An Evaluation of Supply Chain Management and Total Quality Management (TQM) Practices in Bangladesh Ready-made Garments Industry: A Conceptual Model

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***Abstract*— Bangladesh Ready-Made Garments (RMG) had grown significantly over the last decades in every term but unfortunately quality of locally produced goods is still an issue. According to BGMEA report (2015) it captures 40% of total manufacturing, 50% of total employment and a huge 78% of total export earnings generated from RMG sector and employs about 4.2 million workers of whom 90% are women. So the potential growth and prospect in Bangladesh RMG sector is huge. However, studies show Bangladesh RMG lack of focusing on Supply Chain Management (SCM) practices in order to achieve effectively desired goal. Thus, the aim of this paper is to identify the impact of Supply Chain Management (SCM) as well as Total Quality Management practices for sustainable growth in Readymade Garments (RMG) sector of Bangladesh where HRM practices play mediating role. It is notable to mention that in case of Bangladesh RMG sector most of the existing literatures discussed about the infrastructural and strategic matters whereas SCM and TQM practices in an attempt to improve sustainable competitive advantage is still a debate both theoretically as well as empirically and it has not been studied before, especially in RMG industry context. This study considered a starting point for further studies that related to SCM and TQM practices in RMG sector. In order to generate a more comprehensive argument and bridge the gap, this paper further proposes a procedural framework to ensure organizational sustainable competitive advantage. Proposed research direction and conclusion are discussed in conclusion of this paper.**

***Keywords*—** *Supply Chain Management, Total Quality Management, Sustainable Competitive Advantage, Human Resource Management practices, Ready-made Garments (RMG).*

1. Introduction

In case of ready-made garments manufacturer, Bangladesh position second in the world where china is number one. Bangladesh contributed around 60% export contract with European buyers and rest of the 40% with American buyers. In terms of investors, local investors control most of the production and manufacturing garments companies whereas foreign investors only control 5 %. However, this sector is the main source of income in case of national economy in a condition where, according to the World Bank, "you either export or die" [1]. Bangladesh Garments manufacturing industry is expanding at a rate of 20% per year [2]. In the industrial sector, Bangladesh set the example of cheapest and low cost use of human resources. At the same time, Bangladesh garments industry fully labour intensive rather than technology oriented as Bangladesh is the cheapest labour country; the average labour cost per hour is only $0.3 [3]. Here, noteworthy to mention that since 1985, the growth rate of Bangladesh RMG sector is remarkable because of few privileges and opportunities, such as Multi-Fibre Arrangement (MFA), Quota and the Generalised System of Preferences (GSP) etc. [4, 5]. Basically they are performing cutting, making and trimming (CMT) activities [2, 6]. Therefore, this industry takes maximum lead time to process an order [7]. According to Rahman and Anwar [8] in Bangladesh the lead time for apparel export varies between 90-120 days, whereas the time for Sri-Lanka is about 19-45 days, China 40-50 days and for India 50-70 days for similar products.

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Whereas, according to BGMEA [9] Bangladesh Ready-Made Garments (RMG) shows remarkable growth and significant contribution in the country's economic development though qualities are yet a crucial problem to discuss. Cost of poor quality of Bangladesh ready-made garments amounted to 18 percent of the operating costs [9]. In this regard, Sharmin Akhter [5] stated that the theory of quality management is new in Bangladesh RMG sector and the state is in a limited understanding condition. In contrast of few organizations that have adopted quality management practices have experienced an overall improvement in corporate performance [4]. However, according to Mamun and Islam [10] in nearly all cases, TQM organizations achieved better employee relations, higher productivity, better customer satisfaction, increased market share and improved profitability. According to Sharmin Akhter [5] little research has been conducted in TQM practices area in Bangladesh Ready-Made Garments sector. In case of Bangladesh Ready-made Garments companies, rather than take the whole process, most local authorities narrowed down their quality approach to few operations in order to cut cost [11]. TQM practices is always the most neglected field of research in case of Bangladesh RMG sector as very few research have been conducted in this area [5, 12]. So there is an unsolved and emerging research argument in the field of TQM practices in Bangladesh RMG sector is yet need to be answer.

