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The Impacts of Total Quality Management, Human Resource Management, and Agility in Business on Firms Financial Performance: Moderating Role of Emerging Business Competition

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ABSTRACT

The current study explores the nexus of total quality management, human resource management, Agility in business, and firms' financial performance. The current study's objective also investigates the moderating impact of emerging business competition among the nexus of total quality management, human resource management, Agility in business, and the firm's financial performance. The primary data has been gathered by using questionnaires from Chinese organizations' employees, while smart-PLS has been executed for analysis. The results exposed that total quality management, human resource management, and Agility in business positively associate with firms' financial performance. The output also shows that the emerging business competition moderated among the nexus of total quality management, human resource management, and firms' financial performance. These outcomes are suitable for the regulation-making authorities who want to develop quality and human management policies that could increase the firm performance.

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1. Introduction

To keep the business organization's financial performance healthy according to emerging national and international market requirements and policies is one of the dynamic business targets (Elyasiani, Mehdian, & Rezvanian, 1994). It may be said that it's the most preferred aim of a business organization that can be judged by its internal and external functions' accuracy and speed. To keep its financial performance highly intact, a business organization, whether it is dealing in the manufacturing of goods or rendering services, is included in its priorities. For this motive, every organization keeps its operational, practical, and managerial practices up-to-date, agile, and accurate. This study focuses on the influences of the performance of some business managerial areas like total quality management (TQM), human resource management (HRM), and Agility in business on the financial performance of the business. This study also checks the moderating role of constantly emerging business competition between TQM, HRM, Agility in business, and firms' financial performance. This study establishes its policies concerning business organizations working in China.

The broad scope investigation by highly qualified scholars in organizations' managerial performance in China proves that these companies that are implementing the TQM practices are making rapid progress in financial terms. TQM is the area of a company's management under which such activities are operated to improve the quality of products and services according to ever-changing customer preferences (Samson & Terziovski, 1999). This philosophy of TQM applies to everything, as indicated by the word total. It seems to be intended to give satisfaction to all the customers, internal and external, by providing super quality products and services. It follows the set of instances to bring quality improvement.

Better quality assists in maintaining existing customers and catching the attraction of new customers; thus, it raises the rate of marketing and profitability (Powell, 1995). This all strengthens the financial performance of the organization. TQM is a corporate philosophy along with being a managerial procedure. It identifies market innovations, modification of consumers' needs, and changes in firms' goals (Akram, Siddiqui, Nawaz, Ghauri, & Cheema, 2011). To achieve success, it must be driven at a high level to gain optimal efficiency and activeness, and the increase in marketing scale by bringing improvement in the overall system, error reduction (Sitkin, Sutcliffe, & Schroeder, 1994). It aligns business goals according to consumers' preferences. Though total quality management is a recently working business phenomenon, it has attained an important place in the business world as it ensures a healthy business performance through an integrated setup of techniques, strategies, tools, and training of the employees. This study elaborates that total quality management comprises efficient, systematic methods for achieving consistent improvement in the production of goods, operation procedures, and marketing strategies, which results in superior quality products and services. Thus, TQM enables business organizations to raise the rate of profitability and keep their financial performance stronger than others.

This article checks the relationship between the practices and policies with the economic performance of a business organization with evidential support from the performance of the organization in China. In their study, Sels et al. (2006) suggest that HRM's decisions have a deep association with organizations' financial performance. HRM is the part of business management under which such activities are undertaken to strengthen an organization's workforce (Haq, Nawaz, Mahtab, & Cheema, 2012). It performs functions regarding the hiring of the employees and the provision of a suitable work environment. This management arranges for the training and development of the work competences. It takes decisions about the motivation, administration, and development of the employees' analytical and technical skills (Quresh, Akbar, Khan, Sheikh, & Hijazi, 2010). This paper forces the fact that the decisions mentioned above and functions have a strong connection with the rate of the business's economic performance. If human resource management succeeds in hiring an efficient and educated workforce or improving the workforce's work skills according to the changing market demands, it would positively affect the organizations' financial performance.

In this paper, it is examined that the implementation of Business agility is imparting strong positive influences on the firms' financial performance. This study illustrates how business agility affects organizations' manufacturing of goods, procedures to render services, and their marketing rate. It checks the business financial performance improvement by rapidness of business responsiveness to change in customers' demands and marketing preferences. Some scholars believe that in this highly competitive age, where customers' demands are continuously changing, and up-to-date technology is being used, companies are required to sense the changes and respond to them as quickly as possible (Ganguly, Nilchiani, & Farr, 2009). The companies should acquire agile competencies to meet the emerging business requirements. In China, these competencies are significant to the business firms intended to recognize and cope with the changes occurring in marketing policies and other institutions' strategies in the context of the supply chain (Christopher & Towill, 2001). Such competencies are acquired concerning Agility. In this age of competition, the firms that apply agile strategies and agile competencies can sense the market changes and respond accordingly. Such agile firms attain competitive advantages over other firms and save their performance in the market as a superior one. Electronic and technical tools used to collect and communicate information, and to coordinate with others contribute business agility which enables business firms to recognize and respond to business and market changes as soon as possible.

