

**Implementing Total Quality Management Philosophy through  
Human Capital Development: An Exploratory Study of Selected  
Ready-Made Garment Establishments in Bangladesh**

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## **Abstract**

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### **Implementing Total Quality Management Philosophy through Human Capital Development: An Exploratory Study of Selected Ready-Made Garment Establishments in Bangladesh**

**Keywords** - Human capital, Education, Training, Development, Healthcare, Involvement, Innovation, Improvement, Total quality management, Ready-made garment.

The significance of human capital development (HCD) from an organizational perspective is adequately reflected in the extant literature; however, its inherent connection with total quality management (TQM) philosophy is yet to be investigated. Hence, this study intends to explore the role of HCD in implementing TQM philosophy and to develop a comprehensive HCD framework in this respect. The labor-intensive Bangladesh ready-made garment sector is used as the research site since the phenomenon under inquiry is not readily evident in the chosen setting. The interpretivist worldview is espoused in this exploratory research to accomplish the research aim. Correspondingly, an inductive approach followed by a qualitative multiple case study methodology is adopted. Five (5) RMG establishments are purposively selected as case organizations. Thirty (30) in-depth interviews (6 from each case organization) are conducted, using the semi-structured interview technique to generate rich and thick primary data. Reflexive thematic analysis is manually performed to analyze the interview transcripts. Findings imply that HCD engenders three major effects: reduced costs of operations, improved product quality, and on-time shipment. Thereby HCD ensures greater customer satisfaction and loyalty, which is the essence of TQM philosophy. Empirical evidence specifically suggests that HCD can contribute to TQM implementation by empowering employees to reliably participate

in problem solving and decision-making, innovatively perform tasks, and effectively accomplish appropriate changes in work processes and procedures. This study contributes to the knowledge by evidencing the fact that an HCD framework integrating both learning and healthcare interventions has an explicitly positive nexus with TQM philosophy.

## **Dedication**

This Thesis is Dedicated

to

The Great Architect of the Universe Allah Subhanahu wa Ta'ala

*(The Most Glorified and the Most Beneficent)*

and

The Blessed Prophet Muhammad Sallallahu 'Alaihi wa Sallam

*(The Greatest Philosopher and Teacher of Mankind)*

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## **List of Abbreviations**

ASTD	American Society of Training and Development
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
BKMEA	Bangladesh Knitwear Manufacturers and Exporters Association
BIDS	Bangladesh Institute of Development Studies
COC	Code of Conduct
CPD	Center for Policy Dialogue
DoT	Directorate of Textile
ERP	Enterprise Resource Planning
ETP	Effluent Treatment Plant
FGD	Focus Group Discussion
FMCG	Fast-Moving Consumer Goods
GDP	Gross Domestic Product
GOTS	Global Organic Textile Standard
HCD	Human Capital Development
HER	Health Enables Returns
HR	Human Resources
HRD	Human Resource Development

HRM	Human Resource Management
ILO	International Labor Organization
ISO	International Organization for Standardization
ITS	InterTech Service
JD	Job Description
JIT	Just-in-time
KPI	Key Performance Indicators
KRAs	Key Responsibility Areas
KSA	Knowledge, Skills, and Abilities
KSAO	Knowledge, Skills, Abilities, and Other characteristics
KSF	Key Success Factor
LNA	Learning Needs Analysis / Assessment
NQC	Nominated Quality Controller
OD	Organization Development
OQL	Overall Quality Level
PDS	Product Design Specification
PPE	Personal Protective Equipment
QDA	Qualitative Data Analysis
QMS	Quality Management System
RBV	Resource-based View

RMG	Ready-made Garment
SDGs	Sustainable Development Goals
SHRM	Strategic Human Resource Management
SOP	Standard Operating Procedure
SPC	Statistical Process Control
TA	Thematic Area
TM	Traditional Management
TNA	Training Needs Assessment
TOT	Training of Trainers
TQM	Total Quality Management
UK	United Kingdom
UN	United Nations
USA	United States of America
USD	United States dollar
VAT	Value Added Tax
VRIN	Valuable, Rare, Inimitable and Non-Substitutable
WTO	World Trade Organization

## **Chapter One: Introduction**

This study on human capital development (HCD) can be viewed as an extension of human resource development (HRD) aiming to strengthen the theoretical aspects of people's development at an organizational level. HCD can be conceptualized as a set of planned and systematic organizational endeavors assumed to strategically enhance the level of knowledge, skills, and abilities (KSA) of employees for creating meaningful behavioral change so that they can satisfy existing and potential job demands as well as generate creative outcomes in the work setting (Desimone et al. 2002). Such endeavors have an implicit linkage with total quality management (TQM) philosophy given that only a competent workforce can meaningfully contribute to the application, development, and enduring reinforcement of the TQM process in an organization (Wilson and Chapman 2009). HCD interventions like training and development arguably play the key role in making quality a reality (Thomas 1992). This research was intended to explore the critical roles of HCD in the implementation of TQM philosophy and recognize the association between HCD and TQM explicitly from an organizational perspective.

However, this introduction chapter aims to provide a background of the thesis, the motivation behind conducting such exploratory research, and the justification for integrating HCD with the philosophical facets of the TQM. Subsequently, the aim, objectives and specific research questions that were sought to address throughout the study are elucidated in this chapter. The philosophical stance of the researcher and the congruent methodological choice made for this study are briefly explained to demonstrate how the research was carried out. The anticipated contribution of this research to the knowledge is also elaborated in line with the research gap identified. Finally, to acquaint the readers with the thesis and its contents, the overall thesis structure is presented in a nutshell.



## **1.1 Background of the Research:**

The phrase ‘human capital’ can be traced back to the father of economics, Adam Smith, in the 18<sup>th</sup> century (Kolomiets and Petrushenko 2017). Though Smith (1776) first defined it, this concept became familiar through the notable work of scholars including Schultz (1961), Becker (1964), and Mincer (1974), and was more broadly recognized when one of the proponents of human capital theory, Schultz (1961), regarded it as the principal factor behind the longest period of uninterrupted growth in the US economy during the 1950s (Nafukho et al. 2004). The significance of investment in human capital is acknowledged by every scholar but controversy remains regarding the nature of its return. Becker (1993) argued that the return of such outlay can be calculated. Mincer (1958) developed a model popularly known as the Mincerian model for estimating the value of human capital investment (Kolomiets and Petrushenko 2017). However, Schultz (1961) disagreed with this and strongly argued that no model can capture the true value of human capital.

