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INFLUENCING FACTOR OF NEW DRUG DEVELOPMENT PERFORMANCE OF DRUG INDUSTRY

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ABSTRACT

The speed of new product development (NPD) has become increasingly significant for many organizations for the enhancement of the performance of new products because NPD manages all the aspects of performance with fast-changing conditions of business. Though, the main objective of this research paper is to investigate the impact of customer participation (CP) on the performance of new drug development of the pharmaceutical sector of New York. The mediating role of new drug development (NDD) speed and learning demand were also been identified in the study to check the further performance of new drug development. The results of this research paper indicate that organizations that involve customers and collaborate with consumers during the development of products ay significant levels are mainly able to enhance the performance of products. Furthermore, the results of this research study also indicate that new drug development speed can positively mediate the relationship between CP and NDD performance. The results also revealed that CP in the development process of products allows organizations to better manage the performance of products mainly by improving the speed of product development. A significant implication of the research is the evaluation of additional mediating variables regarding CP and its effects on the performance of products.

Keywords: Customer participation, new drug development speed, learning demand, new drug development performance

Introduction

Volatile preferences of the customers and the rapid advancements made in the field of technology has enhanced the efficiency of the manufacturing industries to develop new products and maintain competitive advantages in the market (Abbasi, 2018; Chambers, Feero, & Khoury, 2016; Dolgos et al., 2016; Rosen & Dietz, 2017). Development of new drugs is essential for the competitiveness of the pharmaceutical industries and that is why a number of manufacturing industries are focusing on the quick production of new drugs from the stage of idea sharing to the production of drug (Babal & Moreno, 2019; L. Fang et al., 2018; Khanna, Guler, & Nerkar, 2016; Kraus, 2018). The idea generation of a new drug must be according to the demand of consumers. Therefore, it is necessary for the industries to learn about the market demands, which can be enhanced through initiating customer participation (Ahneman,

Estrada, Lin, Dreher, & Doyle, 2018; Berry-Kravis et al., 2018; Brinke, 2017; Hinton, 2018).

The market performance of the new drugs highly gets effected form the level of the manufacturer. The small and medium industries have to face much more complexities than the big firms (Abbasi, 2018; Chambers et al., 2016; Dolgos et al., 2016; Rosen & Dietz, 2017). This is because of the lack of resources and the economies of scale along with the low level of bargaining with the suppliers (Barling, Akers, & Beiko, 2018; Beam & Kohane, 2018; Fernandes, Larsen, & Chan, 2017; Volk, 2017). Therefore, the medium level firms have to spend more time on the market research and also have to gather more information about consumer preferences by engaging them in related activities or getting feedback from them about the products (Babal & Moreno, 2019; L. Fang et al., 2018; Khanna et al., 2016; Kraus, 2018).

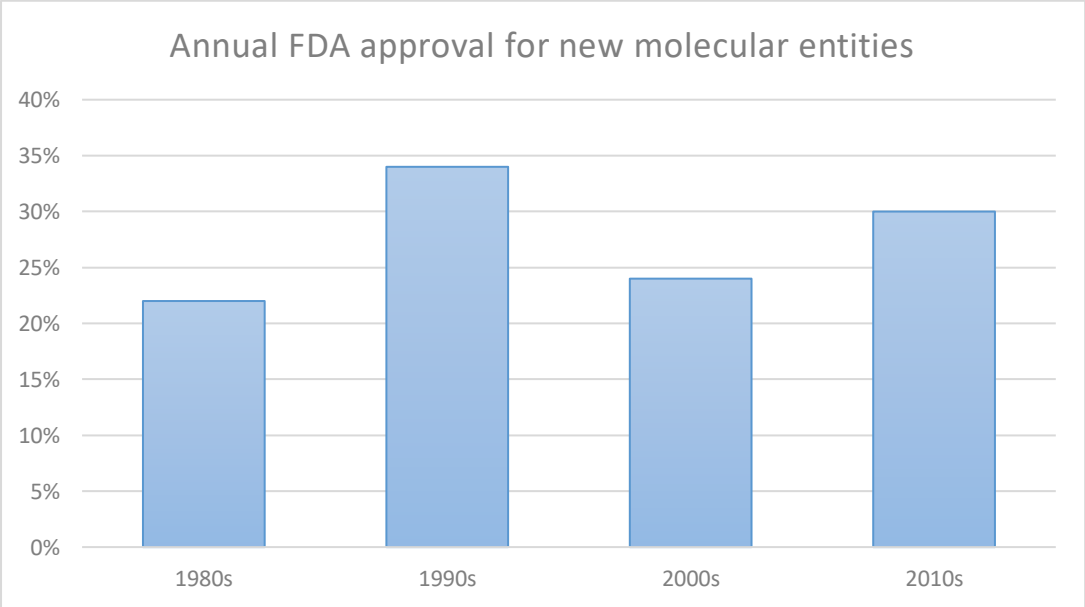


Figure 1: Average annual FDA approval for new molecular entities

Source: Science Innovation Union

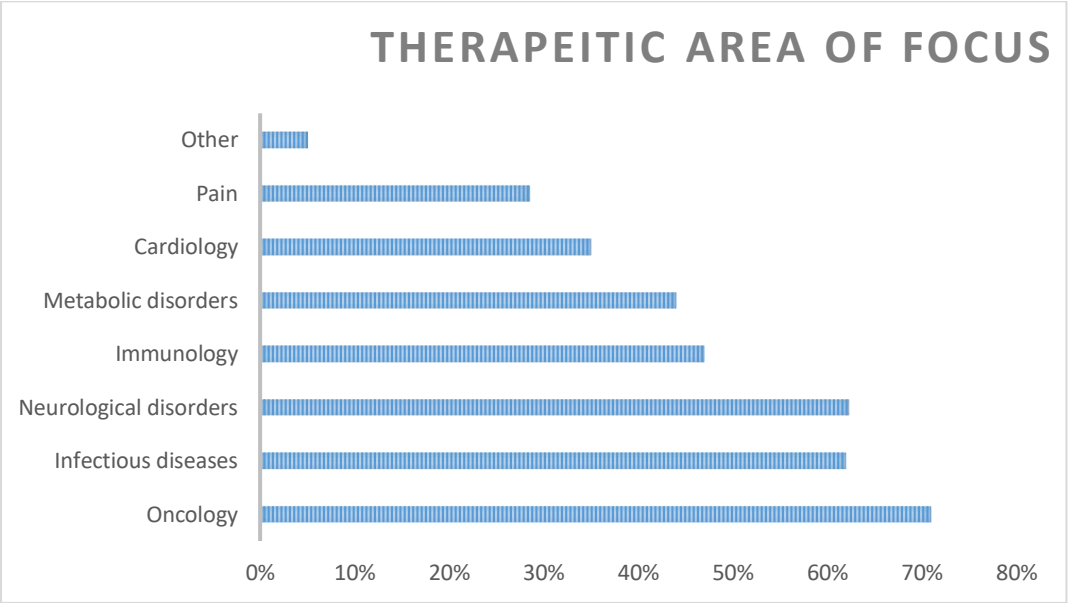


Figure 2: Area of focus of new drug development.

Source: (Addconsortium)

Following are the research objectives for the study:

1. To determine the impact of customer participation on the new drug development speed.
2. To determine the impact of customer participation on the learning demand.
3. To determine the impact of customer participation on the new drug development performance.
4. To determine the impact of the new drug development speed on the new drug development performance.
5. To determine the impact of the learning team on the new drug development performance.

The present study has contribution in the theoretical and practical significance of the participation of customers in effecting the development speed and performance of the new drug in the market. The availability of such information is essential for the pharmaceutical industries so that they can look for ways to improve their performance (Ahneman et al., 2018; Berry-Kravis et al., 2018; Brinke, 2017; Hinton, 2018). Moreover, the research study will also provide information regarding the strategic planning process needed for the development of a new drug and the importance of learning demand in this strategic planning. Remainder of the study will provide the literature that had been reviewed and the methodology used for the study along with the results in discussion.

Review of literature

2.1 Theoretical background

To gain competitive benefits from the market and have a sustainable business there is a need to have speed in the development of new products that will attract the potential customers (Barling et al., 2018; Beam & Kohane, 2018; Fernandes et al., 2017; Volk,

2017). Competition is increasing at the great pace in the market and that is why the industries have to look for ways to maintain and sustain their position among the competitors. Moreover, the speed of introducing new products in the market also helps the firm to engage its customers (Colman, Figueroa, McCracken, & Hebbar, 2019; DelConte & Gast, 2019; Haenssle et al., 2018; Jha, 2018; Khullar, Wolfson, & Casalino, 2018). It has been observed that if the speed of developing or introducing a new product in the market is slow, the company does has to face many issues because of the decreased life cycle of products in today's time.

2.2 The impact of customer participation on the new drug development speed

Customer have a vital role in the profitability and business performance of any organization. If a firm manages to hold its customers and have a great sum of loyal ones, the overall business performance of that organization will boost and it has also been observed in a number of literature studies (Colman et al., 2019; DelConte & Gast, 2019; Haenssle et al., 2018; Jha, 2018; Khullar et al., 2018). Moreover, it has also observed that the organization that makes their customers participate in the organizational activities, gain a high level of strategic resources. Through this, the organization speed up their development process of the new products (Andrade et al., 2016; Denny, Van Driest, Wei, & Roden, 2018; Kim, Song, Lindquist, & Kang, 2016; Mak & Pichika, 2019; Tschan, Semmer, Vetterli, Hunziker, & Marsch, 2019). Therefore, the studies have supported the development of the following hypothesis:

H1: There is a significant relationship between the customer participation and the new drug development speed.

2.3 The impact of customer participation on the learning demand

Through the participation of customers in the learning activities, the organizations become able to have information about the market and also learn about the first hand solutions that can be used to work on the new and innovative ideas (Colman et al., 2019; Haenssle et al., 2018; Jha, 2018). Efficiency in the processes and structure of the firms is also gained through this learning. Therefore, the organizations does focus on the learning demand and tend to gain more knowledge about the various aspects of market (DelConte & Gast, 2019; Fernandes et al., 2017; Khullar et al., 2018; Volk, 2017) to analyze the performance of the new products. Therefore, the studies have supported the development of the following hypothesis:

H2: There is a significant relationship between the customer participation and the learning demand.

2.4 The impact of customer participation on the new drug development performance

A sit has been observed though the various literature studies that the customers have a vital role in the market performance of the businesses (Andrade et al., 2016; Denny et al., 2018; Kim et al., 2016; Mak & Pichika, 2019; Tschan et al., 2019) and so does improving the performance of the new products also. Research studies (Barling et al., 2018; Beam & Kohane, 2018; Berry-Kravis et al., 2018; Brinke, 2017; Hinton, 2018) also shows that the organizations that are more actively involved in engaging their customers in the organizational activates are more likely to have loyal customers who look forward to the new products released by the company. That is why the customer participation is important for the performance improvement (Ahneman et al., 2018;

Babal & Moreno, 2019; L. Fang et al., 2018; Kraus, 2018). Therefore, the studies have supported the development of the following hypothesis:

H3: There is a significant relationship between the customer participation and the new drug development performance.