On the other hand, Bangladesh RMG sector faces a crucial problem of maximum lead time which occurred reasonably for the problem of SCM and TQM [13]. Supply chain management consists of practices and a set of methods to efficiently relate with suppliers, traders, middleman, customers and distribution channels for the enhancing Bangladesh ready-made companies overall performance and sustainability [14]. According to Sila et al. [15] SCM is such an important model which can incorporated with consumer as well as customer satisfaction in long run. However, effective utilization of SCM practices and concepts can have the potentiality to enhance the competitiveness of the organizations. On the basis of the analysis and literature, there is a necessity to conduct research on TQM and SCM which largely have impact on organizational sustainability and growth [16].Review of literatures pursue that very few studies have been conducted on the relationship and aspect of TQM and SCM in the context of Bangladesh RMG sectors sustainability.

At the same time, according to Seddiqe and Basak [17] Human Resource is the most important asset for Ready-made Garments industry in Bangladesh. As each organizations success and quality goal accomplishment is largely depends upon the capabilities of human resources [18]. In this regard according to Ahamed [19] against technological scenery, a thorough analysis of human resource management practices on manufacturing industries especially on Bangladesh RMG sector is very much needed. HRM practices are immensely necessary for the achievement and ensuring quality performance and supply chain management in the organization. It is not secondary rather than crucial and major elements for the implementation of TQM practices [20]. SCM and TQM studies related to HR practices can be found in the operations management literature but paid little attention to human resources issues towards gaining sustainable competitive advantage [21, 22]. According to Alsuhaimi [23], indirect effects (mediation) of HRM have been neglected in most empirical research specifically in quality management area. These issues are more significant in Bangladesh RMG sector as never tested the mediating role of HRM practices in the aspect of SCM, TQM and sustainable competitive advantage [5]. So this research will help to explore and propose a conceptual model to fulfil this research gap.

Furthermore, Bangladesh has reached and gains a remarkable development especially in inexpensive workforce context of RMG sector still its development and continuity of growth is not assured [24]. For identifying the need of SCM and TQM practices in Bangladesh RMG sector, it already focused and start working on using quality control issues but unfortunately due to structural difficulties and inflexible hierarchical difficulties quality goals not achieved [5]. So, the defining role of SCM and TQM implementation in predicting to gain sustainable competitive advantage in Bangladesh RMG context is required [25]. Hence, the purpose of this study is to generate research idea for investigation the potential link and association of SCM and TQM practices in Bangladesh RMG sector to gain sustainable competitive advantage mediated by Human Resource Management practices.

2. Literature Review

2.1 Supply Chain Management

Supply chain management always give emphasis on the relation and integration of the procedure of on time product or service delivery with the assurance of highest customer satisfaction [26]. According to Kanji and Wong [27] SCM always make a link between buyer and supplier ensuring the backward and forward integration effectively. TQM has a correlation and association with the variable and practices of SCM which is essentially focused on organizational reliability and performance [28]. The following table (Table 1) shows the significant SCM practices generated from literatures.

Table 1: SCM practices generated from literatures

No.	Significant Practices of SCM	Related References
1	"Customer relationship (includes complaints handling, customer satisfaction, and long term relationship establishment, close partnership with customer, customer service management, customer needs, increased customer responsiveness)"	Chandra and Kumar (2000); Kuei et al. (2001); Millen et al. (1999); Min and Mentzer (2004); Ulusoy (2003); Tan (2001); Tan et al. (1998); Koh et al. (2007); Li et al. (2005)
2	"Re-engineering material flows/Lean practices (including management of material flows, reducing inventory, elimination of waste, JIT delivery/JIT Capability, manage inventory investment in the chain)"	Chandra and Kumar (2000); Millen et al. (1999); Tan (2001); Alvarado and Kotzab (2001); Koh et al. (2007); Li et al. (2005); Chin et al. (2004)
3	"Strategic supplier partnership (includes many supplier relationship, supplier involvement, supplier quality management, collaboration)"	Chandra and Kumar (2000); Kuei et al. (2001); Chen and Paulraj (2004); Ulusoy (2003); Donlon (1996); Koh et al. (2007); Li et al. (2005)
4	"Employing information and communication technologies (including information technology sharing/communication, information systems)"	Lee and Kincade (2003); Chandra and Kumar (2000); Burgess et al. (2006); Chen and Paulraj (2004); Donlon (1996); Chin et al. (2004)
5	"Changing corporate culture (including management support and commitment, leadership, participative management, cooperation, top-management leadership)"	Lee and Kincade (2003); Kuei et al. (2001); Burgess et al. (2006); Min and Mentzer (2004); Chin et al. (2004)
6	"Close partnership with suppliers (include longterm relationship, partnership, reliable suppliers)"	Lee and Kincade (2003); Kuei et al. (2001); Millen et al. (1999); Chen and Paulraj (2004); Koh et al. (2007)