The emerging competitive market atmosphere contributes to the operational and economic performance of business organizations. It contributes to the maintenance and the rise in a business's financial performance as well. It triggers the internal and external managerial and operational practices to improve quality, value, and speed to compete efficiently in the market (Soyemi, Ogunleye, & Ashogbon, 2014). Thus, it not only derives the environmental and financial performance, but it also pressurizes the business management to operate its activities in such a way as to achieve higher and higher performance in the market. The emerging business competition contributes to the business Financial Performance, which triggers the TQM, HRM, and Agility in business operations. It performs a moderating role between TQM practices, HRM, business agility, and the growth in business financial performance. The long-term analysis of business operations and their impact on business financial performance in China shows that any organization's business environment imparts strong influences on its decisions, working efficiency, and financial growth. Thus the emerging competition among the business organization proves to be healthy and beneficial for financial business growth as it motives the managers to take the right decision at the right without wasting time.

In this literary paper, we initiate examining the association of TQM and HRM strategies with firms' business financial performance. Agility's impacts in managerial, operational, and marketing decisions and activities on the growth in financial performance are checked theoretically with sufficient model and empirical supports. This paper also throws light on the moderating effects of emerging business competition on the relationship between business agility, TQM, HRM, and business financial performance.

2. Literature Review

All business management is engaged to run their activities under some set of principles and strategies to improve their financial growth (Maes, Sels, & Roodhooft, 2005). TQM approaches, HRM, and business agility contribute to organizational performance at a very high rate. The validity of total quality management, human resource management, and Agility in the implementation of business strategies determine the financial performance of the business enterprises. For any business organization's survival and growth, its production procedures should be fast, innovative, and useful. Our motive to write this paper is to enlighten the remarkable influences of TQM, HRM, and Agility in business undertakings on firms' economic progress and growth in their financial performance. The managerial and operational performance of many business organizations working in China and their impacts on their financial performance have been deeply analyzed to serve this literary paper's purpose. This analysis by Muske and Winter (2001) demonstrates that the companies that implement total quality management and human resource management strategies and bring fast rate agility in their operations to sense and respond to the market changes have a better financial performance than their rivals in the market. Emerging business competition has become a hot issue for the researchers of the day. The fast-growing business competition among different enterprises has a significant and unique influence on firms' organizational performance. The business firms are competing to provide better quality products and services in minimum lead time. In fast-paced emerging economies, business organizations continuously struggle to provide innovation-based durable products and services, win customers' confidence and loyalty, and deliver the products to consumers in time. The fast-developing economic atmosphere, characterized by a rapidly emerging competitive environment with globalization, constantly changing markets, changing customers' preferences, and environmental requirements, has become a traditional business organization environment (Ruff, 2006).

Quality management takes initiatives to give more production of goods and services and ensure their quality as per requirements. Besides, it arranges to maintain consistency in the quality of goods and services by regularly bringing innovation in them. The tendency to implement total quality management practices is growing day by day in the business organizations working in China. The companies implementing TQM strategies and practices have a strong financial performance as this approach enables the firms to achieve superior organizational performance. The investigation by Reed, Lemak, and Mero (2000) indicates that organizations operate this approach to the quality of the products and gain more customer satisfaction. Total quality management makes efforts to follow and reinforce the quality of products and services according to changes occurring in the customers' preferences. Much of the study conducted about the business enterprises' organizational performance suggests that TQM initiates to check the business's actual goals. It recognizes that business goals (Organizational performance and strong financial performance) are linked to customers' needs and satisfaction. Thus. TQM undertakes practices to maximize business operations' efficiency and effectiveness, promote dominance in the market, prevent the chances of error to appear on the surface, improve the working of systems and procedures, and enhance customers' satisfaction. The financial performance of any business organization is associated with the customers' satisfaction at minimum cost. Total quality management boosts up the use of up-to-date tools, instruments, machinery plants, innovative techniques, and training of the workforce to improve the quality of goods and services and minimize the total costs. The use of up-to-date technology and instruments for the production of products and services minimizes the waste of material. It gives more production in the minimum time so does the adequately trained workforce.

Moreover, in this context, such policies are designed and applied to decrease the overall cost. The cost reduction under total quality management increases the profitability rate, thus strengthening the firms' financial performance (Agus, Krishnan, & Kadir, 2000). Thus it is hypothesized based on the literature mentioned above:

H1: The business approach to total quality management is positively associated with firms' financial performance.