2.5 The impact of the new drug development speed on the new drug development performance

Speedy introduction of new products in the market is essential for sustaining business performance (DelConte & Gast, 2019; Fernandes et al., 2017; Khullar et al., 2018; Volk, 2017). Research studies (Barling et al., 2018; Beam & Kohane, 2018; Berry-Kravis et al., 2018; Brinke, 2017; Hinton, 2018) have also emphasized on the importance of introduction of new products on the overall market performance of nay business. This is because of the consumer engagement in the company through the regular release of new products (Abbasi, 2018; Chambers et al., 2016; Dolgos et al., 2016; Khanna et al., 2016; Rosen & Dietz, 2017). Therefore, the studies have supported the development of the following hypothesis:

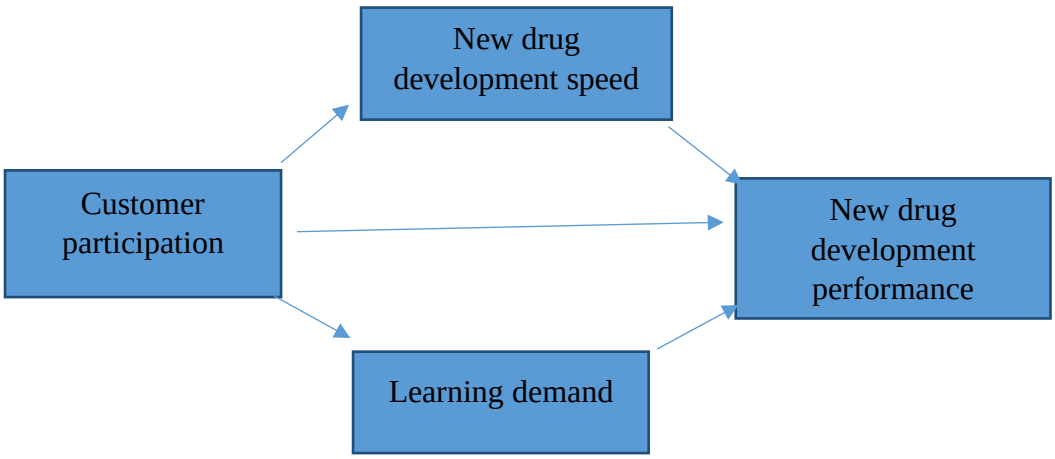
H4: There is a significant relationship between the new drug development speed and the new drug development performance.

2.6 The impact of the learning team on the new drug development performance

The learning team also has a vital role similar to the customer participation because the learning team will be involved in increasing the knowledge (Ahneman et al., 2018; Babal & Moreno, 2019; L. Fang et al., 2018; Kraus, 2018) of the organization regarding the market demands and trends. Research studies have also shown the evidence of vitality of the learning team on the improvement of performance of the new products in the market (Abbasi, 2018; Chambers et al., 2016; Dolgos et al., 2016; Khanna et al., 2016; Rosen & Dietz, 2017). Therefore, the studies have supported the development of the following hypothesis:

H5: There is a significant relationship between the learning team and the new drug development speed.

2.7 Theoretical model



Methodology

3.1 Data and sample

This research was executed in New York, to explore the impact of customer participation in improving drug performance. The targeted sector for this research was New York pharmaceutical sector, as it is the largest market over there and make significant contributions in New York economy and is subjective to changing trends, quality standards etc. Data for following resizes was derived from customers, using purposive sample a final sample was developed of 345 customers. For data collection the tool that was used was questionnaire, respondents were contacted through email with link to google forms. Contact details were obtained from pharmaceutical stores and health centers customer data base. Two email were sent one was explanatory followed by an email containing questionnaire. Four hundred and sixty (460) questionnaires were mailed to those who replied back, but out of which 65 were erased due to insufficient data, so only 345 were retained for further analysis. Demographic analysis shows that 52.70% were male managers and 47.30% were females, 30% have post-graduation degree, 45% have graduation level education and 25% had college level qualification.

3.2 Measurements

All items originated from past studies that are related to current proposed variables. Some scales were used without any changes and some were changed in accordance with our research context. This questionnaire was reviewed by expert to make it free from any content error. 5 point Likert scale was adopted to measure the Reponses.

3.2.1 New drug development performance

The dependent variable that was New drug development performance was measured by employing Atuahene-Gima and Ko (2001) NPD Performance scale modified version. 12 items adapted to measure the performance of new drug, sample item is “New products/services at my firm generally achieve its sales and customer use objectives’’ with options 1=strongly disagree and 5= strongly disagree. with α= 0.94 as Cronbach Alpha.

3.2.2 Customer participation

Customer participation (CP) is computed applying 8 items adapted from (E. Fang, Palmatier, & Evans, 2008) research paper. Ten items including “How deeply do customers participate in idea generation’’ to estimate the influence of customers. Responses were noted on 5 Point-Likert scale ranging from 1=very slow to 5= very fast. Statistical finding showed α= 0.93 composite reliability for CP.

3.2.3 New Product Development Speed

To operationalize New product development speed Rindfleisch and Moorman (2001) scale was utilized, from which three items scale were utilized to measure how speedily a business develop new drug. Sample it is “The speed of new product development of our firm is much faster than the industry norm”. Responses were rated on Five-point scale ranging from 1=strongly disagree to 5= strongly agree having Cronbach Alpha α=0.85.

3.2.4 Learning Demand

Measures for learning demands were taken from The Quality of Governance Standard Dataset by Teorell et al. (2015), four items were used to estimate the demand of learning of a firm for example " current firm need to learn in order to address the needs using 5 Likert scale showing α =0.847 as composite reliability.

3.3 Analysis techniques

Data for this study was analyzed by running multiple statistical tests on SPSS and AMOS. The variables were tested by calculating of Cronbach's alpha (CA), composite reliability (CR) and average variance extracted (AVE) At last, calculated the square root of the AVE (SQAVE). AMOS was operated for testing and analyzing, we performed CFA and descriptive statistics test on data.

Data Analysis

4.1 Demographics

A sample of 298 selected respondents was constructed for the study, out of which 52.3% were male and 47.7% were female. The effective reason for the disparity of gender is the fact that more males were identified to be employed in the production units of the pharmaceutical sectors of New York. The age of 32.6% of the individuals was up to 40 years. The major objective of this section is the level of individuals or workers approached.

4.2 Descriptive statistics

Table 1 contains the representation of maximum as well as minimum values, coefficients of means and skewness are also evaluated in this section to check the data for the existence of outliers. This section also evaluated the normality of data and the inclination of responses. The values of skewness are mainly fallen within the category of -1 and +1, which mainly exhibits the normality of collected data.

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
CustPart	298	1.00	5.00	3.5802	1.05250	-.884	.141
NDDS	298	1.00	5.00	3.5285	1.11938	-.684	.141
LearDem	298	1.00	5.00	3.5479	1.05854	-.784	.141
NDDP	298	1.00	5.00	3.4345	1.09442	-.623	.141
Valid N (listwise)	298						

4.3 Factor loading and convergent validity

Factor loading proves to be very helpful in analyzing the correlation coefficient for the factor and the variable (Hassan, Hameed, Basheer, & Ali, 2020; Iqbal & Hameed, 2020). Factor loading also indicates the variance manifest by the variable on the particular factor. As table 2 indicates, almost all the items are positive and effective, the

loadings are mainly higher than 0.7. The issue of cross-loading has not been perceived as well.

Table 2: Factor Loading and Convergent Validity

	1	2	3	4	CR	AVE
CP1		.682			0.945	0.685
CP2		.754				
CP3		.804				
CP4		.822				
CP5		.774				
CP6		.788				
CP7		.814				
CP8		.816				
NDDS1				.795	0.901	0.748
NDDS2				.804		
NDDS3				.798		
LD1			.795		0.914	0.731
LD2			.843			
LD3			.858			
LD4			.782			
NDDP1	.822				0.968	0.720
NDDP2	.847					
NDDP3	.860					
NDDP4	.871					
NDDP5	.851					
NDDP6	.865					
NDDP7	.794					
NDDP8	.808					
NDDP9	.805					
NDDP10	.824					
NDDP11	.781					
NDDP12	.801					

4.4 Discriminant validity

Divergent validity is a significant type of validity test that shows the existence of relationships. Discriminant validity is presented in table 3 which shows that discriminant validity is present.

Table 3: Discriminant Validity

	NDDS	CP	LD	NDDP
NDDS	0.867			
CP	0.641	0.827		
LD	0.605	0.563	0.854	
NDDP	0.401	0.525	0.431	0.848

4.5 Model fitness (confirmatory factor analysis)

Confirmatory factor analysis is the most significant type of factor analysis and their results are shown in Table 4. The CMIN and DF values are 2.74 which is less than 3, and GIF is higher is 0.8(0.83), IFI is also greater than 0.9(0.92) and on the other hand RMSEA value is less than the 0.08(0.076). According to table 4 threshold values are being satisfied, hence the model is valid.

Table 4: Confirmatory Factors Analysis and KMO

CFA Indicators	CMIN/DF	GFI	IFI	CFI	RMSEA	KMO
Threshold Value	≤ 3	≥ 0.80	≥ 0.90	≥ 0.90	≤ 0.08	0.6 – 1.0
Observed Value	2.742	0.831	0.928	0.928	0.076	0.942

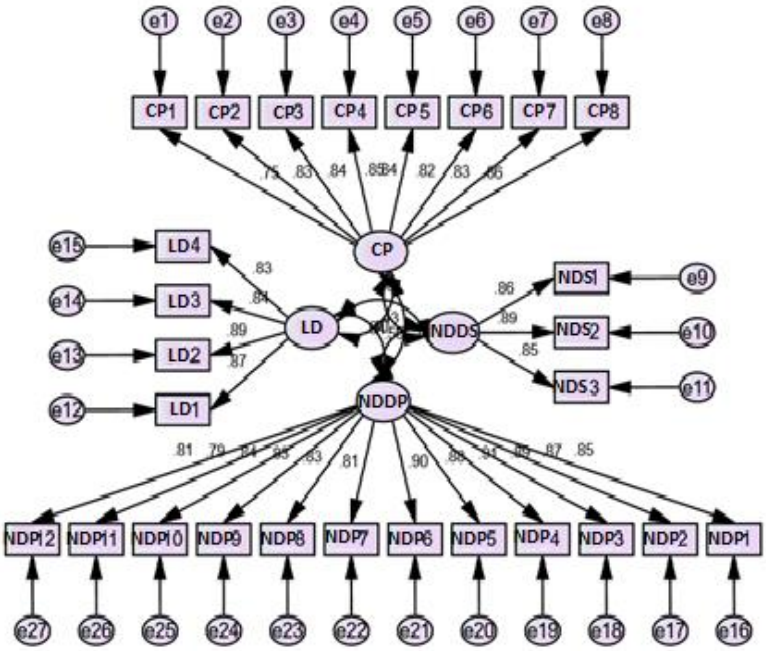


Figure 1: CFA

4.6 SEM: Structural Equation Modeling

A positive unit change in CustPart produces a favorable effect of 0.38 in NDDS, the relationship is effective, and hence the hypotheses are accepted and supported to results. A point change in CustPart develops a positive effect of 0.51 in LearDim, the relationship is favorable, and so the hypothesis is also accepted. A unitary enhancement in CustPart and NDDS generated variations of 0.38 and 0.5 in NDDP. The relationship is positive and therefore the hypotheses are supported. All the mediation results and outcomes are favorable and positive therefore all the hypotheses are accepted.

Table 5: Structural Equation Modeling

Path			Estimate	S.E.	P	Decision
NDDS	<---	CustPart	.601	.048	***	Accepted
LearDem	<---	CustPart	.512	.051	***	Accepted
NDDP	<---	CustPart	.382	.071	***	Accepted
NDDP	<---	NDDS	.052	.058	.048	Accepted
NDDP	<---	LearDem	.197	.057	***	Accepted

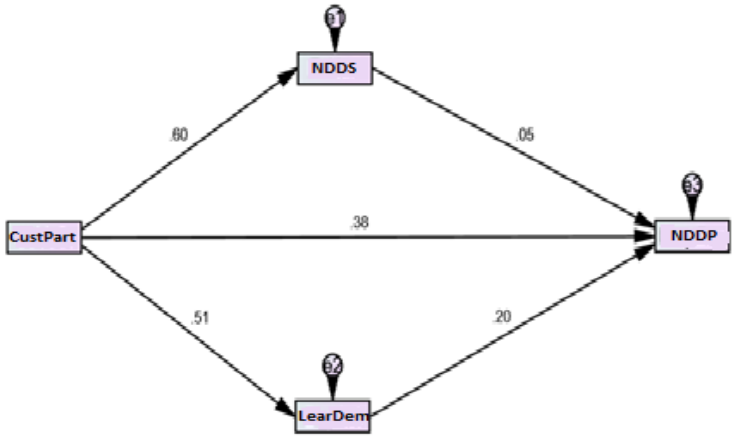


Figure 2: SEM

Discussion and Conclusion

5.1 Discussion

Customer participation (CP) is an important term and factor for businesses because it mainly refers to the active participation of consumers during and after the development of products (Dong & Sivakumar, 2017). In this case, the participation of customers has been evaluated during the development of new drugs and their performance. The results of this research show that customer participation plays a positive role in enhancing the performance of new drug development. A study has indicated that Morgan, Obal, and Anokhin (2018) customer participation has been significant because during the development of products customers and consumers can offer useful and effective solutions related to product development through useful knowledge. Therefore, the hypotheses about the direct impact of CP on new drug development performance have been accepted.