Henceforth, SCM associated with distribution channels, manufacturing units, suppliers as well as traders, retailers and consumers, it is necessary to build up a sound relationship among all the stakeholders of business which is very much essential in aspect of gaining sustainable competitive advantage in Bangladesh RMG Sector. Chin et al. [29] stated that effective utilization of

the concept of SCM will always help the organization reduce cost and time which is very much essential for long term sustainability of Bangladesh RMG sector as because of the problems and issues of maximum lead time. So further study need to be conducted in aspect of SCM, TQM and sustainable competitive advantage in context of Bangladesh RMG companies where HRM practices will be considered as the mediating factor as Bangladesh RMG is largely depends on the cheapest workforce criteria.

2.2 Total Quality Management

Various researchers define the concept of quality in various ways, such as, Deming, Crosby, Juran, Garvin, Feigenbaum and Ishikawa etc. every one gave various types of definition. Garvin's definition was very remarkable; he defined quality in respect of industry based, usage based, service and product based, theoretical based, customer based approaches. Eight attributes of measuring service and product quality is also mentioned by him [30]. According Juran [31] quality is "fitness for use". Planning of quality, control of quality as well as quality improvement is the quality trilogy which was also mentioned by Juran [31]. According to Crosby [32], "quality is the conformance to requirements or specifications and requirements are based on customer needs". Deming [33] defined, "quality is a predictable degree of uniformity and dependability, at low cost and suited to the market". To enhance and ensure the performance as well as productivity, Deming [33] also mentioned 14 quality management principles. To improve organizational performance Ishikawa insist on the importance of total quality control. Ishikawa diagram (the fish bone diagram), the cause and effect diagram is also Ishikawa's contribution to identify quality issues and problems. Feigenbaum [34] denoted the ideas and views of organization wise total quality control. And most interestingly he was the initial user of the concept of total quality control in the literatures of quality aspect. According to Feigenbaum [34], "quality is the total composite product and service characteristics of marketing, engineering, manufacturing and maintenance through which the product and service in use will meet the expectations by the customer". The significant elements of these quality development concepts consists commitment of management, strategic quality system approach, measurement of quality, improvement of process, training and development and reducing the various symptoms and reasons of problematic incidents.

TQM always give emphasis on customer satisfaction to ensure quality culture by using continuous improvement concept. According to Kanji and Wallace [35], "this culture varies both from one country to another and between different industries, but has certain essential principles which can be implemented to secure greater market share, increased profits, and reduced costs". Rao et. al. [36] logically, TQM should be the set of practices that enable an organization to deliver quality products or services.

Therefore, to identify various critical factors for TQM, many researches were conducted as well as lots of identified by many researchers as well as academicians and organizations such as "Malcolm Baldrige Award, EFQM (European Foundation for Quality Management), and the Deming Prize Criteria". On the basis of these researches, a vast majority of managerial concepts, tools, methods, process and strategic system have been developed. For measuring the organizational performance Saraph et al. [37] identified and mentioned 78 items that were categorized in to eight critical factors of TQM. These are: "Role of divisional top management and quality policy, role of the quality department, training, product and service design, supplier quality management, process management, quality data and reporting, and employee relations". Other researchers Flynn et al. [38] suggested other tools to identify major critical factors of TQM. They mentioned seven factors of quality. These are "top management support, quality information, process management, product design, workforce management, supplier involvement, and customer involvement". It's mentionable that Saraph et al. [37] and Flynn et al. [38] their recommended elements are quite identical. Flynn et al. [38] identified the influence of TQM practices in aspect of performance of quality and gaining competitive advantages of the organizations. In this regard, other significant study, Anderson et al. [39] mentioned the basic concepts of TQM practices on the basis of Deming's 14 principles. By using the Delphi technique they could able to reduce the number of elements from 37 to only 7. The elements are: "visionary leadership, internal and external cooperation, learning, process management, continuous improvement, employee fulfillment, and customer satisfaction". On the basis of the Malcolm Balridge Award measurement tools, Black and Porter [40] suggested critical factors for TQM. Actually they formulated 32 elements which were categorized into 10 different categories of critical factors which are: "corporate quality culture, strategic quality management, quality improvement measurement systems, people

and customer management, operational quality planning, external interface management, supplier partnerships, teamwork structures, customer satisfaction orientation, and communication of improvement information".