As Altinok (2014) says, the emerging business competition strengthens the effects of strategies and practices of TQM on the enterprises' financial performances. The growing business competition affects the points of view and behaviors of managers and professionals. It motivates them to recognize the changes in the market place, economic strategies, and customers' expectations about the quality of products and services. Under the emerging competition, business organizations try to leave others behind in operational and economic performance. In this struggle, they take specific initiatives like applying up-to-date techniques, using modern technology, and novel procedures to improve innovative quality in the products and services. In this way, emerging business competition triggers the practices of TQM. Hence, emerging business competition reinforces TQM's influences on the firms' economic performance and financial performance. Thus, the following hypothesis has been developed in support of the above discussion:

H2: The role of emerging business competition is moderating between total quality management and firms' financial performance.

As Akhtar, Ding, and Ge (2008) point out, the decisions made under HRM affect organizational performance and the firm's financial performance. This paper focuses on the deep insight into the association of HRM with firms' performance in the market and financial performance. Much of the study conducted in this respect suggests that human resource management undertakes to improve employees' work efficiency to contribute a business's competence to make more significant revenues. Past experiences of business organizations throw light on the fact that any business organization's workforce performs an essential role in its survival, sustainability, and performance improvement, in the achievement of business goals, and in making the financial performance stronger than earlier. Human resource management brings improvements in the workforce's competencies through efficient strategies and right decision making about the recruitment, training, education, refreshment of employees, and implication of the workforce environment (Alfes, Shantz, & Truss, 2012). In most business organizations functioning in China, human resources are viewed as a potential source of handsome earnings and gains. Human resource management develops a system for the mental and physical satisfaction of laborers needed to achieve better operational and economic performance. Effectively trained employees prove to be a contributing asset; they contribute to producing goods and services (Naqvi & Khan, 2013). They improve the production quality, taking great interest in production and business operations, being active by the refreshment courses. The workers are periodically trained to tackle the difficulties and problems occurring in their products and operations. Training enables them to overcome the issue in production and improves its quality and speed.

An analytical study by researchers highlights that even in this fast-moving business world, some of the business organizations are still hesitating to take advantage of the HRM strategies and practices because it may require massive costs. But most scholars believe that though human resource management's implications may be costly, it helps to overcome other costs by minimizing waste material, removing harmful factors, speeding up production, and removing defective goods. Teo, Le Clerc, and Galang (2011) believe that in HRM, cost-reducing measures and restructurings are applied in which only fewer persons are employed to create a more excellent value. Thus single cost occurring under the implementation of HRM reduces many costs (Brown, Forde, Spencer, & Charlwood, 2008). On the other hand, it is useful in manufacturing a more significant number of products and raising the products' market by increasing value and quality. It raises the overall profitability of the business organization and improves the financial performance of the firms. Therefore,

H3: Human resource management practices have a positive association with the financial performance of business firms.

This study shows the significance of business agility in achieving financial performance and maintaining a business's financial performance. Nowadays, business organizations have to encounter competition at national and international levels, fast-changing customer preferences, and increasing technological changes. These changes force the firms to create core competencies to sense the changes in the market and act accordingly. The agile business organizations have such competences to keep an eye on the market changes and respond to them as quickly as possible (Van Oosterhout, Waarts, & van Hillegersberg, 2006). Agility in business makes production procedures and operational activities fast. Sustained business agility is helpful to meet the continually changing demands. The business enterprises in China are developing an up-to-date information system, procedures, and modern technology to create Agility in their operations and production process. This innovation enables them to take competitive advantages over their rivals in the market. These firms are making comparatively better operational and economic performance. It enables business enterprises to adjust according to changes in marketplaces, in the business environment and modify their internal and external activities to compete with their rivals in the market. According to (Kock & Georg Gemünden, 2016), Agility in business ensures efficient information and communication system to make quick decisions to cope with the emerging changes. Agile firms use innovative technologies, techniques, and modern procedures in their activities fast (Gurjar & Rathore, 2013). The researchers show that emerging business competition affects HRM practices, business financial performance, and mutual relationships. In the highly competitive business atmosphere, firms are pressured to hire talented and efficient employees in the production procedures and other related business functions. Under the implementation of strategies and practices of HRM, cost-cutting procedures are carried out. Thus overall profitability is increased, and business economically performs in a better way. Emerging business competition supports the institutions' financial performance, and it imparts strong influences on the mutual association of human resource management and business financial performance. So, it has been hypothesized:

H4: Emerging business competition moderately affects human resource management and firms' financial performance.

H5: Agility in business has a positive linkage with the firms' financial performance.

H6: The emerging competitive atmosphere imparts a moderating influence between Agility in business and its financial performance.

3. Research Methods

The current study goal is to explore the nexus of TQM, HRM, Agility in business, and firms' financial performance and examine the moderating impact of emerging business competition among TQM, HRM, Agility in business, and firms' financial performance. The primary data has been gathered by using questionnaires from the employees of Chinese organizations. These questionnaires were distributed to the respondents by personal visit and select the respondents based on simple random sampling. A total of 470 surveys have been sent to the respondents, but only 290 were returned, which has a response rate of 61.70 percent, while smart-PLS has been executed for analysis because the complex model has been adopted by the study (Hair, Ringle, & Sarstedt, 2016). This study adopted three predictors such as TQM that has eight items (Sadikoglu & Zehir, 2010), HRM that has nine items (Huselid, 1995), and Agility to business (A.B.) that has five items (Vickery, Droge, Setia, & Sambamurthy, 2010). Besides, emerging business competition (EBC) has been used as a moderator that has six items. In comparison, firms' financial performance (FFP) has been used as a dependent variable with four items (Vickery et al., 2010). These constructs have been shown in Figure 1.