New drug development (NDD) speed has become significantly important for enhancing and managing the performance of new drug development mainly due to continuous minimization in the life cycle time of products. Therefore, the hypothesis has been accepted and indicates positive outcomes. The results of the study also revealed that learning demand also plays a positive role in improving the relationship between CP and NDD performance.

5.2 Conclusion

The research paper signifies the participation of the customers regarding better new drug performance in New York pharmaceutical sectors and the industry. The rate and the speed of the new drug development can be increased at the best level. The customers are the backbone and the source of progress and success. The research also indicates that the positive participation of the customers can take the industry at a higher level as the demand increases the supply is made and the New York pharmaceutical industry needs to implement this principle for this major purpose.

5.3 Implications and Limitations

The study undertaken provides a detailed idea that customer participation has a vital role in the better New Drug performance in the industry of New York Pharmaceutical sector. This study also provides a vast place for future researchers to find more means and ways to enhance the performance and the quality of working in the field of pharmaceutical sectors.

The significant results and outcomes of this research need to be clarifying in light of limitations. First, this research is limited to the role of customer participation in evaluating the performance of new drugs, so, due to this limitation; it is highly recommended to future analysts that they should add other independent variables to get more accurate results. Second, fewer consumers involved in the process of new product development, thus, it is proposed to future studies that they should involve a large number of customers to get wider outcomes. Another limitation of this research is that in this study the long term involvement of consumers in new drug performance does not evaluate.

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INFLUENCING FACTORS OF REDUCING EMPTY TRUCKS IN GUANGDONG, CHINA

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ABSTRACT

The effective transport system is the necessary element for the high business performance and needs the attentions of recent studies and regulators. Therefore, the current article goal is to examine the impact truck sharing system and supply chain perspective on the improve transportation system and reduce empty truck in Guangdong. This study also analyze the mediating impact of improve transportation system among the nexus of truck sharing system, supply chain perspective and reduce empty truck in Guangdong. This study has taken the quantative method of data collection and used the surveys for gathering data and used the smart-PLS for analysis purpose. The findings exposed that truck sharing system and supply chain perspective have positive association with improve transportation system and reduce empty truck in Guangdong. The results also indicated that improve transportation system positive mediates among the nexus of truck sharing system, supply chain perspective and reduce empty truck in Guangdong. This study guided to the regulators in term of developing the policies related to the transportation system that could enhance the business performance.

Introduction

In a socio-economic environment, the construction of transport networks takes place. Although policy and planning for growth tend to rely on capital, human capital has strengthened in recent years. Regardless of physical and human resources relative value, construction cannot take place without interplay as infrastructure cannot stay successful until proper service and maintenance are carried out. Economic growth cannot concurrently take place without an infrastructure foundation. Many transport operations underlined the dynamic interaction between physical and human resource demands, with their highly transactional and service-oriented roles. The transport sector is a significant economic factor and is a common tool for growth because of its intense use of infrastructure (Bakker et al., 2017). This is particularly true in a global economy where economic prospects, including information and communication technology, have become rapidly correlated with people and freight mobility. A relationship between quantity, efficiency, and the extent of economic growth of transport infrastructure is

evident. Extremely densely interconnected transport infrastructure and networks are typically correlated with high growth levels (Mansourianfar & Haghshenas, 2018; Zhankaziev et al., 2018). Although there are number of studies conducted on transportation system in Guangdong (Crainic, Perboli, & Rosano, 2018; Puchongkawarin & Ransikarbum, 2020) but there is less literature available regarding empty trucks and transportation planning. This study will also highlight the importance of transportation system in the country like Guangdong.

The transport of freight and passengers in Guangdong was largely based on the transport of roads. In terms of transport by freight, road, water, and rail, domestic passengers accounted for 82, 15, and 3 percent, respectively, at 74, 21, and 5 percent, respectively (NESDB, 2012a). That is why the road network can conveniently reach anywhere that door-to-door service is offered, while other transport modes are constrained and of poor service quality. Today moreover, all transport infrastructure proposals and policies are designed to encourage rail and water transport to compete with road transport. A mechanism for all agencies of the Ministry of Transport is to be created for investment proposals and development plans in the Thai National Transport Master Plan 2011-2020 (OTP, 2011). The Master Plan sets a vision for sustainable transportation and then priorities, objectives, metrics, and primary metrics of success. Recently, investment plans for transport infrastructure investment 2015-2022 (OTP 2015) have been identified as a master plan (Peraphan & Sittha, 2017).

The National Transport and Traffic Master Plan (2011-2020, OTP, 2011a) was drawn up by the Ministry of Transport in conjunction with the Eleventh National Economic and Social Development Plan. It outlines both the vision and aims of each transport sector in Guangdong and offers an overview strategy. Volume 1 (2007–2011) of NESDB- 2007 and Volume 2 (2012-2017) of NESDB, along with strategic strategies for logistics growth, mentions the development of transport networks to increase logistics network performance across key corridors. Transport by road, water, and air must be strengthened and optimized. The master plan used all departments within the department as a structure to complete their activities in the same direction integrally. The Master Plan sets a vision for sustainable transportation and then priorities, objectives, metrics, and primary metrics of success. The key transport development plan has six objectives: 1- making Guangdong a communications center. Thai transport development plan, 2- have a high quality of service, reliable transit infrastructure and mobility for industrial zones and communities, 3- to improve and enhance passenger and freight transportation security, 4- Encouraging energy conservation and transport with ecological advantages, 5- improve accessibility and expand public transit use, 6- improve mobility in the movement of passengers and freight (Klungboonkrong, Jaensirisak, & Satiennam, 2017; Peraphan & Sittha, 2017).

The overall spending ratio shows that in 2006-2010 the expenditure ratio for rail transport was very modest (18%), relative to 2011-2020. (46 percent). In 2006-2010,

spending on road transport has declined considerably from 77% to 39% in 2011-2020. Transport infrastructure projects in Guangdong are highly dependent on public loans and budgets. During the first master plan phase, 70% of the expenditure comes from government loans and the allocation, but the growth in the share of private sector investment should be decreased. The strategy for improving transportation infrastructure in Guangdong (2015-2022) (OTP, 2015), was recently established by the government with a view to pushing transportation infrastructure growth into effect. The policies are designed to address those challenges: (1) modal transformation from road to alternative modes that provide lowers transportation costs per vehicle, (2) neighboring country connectivity, (3) movement of people and commodities through Canada, and (4) improvement of transport and logistics facilities laws and regulations. These main five sections of Guangdong's transportation sector are (1) rail infrastructure, (2) Guangdong mass-transit system, (3) road infrastructure, (4) water infrastructure, and (5) air infrastructure.

Literature Review

Sharing abilities trend as an intelligent and efficient means of running a system with consistency. Although, it also applies to the truck sharing system which significantly inserts a centralized system to bring feasible modes of transport for various businesses. This ability is not only beneficial for the efficient transport system but also helps businesses of Guangdong to reduce the empty trucks. The evaluation of truck arrivals is connected with the sharing benefits of trucks to eliminate empty trips (Islam, 2018). A centralized system of logistic services provides an easy mode of sharing truck facilities among the businesses to reduce the empty trucks. This facility of empty truck sharing not only fulfills the demands of businesses but also raises the demand and supply of businesses in Guangdong. Products will be faster than ever in the markets by occupying the truck sharing for a reduction in empty trucks. With the shovel system of trucks, bunching effects are stimulated with faster and slower trucks to reduce the empty trucks (Islam, 2018). Problems of transport are growing due to a large number of empty trucks. Therefore, efficient implementation of truck sharing has somehow overcome the issue of prevailing empty trucks. Empty trucks have been a consistent issue in the markets of Guangdong which are eradicated by the strong appointment of a proper track sharing. The sustainability of trucks is grouped with problems of a railroad which ensures the efficiency of empty truck coverage (Chargui et al., 2020). It denotes the resemblance of a truck sharing system which positively depicts the image over the empty trucks rotating on roads. This could cost the companies without any coverage of cost and will be beneficial after the implementation of a truck sharing.

H1: Truck sharing significantly impacts the reduce empty trucks

While establishing the perspective of the supply chain in the truck systems, positively help to reduce the empty trucks. The determination of supply chain may vary

upon the goods circumstances which are playing benchmark role toward the empty trucks reduction. It is upon the planning and management of the supply chain of products that could minimize the reduction of empty trucks. The perspective of the supply chain is disrupted due to the propagation of normal and systematic risks related to empty trucks (Scheibe & Blackhurst, 2018). The speedy inclusion of a green supply chain has emerged in the past few years which positively eliminated the dominance of empty trucks. Especially in Guangdong, empty trucks have gained much importance for organizations costing a lot. Therefore, the significant development of the supply chain focus has attained importance over the reduction of empty trucks. It is the flexibility of drivers consistent with the operations of services, supply chain, and manufacturing that counters the ratio of empty trucks (Ivanov, Das, & Choi, 2018). With the collaboration of supply chain focus, the reduction in empty trucks has been significantly erased. There is the dominance of schedules for the efficacious supply chain of products that developed the models of empty trucks in Guangdong. Huge traffic of empty trucks has where created environmental problems also hikes the costs of organizations. Upon the prioritization of some feasible solutions related to the reduction of empty trucks, the decisions making element is important (Rahimdel & Mirzaei, 2020). Special considerations are required to contribute a specific portion toward the conditions that are more related to the dominance of empty trucks. Although, many elements like off-road conditions, payload capacity, the large size of products, and suspension systems are also important toward transportation system.

H2: Supply chain focus significantly influence reduce empty trucks

Trucks with empty material not only costs the companies but also raise high traffic on the roads which are also dangerous to the environment. The capabilities of shared ahead among the logistic companies allow collaborative measures to various businesses with an improved transportation process in Guangdong. These measures help businesses and private consumers to fulfill their needs within a short time. Certain recovery systems are established to reduce the hike in costs of empty trucks and this will also improve the transportation system (Terblanche, Kearney, & Knights, 2018). With the proper system of logistics transport, the companies can decrease their fleets on the road with improved transports. Goods could be easily moved to one place from another with an improved transportation process in Guangdong. This could be efficiency done by the induction of a truck sharing system that impacts the improved transportation process. Resource sharing and product consideration schedule the problems related to truck sharing that help task resources to improve the systems of transportation (Liu et al., 2018). The truck sharing system has provided beneficial measures for the reduction of empty trucks in huge organizations as well as small enterprises. This positive development of the truck sharing has also helped the improved transportation process for competitive markets. Many competitive

organizations of Guangdong have enabled the truck sharing through which the empty trucks have been significantly erased. Effectiveness of transportation system reduces the transportation congestion and also improves the system of transportation with service and operational effectiveness (Suryani et al., 2020). Some factors are influential toward the uncertain elements of the improved transportation process with future and alternative strategies.