On the basis of thorough investigation of literatures Ahire et al. [41] also recommended 12 elements to measure critical factors of TQM of firms. The 12 factors are: "supplier quality management, supplier performance, customer focus, statistical process control usage, benchmarking, internal quality information usage, employee involvement, employee training, design quality management, employee empowerment, product quality, and top management commitment". Motwani [42] denoted, "TQM as constructing a house". Firstly, he considers top management commitment as the base line concept. For a better house construction of base line or foundation is essential. After that "employee training and empowerment, quality measurement and benchmarking, process management, and customer involvement and satisfaction" should be assured and placed. All these elements are considered as the basic four concepts of constructing a house. When the four concepts or pillars are developed properly then time to give emphasis on product manufacturing and design as well as service quality which are the end step of ensuring TQM practices of organization. In this regard, generally many researchers have been mentioned that the center of effective implementation and execution of TQM practices is top management commitment and capability to work as a visionary leader to cope up with the continuous changing and competitive market [43]. Literatures also showed the necessity of training for the effective implementation of TQM practices [44]. In this respect, Wali, Deshmukh and Gupta [45] also work on selecting TQM elements for organizational success. Though, their research work focused on quality gurus works only. In Bangladesh few researchers [12, 23, 46] work haven been found which was concentrated only on the TQM elements which were proposed by Ahire, Golhar and Waller [47] as well as they tried to relate it with Bangladeshi context. In their research they mentioned twelve TQM elements which are responsible for Bangladeshi organizational success [12, 23, 46].The twelve factors are: Innovation and leadership, employer and employee relationship, rewards and recognition, culture of the organization, Information system, concentration on customer related factor, issues related with ethics, channel of organizational communication, work Team, mutual respect among employees, employee empowerment, continuous improvement. Therefore, on the basis of the above literature it is easily concluded that the ideas and opinions of various researchers are not identical rather complementary to each other. And in this paper more focused will be given on leadership and top management commitment, focus of customer, process approach, training & development, system approach, continuous improvement, reward and recognition and supplier relationship.

2.3 Human Resource Management

Generally, HRM practices can contribute to superior productivity by improving the quality of employees work Life [48]. In Bangladesh context very few researchers have been conducted though the importance of HRM practices are immensely important for organizational development, growth and sustainability (Ahamed [19]. According to Absar [49] denoted that due to lack of proper HR policies and procedures, labor-intensive manufacturing firms are facing shortage of workers, and high job turnover in developing countries such as Bangladesh. Shahin and Basak [17] stated that Human Resource is the most important asset for Ready-made Garments industry in Bangladesh for implementing SCM system and TQM properly. Though there is a rapid growth of industrialization in Bangladesh, yet, the realities for Bangladesh RMG sector is that their people remain undervalued, under trained and underutilized. So the potential growth and prospect in Bangladesh RMG sector is huge. And for using this opportunities it should focused on proper implementation of HR policies to emphasis quality performance [43].

In context of Bangladesh ready-made garments industry, in this research we consider the following four practices: recruitment and selection, job analysis, manpower planning, equal employment opportunity act (EEOA) which are generated from Pfeffer's study. Pfeffer [50] introduced 16 HR practices which denote best practice. The main focus of recruitment and selection process is the choosing the right person for the right position. According to Mládková [51], "workers must be able and willing to cooperate and communicate and accept the way of sharing their knowledge (skills, abilities and experience) based on reciprocity, reputation and altruism". Schuler [52] give emphasized in his study on more general, implicit and less formalized selection criteria are proposed by some authors. In Bangladesh ready-made garments, they don't follow any defined recruitment and selection policies which largely

affect employees' turnover and competitiveness [19].