Schultz (1961) considered human capital as a determinant of qualitative attributes of human resources which, according to Baron and Armstrong (2007), is a vital component of the intangible assets of an organization. Measuring this asset is always seen to be difficult since the things that it is likely to impact, such as innovation, customer satisfaction, service rendering, are at the mercy of several other contextual factors (Baron and Armstrong 2007). However, the great differentiator for any organization is human capital (Chatzkel 2004), and the yield on investment in human capital is believed to be much larger and more significant than that derived from investment in physical capital (Schultz 1961). Scarborough and Elias (2002) considered it as the bridging concept that defines the link between Human Resource (HR) practices and business performance in terms of assets rather than business processes.

This intangible, and socially complex human capital is, however, distinct from any other asset in that it is never owned by the employer, but rather by the employee (Wright and McMahan 2011) and the value it generates is to a great extent impossible to measure (Bontis et al. 1999; Fulmer and Ployhart 2014). Many organizations might view it as being risky to invest in HCD (Robinson and Zhang 2005) as human capital is mobile in nature and post-hoc evaluation of such investment is quite complicated (Cairns 1997).

Nevertheless, the proponents of resource-based view (RBV) persistently assert that human capital, which is inimitable in nature, can help an organization to gain sustainable competitive advantage (Hatch and Dyer 2004; Delery and Roumpi 2017; Gerrard and Lockett 2018). The behavioral theory, therefore, advocates that the psychologically framed organizations must undertake HCD interventions prudently for cultivating employee knowledge and expertise. Only then can employees become a key driver at the workplace in establishing an all-embracing quality culture which is widely conceptualized as TQM (Dale and Cooper 1992; Wilson and Chapman 2009; Pantouvakis and Karakasnaki 2017).

TQM is regarded as the key to organizational profitability and success; hence the question of whether an organization should implement it no longer exists (Hart and Schlesinger 1991). Rather, the challenging issue that needs to be critically addressed is how to implement TQM, and part of its answer must inexorably be with the support of visionary HR practices (Hart and Schlesinger 1991). More specifically, the HR efforts relating to the development of firm-specific human capital can be instrumental in this regard. Based on the extant literature of HRD, human resource management (HRM), and economics, certain HCD interventions (such as education, training, development, healthcare) can be identified that help in forming and nurturing human capital within the organization (Schultz 1961; Hatch and Dyer 2004; Tetteh et al. 2017). Such interventions can positively contribute to effective employee participation,

creative exercises, and adaptability to continuous improvement process that combinedly constitute the philosophical ground of TQM (Edralin 2007; Jørgensen et al. 2007; Bornay-Barrachina et al. 2012; Zakuan et al. 2012).

To adopt TQM philosophy in order to become more competitive in the market, an organization is required to make a paradigm shift from a traditional management (TM) to a participative management style (Silos 1999). If employees do not possess the requisite knowledge and skill, they will not be able to assume higher responsibility. The new management style will demand amplified involvement. To enable the employees to have meaningful and effective participation, the organization will be required to undertake HCD interventions like education and training (Zakuan et al. 2012). To make TQM a success for transforming the organization from a market follower to a leader, it is argued that innovation is also essential that can be triggered by HCD interventions like continuous training, development and even an unconventional storytelling (Edralin 2007; Sheehan et al. 2014). Education leads to innovation as well, since it can escalate employee's capability to think out of the box and people usually cannot think creatively without an enriched cognitive stock (Flores-Crespo 2007).

Moreover, continuous improvement (which is another pivotal component of TQM philosophy) has, arguably, a positive correlation with quality-oriented training and development program (Arulrajah 2017). In a wider sense, various HRM practices can play a critical role in supporting continuous improvement and thereby enhancing performance (Jørgensen et al. 2007). Though the role of different HCD interventions in TQM execution can be implicitly presumed from the extant literature, it is not clearly understood whether and how HCD as an organized framework can contribute to the implementation of TQM philosophy, nor is there any such established theoretical framework in the HRD literature.

## **1.2 Rationale for the Research:**

This study was motivated to establish the association between HCD as a comprehensive employee development framework and TQM philosophy through an inductive exploration since empirical research on their relationship was found to be limited. Most of the prior studies relating to HCD addressed its impacts on performance or returns typically in financial terms, paying nominal attention to employee behavioral aspects (Harris et al. 2019) such as involvement, participation, innovation, which subsequently influence quality management. This research, primarily underpinned by human capital theory, was intended to take a different stance, assuming that it is not the individual employee but rather the employer, who, for its own sake, to ensure quality functioning in the whole supply chain, is more responsible to provide employees with the required education, training, development and (no less significantly) better healthcare facilities, given that the employer is the beneficiary of human capital (Stone 2002; Marimuthu et al. 2009), though does not own this asset (Wright and McMahan 2011).

Much has been studied about TQM practice, addressing the benefits it typically generates for organizations (Douglas and Judge 2001) but as a people-centric philosophy (Dale and Cooper 1992) how it can be adopted, particularly in a labor-intensive establishment, is not adequately explored (Douglas and Judge 2001; Kaynak 2003; Rahman and Bullock 2005; Augusto et al. 2014; Al-Juboori and Al-Azemi 2016; Yu et al. 2017; Worlu et al. 2019). Prior studies mostly consider only the hard aspects of TQM, such as structural control, statistical process control, exploration, and many others, considering them as complementary variables to realize TQM effectively whereas the soft elements, such as human capital or people who are at the center of the organization, were mostly overlooked (Douglas and Judge 2001).