H3: Truck sharing significantly impacts the improved transportation process

Although, certain facilities have been explored by the induction of supply chain perspective which hikes the demand for goods. The higher demands have also raised the modes of transportation and hence also increased the traffic on roads. Especially, the Guangdong transport system is improved by the increment in supply chain perspective. External risk factors are evident toward the supply chain focus which enables the improvement toward the transportation system (Lockamy, 2017). With an emerging improvement in the supply chain focus with fast-moving goods, the transportation system has also been improved. This improvement comprises various techniques which have been inducted by the organizations in the form of supply chain dimensions. While classifying the goods of various nature, the trucks and transportation have been designed accordingly. In the creation of values, loops of supply chain management help the fast consumer goods services for the improvement of the transportation system (Mishra, Hopkinson, & Tidridge, 2018). With the establishment of a supply chain focus, the transportation system has been improved for the reduction of congested traffic. By applying the improved transportation process, the impact of the supply chain focus has attained much importance for the organizations of Guangdong. This helped the companies to establish better measures for the management of transportation fleets with an improved transportation system. Demands of transportation planning are increased with the perspective of the supply chain that enhances the transportation system (Lawson, Newman, & Monz, 2017). These are usually based on the crow of visitors and the systems of shuttles convene the supply chain focus with a variety of threshold factors. Driving efforts of unintended demands and planning operated the convenient transportation system.

H4: Supply chain focus significantly influence the improved transportation process

Many intelligent and efficient systems help companies and organizations to manage the discrepancies prevailing in their structures. These discrepancies also define particular gaps which are importantly rectified by the establishment of a truck sharing. Especially, in the Guangdong companies, more transportation system and truck improvement has overcome the elements of reduction in empty trucks. A variety of frameworks has been developed while considering the improvement toward the

transportation system (Fontoura, Ribeiro, & Chaves, 2020). The establishment of an improved transportation process helped the truck sharing more feasible. This development of an improved transportation process in Guangdong also endorsed significant measures for the reduction of empty trucks. The positive mediating role of the improved transportation process is depicted among the truck sharing and reduction of empty trucks. The routes of intercity for trucks have been developed with the consideration of reducing empty truck ratio with implementation and incorporation of GPS. After the implementation of a strong truck sharing \to control the hike in empty trucks on road. The improved transportation process has induced significant channels among both factors which are important for the organizations. There is considering the element of truck appointments which have to hinder the role of empty trucks. Therefore, the positive implementation of an improved transportation process plays a vital role in the truck sharing and reduction of empty trucks. The commencement of foldable containers in an improved transportation system helped companies to reduce the empty trucks on roads and belts (Toledo et al., 2020). With the limitations and strengths, the initiatives of various road projects have hiked the demand for the truck which is major in empty trucks transportation.

H5: Improve transportation process significantly mediate among the relationship between trucks sharing and reduce empty trucks.

The channels of the improved transportation are providing feasible benefits to the supply chain focus as well as also improve the reduction of empty products. Different modes of connectivity and complexity also prevail among the supply chain and empty trucks in Guangdong. These modes are efficiently elaborated by the significant mediating role of an improved transportation process. There is significant resilience of transportation system with the systematic reviews of supply chain focus considering challenges and constraints (Zhang et al., 2018). Through transparent and systematic means, the supply chain focus classified materials accordingly to reduce the empty trucks. This reduction has so far been improved by the efficient induction of an improved transportation process. The role of an improved transportation process in Guangdong has also helped companies to reduce the empty truck fleets on the road. Various collaborative means are developed with the chain of humanitarian supplies by emphasizing the organizational culture (Wan et al., 2018). Transport is an international means of not only traveling but also for the management of the supply chain of goods. These are rendered to the improved transportation process which is efficiently managed from the perspective of the supply chain. The elements of costs, time, and accuracy within specified demand and supply are major elements of the supply chain focus in Guangdong. Empty containers are procured with economic returns and the costs and shortage of products are replaced through an effective supply chain (Adetunji et al.,

2020; Prasanna & Haavisto, 2018). This is dependent on the quantities and the cycles of times that integrate the optimal measures of an improved transportation process.

H6: Improve transportation process significantly mediate among the relationship between supply chains focus and reduce empty trucks.

Methodology

This article examines the impact truck sharing and supply chain focus on the improve transportation process and reduce empty truck and also analyze the mediating impact of improve transportation process among the nexus of truck sharing, supply chain focus and reduce empty truck in Guangdong. This study has taken the quantitative method of data collection and used the surveys for gathering data. The five point Likert scale has been followed by the surveys that show five for strongly agree to one for strongly disagree. The employees of transportation business are the respondents that are selected based on simple random sampling. A total of 1200 surveys were sent and received only 760 after three weeks that shows about 63.33 percent.

This research has adopted the smart-PLS for analysis purpose because the purpose of the research is hypotheses testing, the sample size is large and complex framework has been used (Hair Jr, Babin, & Krey, 2017). This research has taken two independent variables such as truck sharing (TSH) with six items and supply chain focus (SCF) with seven items. In addition, the current article is taken improve transportation process (ITP) with seven items and reduce empty truck (RET) is taken as the dependent variable with five items.

Findings

The results have shown the convergent validity that show the relation among the items. The figures has shown that AVE and loadings are not smaller than 0.50 and Alpha and CR are not lower than 0.70. These values have been indicated that high correlation among items. These values are shown in Table 1.

Table 1: Convergent Validity

Constructs	Items	Loadings	Alpha	CR	AVE
Improve Transportation Process	ITP1	0.770	0.890	0.912	0.565
	ITP2	0.784			
	ITP3	0.802			
	ITP4	0.760			
	ITP5	0.702			
	ITP6	0.742			
	ITP7	0.728			
Reduce Empty Trucks	RET2	0.796	0.849	0.898	0.689
	RET3	0.837			
	RET4	0.850			

	RET5	0.835			
Supply Chain Focus	SCF1	0.767	0.880	0.908	0.587
	SCF2	0.813			
	SCF3	0.779			
	SCF4	0.814			
	SCF6	0.781			
	SCF7	0.793			
Truck Sharing	TSH1	0.803	0.813	0.853	0.540
	TSH3	0.727			
	TSH4	0.831			
	TSH5	0.629			
	TSH6	0.663			

The results have also shown the discriminant validity that show the relation among the variables. This study has used the cross-loadings and Fornell Larcker to test the variable relationships. The figures has shown that the values that exposed the nexus with variable itself are larger than the values that show the relations with other variables. These values have been indicated that low correlation among variables. These values are shown in Table 2 and Table 3.

Table 2: Fornell Larcker

	ITP	**RET**	**SCF**	**TSH**
ITP	0.751			
RET	0.628	0.830		
SCF	0.594	0.611	0.766	
TSH	0.440	0.448	0.506	0.735

Table 3: Cross-loadings

	ITP	**RET**	**SCF**	**TSH**
ITP1	**0.770**	0.440	0.419	0.367
ITP2	**0.784**	0.563	0.462	0.374
ITP3	**0.802**	0.478	0.425	0.412
ITP4	**0.760**	0.473	0.441	0.440
ITP5	**0.702**	0.472	0.401	0.300
ITP6	**0.742**	0.449	0.506	0.241
ITP7	**0.728**	0.416	0.455	0.251
RET2	0.523	**0.796**	0.469	0.351
RET3	0.524	**0.837**	0.500	0.398
RET4	0.518	**0.850**	0.533	0.362
RET5	0.518	**0.835**	0.527	0.377
SCF1	0.406	0.432	**0.767**	0.296
SCF2	0.446	0.486	**0.813**	0.325
SCF3	0.408	0.515	**0.779**	0.311
SCF4	0.549	0.503	**0.814**	0.402
SCF6	0.448	0.420	**0.781**	0.389
SCF7	0.431	0.471	**0.793**	0.326

TSH1	0.410	0.396	0.458	**0.803**
TSH3	0.200	0.204	0.286	**0.727**
TSH4	0.468	0.448	0.500	**0.831**
TSH5	0.162	0.216	0.201	**0.629**
TSH6	0.178	0.242	0.249	**0.663**

This study has also used the Heterotrait Monotrait (HTMT) ratio to test the variable relationships. The figures has shown that the values of HTMT are less than 0.85. These values have been indicated that low correlation among variables. These values are shown in Table 4.

Table 4: Heterotrait Monotrait Ratio

	ITP	**RET**	**SCF**	**TSH**
ITP				
RET	0.720			
SCF	0.669	0.705		
TSH	0.438	0.479	0.530	

This study has also shown the relations among the variables and the findings exposed that truck sharing system and supply chain perspective have positive association with reduce empty truck in Guangdong and accept H1and H2. The findings also exposed that truck sharing system and supply chain perspective have positive association with improve transportation system in Guangdong and accept H3 and H4. The results also indicated that improve transportation system positive mediates among the nexus of truck sharing system, supply chain perspective and reduce empty truck in Guangdong and accept H5 and H6. These relations have been mentioned in Table 5.

Table 5: Path analysis

Relationships	**Beta**	**S.D.**	**T Statistics**	**P Values**	**L.L.**	**U.L.**
ITP -> RET	0.384	0.037	10.484	0.000	0.317	0.460
SCF -> ITP	0.500	0.033	15.203	0.000	0.435	0.560
SCF -> RET	0.325	0.043	7.486	0.000	0.232	0.402
TSH -> ITP	0.187	0.035	5.270	0.000	0.118	0.256
TSH -> RET	0.115	0.031	3.751	0.000	0.053	0.174
SCF -> ITP -> RET	0.192	0.024	8.104	0.000	0.150	0.241
TSH -> ITP ->RET	0.072	0.015	4.682	0.000	0.044	0.105

Discussions and Implications

The study results have revealed that the truck sharing has a positive impact on the reduction of empty trucks. The study examines that the number of trucks that are excessive or are not currently underuse can be reduced with the development of truck sharing. These results are in line with the past study of Islam (2018), which shows that the truck sharing allows the sharing of vehicles among the countrymen on rent to serve a group of persons or individuals. The development of this system has brought a

dramatic decrease in the number of trucks which are standing empty without any use. These results are also in with the past study of Schulte et al. (2017), which states that some enterprises or individuals use trucks or other vehicles for transport purposes at some specific time in a day. Afterward, these trucks or other vehicles remain empty and useless. Under the truck sharing, these vehicles can be provided for rent for personal use or for some commercial purpose. This system minimizes the number of empty trucks in the country. The study results have also indicated that the integration of supply chain focus into the transportation industry has a positive association with the reduction of empty trucks. The upstream and downstream supply chains in the transportation industry increase mobility of logistics, material, and other resources across the chain node. This increases the use of trucks or other vehicles, and thus, the number of empty trucks decreases. These results are in line with the past study of Galanopoulos, Barletta, and Zondervan (2018), which analyzes the contribution of the introduction of the supply chain in the transportation industry in the developing economy of Germany.

This study concludes that the supply chain in the transportation industry reduces the number of empty or free trucks as the supply chain motivates mobility of logistics across the concerns in the chain. In a chain, the trucks or other vehicles can be acquired instantly at the time of need, and the enterprises do not have to face issues raised by the excessive number of empty vehicles. These results are also in line with the past study of Abdulrazik et al. (2017). This study compares the situation in the transportation industry both in the case of the supply chain and without the supply chain. This study states that as the supply chain builds a network of all individuals, enterprises, activities, and resources, there is more mobility and more need for vehicles which brings a reduction in the number of excessive or empty trucks and other vehicles. Thus, the supply chain enhances the use of transports and decreases the number of empty vehicles. The study results have shown that the truck sharing has a positive impact on the improvement in the transportation system. The study implies that the development of truck sharing system in an economy brings improvement in the overall transportation system as on one side it increases the use for different types of vehicles, and on the other hand, it facilitates the enterprises which deal in the production and trade of transports. These results are in line with the recent study of Wang et al. (2018), which suggests that the truck sharing system facilitates the transportation enterprises in acquiring material, resources, and technology that enable them to produce the transport equipment and logistics.