On the other hand, Chen and Huang [53] stated that, "manpower planning is the process – including forecasting, developing and controlling by which a firm ensures that it has- the right number of people, the right kind of people, at the right places, at the right time, doing work for which they are economically most useful". Manpower planning is associated with organizational optimum size of workforce, appropriate training design, and compensation system design as well as the future vision of the workforce management which are highly recommended in case of SCM and TQM practices in Bangladesh RMG sector [19]. According to Bansari [54], "most garments factories in Bangladesh pay little attention to labour standards and labour rights, disallow trade union activities, unsafe working environment, and ineffective laws and discard fair labour practices, and compliance enforcement is limited and limited role of stakeholders". According to Ahamed, F. [55], "there is a rising fear in Bangladesh that the readymade garments sector may face a decline in demand and social compliance in the RMG industry is a key requirement for most of the world's garments buyers which ensures labor rights, labor standards, fair labor practices and a Code of Conduct". So for ensuring quality practices and gaining sustainability in RMG sector of Bangladesh much attention should be given to EEO approach to avoid labor unrest and lack of quality performance.

Job analysis is required huge impact for starting to implement any HR practices in organization [5]. According to Clark and Kanter [56] for evaluating the organizational performance effectively job analysis also associated with performance management and compensation, recognition and reward. Therefore, according to Dobbins et al. [57], individual skills and competencies are focused in job analysis which is needed for empowering employees. Lastly, According to Shahin and Basak [17] measuring job fitness is also a part of job analysis process which includes change management, job classification, creativity, and job design and job rotation. In this research, job analysis requires more significant attention in context of Bangladesh ready-made garments industry to gain sustainable competitive advantage.
However, based on literature it is easily understandable that HR practices didn't get much attention which need to be measured and analysis in the aspect of Bangladesh RMG sectors quality performance improvement as in RMG sector human resources is the main advantage for industrial growth and sustainability in business. Therefore, according to Absar [49] HRM practices were not given proper acknowledgements and preferences in aspect of Bangladesh RMG sector. So this study is required to lift up this expectation to fulfill up those issues in RMG companies.

2.4 Sustainable Competitive Advantage

Many organizations have already realized that their only way of surviving in today's competitive global market is to become a successful total quality organization [58]. According to Fasil and Osada [59] Total Quality Management and SCM is a buzzword for the organizations to safeguard their growth and sustainability in today's strongly competitive and turbulent global scenario. Several other researchers support the findings of this study. Generally, sustainable competitive advantages are company assets, attributes, or abilities that are difficult to duplicate or exceed and provide a superior or favorable long term position over competitors.

In this regard, According to Rahman and Rahman [60], "currently garments sectors financial performance is satisfactory but to gain the long term sustainability and competitiveness need to focus on SCM and TQM practices". According to Zineldin [61], RMG sector needs to retain its customers by providing excellent quality services with minimum or no defects to gain sustainability. So, the defining role of SCM and TQM implementation in predicting to gain sustainable competitive advantage in Bangladesh RMG context is required [46]. According to Pinho [62] in the global market, for gaining sustainability practices of SCM and TQM received proper attention and acknowledgement. Kanji [63] stated that, "organizations need a framework that is comprehensive, flexible and easy to adopt and help to gain sustainability". TQM practices and SCM enhance the whole organizational communication system which is highly required for quality performance in the current business world [64]. Drew and Healy [65] stated that, "TQM allows firms to obtain a high degree of differentiation, satisfying customer needs and strengthening the brand image, and also acts as a tool to reduce costs by preventing mistakes and time wastage, while it allows improvement in the corporation processes". For sustainability cost reduction, minimize lead time as well as product and service differentiation is required which can be achieved through SCM and TQM practices [66].

In this research organizational performance selected as the part of gaining sustainable competitive advantage in Bangladesh RMG sector. According to Li et al. [67] organizational performance refers to how well an organization achieves its market-oriented goals as well as its financial goals. In this regard, Stock et al. [68] mentioned that a number of prior studies have measured organizational performance using both financial and market criteria, including return on investment (ROI), market share, profit margin on sales, the growth of ROI, the growth of sales, and the growth of market share. In this research long term performance is focused which is related with organizational long-term sustainability. According to Terziovski [69] TQM is the source of sustainable competitive advantage for business organizations. Teh et al. [70] stated that SCM work as a source of enhancing organizational performance through continuous improvement in organization's activities. At the same time, much research had been conducted to define the relationship among TQM and innovation [71]. The relation between SCM, TQM and innovation also need to be considered in aspect of gaining Bangladesh RMG sectors sustainable competitive advantage which is focused in this study.

