharm El-Sheikh and Hurghada.

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Moreover, the current study focused only on front-office department. So, further studies could focus on other departments in hotel especially on food and beverage and housekeeping. Further studies also could use other statistical methods, which may lead to better understanding of simulation influences.

References

- Adobor, H. and Daneshfar, A. (2006). Management simulations: Determining their effectiveness. *Journal of Management Development*, 25(2), pp.151-168.
- Alinier, G. (2003). Nursing students' and lecturers' perspectives of objective structured clinical examination incorporating simulation. *Nurse Education Today*, 23(6), pp. 419-426.
- Anderson, J. (2003). The relationship between student perceptions of team dynamics and simulation game outcomes: An individual-level analysis. *Journal of Education for Business*, 81(2), pp. 85-90.
- Anderson, P. and Lawton, L. (2009). Business simulations and cognitive learning. *Simulation and Gaming*, 40(2), pp.193–216.
- Astleitner, H. (2002). Teaching critical thinking on-line. *Journal of Instructional Psychology*, 29(2), pp. 53-77.
- Avramenko, A. (2012). Enhancing students' employability through business simulation. *Education and Training*, 54(5), pp. 355-367.
- Baker, E. and O'Neil, H. (2002). Measuring problem solving in computer environments: Current and future states. *Computers in Human Behavior*, 18, pp. 609-622.
- Birdir, K. (2002). General manager turnover and root causes. *International Journal of Contemporary Hospitality Management*, 14(1), pp. 43-47.
- Chilcott, M. (1996). *Effective Use of Simulations in The Classroom, System Dynamics Project*. Tucson, AZ.
- Clarke, E. (2009). Learning outcomes from business simulation exercises: Challenges for the implementation of learning technologies. *Education and Training*, 51(5/6), pp. 448-459.
- Day, G. and Reibstein, D. (1997). *Wharton on Dynamic Competitive Strategy*. John Wiley and Sons, New York, NY.
- Edelheim, J. and Ueda, D. (2007). Effective use of simulations in hospitality management education – A case study. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 6(1), pp. 18-28.
- Egyptian Hotel Association (2013). Retrieved from: <http://www.Egyptianhotels.org/> [Accessed on 23-09-2017].

- Feinstein, A., Mann, S. and Corsun, D. (2002). Charting the experiential territory: Clarifying Definitions and Uses of Computer Simulation Games and Role Play. *Journal of Management Development*, 21 (10), pp. 732-744.
- Fripp, J. (1997). A future for business simulations?. *Journal of European Industrial Training*, 21(4), pp. 138-142.
- Froebel, P. and Marchington, M. (2005). Teamwork structures and worker perception: A cross national study in pharmaceuticals. *International Journal of Human Resource Management*, 16(2), pp. 256-276.
- Garris, R., Ahlers, R. and Driskell, J. (2002). Games, motivation, and learning: A research and practice model. *Simulation and Gaming*, 33(4), pp. 441-467.
- Gilgeous, V. and D’Cruz, M. (1996). A study of business management games. *Management Development Review*, 9 (1), pp. 32-39.
- Gredler, M. (2004). *Games and Simulations and Their Relationships to Learning. Handbook of Research on Educational Communications and Technology*, 2, pp. 571-581.
- Gröbler, A. (2004). Don’t let history repeat itself - methodological issues concerning the use of simulators in teaching and experimentation. *System Dynamics Review*, 20(3), pp. 263-274.
- Hair, J., Black, W., Babin, B. and Anderson, R. (2010). *Multivariate Data Analysis*. Seventh edition. New Jersey: Pearson Prentice Hall.
- Hall, J. (2011). *Simulation Training*. Third Edition, Jeremy J. S. B. Hall, pp. 2-7
- Hays, R. and Singer, M. (1989). *Simulation Fidelity As An Organizing Concept*. In *Simulation Fidelity in Training System Design*. Springer New York.
- Iqbal, N., Ahmad, N., Haider, Z., Hamad, N. and Mir, M. (2014). Impact of training and development on the employee performance: A Case study from different banking sectors of north punjab. *Nigerian Chapter of Arabian Journal of Business and Management Review*, 2(4), pp.19-24.
- Jager, W. (2007). The four p’s in social simulation, a perspective on how marketing could benefit from the use of social simulation. *Journal of Business Research*, 60, pp. 868-875.
- John, R., Stewart, G., Micheal, W. and Hargrava M. (2012). Business simulation games: Effective teaching tools or window dressing?. *American Journal of Business Education*, 5 (2), pp. 115-128.
- Jones, A., Richard, B., Paul, D., Sloane K. and Peter, F. (2007). Effectiveness of teambuilding in organization. *Journal of Management*, 5(3), pp. 35-37.
- Kanner, M. (2007). War and peace: Simulating security decision making in the classroom. *PS: Political Science and Politics*, 40(4), pp. 795-800.