The truck sharing is also helpful to the transportation system in mobilizing the products and services. These results are also in line with the literary work out of Kuklina et al. (2020). This workout shows the significance of the introduction and implementation of truck sharing in the overall transportation system. This workout suggests that as under the truck sharing, the transport vehicles can be leased or granted on rent for a specific period of time, which promotes transportation business. Now

many transportation entities buy a number of vehicles and then give them on rent to individuals for personal use or business enterprises for commercial use. Moreover, the study results have indicated that the supply chain focus has a positive association with the improvement in the overall transportation system. These results are supported by the past study of Sim (2017), which shows that like any economic industry, the integration of individuals, enterprises, resources, technology, and processes within a chain improves the performance of enterprises in the transportation industry. The supply chain facilitates the movement of information and other technology which are used in the transportation enterprises in their operations and marketing. The study results have also indicated that the improvement in the transportation system plays a mediating role between the truck sharing and the reduction of empty trucks. These results are in line with the past study of Holeczek (2019), which indicates that the development in the truck sharing brings improvement in the overall transportation system as it creates stimulation in the transportation activities. The improvement in the overall transportation system reduces the number of empty trucks. Moreover, the results have shown that the improvement in the transportation system plays a mediating role between the supply chain focus and the reduction of empty trucks. These results are following the past study of Obara (2019), which shows that the overall transportation system is improved by the integration of transportation stakeholders within a supply chain, and it further reduces the number of empty trucks.

Both the theoretical and empirical implications are made by the current study. The study makes a significant contribution to the economic-based literature. This study gives a detailed description of the contribution of transportation planning factors like truck sharing system and supply chain focus to the reduction of the number of empty trucks. Moreover, this study throws light on the influences of the truck sharing and supply chain focus on the improvement in the overall transportation system. Before the conduct of this study, little attention has been given to the mediating influences of improvement in the transportation system between the truck sharing and supply chain focus and the reduction of the number of empty trucks. This study is one of the initial attempts to introduce the improvement in the transportation system as a mediator between the aforementioned factors and the reduction of the number of empty trucks. This study guided to the regulators in term of developing the policies related to the transportation system that could enhance the business performance. The current study also has a great practical significance to the economists in the emerging economies as it provides guidance on how to reduce the excessive number of trucks that are not underused. This study suggests that the number of empty trucks can be reduced with the developed truck sharing system, the implication of supply chain focus, and improvement in the transportation system.

Conclusion and Limitations

The study investigates the reduction of empty trucks on account of the development of transportation planning system in the economy of Guangdong. In this regard, the study throws light on the truck sharing, supply chain focus, and the improvement in the transportation process and checks their influences on the reduction of empty trucks. This study implies that the improvement in the truck sharing reduces the number of empty trucks. The truck sharing allows the sharing of vehicles among the users on rent to serve either a group of persons or individuals. The development of this system brings a significant decrease in the number of trucks which are standing empty without any use. Similarly, the implication of supply chain focus in the transportation industry increases the use of transport vehicles and thus reduces the number of empty trucks. The study also implies that the truck sharing leads to the improvement in the overall transportation process as on one side it increases the use for different types of vehicles, and on the other hand, it facilitates the enterprises which deal in the production and trade of transports. The study implies that the supply chain facilitates the movement of information and other technology which are used in the transportation enterprises in their operations and marketing. Thus, the supply chain focus improves the transportation process. Moreover, the study states that the transportation process, which is improved by the truck sharing, and supply chain focus, reduces the empty trucks.

The current study addresses a minimal number of transportation planning factors like truck sharing, supply chain focus, and improvement in the transportation process as the measures to be taken to reduce the strength of the empty truck. Economic conditions and many social factors also affect the number of empty trucks in the economy, and all these factors are left by this study unaddressed. Thus, the current study is not comprehensive and less reliable. To produce a more comprehensive and more reliable study, the authors in the future must also investigate the influences of economic conditions and social factors on the number of empty trucks. Moreover, here in this study author has used the improvement in the transportation process as a mediator between truck sharing, supply chain focus, and the number of empty trucks. But, the improvement in the transportation process must be used by future authors as a moderator between the aforementioned factors and the number of empty trucks.

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COMPETITIVE ADVANTAGE OF COMMUNITY-BASED TOURISM INDUSTRY IN NIGERIA

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ABSTRACT

Across the globe, tourist development is a prerequisite for strong economic growth in the country, and authorities and researchers must pay attention. This is why the author doing this research right now on the Effect of Participatory Management and Knowledge management on the Competitive Advantage of Community-Based Tourism in Nigeria. These impacts are also examined in this study by the mediation of trust and gathering community knowledge. The researchers employed questionnaires for data collection and smart-PLS for data processing. Results revealed that knowledge and participatory management impact the competitiveness of community-based tourism in a good way. Likewise, trust and gathering community knowledge also impacts the competitive advantage in a positive way of community-based tourism. Results also revealed that knowledge and participatory management have a positive impact on gathering community knowledge and trust respectively. Gathering knowledge of community mediates the relationship between knowledge management and competitive advantage. Trust also mediated the relationship between participatory management and competitive advantage.

Keywords*:* Competitive Advantage, Community-Based Tourism, Tourism Industry

Introduction

Today's global economy is dominated by the tourism industry, which is one of the most important revenue generators for most countries. In addition to playing a large part in economy and society of a nation. Tourism is a main cause of earnings, bringing cash in the nation with creating jobs, as well as contributing to the development of the region's economy. When residents (typically rural, poor, and economically challenged) welcome tourists to stay with them, they're engaging in community-based tourism (CBT). As much of the tourist cash as possible is allocated to projects that benefit the entire community. Not only does community-based tourism encourage closer ties between host and visitor, but it also supports environmental protection, cultural preservation, social responsibility, and economic development.

Community-based sustainable tourism, according to the researcher, is tourism that considers environmental, social, and cultural sustainability as well as community direction and management, as well as the owner's right to care to learn from visitors who travel to work by covering five areas: politics, economics, so on and so forth. Tourism can also be used as a development tool. A community organization can play a part in planning the growth of their community when there is a tourist situation. Most of all, in communities that are likely to participate in the trip to reveal or make known their community to the general public, On the other hand, tourism can be used as a tool for community development while learning about resource management and decentralized decision making (Dangi & Petrick, 2021).

To those living in rural and distant areas of developing countries, tourism has been considered as an industry that may give much-needed economic benefits to those who lack the skills and financial resources to participate in tourism development without external assistance. There are new development paradigms that support and encourage self-help, self-reliance, and empowerment of communities. A new worldwide standard for sustainable tourism was introduced as a replacement for traditional tourism and several governments adopted regulations that reflected this transition (He et al., 2021).

Local requirements, particularly the ability to fully incorporate nature, should be the basis for tourism management. Und a cultural and social alternative travel arrangement that fulfills the demands of the community. Greater economic integration with social development and environmental conservation. Community-driven tourism as a whole, which CBT is relevant to the development of community relationships both within and outside the community, as well as the spirit of community (Khaenamkhaew, 2021). Poor accessibility, limited income generation, heavy reliance on external donor funding, inadequate marketing, lack of capacity among Community Trust Board and Staff, as well as unsatisfactory involvement and limited capacity among Technical Advisory Committee are some of the challenges that have been cited as obstacles to overcome (Pasanchay & Schott, 2021).

Current challenges with Community Based Tourism Network in Nigeria stem from the fact that tourism community leaders, local politicians, government personnel, and non-government staff that have a role in marketing the villagers and tourists have different levels of awareness about Community Based Tourism. There is also a need for the Community Based Tourism Network to research whether or not knowledge management is an effective way to assemble, preserve, and communicate information to expand knowledge and reduce the knowledge gap of persons working in Community Based Tourism (CBT) (Priatmoko et al., 2021).

The impact of participative and knowledge management on the development of the Community Based Tourism Network was studied in this research as a pilot project.

Community-based tourism has grown as a network because some communities have discovered the challenges with the support from the public and private sectors, focusing them to be the working center of the network's development (Sasong, 2021). It is envisioned that tourist management will be at the center of the communities. Aside from meeting the needs of visitors, this practice highlights the potential of local people to use their knowledge to preserve and participate in the management of their community to contribute to the maintenance and restoration of natural resource balance, cultural identity, as well the future economy of their community (Singcram, 2021).

Literature Review

Tourism quality of life development is a community development job. Tourist items and services are purchased at the peak of the tourist season and can be identified. Tourism is the development of responsiveness consumerism. Tourism communities disconnected from its initial output in agricultural versus commercial services. Often, external cultural tourists who come with a sword and a big risk in the adoption of development are the ones who control the social and cultural attractions (Adham et al., 2021). Local requirements, particularly the ability to fully incorporate nature, should be the basis for tourism management. As well as the aptitude to act as a social and communal substitute to traditional travel arrangements. It truly serve the requirements of the community. Greater economic integration with social development and environmental conservation. Community-driven tourism as a whole, which CBT is significant to the development community? Relationships both within and outside the community, as well as the community's spirit (Amini, Malekmohammadi, & Jafari, 2021).

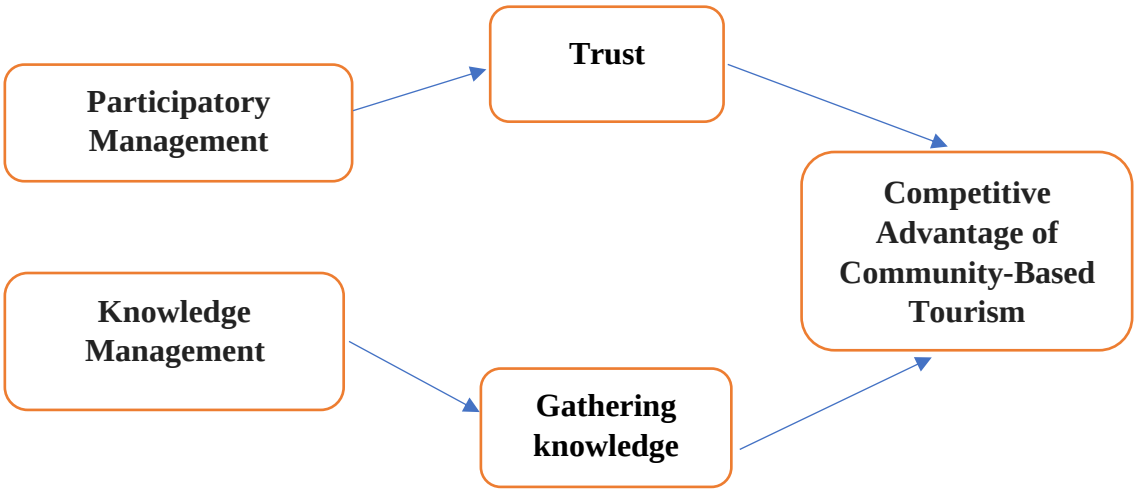

Figure 1. Theoretical Conceptual Model

2.1: Participatory Management, Trust, and Competitive Advantage of Community-Based Tourism.

It's a management style that relies on the collaboration of the staff to be successful. Within the work teams, it attempts to foster commitment and encourage initiative. A manager must transfer some of his authority to achieve this goal, and the teams must decide collectively on the best alternatives to implement. Consequently, participation in management increases an employee's sense of responsibility for their work. An increase in efficiency and higher output can result from this type of empowerment as well as an increase in morale and job satisfaction. When managers have entire faith in their subordinates, they practice participatory management, which relies heavily on group decision-making. A participative management approach increases trust, and high-level trust accelerates the formation of strong networks among the members (Dimitrovski, Leković, & Đurađević, 2021).

For participative management to be successful, it must be carefully planned and implemented in phases. As with any successful cultural shift from an authoritarian or democratic management style to a participative one, changing employees' perceptions of management takes time. Employees who have been with the company for a long time may fight changes since they don't believe they will last. Managers must be sincere and honest when administering the program for it to be successful. It will be necessary for many employees to see evidence that their ideas will be adopted or at the very least thoroughly evaluated on an ongoing basis. Staff must be able to rely on their bosses and feel valued (Hock-Doepgen et al., 2021).