Therefore, according to Issac et al. [72] SCM and TQM has been widely considered as management tool for business stability, growth and prosperity as a tool to keep competitive advantage. In this regard, Dale and Plunkett [73] stated that for last two decades, quality has been considered as one of important factor in manufacturing, service and purchasing to increase sales and profits. There is an inconsistency of research result of these studies and worthy to examine as research gap. According to Lewis et al. [74] the relationship is not so clear when the TQM concept is divided into different dimensions and those dimensions are evaluated for their separate effect. The effect of SCM and TQM practices on gaining sustainable competitive advantage in context of Bangladesh ready-made garments industry should be select for further research which will done in this research as there is a huge research gap for it [75].

3. Proposed Model

In recent economic growth RMG sector is showing growth and prospect but the current problem facing by all business organizations are to adopt with customers' needs which change continuously with the business environment change [2]. In this regard, SCM is considering one of the most important issues in context of Bangladesh RMG sector to ensure customer satisfaction and buyers consistency [76]. At the same time, TQM is one of the most widely used operation management practices which most of the developed countries already adopted [2, 77]. Whereas, According to BGMEA [9] the quality of products and services of Bangladesh ready-made garments are a vital issue to concern. RMG can charge high prices as well as increase their profit if they can ensure about their quality operation of product and service delivery [7, 78]. According to Li et al. [67] TQM practices enhance the whole organizational communication system which is highly required for quality performance in the current business world. Recent research proves that Bangladesh RMG sector faces some serious quality issues that have largely influenced the growth rate of this sector [78, 79]. Over the last three decades, there has been a growing interest in Total Quality Management (TQM) as a strategy that is capable of offering organizations a competitive advantage [80]. Empirically, In the aspect of Bangladesh garments manufacturing industry a SCM and TQM model need to be formulated [2, 12]. In this regard, Absar and Mahmood [43] stated that in the context of TQM, the extent to which HR departments undertake and support organizational sustainability competitive advantage have been examined and seriously questioned. In the current Bangladesh RMG context, literatures suggest that, several TQM practices help organization to gain sustainable competitive advantage, specially, developing country like Bangladesh ready-made garments industry [54, 55].Hence, the following framework is put forward (Figure: 1)

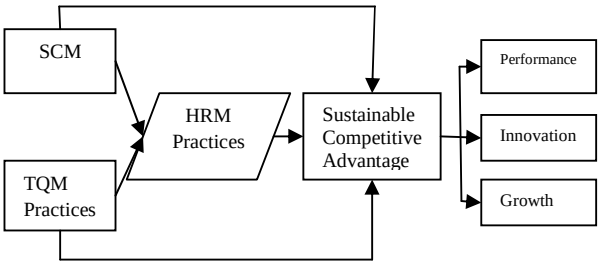

Figure 1: Proposed Research Model

Based on the Figure 1, HRM practices will influence or alter the value of link among IV and DV. The IV (Independent Variable) is consists of eight TQM practices such as leadership and top management commitment, customer focus, process approach, system approach, training and

development, continuous improvement, supplier relationship, reward and recognition and Supply chain management. HRM practices work as mediator which consists four practices. The four functions are: Selection and recruitment, job analysis, manpower planning and equal employment opportunity (EEO) will help to build up the efficient workforce. And lastly, the DV (Dependent Variable) is the sustainable competitive advantage which consists of three criterions to measure, such as organizational performance, innovation and organizational growth in the context of Bangladesh Ready-made Garments industry. DV and IV relation or association will be influenced by the levels of mediator, either strong or weak. In few circumstances, the relation will be either positive or negative depends on the level of mediator. So the impact of mediator will be considerable in aspect of defining the condition of IV and DV.

4. Proposition Testing

Hypothesis tests, or tests for statistical significance, require a number of elements. This part explains how the relationship among variables will be managed and how hypotheses developed and tested. Before going further, the proper terminologies such as null and alternative, distribution data, critical value, confidence level, two-tailed or one-tailed test and errors should need to be considered. From the purposed framework, null hypothesis can be generated. A null hypothesis is a claim made, a belief expressed, a statistic is held to be the norm. The proposed framework assigned Human Resources Practices as a mediator variable. Based on the literature reviewed in the previous section, therefore these hypotheses are formulated:

H1: Total Quality Management practices are positively associated with Human Resource Management practices.