It is indeed human capital (i.e., the knowledge, skills, abilities, and other relevant characteristics of employees) that creates immense value for the organization (Armstrong and Taylor 2017). Ployhart et al. (2014) regarded human capital as resources that are individual, or unit-level capacities built on individual KSAOs and accessible for unit-relevant purposes. It is, therefore, essential for organizations to develop human capital through HCD interventions as TQM implementation requires employees' evocative involvement and teamwork for continuous improvement leading to external customer satisfaction (Dale and Cooper 1992; Oakland 2014).

The Bangladesh ready-made garment (RMG) sector was used as the research site in this exploratory study. This is the country's dominant export-oriented industrial sector, holding second position after China in the global market (Uddin 2019). This sector acts as the lifeblood of the national economy given that it contributes more than 80% of the country's total export earnings as well as employing more than 4 million people, most of whom are unskilled or semi-skilled women (BGMEA 2019). Despite its predominant role in the national economy and competitiveness in the global market, it is now challenged by its close competitors, like Vietnam (Talapatra et al. 2020). This is perhaps due to the fact that the cost competitiveness Bangladesh RMG sector usually enjoys is not the outcome of operational efficiency, but the poor compensation made to unskilled employees (Kurpad 2014; Farhana et al. 2015). It is evident that the success of this sector hinges on relatively low manufacturing cost as a consequence of cheap labor (Talapatra et al. 2020). However, the prevailing knowledge and skill gap, poor health conditions, and overall incapability of working employees ultimately led to lesser productivity and quality, higher lead time, and poor compliance practice (Hossain et al. 2019).

Moreover, the relevance of TQM cannot be underemphasized in this perspective (Rahman and Masud 2011; Asif et al. 2013; Syduzzaman et al. 2014) given that the language and principles of TQM philosophy is not well conceived in most of the RMG establishments in Bangladesh resulting in losing market share and competitiveness (Akhter 2016; Talapatra and Uddin 2017). If appropriately executed, TQM could promote effectiveness and quality, as well as shrink rework, wastage, and thereby production costs (Syduzzaman et al. 2014). On the contrary, there are some exemplary TQM practicing RMG establishments in this sector that consistently serve the leading international buyers across the globe with a high reputation. Following a participative management system with the support of a dynamic and dedicated workforce, they are successfully transformed into TQM practicing organizations and thereby enjoy competitive edge in the international market. Based on the evidence of such cases, this research was aimed to assert that HCD can play a crucial role in adopting TQM philosophy effectively and subsequently achieving market leadership. To the best knowledge of the researcher there is no such primary study conducted to date from this perspective particularly on the role of HCD in the successful execution of TQM philosophy. Whether and how HCD can contribute to TQM implementation remains an unexplored phenomenon in the chosen context.

Though limited in number, the previous studies mostly addressed the HRM issues of different RMG companies and their loopholes in a generalized way (Miah and Hossain 2014; Seddiqe and Basak 2014; Chowdhury 2015; Akter 2016; Haq 2016; Niluthpaul et al. 2016; Rashid et al. 2016; Alam et al. 2017) overlooking the critical investment perspective of human capital. Some authors considered people as the most crucial factor for RMG establishments, but how the vast number of unskilled and semiskilled employees involved in this sector (Mohiuddin 2012) can act as the key to unlocking TQM implementation is not well researched (Seddiqe and Basak 2014). This study thus aimed to develop an understanding based on the

participants' opinions about the role of HCD in establishing a TQM based culture. Moreover, there was a need for developing an inclusive theoretical framework in the broader field of HRD that also was a factor in instigating this research.

### **1.3 The Significance of Linking HCD with TQM Philosophy:**

While the concept of HCD is centered around developing people holistically at the workplace in terms of knowledge, skills, and overall capabilities (Desimone et al. 2002), the philosophy of TQM is largely embedded in employee involvement, innovation, and continuous improvement (Augusto et al. 2014; Oakland 2014) for adopting which a competent workforce is a vital precondition (Kisuju and Analoui 1999). A persistent need, therefore, exists for establishing a strategic link between an HCD framework and TQM philosophy as it is not explicitly recognized in the literature, though some studies merely looked at the role of training and development in making quality a reality (Thomas 1992).

It is widely believed that while physical, financial, and information resources can only make things possible, it is people that can make things happen (Mortita 1982). They are assumed to be the most vital resource (Fulmer and Ployhart 2014), hence the most valuable investment an organization can make is in its human capital (Becker 1993). People at the workplace are such essential elements that the successful execution of TQM philosophy largely relies on their adherence to this philosophy (Limpiada 2016). Based on the existent management literature, it can be argued that TQM is not a mass of machines, tools, statistical techniques, quantitative methods, and systems; rather it is a guiding management philosophy (Dale and Cooper 1992; Syduzzaman et al. 2014; Yu et al. 2017) necessitating a substantial organizational focus on soft aspects like continued employee development (Samson and Terziovski 1999; Hafeez et al. 2006). The management, specifically HRD literature also

implicitly recognized that human capital could play a driving role in TQM execution, particularly when leveraged through HCD interventions (Wilson and Chapman 2009).

Developing human capital is pivotal as it can trigger the enhancement of both productivity and quality in several ways (Arulrajah 2017), resulting in increased competitive advantages (Powell 1995; Reed et al. 2000). On the other hand, the lack of continued emphasis and investment in developing human capital results in TQM failure and, thereby, poor business performance (Tamimi and Sebastianelli 1998). The role of HCD is critical on the ground that implementing TQM philosophy or establishing a quality culture in a broader sense does not only impact the quality of processes or finished products, but it also helps an organization survive as well as outperform competitors by shifting the organization into a more market-driven one (Yeung et al. 2006). TQM has remained a key factor for organizational growth and success and is required for organizations to compete in today's global business market as it can advance competitiveness, effectiveness, and flexibility (Oakland 2014). It can be argued, therefore, that implementing TQM philosophy in business operations is crucial for any organization, which is, however, contingent to a great extent on how robustly the HCD interventions are applied to develop an effective workforce. It can be assumed from the extant literature that TQM is strategically linked with HCD.

#### **1.4 Research Aim, Objectives, and Questions:**

This study, underpinned by human capital theory, resource-based view, and behavioral theory, aims to explore and understand the critical role of HCD in implementing TQM philosophy specifically in the context of the Bangladesh RMG sector. It aims also to develop an inclusive HCD framework in this respect based on the opinions and suggestions of the research participants.