When it comes to tourist planning, community involvement is centered on the decision-making process and the benefits of tourism growth. Residents' respect for their traditional lifestyles and values increases as a result of local community involvement in the decision-making process. If local citizens are employed by new firms, or start their small businesses, they can reap the economic benefits for their town. Several options are available for citizens to participate effectively in tourism development operations, mobilize their capacities as social agents rather than passive subjects, make decisions, and manage the activities that affect their lives. The involvement of the local community in the tourism industry is a driver for change and growth (Huang & Li, 2021). A wide range of insights on tourism development can be gained from local populations. Local communities' socioeconomic gains from tourism can only be maximized by their participation in tourism activities, according to the literature. Aside from that, the accuracy of depictions of their traditional lives and beliefs depends on the local community's involvement in the planning and development process Because of this, sustainable tourist development depends on local community participation (Liu, Yang, & Wu, 2021). Many studies have shown, however, that destination communities in the poor world, especially in less developed locations, such as rural destinations, prefer low degrees of community participation and economic involvement in these

areas, residents are less likely to participate in decision-making or control the process of tourism development and heritage conservation than in other areas. Residents in some less developed areas preferred economic participation and benefit-sharing above participation in decision-making processes. Local citizens will be more likely to participate if they believe that authorities and government officials are interested in hearing their opinions and will offer them opportunities to participate in the decision-making process. Residents will eventually join in conservation programs and tourism development to the extent that they believe local authorities will allow it. The centralized political system, however, and the inclination of local decision-makers to resist power-sharing, are seen as a hindrance by residents of impoverished and rural areas, particularly in emerging countries (Lopes et al., 2021).

H1: Participatory Management has a positive significant impact on trust.

H2: Trust has a positive significant impact on the Competitive Advantage of Community-Based Tourism.

H3: Trust mediates the relation between Participatory Management and Competitive Advantage of Community-Based Tourism.

2.2: Knowledge Management, Gathering knowledge, and Competitive Advantage of Community-Based Tourism.

In knowledge management, the goal is to bring together all of the information that exists within a company. Who distributed in the person or papers to create the system. This is so that everyone in the company has access to information. As well as the growth of self-knowledge. In addition, operational efficiency is important. This will allow firms to be more competitive in the future. And leads most people's tacit knowledge to become explicit (infinite tapestry of sound). Knowledge management technologies for storing and disseminating knowledge are also important. As a written record, the instrument is straightforward and can be utilized in any situation because it's easy to apply to the publisher. A recording can be made if it hasn't been recorded as a picture or an audio file. This is dependent on limits and the operator's capacity to publish. As a result, these tools will make it easier to disseminate knowledge. Knowledge may now be easily accessed thanks to contemporary information technologies. In either case, the picture and sound can be saved combined (Odunga, 2021).

Its natural resources and production methods rely on sustainable use of resources while its cultural history is distinct. Communities with a wise or knowledgeable person with skills in several fields and a sense of ownership and participation in the development process are the most desirable. The ecology, culture, and tourism are governed by rules and regulations. People profit equally from traveling and interacting within their communities. There is a fund supporting the community's

economic and social growth. To promote an awareness and comprehension of diverse cultures and lifestyles, tourism activities include a learning component that is inherent in them. Residents and visitors can learn from one another, as well as from the management, which encourages the conservation of natural and cultural resources (Pérez-delHoyo et al., 2021). The specialists in Community Based Tourism and Knowledge Management gave a presentation on the concept and understanding of CBT and knowledge management to manage knowledge in the same direction. The villagers then ate dinner and were separated into four groups for brainstorming on topics of natural resources and cultural organizations, community management and learning, as well as presenting data acquired from each group's brainstorming sessions. The collective of all individuals in knowledge management who are knowledgeable. Because of operational experience and research, this group has a good understanding of CBT (Rezaei, Khalilzadeh, & Soleimani, 2021). As well as public sector training and observational trips to promote and support. Some local politicians and young people in the community have attended the training, including through the study process, but only a limited number of persons in this group. It offers the potential for tourism management, as well as the ability to pass on information to locals and tourists (Rezaei et al., 2021).

H4: Knowledge Management has a positive significant impact on Gathering knowledge of the community.

H5: Gathering knowledge of community has a positive significant impact on Competitive Advantage of Community-Based Tourism.

H6: Gathering knowledge of community mediates the relation between Knowledge Management and Competitive Advantage of Community-Based Tourism.

Methodology

Every research relies heavily on methodology. In this section of the research, the author explains the research strategy, demographic, sample, sampling, and data gathering procedure in more detail than ever before. A quantitative research design was chosen for this investigation. Various hypotheses are tested in this research approach, including (Participatory Management, Knowledge management, Competitive Advantage of Community-Based Tourism, Trust, and gathering community knowledge). Employees of community-based tourism made up the study's sample. Respondents in this study were Thai community tourism workers.

Data was collected using a simple random sampling technique. This simple random sampling technique is quick and straightforward to use, as well as cost-effective. The e-mail survey method is used to gather data. The administration has provided the e-mail addresses of personnel who work in community-based tourism in Nigeria. A questionnaire was then emailed to their e-mail addresses when it was completed. The

questionnaire asks about the age, gender, and qualifications of the players. In addition, the questionnaire asks about variables.

Respondents returned the questionnaire to the author after completing it in its entirety. It is here that the missing data and outlier questions are subtracted from the questionnaires. These missing values and outliers have been filtered out of the collected data. The remaining data will be used in the analysis process.

Data Analysis

By using Smart PLS, data is cleaned up of outliers and missing values. There is a purpose in analyzing the reliability and validity of data with this model of measurement. Factor loading, the value of alpha, composite reliability, and average variance are used to test the data's dependability (AVE) (Henseler, Ringle, & Sinkovics, 2009). As shown in Table 1, the factor loading of the given data is depicted, and the remaining relevant values are shown in Table 2. Testing the validity of the data with the HTMT yielded these results, which are shown in Table 3. According to Figure 3, these values are well beyond their acceptable levels.

Table 1. Factor Loadings

	CA	GKC	KM	PM	TR
CA1	0.882				
CA2	0.821				
CA3	0.815				
CA4	0.847				
GKC1		0.775			
GKC2		0.766			
GKC3		0.841			
GKC4		0.797			
KM1			0.668		
KM2			0.843		
KM3			0.902		
KM4			0.719		
PM1				0.764	
PM2				0.721	
PM3				0.693	
PM4				0.82	
TR1					0.8
TR2					0.817
TR3					0.645
TR4					0.746
TR5					0.807

Table 2. Reliability and Convergent Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
CA	0.862	0.907	0.708
GKC	0.807	0.873	0.633
KM	0.791	0.866	0.622
PM	0.741	0.838	0.564
TR	0.822	0.875	0.586

Table 3. HTMT

	CA	GKC	KM	PM	TR
CA					
GKC	0.005				
KM	0.847	0.506			
PM	0.87	0.78	0.519		
TR	0.705	0.894	0.638	0.835	

This structural model assessment is produced in Table 4. The t-values used to test the hypothesis are shown in Table 4. All the direct effect hypotheses are accepted because the t values are greater than 1.96.

Table 4. Direct Effect Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation	T-Statistics	P-Values
GKC -> CA	0.653	0.653	0.074	8.781	0
KM -> GKC	0.736	0.738	0.044	16.695	0
PM -> TR	0.742	0.744	0.05	14.737	0
TR -> CA	0.244	0.246	0.071	3.442	0.001

PM: Participatory Management, KM: Knowledge Management, CA: Competitive Advantage of Community-Based Tourism, TR: Trust, GKC: Gathering community knowledge

There is an in-direct relationship between the variables which is shown in Table 5. It was shown that the t value of (7.596) explains gathering knowledge of community mediates the relationship between knowledge management and competitive advantage. Trust also mediated the relationship between participatory management and competitive advantage with a t value of 3.242.

Table 5. Indirect Effect Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation	T-Statistics	P-Values
KM -> GKC -> CA	0.48	0.482	0.063	7.596	0
PM -> TR-> CA	0.181	0.184	0.056	3.242	0.001

Discussion

To establish an information system for Nigeria's community-based tourist network, data from community-based tourism was gathered via participatory management and knowledge. Results from this data revealed that knowledge and participatory management have a positive impact on the competitive advantage of community-based tourism. In the same way, each community network aspired to build a Community-Based Tourism concept that would be shared by the community leaders and local citizens or kids (Hock-Doepgen et al., 2021). An effective system for community-based tourist management was created as a result of this, as was a cooperative approach to planning and managing sustainable tourism resources. It also strengthened the ability to negotiate and collaborate with other public and private sector groups that are involved in Community-Based Tourism management to achieve the goals (Wan & Monpanthong).

Likewise, trust and gathering community knowledge also has a positive impact on the competitive advantage of community-based tourism. Results also revealed that knowledge and participatory management have a positive impact on gathering community knowledge and trust respectively. Gathering knowledge of community mediates the relationship between knowledge management and competitive advantage. Trust also mediated the relationship between participatory management and competitive advantage.

Conclusion

The term community-based tourism refers to the practice of inviting tourists to stay with residents (usually rural, impoverished, and economically challenged) (CBT). When residents (typically rural, poor, and economically challenged) welcome tourists to stay with them, they're engaging in community-based tourism (CBT). They use as much of the tourist money as they can to fund projects that benefit the whole community. As a result of community-based tourism, visitors and hosts can form stronger bonds, and environmental conservation, cultural preservation, social responsibility, and economic development are all benefited. As a result, authorities, and experts must pay attention to the development of tourism around the world. As a result of this, the author is currently doing a study on the effects of participatory management

and knowledge management on the competitive advantage of community-based tourism in Nigeria. As part of this study, trust is mediated and community knowledge is gathered to assess these implications. In order to collect data, the researchers used questionnaires and smart-PLS software.

Results revealed that knowledge and participatory management have a positive impact on the competitive advantage of community-based tourism. Likewise, trust and gathering community knowledge also has a positive impact on the competitive advantage of community-based tourism. Results also revealed that knowledge and participatory management have a positive impact on gathering community knowledge and trust respectively. Gathering knowledge of community mediates the relationship between knowledge management and competitive advantage. Trust also mediated the relationship between participatory management and competitive advantage.

Implications

Theory-wise, this study adds to the existing literature by examining the effects of participatory management and knowledge management on the competitive advantage of community-based tourism in Nigeria with the mediation of trust and gathering community-based knowledge. For those who have a wise or knowledgeable person in their community, as well as skills in a variety of communities, and who feel that they are part of the process, this study can be very useful because Community-based tourism has grown as a network. After all, some communities have discovered the challenges with the support from the public and private sectors, focusing them to be the working center of the network's development.

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ROLE OF MARKETING ON CHOOSING DECISION MAKING IN SHOOTING TYPES OF SHOOTERS IN SPORT TOURISM

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ABSTRACT

The research objectives represented 1) to study the marketing and the decision making on the types of shooting sports. 2) to study the relationship between the marketing and the decision making on the types of shooting sports. This research represented the quantitative approach. The population was the sport shooters. Because of the unknown number of Population, the 384 sample sizes of sport shooters were determined from the unknown number of shooters. The research instrument represented the questionnaire and collecting data form the sport shooters. The data analysis represented descriptive statistical approach by percentage, mean and standard deviation, the statistical correlation analysis represented the Pearson correlation coefficient. The finding found the shooting business marketing strategies were comprised of 1) product 2) price 3) place 4) promotion 5) Packaging 6) Personal and 7) Public Relation, all of seven strategies related with the choosing decision making in shooting types of shooters.