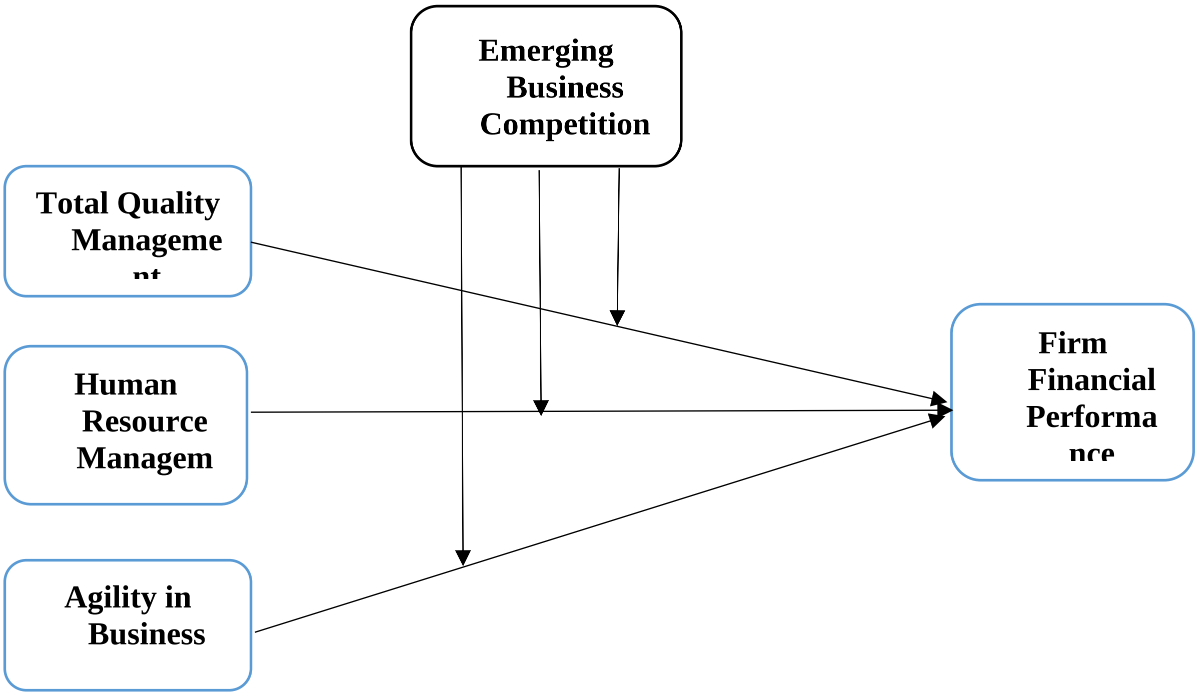

Figure 1: Theoretical framework

4. Results

The results highlighted the convergent validity in Table 1 that shows high linkage among the items and valid convergent validity because the loadings and AVE are more considerable than 0.50 while C.R. and Alpha are higher than 0.70.

Table 1
Convergent validity

Constructs	Items	Loadings	Alpha	CR	AVE
Agility in Business	AB1	0.954	0.964	0.972	0.874
	AB2	0.935			
	AB3	0.944			
	AB4	0.955			
	AB5	0.887			
Emerging Business Competition	EBC1	0.734	0.911	0.908	0.623
	EBC2	0.723			
	EBC3	0.821			
	EBC4	0.798			
	EBC5	0.826			
	EBC6	0.827			
Firm Financial Performance	FFP1	0.868	0.873	0.913	0.724
	FFP2	0.857			
	FFP3	0.828			
	FFP4	0.851			
Human Resource Management	HRM1	0.831	0.935	0.946	0.663

	HRM2	0.857			
	HRM3	0.848			
	HRM4	0.812			
	HRM5	0.863			
	HRM6	0.860			
	HRM7	0.854			
	HRM8	0.778			
	HRM9	0.586			
Total Quality Management	TQM1	0.860	0.928	0.941	0.669
	TQM2	0.883			
	TQM3	0.857			
	TQM4	0.675			
	TQM5	0.754			
	TQM6	0.879			
	TQM7	0.856			
	TQM8	0.752			

The results also highlighted the discriminant validity by using Fornell Larcker and cross-loadings in Table 2 and Table 3 that show low linkage among the variables and valid discriminant validity because the values that show links with construct itself are larger than the figures that exposed the links with other constructs.