In line with the aim, this research intends to achieve the following five research objectives:

- I. To review the literature on HCD and TQM critically
- II. To explore and understand the role of HCD in implementing TQM philosophy
- III. To investigate how HCD affects the implementation of TQM philosophy
- IV. To explicate the linkage between HCD and TQM philosophy
- V. To develop an HCD framework for the implementation of TQM philosophy

Considering the above-mentioned objectives, this research intends to answer the following four specific research questions:

RQ 1: What role does HCD play in the implementation of TQM philosophy?

RQ 2: How can HCD contribute to the implementation of TQM philosophy?

RQ 3: What is the relationship between HCD and TQM philosophy?

RQ 4: How to develop an HCD framework for the implementation of TQM philosophy?

The next section will briefly elucidate the research methodology that will be followed to answer the above research questions.

### **1.5 Research Philosophy and Methodology:**

This basic exploratory research driven by the interpretivism research paradigm was principally embedded in ontological idealism and epistemological subjectivism. Philosophically, the interpretivist worldview was espoused since the drive of this study is to understand how subjective reality is socially constructed in the natural settings of the research participants. The study followed an inductive approach and adopted a qualitative research design in congruence

with the philosophical stance to accomplish the research aim and objectives, as well as to answer the research questions specified in the previous section. Broadly, as a research methodology, the case study was used, as it supports theory building (Yin 2018), which is appropriate in fields like HCD where comprehensive theoretical and conceptual frameworks are scarce (Chetty 1996).

A multiple case study methodology was pursued and specifically five RMG establishments of Bangladesh were purposively selected as cases based on their consent to making an in-depth exploration and their characteristics relating to the research motivation and questions (Mathews and Ross 2010; Creswell and Poth 2018). To elicit subjective responses in the form of rich and thick primary data from the selected participants of chosen cases, the interview method was used, and the semi-structured interview technique was applied as a research instrument. Fieldwork was carried out in two phases. The first phase involved 30 interviews (6 from each case) for which participants were selected based on their functional relevance to the study and by following an initial purposive sampling and subsequent snowballing approach. Maximum variation sampling strategy was applied in this regard (Creswell and Poth 2018). Prior to fieldwork, a formal consent form was sent to the potential participants through the relevant authority of the respective organizations. Participants were made aware of the research topic, aim and other related issues in detail by providing them with a participant information sheet so that they could give informed consent voluntarily.

While conducting the interview, a semi-structured interview guide consisting of eight open-ended thematic questions was followed, in order to stay focused on the research topic. Apart from taking notes, with prior permission, the conversation was recorded using a voice recorder during the interview session for more accurate rendition (Yin 2018). The second phase involved translation and transcription of the recorded interview data manually. At this follow-

up phase, the draft of each transcribed interview was sent back to the respective participant to authenticate the written script. In addition, secondary data sources were also utilized to form five comprehensive cases and craft robust arguments. Finally, thematic analysis was manually performed to analyze the interview data in a reflexive manner (Braun and Clarke 2006; 2019).

### **1.6 Intended Research Contribution:**

The anticipated contributions of this research were twofold, i.e., theoretical, and empirical. This research, primarily underpinned by the human capital theory, focused on a fundamentally distinct dimension in the following way:

Unlike existing human capital theory, this study tried to explore and understand the organizational benefits of HCD practices in qualitative terms, particularly concerning the enhancement of quality management in every sphere of organizational life. While human capital theory mostly focuses on the individual responsibility of people to develop human capital and its subsequent impacts on their earnings because of productivity gains, and consequently on overall economic growth, this research largely placed emphasis on the roles and responsibilities of the organization, especially the HR team, in developing both generic and firm-specific human capital of the employees and how these endeavors can help the organization in establishing a quality culture where all employees will actively and innovatively participate in the continuous improvement process. This study was expected to establish an explicit linkage between HCD and TQM philosophy at the workplace through an inductive exploration, which, according to the literature reviewed has not been critically studied earlier.

Besides, HRD literature implicitly recognizes education, training, and development as three different dimensions of employee learning and the means of developing human capital (Nadler and Nadler 1990; Armstrong 2001; Wilson 2009). Despite its advent as a maturing discipline, HRD still fails to explicitly state what interventions should be incorporated in it (Garavan et al. 2000) and that is why there remains a significant theoretical gap to develop an all-embracing framework of HCD, which this research is anticipated to fill in. HRD literature disregarded health issues in the discussion on employee development but without ensuring these, human capital cannot be truly formed and nurtured at the workplace (Fisher 1906; Schultz 1961; Becker 1964; Savu 2013; Goldin 2016). Hence, this study, backed by human capital theory, endeavored to integrate health elements to portray an all-encompassing picture of human capital and in this way sought to cover the gap in HRD literature.

The anticipated theoretical contribution of this study was to develop a theoretical framework of HCD as there exists an important need for further theory development in the field of HRD. The study also endeavored to end up with a sound exploratory base for future researchers to establish a theory on it through conducting comprehensive explanatory studies. The expected empirical contribution of this study was the enhancement of understanding of the role of HCD in implementing TQM philosophy in the context of the Bangladesh RMG sector based on the evidence of multiple case study. There is no such study conducted to date in this perspective and this study would, therefore, be the first exploration of the pressing issue of quality enhancement through HCD.

### **1.7 Structure of the Thesis:**

This thesis consists of seven chapters, including this introduction chapter. The structure of the remaining chapters is briefly presented in this section.

**Chapter 2:** The second chapter provides a critical review of the extant literature on HCD and TQM and presents a conceptual framework to comprehend the linkage between them.

**Chapter 3:** The third chapter presents an overview of the Bangladesh RMG sector in which the study was conducted.

**Chapter 4:** This chapter focuses on the philosophical stance of this research and provides an extensive account of the research methodology. Additionally, the ethical issues being considered are also briefly explained.

**Chapter 5:** This chapter introduces the case organizations and presents within-case reflexive thematic analysis and major findings.

**Chapter 6:** In this chapter, a discussion on the research findings in relation to the research objectives and the extant literature is presented. A proposed framework of HCD is demonstrated with an explanation.