H2: Total quality management practices are positively associated with sustainable competitive advantage.

H3: Supply Chain Management is positively associated with Human Resource Management practices.

H4: Supply Chain Management is positively associated with sustainable competitive advantage.

H5: Human Resource management practices are negatively associated with sustainable competitive advantage.

H6: Human Resource management practices are positively associated with sustainable competitive advantage.

In this research, we tend to use positivism philosophy which is more suitable with the content of this research. A survey methodology will be used to collect data on the variables used in the proposed model. The total number of population size is 4296 registered ready-made garments companies which are currently operating in Bangladesh (BGMEA Report 2014-15, source: http://www.bgmea.com.bd/). The following table shows the research design at a glance.

Table 2: Research Design

Research Design	Unit of analysis	Population	Sample Size	Sample technique	Data collection method
Quantitative	Bangladesh RMG companies	4296	500	PPSS	None

The study tries to ensure absolute representation considering the homogeneity. The gender proportion will equal be considering a targeted sample size of 1000 employees belongs to minimum 500 allied companies in Bangladesh. The sample of this study will be collected from various RMG companies in Bangladesh in five major cities in Bangladesh, including Dhaka the capital, Narayangonj, Savar, Chittangong and Khulna. Geographical area, size, nature of industry, education of employees and employers, etc. will be considered for selection of appropriate sample. To arrive at the representative sample size the study will be considered proportionate probability sampling method (PPSS). Structured questionnaire will be used to measure the basic four constructs—TQM practices, SCM, organizational sustainable competitive advantage, the mediating role of HRM practices. For the purpose of data analysis and hypothesis testing, several statistical tools and methods will be employed using SPSS software and Partial Least Squares -Structural Equation Modelling (PLS-SEM).

5. Conclusion

After 2005, Bangladesh RMG sector face huge global competition as it entered in to the quota free market. One of the biggest disadvantages of Bangladesh RMG companies is their long lead time which is 90 to 120 days that usually has adverse impact on export growth. The levels of service offered by ready-made garments companies in

Bangladesh were not always acceptable to customers. However, this study is immensely significant for Bangladesh Ready-Made garments companies as for the growing competition, imposition of various new rules and regulations in global business context.

The necessity of this research can be justified. Almost every organization needs to develop a quality environment to ensure the quality performance and to cope up with the changing market condition. Bangladesh RMG industry so far gains advantage out of the cheapest price competitiveness. The minimum wage rates of labors are yet remain the lowest among the competitors but the lead time is yet a significant problem to notice considerable attention. An appropriate and efficient supply chain management system can help to solve this problem of Bangladesh RMG sector. For ensuring customer satisfaction and retention, cheapest workforce is not the only criteria of business, for gaining sustainability in business proper implementation and management of supply chain is a must. In Bangladesh RMG sector SCM, minimize lead time, ensuring TQM and optimum utilization of human resources is very much essential to gain sustainability and survive in long run. Mainly ensuring customer satisfaction is the precondition of business success and sustainability.

Therefore, this paper has discuss the relationships between the variables represented by SCM and TQM as independent variables, and their relationship to sustainable competitive advantage as a dependent variable where HRM practices play the mediating role. In a review of the literature found, there is a relationship between the practices and sustainability in general. The lack of studies that tested the effect of SCM and TQM, this paper provided an opportunity and justifications to propose new model to test the relationship depending on two independent variables are the practices of SCM, and TQM, in the context of Bangladesh RMG sector with the Organizational sustainable competitive advantage as a dependent variable. This model will enable buyers as well as customers to buy products from Bangladesh without worrying about the quality standard of products and services. Clearly, theoretical contribution of this study is significant because the research model will form theoretical and practical variables to relate SCM, TQM, HRM practices and sustainable competitive advantage. Therefore, the examinations of each hypothesis and the subsequent empirical investigations of this study are crucial to validate the proposed research framework. It is expected that the study will be beneficial to local manufacturing players, policy makers, government and relevant practitioners.

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