Keyword; marketing, shooting sports, sport tourism

Introduction

Gun shooting sports was a sport that had been widely accepted and competition in every country around the world that contributed to be an important business of the business organizer. Each business organizer provided a lot of marketing competition in order to attract the gunmen to apply in the shooting competition games, therefore the companies provided the crucial marketing strategies that the various matches should be chosen by the gunmen. The gunmen had the decision makings process in choosing the matches also. Shooting represented a sport that competed at precision. Pierre De Coubertin, the modern Olympic revivalist He was a French short shotgun champion many years ago. He equally participated in the first Olympic Games in Athens in 1896. At that time there were only three matches. After that, the shooting sport was selected into the matches of all the Olympic game besides in two Olympic Games years 1904 in St. Louis, USA and 1928 in

Amsterdam, the Netherlands. The team shooting both of short guns and long guns were completely cut off in 1948.After the National Shooting Sport Association of Thailand under The Royal Patronage was established, the association qualified the shooter to contest the national race like the SEA games, ASIAN games and the first time to Olympic Game 17th at Rome, Italy in 1960. In the year 1958, the National Shooting Sport Association of Thailand under The Royal Patronage applied to be a member of the Gun Shooting Federation of Asia and a member of the International Shooting Federation at the same time. The type of gun shooting competition that complied with the standard of the International Shooting Federation which attended on the listed competing in the Olympic Games. There were seven types of listing; 1) the rifle prone 2) the pistol 3) the running trap 4) the rifle 3-poition 5) the shot gun 6) the rapid-fire pistol 7) the skeet running target. The various types of shooting game provided the marketing strategies that contributed the decision making in matches of the gunmen. (Jersilp, 2018; Mekhum, 2016; Delcea, et al 2019)

Objectives

1. To study the marketing strategies and the decision making on the types of shooting sports.

2. To study the relationship between the marketing and the decision making on the types of shooting sports.

Literature Reviews

At the present, the various strategies should be implemented according to the businesses especially distinctive 4P's and also the contemporary strategies such as 7P's that the businessmen around the world accepted in their obviously marketing efficiency, in addition, there were recent strategies in the crucial internet era which was called the 4C's strategies. The key objectives of every organization represented the survival and growth among the crucial competitions. The entrepreneurs had to prioritize the marketing mix, but the marketing strategies especially the classical marketing mix was inadequate for the effectiveness of competitiveness strategies. The adding of other marketing mix became to the marketing mix 7P's that represented the significant factors that all organization prioritized to perform the business on the intense competition and the entrepreneurs could not exclude the marketing activities that according to the service recipient needs. (Kotler & Armstrong, 2014; Kotler & Keller, 2016 Chomrat, 2016)

The marketing strategy comprised with the product, price, place, promotion, people, process and physical evidence that would provide a stimulus or marketing stimulus that affects the products and services purchasing processes. The consumers provided more alternatives to buy products and services. Therefore, the analysis of the

decision making of the consumers was crucial to the business. The entrepreneurs prioritized the activities that contributed the consumer decision making in products or services. The entrepreneurs had to have the systematic operations and good principles according to the consumer behavior. (Kotler & Armstrong, 2014; Kotler & Keller, 2016)

The distinctive marketing strategies represented as following 1) the product strategy shown the distinction of products that could communicate to the customer perception of value, the more customer perception the more competition. 2) the pricing strategy represented the appropriate pricing on the products and the willing to pay of customers 3) the place strategy represented the place where the product was proposed and this point the customer target was known and how to satisfy their customers for appropriated placing and further sales 4) the promotion strategy persuaded the customer in products buying and also contribution on products through the word-of-mouth 5) Packaging Strategy seemed the products image that was the first stage to persuade customers to purchase or not which the distinctive on the graceful packaging and the competition in addition with the marketing competition 6) the personal strategy contributed the sales that salesmen considered the art of the persuading conversation on products and making the decision in finally 7) the public relation strategy, the globalization contributed the effective communication in addition of good image on products and organization. (Kotler & Armstrong, 2014; Kotler & Keller, 2016)

The decision making represented the process of selection in the provided alternatives that consumers had to make a decision on the alternative on products or services based on the data and the situational constrains. The decision making represented the crucial processes on the inner state of customers mind (Kaewsamor, 2008; Kotler & Keller, 2016). The decision makings process represented five steps as the following; 1) the problem recognition 2) the information searching 3) the alternative evaluation 4) the making decision to purchase and 5) the post-purchase behaviors. One of the objectives of businesses obtained the customers who made the decision on products buying or serving. Every business determined to study the stepping of the customer decision making, consumer behaviors on buying decision making that the starting and final of the thinking processes and contributed the marketers to formulate the marketing strategies. (Kaewsamor, 2008; Kotler & Armstrong, 2014; Kotler & Keller, 2016).

Conceptual framework

Literatures reviewing contributed the conceptual framework as bellow.

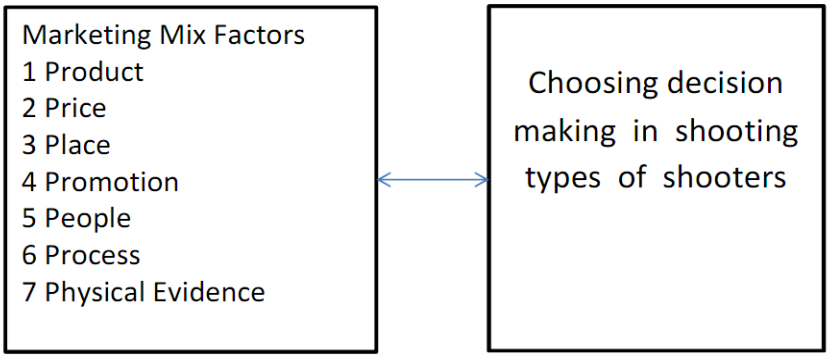

Figure 1 Conceptual Framework

Methodology

This research represented the quantitative approach. The population was the sport shooters. Because of the unknown population, the 384 sample sizes of sport shooters were determined from the unknown of number of Population by W.G. Cochran formula with the 95 percent of confidence and the 5 percent of error. The research instrument represented the questionnaire and collecting data form the samples that were the sport shooters. The data analysis represented descriptive statistical approach by percentage, mean and standard deviation, the statistical correlation analysis represented the Pearson ‘s correlation coefficient.

Results

The finding of the research found that the marketing strategy relating to the choosing decision making on the types of shooting matches had moderate with the high statistical level. In addition, the studying of marketing strategy relating to the choosing decision making on types of shooting was found that both factors were indeed related with the high statistical level with crucial factors including as following 1) product strategy 2) price strategy 3) place strategy 4) promotion strategy 5) Packaging strategy 6) personal strategy and 7) public Relation strategy that indicated the implementation of marketing strategy was necessary for the choosing decision making on the types of shooting matches to stimulus the sport shooters.

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THE MEDIATING ROLE OF CREATIVITY ON ORGANIZATIONAL CLIMATE OF COMMUNITY-BASE TOURISM IN BARCELONA SPAIN

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ABSTRACT

Organizational climate is most important to promote the industry performance. It also has central importance in community-based tourism; however, it is not addressed in Community-Based Tourism in Barcelona Spain. Therefore, aim of this study is to examine the role of inno-life management, transformational leadership and creativity in organizational climate. The relationship between inno-life management, transformational leadership, creativity and organizational climate was examined. Primary data were collected from Barcelona Spain with the help of questionnaire. Results of the study reported that; inno-life management has positive effect on organizational climate. Furthermore, transformational leadership has positive effect on organizational climate. Both the inno-life management and transformational leadership has direct and indirect effect on organizational climate through creativity. Therefore, community-based tourism can be promoted with the help of organizational climate through inno-life management and transformational leadership.

Keywords. transformational leadership, creativity, organizational climate,

Introduction

Organizational climate is playing a major role among the organizations (Powell et al., 2021). Because a better organizational climate is always required for the employees to perform better. It has direct relationship with the performance of the employees. Therefore, to achieve higher performance, organizational climate has central importance for the companies. Along with the other industries, organizational climate is also most important in tourism industry. Among the tourism management companies, the role of organizational climate is important to perform better. Employee working in tourism management companies require supportive climate to perform better.

Along with the other industries, the role of organizational climate is important in community-based tourism activities. Similar with other countries, community-based tourism also playing vital role in tourism industry (Jomsri, 2020). Therefore, the focus of this study is community-based tourism. This study considered community-based tourism in Barcelona Spain. Barcelona is the Southern provinces of Spain having

important opportunities of community-based tourism. Tourism is the important industry in Spain which is important contribution to Spain. This industry is growing rapidly in Spain as shown in Figure 1. The number of tourists traveling to Spain enhanced from 35.35 million in the year of 2017 to 38.28 million in the year of 2018 and then 39.92 million in 2019. The increase in travelers from the year 2018 to 2019 was restricted to 4.24 %, which essentially was less than expected results of management in Spain. However, from March 2020 to end August 2020 no tourists were allowed in Spain due to COVID-19.

According to this study, organizational climate in tourism management firms related to the community-based tourism can be managed with the help of inno-life management and leadership activities. Both has key importance to enhance organizational climate among the tourism management companies related to the community-based tourism. Inno-life management and leadership activities have the potential to enhance creativity among the employees which lead to the organizational culture. Thus, this study proposed the relationship between inno-life management, transformational leadership, creativity and organizational climate in relation to the community-based tourism in Barcelona Spain. Several previous studies carried out organizational climate in tourism and community-based tourism in various countries (Hoang, Wilson-Evered, & Lockstone-Binney, 2020; Ibrahim & Shuib, 2016; Sawatsuk, Darmawijaya, Ratchusanti, & Phaokrueng, 2018), but, it is not considered in relation to the inno-life management and leadership in Barcelona Spain. Thus, the aim of the study is to inspect the role of inno-life management, transformational leadership and creativity in organizational climate in Barcelona Spain. Hence, this study has important contribution to the literature with the help of introducing the current relationship which is not addressed in previous studies. This study also addressed the indirect effect of creativity. More importantly, the indirect effect of creativity is not highlighted in the past studies in relation to the community-based tourism.

Literature Review

The proposed relationship between inno-life management, transformational leadership, creativity and organizational climate in relation to the community-based tourism activities in Barcelona Spain. Community-based tourism is an important activity in which local people invite tourists from various parts of country as well as internationally to see various events related to the local community. While inviting the tourists, these local community people generate income from tourists by providing various opportunities related to the accommodation. In this direction, local community has central importance because various events in the community is the central cause of attraction for the tourists. Along with other fields of tourism, community-based tourism has key importance in Spain and contributing to the overall tourism industry. It is proposed that; organizational climate has major importance in community-based tourism industry. Organizational climate is influenced by inno-life management through creativity. It is proposed that inno-life management has positive role to enhance creativity among the tourism management companies which further improves the

organizational climate. Furthermore, transformational leadership also has the similar role to promote organizational leadership through creativity.

2.1 Inno-life Management, Creativity and Organizational Climate

Inno-life management has important contribution to the people living in the any community with potential opportunities for community-based tourism. This concept is based on the introduction of innovation in community-based tourism activities. The introduction of innovation along with the traditional methods of community-based tourism can attract the tourists. Especially, innovative products as well as services at village level has the potential to attract the tourists. Previous studies also reported that innovative services and products in tourism industry has major importance (Su, 2020). Therefore, introduction of innovative services or products in community-based tourism has vital role to enhances tourism activities.

Creativity is a phenomenon whereby something somehow new as well as somehow valued is formed. The formed item may be intangible or a physical object. Creativity in the hospitality industry has major importance. Generally, the creativity in various products as well as services for tourists by the tourism management companies has vital importance. Creativity is one of the important parts of innovations which bring something new in services and attract the tourism in any specific area. It is most imperative in community-based tourism activities. Local people living in the specific area and management of tourism companies can enhance tourist's attraction with the help of creativity which can promote several opportunities for the tourists in community-based tourisms. Previous studies also highlighted the important role of creativity in tourism (Kršlak & Ljevo, 2021).