**Chapter 7:** In the conclusion chapter of the thesis, the specific answers to the research questions are briefly presented. Furthermore, the contributions of the study to the knowledge, managerial implications, research limitations, and directions for future research are also discussed. The chapter ends with a personal reflective statement of the researcher.

## **Chapter Two: Literature Review**

### **2.1 Introduction:**

This chapter is intended to explore and uncover the inherent association between HCD and TQM philosophy from a holistic perspective. Human capital theory as a focal theory along with the resource-based view of the firm and behavioral theory guides the discussion in this chapter. Addressing the broader perspective of HRD, this chapter examines the concept of human capital and its ownership perspective, the major HCD interventions and their impacts, and the difficulties of measuring HCD returns. It subsequently examines the TQM philosophy, underlying themes of TQM philosophy, and finally the nexus between HCD and TQM philosophy to create a conceptual framework for representing this exploratory study.

### **2.2 Human Capital Development:**

#### **2.2.1 Human Resource Development Perspective:**

The concept of HRD was initially introduced by Leonard Nadler in 1969 at the Miami conference of the American Society of Training and Development (ASTD) (Wilson 2009). It has then gradually manifested itself as a distinct academic discipline and a professional field (Shirmohammadi 2020). HRD can, however, be distinguished from its connected fields like HRM in a way that is specifically related to enhancing employee learning and development (Sadler-Smith 2015). Wilson (2009) viewed HRD as the modern evolutionary phase in the long tradition of educating, training, and developing employees so that the workforce can contribute to attaining individual, organizational, and societal goals.

HRD basically refers to a process of building and unleashing human expertise which is centered around a core belief that an organization is a human-made entity relying on such expertise for establishing and achieving both short-term and long-term individual and organizational objectives (Swanson 2001). For understanding, explaining, and carrying out its roles and processes, HRD as a discipline depends on three fundamental theories: the economic theory, psychological theory, and systems theory (Swanson 2001).

HRD as a branch of study has borrowed several components from these theories. Three economic theories, namely scarce resource theory, sustainable resource theory, and human capital theory, are assumed to be more applicable to HRD (Swanson and Holton, 2001). Swanson and Holton (2001) named three psychological theories as most fitting to explain HRD i.e., gestalt psychology, behavioral psychology, and cognitive psychology. Swanson and Holton (2001) also suggested three system theory perspectives to be relevant in this regard, these being general system theory, chaos theory, and futures theory.

Human capital theory was used as a focal theory in this research as it is found to be strongly associated with the study of HRD (Nafukho et al. 2004). This research was motivated by the belief of Nafukho et al. (2004) that exemplifying the association between organizational performance, HRD, and human capital could better place HRD in terms of HCD from the perspective of a knowledge-based economy. Moreover, by sequentially exploring the definition of human capital theory, Nafukho et al. (2004) identified a link between HRD and human capital.

The connotation of human capital is, however, different from human resources as capital means something to be grown while resources refer to something to be utilized. The extant literature suggests that human capital is a novel topic in human resources (Pasban and Nojedeheh 2016). Pasban and Nojedeheh (2016) differentiated between these two terms by viewing

human capital as the investment in human resources to increase their efficiency. Moreover, according to the two proponents of human capital theory, Schultz (1961) and Elliott (1991), human capital is a determinant of qualitative attributes of human resources. However, in the next section, the concept of human capital is explained to comprehend the inevitability of focusing on it.

### **2.2.2 Conceptualization of Human Capital:**

The term ‘Human capital’ has possibly embarked on more emotions than any other in the HR discipline (Baron and Armstrong 2007). Studying the concept of human capital is inherently historical (Goldin 2016); as such the original idea can be traced back at least to the father of Economics, Adam Smith, in the 18<sup>th</sup> century (Kolomiets and Petrushenko 2017). It has been later popularized by the noteworthy works of eminent scholars, including Theodore Schultz, Gary Becker, Jacob Mincer, and others (Schultz 1961; Becker 1964; Mincer 1974). In the 1950s, it was assumed that land, labor, physical capital, and management were the major factors of production (Mincer 1962; Becker 1993), all of which later in early 1960 failed to explain the enormous economic growth of a nation (Schultz 1961; Denison 1962; Krueger 1968). Schultz (1961) identified this gap and found a new reason, known as ‘residual factor’, which indicates nothing but human capital, as being the principal factor causing the longest uninterrupted economic expansion in the United States.

Over the last fifty-five years, extensive research has been conducted on this pressing issue in diverse disciplines, including economics, strategy, HRM, and psychology. Most of the studies, however, convergently focused on the formation of human capital and its impact on the individual level and unit-level performance results. For example, Campbell et al. (2012) used the term ‘human capital’ to imply investment in employees, implicitly presuming that



employees with human capital generate some value for the work unit. Haq (2016) tried to offer a comprehensive definition of human capital by incorporating the perspectives of scholars from diverse fields (e.g., Mincer 1958; Becker 1962; Blaug 1976; Wernerfelt 1984; Barney 1991; Teece et al. 1997; Ployhart and Moliterno 2011; Nyberg et al. 2014; Ployhart et al. 2014; Wright et al. 2014; Arend 2015).

According to Haq (2016:10), “human capital is comprised of knowledge, skills, and abilities (KSAs) possessed by individuals which have the potential to affect individual-level performance”. This conceptualization of human capital, however, does not cover a holistic view of firm performance. Ployhart et al. (2014) undertook a wider stance regarding the concept of human capital and defined it as a resource by decomposing it into three elements: structure, function, and level. According to Ployhart et al. (2014: 374), “human capital resources are individual, or unit-level capacities based on individual KSAOs that are accessible for unit-relevant purposes”. Here, knowledge, skills, abilities, and other characteristics (KSAOs), including both individual and unit-level capabilities, constitute human capital resources required for unit-related performance.