Table 2
Fornell Larcker

	AB	EBC	FFP	HRM	TQM
AB	0.935				
EBC	0.671	0.789			
FFP	0.413	0.277	0.851		
HRM	0.421	0.295	0.407	0.814	
TQM	0.494	0.337	0.494	0.436	0.818

Table 3
Cross-loadings

	AB	EBC	FFP	HRM	TQM
AB1	**0.954**	0.600	0.405	0.369	0.455
AB2	**0.935**	0.603	0.362	0.427	0.469
AB3	**0.944**	0.617	0.384	0.412	0.467
AB4	**0.955**	0.594	0.408	0.370	0.456
AB5	**0.887**	0.734	0.366	0.394	0.463
EBC1	0.287	**0.734**	0.366	0.394	0.463
EBC2	0.280	**0.723**	0.130	0.144	0.166
EBC3	0.275	**0.821**	0.107	0.109	0.138
EBC4	0.279	**0.798**	0.116	0.119	0.065
EBC5	0.256	**0.826**	0.094	0.107	0.118
EBC6	0.271	**0.827**	0.106	0.101	0.133
FFP1	0.350	0.250	**0.868**	0.364	0.442
FFP2	0.410	0.264	**0.857**	0.343	0.443
FFP3	0.303	0.204	**0.828**	0.317	0.378
FFP4	0.333	0.218	**0.851**	0.359	0.415
HRM1	0.338	0.261	0.332	**0.831**	0.321
HRM2	0.352	0.236	0.324	**0.857**	0.372

HRM3	0.337	0.258	0.314	**0.848**	0.361
HRM4	0.376	0.266	0.299	**0.812**	0.356
HRM5	0.364	0.277	0.296	**0.863**	0.380
HRM6	0.377	0.250	0.355	**0.860**	0.398
HRM7	0.387	0.240	0.399	**0.854**	0.398
HRM8	0.340	0.274	0.351	**0.778**	0.333
HRM9	0.179	0.081	0.279	**0.586**	0.252
TQM1	0.401	0.266	0.446	0.375	**0.860**
TQM2	0.441	0.324	0.446	0.349	**0.883**
TQM3	0.452	0.294	0.429	0.376	**0.857**
TQM4	0.310	0.183	0.299	0.345	**0.675**
TQM5	0.318	0.196	0.300	0.351	**0.754**
TQM6	0.452	0.318	0.444	0.351	**0.879**
TQM7	0.447	0.292	0.433	0.369	**0.856**
TQM8	0.373	0.294	0.392	0.351	**0.752**

The results also highlighted the discriminant validity by using Heterotrait Monotrait (HTMT) ratio in Table 4 that shows low linkage among the variables and valid discriminant validity because the ratio values are lower than 0.90.