Organizational climate can be explained into four diverse classes: people-oriented climate, rule-oriented climate, innovation-oriented as well as goal-oriented. Organizational climate effects to an excessive extent the performance of the employees since it has a key influence on motivation as well as job satisfaction of specific employees. Organizational climate regulates the work environment in which the employee senses gratified or dissatisfied. The employees working in the tourism management companies related to the community-based tourism is most important to provide important services. Employees require better organizational climate to enhance the performance which effect on the services providing by the tourism companies to the tourists. Therefore, in the current study, organizational climate is used in tourism management companies related to the community-based tourism. The importance of organizational climate among various industries is highlighted by previous studies (Liu, Chow, Zhang, & Huang, 2019). However, while dealing with inno-life management, organizational innovative climate is most important to support community-based tourism.

There is an important relationship between inno-life management, creativity and organizational climate. The relationship between inno-life management lead to the positive organizational climate among the tourism management companies. Inno-life

management has the ability to enhance creative ideas among the companies and creative ideas may lead to the innovative tourism services. Innovative services can lead to the better tourist satisfaction. The positive association between creativity and organizational climate is also highlighted in the literature (Kijački, 2021). According to this study, creativity playing a mediating role between inno-life management and organizational climate which lead to the following hypotheses;

Hypothesis 1. Inno-life management has positive influence on organizational climate.
Hypothesis 2. Inno-life management has positive influence on creativity.
Hypothesis 3. Creativity has positive influence on organizational climate.
Hypothesis 4. Creativity mediates the relationship between inno-life management and organizational climate.

2.2 Inno-life Management, Transformational Leadership and Organizational Climate

Leadership can be well-defined as "the action of leading a group of people or an organization." Transformational leadership is one of the important types of leadership. Transformational leadership is a philosophy of leadership where an individual person as leader works with groups beyond their immediate self-interests to classify desired change, vision creation for change. It has vital importance among organizations because leadership style by the management has influence on the performance of employees.

Transformation leadership is identified as the most important part among the organizations (Cho, Shin, Billing, & Bhagat, 2019). Even it has key importance among the tourism related companies. It has positive role with employee creativity (Karunasekara, Karunarathne, & Wickramsinghe, 2021). Better leadership activities among the organizations lead to the higher employee creativity. Increase in the leadership activities in tourism management has the ability to enhance organizational climate. As the previous studies proved an important relationship between leadership and organizational climate (Kawangung, Rahmawati, Husni, & Kurniadi, 2021). This study proposed that; transformational leadership has major influence on employee creativity among the tourism management companies. The positive effect on transformational leadership on creativity promote organizational climate. In this direction, creativity playing a mediating role between transformational leadership and organizational climate. Hence, it is hypothesized that;

Hypothesis 5. Transformational leadership has positive influence on organizational climate.
Hypothesis 6. Transformational leadership has positive influence on creativity.
Hypothesis 7. Creativity mediates the relationship between transformational leadership and organizational climate.

Methodology

There are several techniques available in the literature to inspect the relationship between variables. However, the selection of suitable technique is most important to

get original results. Since the current study considered the inno-life management, transformational leadership, creativity and organizational climate, the nature of this relationship is supported by primary data. In this study, primary data were collected through survey method. While doing a survey, the current study preferred questionnaire approach. A questionnaire survey is a suitable method for data collection (Zhang, Kuchinke, Woud, Velten, & Margraf, 2017). Therefore, the relationship between inno-life management, transformational leadership, creativity and organizational climate is measured through survey questionnaire. Questionnaire was considered with the help of previous studies as the measures are adopted from previous studies for the development of questionnaire. It was divided into various sections including demographic information of respondents and scale items related to the inno-life management, transformational leadership, creativity and organizational climate. Population of the study is based on the tourism staff working in Barcelona Spain. Therefore, data were collected from the staff of tourism associated companies in Barcelona Spain. After the development of questionnaire, 400 questionnaires were distributed among the tourism companies. 231 questionnaires were returned and 225 were used in data analysis. Six questionnaires were not completed, therefore, excluded from the study. Furthermore, this study preferred cluster sampling for data collection. Cluster sampling was used because it is most suitable while collecting data from large population. In this study, population is spread on wide area of Barcelona Spain, consequently, cluster sampling is suitable.

After data collection, this study carried out data screening in which missing value, outlier and normality of the data was considered. It is important to remove these errors from the data because it may affect the results of the study. As previous studies also highlighted that data screening is most important in research study (Ahmad Mahmoud, Ahmad, & Poespowidjojo, 2018). Table 1 shows the statistics of the data indicating that data is free from any case of errors.

Findings

This study employed Partial Least Square (PLS) as recommended in previous studies (Hair et al., 2012; Peng & Lai, 2012). In this way, the current study assessed the measurement model with the help of factor loadings. Factor loadings are displayed in Table 1 and measurement model is given in Table 1 shows that all the scale items have factor loading above 0.5. Inno-life management is measured through five scale items, transformational leadership is measured through four scale items, creativity is measured through using four scale items and finally, organizational leadership is measured through five scale items. Most of the scale items having factor loadings above 0.8 and 0.7. Few scale items have factor loading is above 0.5 but below 0.7. However, finally, all the items are with loadings above 0.7 which is minimum threshold level.

Table 1. Factor Loadings

	Creativity	Inno-life Management	Organizational Climate	Transformational Leadership
CR1	0.932			
CR2	0.943			
CR3	0.914			
CR4	0.927			
ILM1		0.924		
ILM2		0.926		
ILM3		0.939		
ILM4		0.921		
ILM5		0.898		
OC1			0.892	
OC2			0.908	
OC3			0.913	
OC4			0.918	
OC5			0.689	
TL1				0.939
TL2				0.932
TL3				0.914
TL4				0.914

Note: ILM = Inno-life Management; TL = Transformational Leadership; CR = Creativity; OC = Organizational Climate

After the factor loading assessment, this study observed composite reliability (CR) which must be higher than 0.7. Table 2 shows the CR which is above 0.7 for inno-life management, transformational leadership, creativity and organizational climate. Additionally, average variance extracted (AVE) is examined for inno-life management, transformational leadership, creativity and organizational climate. Results of the study shows that all the constructs have AVE above 0.5 which confirmed the convergent validity (Hair et al., 2017). Discriminant validity is attained with the help of cross-loadings as revealed in Table 3.

Table 2. Reliability and Convergent Validity

	Alpha	rho_A	CR	(AVE)
Creativity	0.947	0.947	0.962	0.863
Inno-life Management	0.956	0.956	0.966	0.85
Organizational Climate	0.916	0.931	0.938	0.754
Transformational Leadership	0.943	0.944	0.959	0.855

Table 3. Cross-Loadings

	Creativity	Inno-life Management	Organizational Climate	Transformational Leadership
CR1	0.932	0.871	0.889	0.888
CR2	0.943	0.874	0.86	0.868
CR3	0.914	0.855	0.855	0.847
CR4	0.927	0.844	0.853	0.853
ILM1	0.849	0.924	0.862	0.863
ILM2	0.846	0.926	0.833	0.851
ILM3	0.854	0.939	0.839	0.849
ILM4	0.874	0.921	0.847	0.847
ILM5	0.847	0.898	0.866	0.887
OC1	0.855	0.831	0.892	0.82
OC2	0.883	0.861	0.908	0.901
OC3	0.842	0.852	0.913	0.849
OC4	0.829	0.821	0.918	0.837
OC5	0.592	0.606	0.689	0.582
TL1	0.849	0.878	0.841	0.939
TL2	0.832	0.871	0.861	0.932
TL3	0.865	0.855	0.859	0.914
TL4	0.892	0.845	0.88	0.914

Note: ILM = Inno-life Management; TL = Transformational Leadership; CR = Creativity; OC = Organizational Climate

Moreover, this study assessed structural model. In structural model, this study considered the relationship between inno-life management, transformational leadership, creativity and organizational climate. Relationship based on the primary data can be well measured through PLS structural model (Hair et al., 2014; Hair, et al., 2013). The direct effect of inno-life management and transformational leadership is examined on organizational climate and creativity. Furthermore, the direct effect of creativity is examined in relation to the organizational climate. T-value 1.96 and beta value was considered to examine the relationship. The direct effect results are given in Table 4 and indirect effect results are given in Table 6.

Table 4. Direct Effect Results

	(β)	Mean	S.D.	T Statistics	P-Values
Creativity -> Organizational Climate	0.371	0.372	0.102	3.615	0
Inno-life Management -> Creativity	0.454	0.448	0.082	5.508	0
Inno-life Management -> Organizational Climate	0.243	0.245	0.089	2.726	0.007
Transformational Leadership -> Creativity	0.507	0.513	0.079	6.375	0
Transformational Leadership -> Organizational Climate	0.363	0.357	0.079	4.534	0

Table 5. Indirect Effect Results

	(β)	Mean	S.D.	T Statistics	P Values
Inno-life Management -> Creativity -> Organizational Climate	0.168	0.166	0.055	3.055	0.002
Transformational Leadership -> Creativity -> Organizational Climate	0.188	0.191	0.062	3.018	0.003

Inno-life management has positive influence on organizational climate with t-value 2.726. Furthermore, inno-life management has positive influence on creativity with t-value 5.508. Transformational leadership has positive influence on organizational climate with t-value 4.534. Transformational leadership also has positive effect on creativity with t-value 6.375. Additionally, creativity has positive effect on organizational climate with t-value 3.615. Finally, indirect effect of creativity is examined between inno-life management and organizational climate which is significant as the t-value is 3.055. It is also given in Figure 5. This indirect effect shows that creativity reflect the positive effect of inno-life management on organizational climate. Indirect effect of creativity is examined between transformational leadership and organizational climate which is also significant as the t-value is 3.018. It is also given in Figure 6. It shows that creativity reflect the positive effect of inno-life management on organizational climate.

Conclusion

The aim of this study was to observe the role of inno-life management, transformational leadership and creativity in organizational climate. In this direction, the relationship between inno-life management, transformational leadership, creativity and organizational climate was preferred. This study preferred survey to examine this relationship. Furthermore, community-based tourism in Barcelona Spain was considered to measure organizational climate. Results of the study shows important insights for the literature. According to the results, inno-life management and transformational leadership has key role to enhance organizational climate for community-based tourism. Inno-life management has positive effect on organizational climate. Increase in inno-life management in Barcelona can promote organizational climate for community-based tourism. Therefore, to promote community-based tourism in Barcelona, government should enhance inno-life management. Furthermore, transformational leadership has positive effect on organizational climate. Increase in leadership increases to improve the organizational climate. Along with the direct effect, innp-life management can improve organizational climate through creativity. This study shows that; inno-life management increases the creativity which further lead to the improvement in organizational climate. Similarly, transformational leadership enhances the creativity of people which lead to the organizational climate. Hence, both the inno-life management and transformational leadership has direct and indirect effect on organizational climate through creativity.

5.1 Theoretical Implications

This study has vital implications because this study considered important relationship between inno-life management, transformational leadership, creativity and organizational climate. Previously, literature has not addressed this relationship. Especially, the inno-life management is not addressed in organizational climate through creativity in relation to community-based tourism. Similarly, the transformational leadership is not addressed in organizational climate through creativity in relation to community-based tourism. Additionally, this study examined the mediating role of creativity between inno-life management and organizational climate in community-based tourism which is important contribution to the literature. Nevertheless, this study examined the mediating role of creativity between transformational leadership and organizational climate in community-based tourism which is important contribution to the literature. Finally, it is important to highlight that; this combination of variables along with the creativity as indirect effect and organizational climate is not investigated by the literature in Barcelona Spain.

5.2 Practical Implications

As this study contributed significantly to the literature, therefore, it has major practical implications in relation to the community-based tourism Barcelona Spain. Because this study proved that inno-life management has positive effect on organizational climate of community-based tourism, therefore, management of tourism activities in Barcelona Spain should enhance inno-life management. Furthermore, practitioners should promote transformational leadership Barcelona Spain to enhance community-based tourism through the improvement in organizational climate. Thus, this study has important insights to make strategies to improve the community-based tourism in Barcelona Spain.

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