However, people are justifiably viewed as human capital across different disciplines, including HRM (Becker 1962; Huselid et al. 1997; Hitt et al. 2001; Youndt and Snell 2004; Coff and Kryscynski 2011; Crook et al. 2011; Wright and McMahan 2011; Makarius and Stevens 2019). Thomas et al. (2013) described human capital as the people, their current job-related behavior, and potential in the organization. A novel term ‘potential’ is included in this elaboration which indicates that employees’ existing skills and abilities need to be expanded over time. Itami (1987) viewed this human capital as an *invisible asset* for the organization, which is not tangible but observable in terms of output. According to Berger et al. (2003), it is

the value of a workforce to an organization that can be seen as a distinct corporate resource contributing to the total value of the organization.

Besides, Noe (2017) defined human capital as the sum of the attributes, life experiences, knowledge, inventiveness, energy, and enthusiasm that are exerted by the employees in their work. This definition focuses on the need for energy, implying sound employee health that constitutes human capital in addition to learning. Savu (2013) stated more specifically that human capital consists of educational and biological capital necessitating investment in both employees' learning and health to strengthen their overall capabilities. Considering the viewpoints of Noe (2017) and Savu (2013), human capital can be defined as the set of knowledge, skills, potentials, and necessary physical and mental capabilities that an individual or group of individuals possesses, having an intangible and intrinsic value to the organization. This definition addresses almost all the required components of human capital and might better inform the focus of this study.

Although, the concept 'human capital' has taken a different dimension like resource or strategy in the extant literature (Nyberg et al. 2014; Ployhart et al. 2014; Wright et al. 2014), the underlying principle of human capital theory still works, this being the belief that the value of learning capability of individuals can be compared to the capacity of other resources being involved in the production process (Lucas 1988; 1990). No matter whether it is termed as a human capital resource or strategic human capital resource, it is the employees of the organization who are the genuine basis for competitive advantage (Chatzkel 2004) and when this human capital is efficiently formed and nurtured, the outcomes are positive for all the relevant stakeholders, including employers as well as employees (Schultz 1961). Human capital can virtually differentiate a great organization from a good one (Chatzkel 2004; Nda

and Fard 2013). However, the human capital theory is elaborated in the following subsection for integrating the concept of human capital with HRD discipline.

### **2.2.3 Human Capital Theory:**

The human capital theory is strongly allied with the study of HRD given that HRD prescribes enhanced employee development through investing in education and training while the human capital theory also claims that investment in people can make them more productive at work (Holton and Naquin 2002). This theory is found to be one of the most relevant and applicable in the field of HRD (Swanson and Holton 2001) that stresses contemplating people as capital (Nafukho et al. 2004). However, it focuses on the alleged association between education and earnings in a way that education increases people's knowledge and skills level that positively affects productivity at work, and this higher productivity is subsequently rewarded by higher earnings (Becker 1964; Mincer 1974).

This theory also assumes a positive linkage between age and earnings, and proposes a justification for such correlation between them through a mechanism that older people earn more as they have greater on-the-job experience or training which is said to make them more productive, and in turn they will be paid higher as rewards (Becker 1964; Mincer 1974). Looking into this hypothesis it can be understood that this theory largely focuses on the financial returns of investment in human capital that, according to Becker (1993), can be calculated. It can also be assumed that the benefit goes mostly in favor of the employees. Nevertheless, there are several impacts of investing in human capital that are beneficial for different stakeholders, including the employer as well as employees (Baron and Armstrong 2007) and many of them cannot be captured for calculation (Abhayawansa and Abeysekera 2008).

Moreover, the correlation between the variables (education, training, productivity, earnings) which stands on the fallacy of *ceteris paribus* is being challenged on several fronts. One of the common arguments reinforcing the criticism of the human capital theory is that education or experience is positively linked with higher earnings, not on the ground that additional knowledge or skill yields higher productivity, rather because employers treat this additional knowledge or experience as a signal or filter of improved quality of employees that must be compensated highly (Strober 1990). Though the central focus of this theory is on the returns of investment into human capital in quantitative terms (Becker 1964; Mincer 1974), the concept of human capital itself is viewed in terms of quality, not quantity, by one of the proponents of human capital theory (Elliott 1991). Schultz (1961) also regarded it as a qualitative attribute of human resources, but the effect of investing in human capital, which is qualitative in nature and cannot be estimated, is not well discussed in this theory.

The underlying essence of this theory lies in the advice *If you want a good job, get a good education* and the theory utters more than simply that greater knowledge, skill, and capability level are positively correlated with higher income level (Strober 1990). This research, underpinned by the human capital theory, takes a slightly different stance, focusing on *who will provide good education to people already in a job and why*. It firmly assumes that it is not the individual employee, rather the employer, who is more responsible for providing employees with the required knowledge, skills, employability, and healthcare facility, since the employer is the beneficiary of this human capital (Stone 2002; Marimuthu et al. 2009), though does not own it (Wright and McMahan 2011). The specific reason behind this stance lies in the assumption that people usually bring general human capital to the organization, which has then to be advanced by the organization through providing firm-specific knowledge, skills, and experience (Baron and Armstrong 2007).

However, this research aims to explore the role of developing human capital from an organizational perspective. It adopts human capital theory as the focal one for some specific reasons. This theory contemplates people as capital and assumes that investing in this capital would result in the creation of a productive workforce which together determines the agenda of this study (Nafukho et al. 2004). It forms the base of this research by providing the insight that investment in employee development has both direct and indirect impacts on the organization (Nafukho et al. 2004). At the individual level, the impacts are positive change in performance, and at the organizational level, the consequences are the enhanced efficiency and profitability (Nafukho et al. 2004). Such impacts can be measured, but this study specifically focuses on the impacts in terms of quality management perspective, which itself is a qualitative and unmeasurable phenomenon and remains unexplored in the literature.

Nevertheless, the human capital theory is not adequate to explicate the intrinsic and intangible value of the employee's human capital that might help an organization in gaining competitive advantage. Hence, the resource-based view of human capital is conceived in this study as a supporting theory which is discussed in the subsequent section.