Table 4
Heterotrait Monotrait ratio

	AB	EBC	FFP	HRM	TQM
AB					
EBC	0.482				
FFP	0.447	0.205			
HRM	0.442	0.216	0.447		
TQM	0.518	0.233	0.541	0.471	

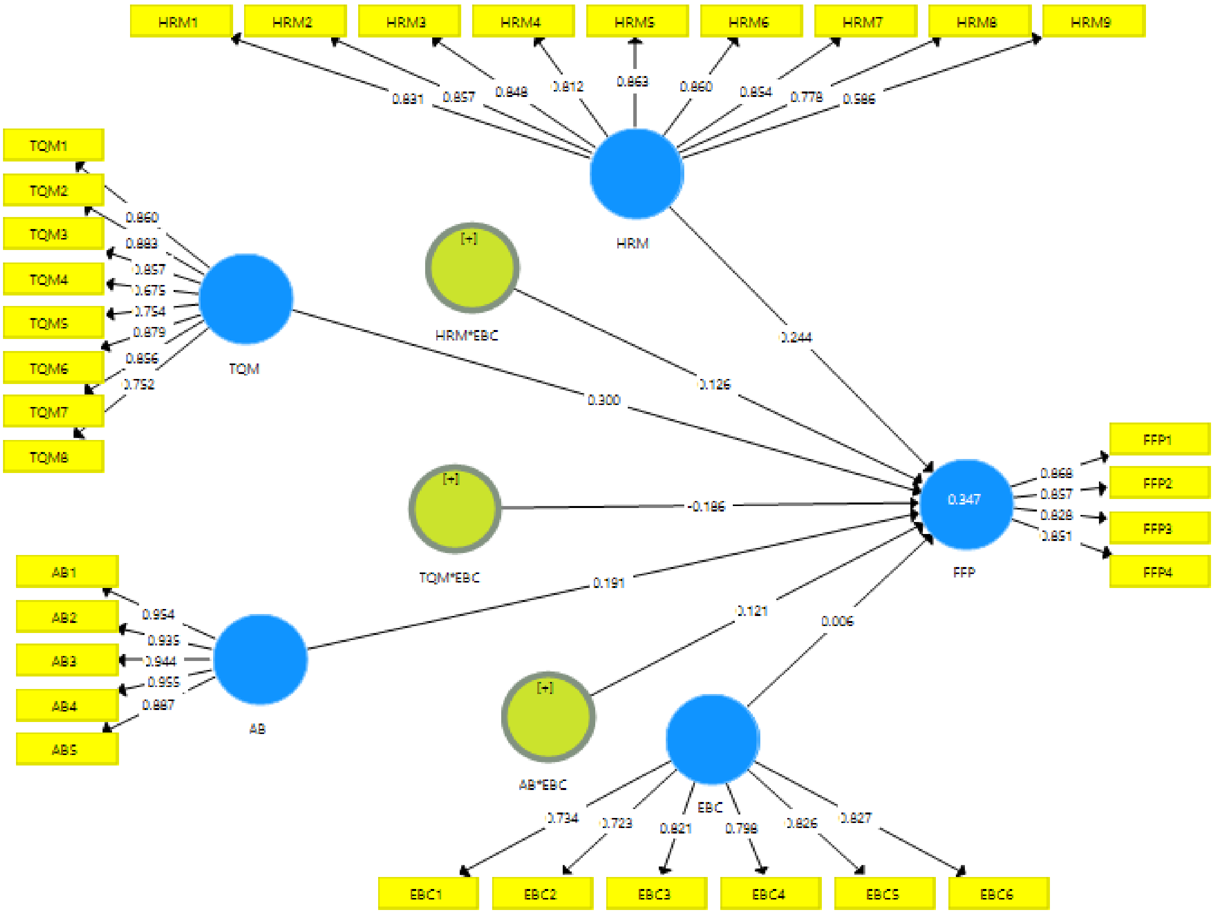

Figure 2: Measurement model assessment

The results also exposed that TQM, HRM, and Agility in business positively associate with firms' financial performance and accept H1, H3 and H5. The output shows that the emerging business competition moderated among the nexus of TQM, HRM, and firms' financial performance and accept H2 and H4. However, the output also shows that the emerging business competition has not moderated Agility's nexus to business and firms' financial performance and reject H6. These are shown in Table 5.

Table 5
Path analysis

Relationships	Beta	S.D.	T-statistics	P-values	L.L.	U.L.
AB -> FFP	0.191	0.088	2.181	0.016	0.047	0.319
AB*EBC -> FFP	0.121	0.083	1.466	0.073	-0.019	0.257
HRM -> FFP	0.244	0.058	4.198	0.000	0.153	0.330
HRM*EBC -> FFP	0.126	0.067	1.885	0.031	0.013	0.225
TQM -> FFP	0.300	0.071	4.238	0.000	0.182	0.418
TQM*EBC -> FFP	-0.186	0.069	2.692	0.004	-0.279	-0.070