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- Lean, J., Moizer, J., Towler, M. and Abbey, C. (2006). Simulations and games: Use and barriers in higher education. *Active learning in higher education*, 7(3), pp. 227-242.
- Lehtinen, E. (2002). Developing models for distributed problem--based learning: Theoretical and methodological reflection. *Distance Education*, 23(1), pp. 109-117.
- Li, T., Greenberg, B. and Nicholls, J. (2007). Teaching experiential learning: Adoption of an innovative course in an MBA marketing curriculum. *Journal of Marketing Education*, 29(1), pp. 25-33.
- Machuca, J. (2000). Transparent-box business simulators: An aid to manage the complexity of organizations. *Simulation and Gaming*, 31(2), pp. 230-239.
- Ogbeide, A. and Harrington, J. (2011). The relationship among participative management style, strategy implementation success, and financial performance in the food service industry. *International Journal of Contemporary Hospitality Management*, 23(6), pp. 719-738.
- Pasin, F. and Giroux, H. (2011). The impact of a simulation game on operations management education. *Computers and Education*, 57(1), pp. 1240- 1254.
- Renner, M., and Taylor-Powell, E. (2003). *Analyzing qualitative Data*. Programme Development AND Evaluation, University of Wisconsin-Extension Cooperative Extension.
- Romme, L. (2003). Learning outcomes of micro worlds for management education. *Management Learning*, 34 (1), pp. 51-61.
- Salas, E., Wildman, J. and Piccolo, R. (2009). Using simulation-based training to enhance management education. *Academy of Management Learning and Education*, 8(4), pp. 559-573.
- Siewiorik, A. (2012). *Playing to Learn: Business Simulation Games as Leadership Learning Environments*. University of Turku, p. 8.
- Sterman, D. (2001). System dynamics: Tools for learning in a complex world. *California Management Review*, 43(4), pp. 8-25.
- Tan, L. and Laswad, F. (2008). Impact of prior content and meta-cognitive knowledge on students' performance in an introductory accounting course. *Pacific Accounting Review*, 20(1), pp. 63-74.
- Tompson, G. and Dass, P. (2000). Improving students' self-efficacy in strategic management: The relative impact of cases and simulations. *Simulation and Gaming*, 31(1), pp. 22-41.
- Van der Zee, D. and Slomp, J. (2009). Simulation as a tool for gaming and training in operations management da case study. *Journal of Simulation*, 3(1), pp. 17-28.

Vescoukis, C., Retails, S. and Anagnostopoulos, D.(2009).Network based-business simulation activitiesin technical professional education.International Journal of Interactive Learning,Environments,11(3),pp.169-191

Zack, H. (1998). An MIS course integrating information technology and organizational issues. *The Data Base for Advances in Information Systems*, 29(2), pp. 73-87.

Zantow, K., Knowlton, D. and Sharp, D. (2005). More than fun and games: Reconsidering the virtues of strategic management simulations. *Academy of Management Learning and Education*, 4(4), pp. 451-458.