#### **2.2.4 The Resource-based View of Human Capital:**

The resource-based view (RBV) of the firm has its origin in the literature of organizational economics where profit and competition theories associated with the writings of Ricardo (1817), Schumpeter (1934), and Penrose (1959) started viewing the internal resources of the firm as the key sources of competitive advantage and success (Wright et al. 1994). In HRM literature, the RBV has been constantly used as a backdrop, either implicitly or explicitly, (Penrose 1959; Barney 1991; Delery and Roumpi 2017) to clarify the strategic importance of human capital (Abhayawansa and Abeysekera 2008). In this study, the human capital theory can be accompanied by the RBV of the firm (Baron and Armstrong 2007; Buta 2015) for

realizing the significance of developing human capital resources apart from investing only in physical and organizational capital resources. The RBV was principally developed by Barney (1991), who classified firm resources into three basic categories: physical, human, and organizational capital resources. Barney (1991) argued that these resources have the potential to become the source of sustained competitive advantage for the organization, given that they are valuable, rare, inimitable, and non-substitutable, widely known as VRIN.

The physical capital resources comprise technology, equipment, plant, geographic location, and raw material accessibility, while organizational capital resources include things like structure, systems, and control (Barney 1991). On the other hand, human capital resource consists of soft elements, such as skill, experience, and the intelligence of employees of the organization (Barney 1991). As this study was intended to focus on employee development and connect such intervention with total quality management (TQM), it adopted the RBV of human capital resource given that only physical or organizational capital resource alone cannot help implementing the TQM philosophy (Dale and Cooper 1992; Samson and Terziovski 1999; Yu et al. 2017). Rather, developing human capital through rigorous HR interventions can arguably bring success in TQM execution and thereby facilitate an organization to gain sustainable competitive advantage (Powell 1995; Reed et al. 2000).

However, there is an ongoing controversy triggered by RBV regarding whether organizational HR practice or human capital itself acts as a source of sustainable competitive advantage (Delery and Roumpi 2017). Wright et al. (1994) argued that an organization cannot have a rare, inimitable, and non-substitutable HR practice. However, integrating and synthesizing the strategic HRM literature, Delery and Roumpi (2017) concluded that well planned and executed HRM practices that specifically emphasize firm-specific skills development of employees can contribute to enduring competitive advantage. Employees may

have firm-specific or generic human capital but unless it is further created and leveraged through different HCD interventions, it would not automatically turn into a positive outcome (Wright and McMahan 2011; Nyberg et al. 2014; Delery and Roumpi 2017). Developing human capital is crucially required as it can enable employees to work more productively, which would ultimately give the organization sustained competitive advantages in the market.

Hatch and Dyer (2004) in this regard discovered that investment in firm-specific human capital development has a significantly positive effect on learning and thereby on firm performance. Through empirical investigation Riley et al. (2017) also found such a positive correlation between investment in HCD and financial performance of the organization. These findings are consistent with the RBV of the firm which frequently presumes that inimitable human capital, which is characterized by intangibility, firm-specificity, and social complexity, gives a competitive advantage to a firm (Wernerfelt 1984; Barney 1991; Peteraf 1993). Human capital is assumed to account for approximately half of the gap between a firm's book value and market value though it cannot be captured on the balance sheet of the firm whereas other resources can be measured and shown in the financial statements (Berger et al. 2003).

Similarly, Fulmer and Ployhart (2014) found that, although all the surveyed managers in their study strongly asserted that human capital is the most vital resource for their organizations, very few of them could confidently state its financial value. Most of the prior studies unequivocally recognized human resources as vital sources of competitiveness, but it needs to also be borne in mind that not all employees have strategic value for the organization (Bornay-Barrachina et al. 2012). Rather, only when the workforce becomes valuable, rare, unique, and organized can it act to provide competitive advantage (Bornay-Barrachina et al. 2012) which can be made happen through prudent HCD interventions.

However, human capital is unique and distinct from the other two forms of capital, especially in terms of ownership. This ownership perspective of human capital is discussed in the next section.

### **2.2.5 Ownership Perspective of Human Capital:**

The ownership perspective of human capital is critical as it might influence an organization's decision regarding investment into this resource which is mobile in nature (Elliott 1991; Lloyd 2002). Most of the research studies within the broader RBV of the firm evaluated the aspects of different resources owned by the firm, such as patents, technologies, etc. (Wright and McMahan 2011). Nonetheless, there is one unique resource, 'human capital', that a firm does not own at all (Wright and McMahan 2011). Unless it is a slave society, organizations own physical capital but not their people (Baron and Armstrong 2007). A dilemma relating to the ownership of human capital takes place as both firms and employees have come to realize the immense value of it and disputes over its ownership have therefore increased (Stone 2002).

Employees generally presume that their acquired knowledge, skills, and abilities on a specific job belong to them in the sense that they take all these with them on departing from the existing employer (Stone 2002). On the other hand, though employers cannot compel an employee to remain with the organization, they typically assume that they own the human capital in the sense that they can ensure that the valuable learning imparted to their employees is utilized on the organization's behalf (Stone 2002). However, according to Wright and McMahan (2011), a firm may possess and utilize this human capital resource provisionally for an uncertain period through a separable employment relationship, but its real owners are the employees themselves. Similarly, Baron and Armstrong (2007) also stated that though human capital is secured through an employment relationship, it is never owned by the organization.



The notion that an organization owns human capital as an asset like a machine is both unacceptable in principle and inappropriate in practice (Davenport 1999).

Given this fact, an employer's investment in human capital which is mobile (Elliott 1991; Lloyd 2002) might be viewed as risky as it is in shareholder equity capital (Robinson and Zhang 2005). Some organizations show reluctance to invest in human capital due to their limited knowledge about its economic returns and this is particularly more evident in the case of generic human capital (Lloyd 2002). These organizations realistically choose either not to invest in employee development and instead to focus on hiring skilled manpower from the external labor market, or only to invest to develop firm-specific skills (Lloyd 2002). Another factor that might exaggerate this sort of hesitancy is that the returns from such investment are intangible in nature (Kumar 1983).

Applying a political game playing perspective, Clarke (2006) argued that due to a vicious cycle of inactivity, the investment made in management training and development failed to generate its promised outcomes. Moreover, post evaluation of such investment is a complicated process as it is difficult to quantify the actual impacts on performance (Cairns 1997). Despite all these dilemmas and complexities, learning in the workplace is regarded as a vital strategic issue to success (Lloyd 2002) and consequently, organizations for their own sake are required to invest in developing human capital which tends to have huge impacts on employee performance (Marimuthu et al. 2009).