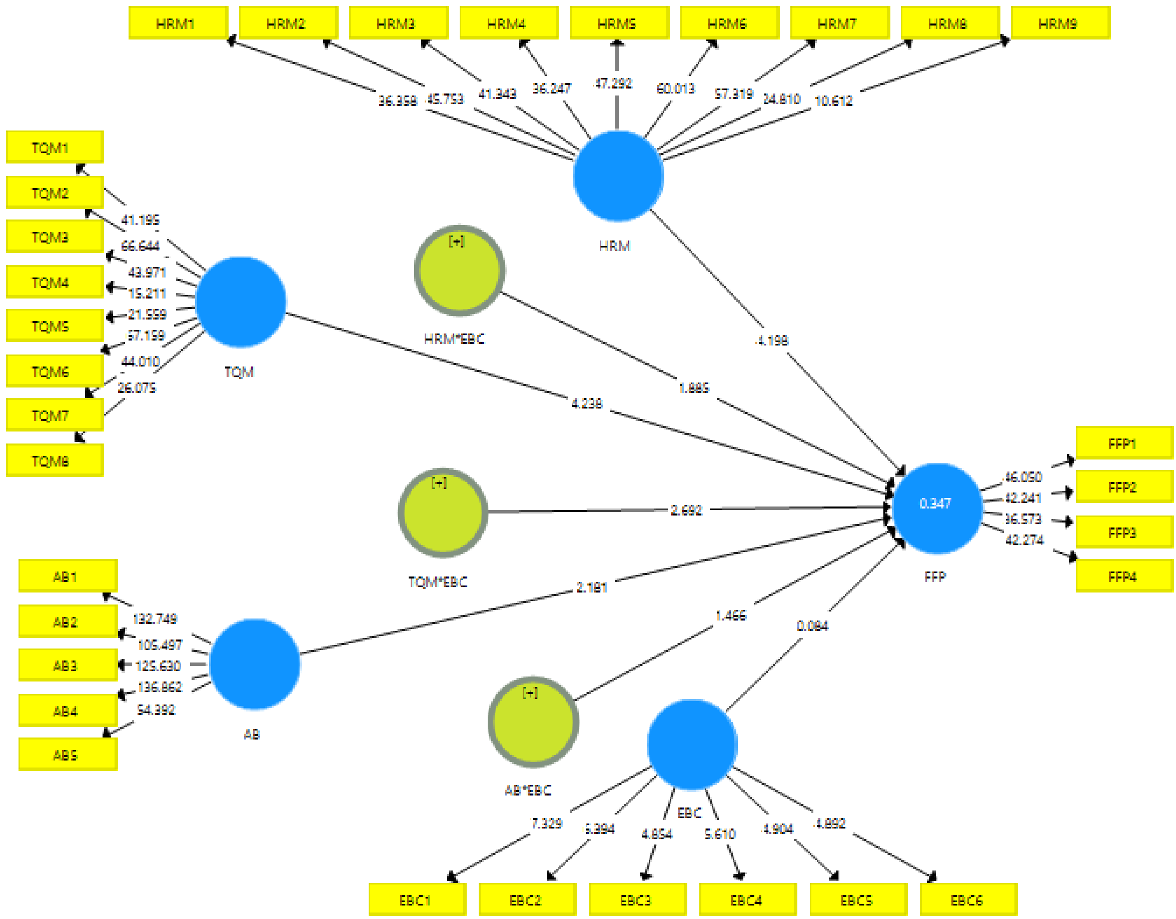

Figure 3: Structural model assessment

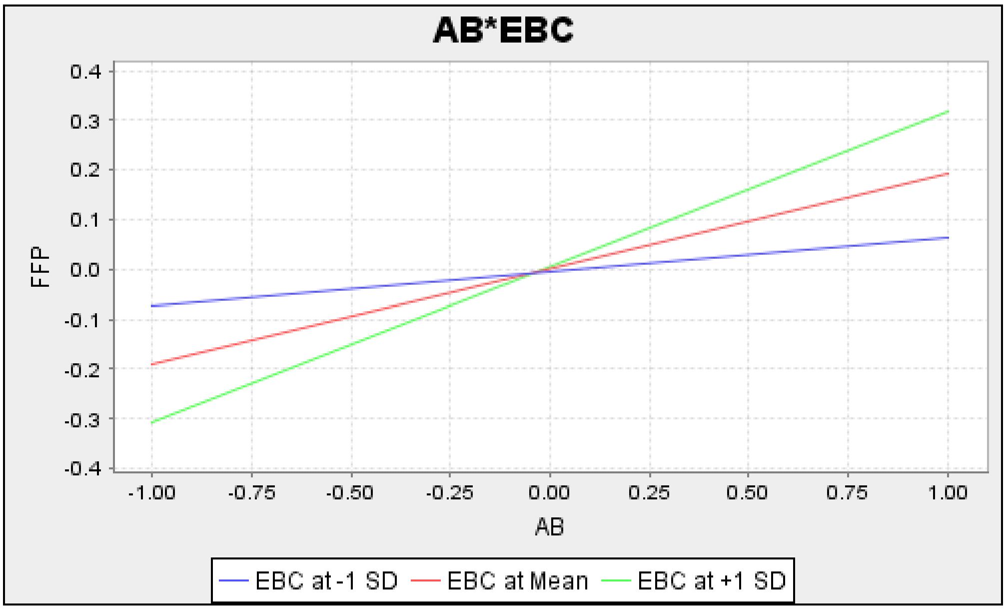

Figure 4: A.B.*EBC

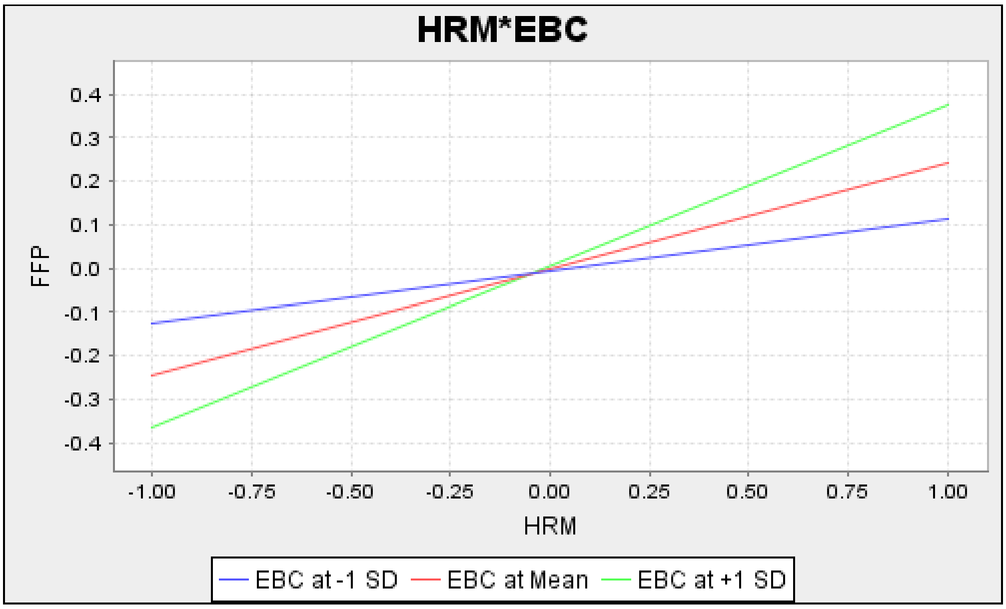

Figure 5: HRM*EBC

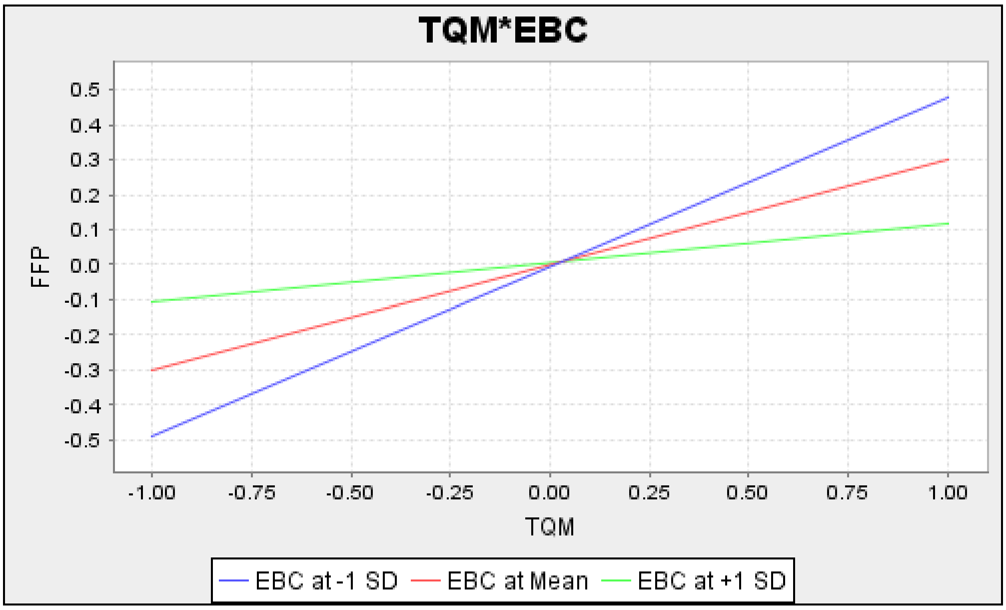

Figure 6: TQM*EBC

5. Discussion and Implication

The results have indicated that total quality management has a positive relationship with the firm's financial performance. These results are in line with Hendricks and Singhal (2001) previous studies, which stress the contribution of total quality management to the firm's financial performance. The results have revealed that human resource management is positively linked with a firm's financial performance. These results agree with the past studies Ogunyomi and Bruning (2016), which show that human resources' performance increases the rate of profitability of an organization. Moreover, the results have represented that Agility in business positively impacts the firm's financial performance. These results match with the past studies Zhou, Mavondo, and Saunders (2019) where there is focus on the role of business agility in raising the market for the products and services, enhancing the rate of profitability.

The results have indicated that emerging business competition is a moderator between total quality management and its financial performance. These results are approved by the studies K. L. P. Ho, Nguyen, Adhikari, Miles, and Bonney (2018) where it has been shown that the emerging business competition is a moderator between total quality management and a firm's financial performance. These results are also in line with the past studies T. C. Ho, Ahmad, and Ramayah (2016), which show that the emerging business competition strengthens the relation between total quality management and a firm's financial performance. The results have revealed that emerging business competition is a considerable moderator between human resource management and its financial performance. These results agree with the previous studies of Games and Rendi (2019).

From the perspective of theoretical implications, it can be said that this study has contributed a lot to the literature on business and management as it throws light on the three contributors of firm's financial performance like total quality management, human resource management, and Agility in business at the same time. And this study attempts to use the emerging business competition between total quality management, human resource management, and Agility in business and the firm's financial performance. On the other hand, a guideline is provided to the business management of how to attain the higher rate of financial performance with the implementation of practices of total quality management and human resource management and the achievement of Agility in the business activities.

5.1. Conclusion and Limitation

In short, the paper examines that the implementation of practices of total quality management brings improvement in the firm's financial performance. The study's findings prove that efficient human resource management has a positive relationship with the rate of the firms' financial performance as it raises the level of profitability with better operations and production. Moreover, the paper analyses that Agility in business activities enhances production and marketing and thereby the financial performance. The results prove that the emerging business competition is a moderator between total quality management, human resource management, Agility in business activities, and its financial performance.

The data supporting this study has been collected from a single source; future scholars should collect data for their study from multiple sources. This study deals with only three financial performance indicators: total quality management, human resource management, and Agility in business activities. Future scholars should deal with some more indicators of financial performance. Besides, the study's scope is limited as it deals with the financial performance of only one country like China. Future scholars should expand the scope of the study by including more than one country.

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