However, discussion on two specific categories, namely firm-specific and general-purpose human capital, can be found in the extant literature. In the next section, the differences between these two forms of human capital are elucidated to help clarify the discussion on HCD.

### **2.2.6 Firm-specific and General-purpose Human Capital: Differences**

The sharpest distinction between firm-specific human capital and general-purpose human capital has appeared within the human capital theory (Harris et al. 2019). One of the leading contributors to the human capital theory, Becker (1993), identified and distinguished between these two concepts. His analysis on the segregation between these two has later been adopted by many researchers (Wright et al. 2001; Hatch and Dyer 2004; Wang et al. 2009; Ployhart and Moliterno 2011; Molloy and Barney 2015; Chadwick 2017).

One of the focal points of explication in this exploratory research is obviously firm-specific human capital which, according to Becker (1993), comprises the expertise gained through education and training in different wings of an operation, like management information system, accounting, or other proficiencies specific to a particular organization. According to Harris et al. (2019) firm-specific human capital is the composition of characteristics having value or worth only to a specific one or a few employers of identical type. On the contrary, general-purpose human capital is the composition of characteristics of individuals which offer value to a huge number and different type of employers (Harris et al. 2019). It refers to knowledge obtained through general education and training in fields of value to various organizations, such as generic skills in management (Becker 1993). Firm-specific human capital involves KSA which have productive value only for a particular organization while general-purpose human capital involves the same having value in any sphere of an individual's working life. Discussion on general-purpose human capital is also relevant to the theme of this study.

However, segregating firm-specific human capital from general-purpose human capital is opposed by Morris et al. (2017) who argued that, at least in some settings, both types of human capital are closely interlinked and investment in them has similar implications for both

the employees and the organization. Furthermore, managers in the organizations often use the term human capital to mean just firm-specific one as they recognize that whatever is invested by the firm in developing employee skill sets is usually pertinent to a specific firm (Morris et al. 2017).

Employers typically emphasize more on firm-specific human capital development assuming that it is the responsibility of an individual employee to build general-purpose human capital. They do, at best, assess the general knowledge of the job candidates during the selection process to make the right choice. Providing job incumbents with firm-specific skills and knowledge is generally considered as a strategic job for the HR team of the organization. The extant literature suggests that people usually bring general human capital to the organization, which is then supplemented by the employer through providing firm-specific knowledge, skills, and experience (Baron and Armstrong 2007).

This perspective is also supported by Ployhart et al. (2014) who purport that almost all human capital resources combined, and around different levels are complex and firm-specific rather than simple and generic. Moreover, according to the previously discussed RBV, firm-specific human capital is thought to be more productive than general-purpose human capital employed externally (Kor and Mahoney 2000; Kor and Mahoney 2004; Penrose 1959). Frank and Obloj (2014) also found that managers with superior firm-specific human capital are more productive, though their study concluded with conflicting implications that these managers can also increase agency costs outweighing the productive benefits. The truth is that, other than the organizational cost concern, firm-specific human capital positively affects firm performance (Frank and Obloj 2014). Nevertheless, both firm-specific and generic human capital are essentially required for any organization to run smooth business operations.

The next section explores the meaning and nature of HCD based on the extant literature to better conceptualize how an organization can build up a highly capable workforce that would correspond to the organizational needs.

### **2.2.7 Conceptualization of Human Capital Development:**

Human capital development (HCD) is virtually the extension of the study of HRD where people are viewed as capital rather than a resource that requires an organization to invest in it for strategically developing and unleashing human expertise towards organizational goal attainment. However, the extant literature based on the human capital theory, which is rooted in economics, does not put considerable effort into how individual firms or organizations would choose investment in human capital, but merely addresses individual efforts in this regard (Wright et al. 2014). The concept ‘human capital’ is well defined and elaborated in the literature (Kolomiiets and Petrushenko 2017), but how it would be formed and developed specifically in an organization remains a critical and challenging issue both theoretically and practically.

One of the influential proponents of human capital theory, Becker (1964), stated that individuals choose education, training, medical care to gain knowledge, skills, and better health by considering their potential benefits and costs. On the contrary, literature in strategic human resources management (SHRM) has placed more emphasis on the role of the firm in developing human capital through strategic HR practices that can positively influence performance (Wright et al. 2014). Investing in human capital can be regarded as the use of explicit HR practices that refer to the commitment of an organization to the employees (Roca-Puig et al. 2019).

In SHRM literature, a strong and positive empirical relationship has been found between the degree to which an organization practices high-performance work systems and the

organization level performance (Combs et al. 2006), though how much of human capital is developed by that organizational HR practice is rarely measured. Actual human capital should not be used as a proxy for organizational investment in human capital, though frequently measured by researchers (Wright et al. 2014). The vital concern here should be the contribution of an organization in crafting human capital among its employees to confirm better performance.

In today's competitive world, the rising demand for a skilled workforce to ensure quality in every single business operation has made corporate attention and investment in HCD more tempting. Organizations must pursue the right ways and invest both time and money for developing their human capital, whereas employees are expected to play a relatively passive role just by engaging in, for example, on-the-job training, off-the-job training, development programs, etc. Existent human capital can be enhanced by an organization through offering education and training which can be regarded as HCD. Nadler and Nadler (1970) described it as a series of planned actions performed within a specified time and intended to produce meaningful behavioral change. A few more contemporary definitions of this term are presented here.

Desimone et al. (2002) defined HCD as a set of planned and organized activities designed by the organization for providing employees with the opportunity to learn the required skills to satisfy existing and upcoming job demands. According to Berna and Radu (2013), HCD involves investing in a steadier infrastructure which increases the latent qualities and traits of human beings to produce innovative outcomes in their social pertaining residing. HCD practically implies developing the necessary skills and capabilities strategically and systematically to advance an individual and onward transmission to the society (Mohammed et al. 2016). Goldin (2016) more clearly identified three major components of human capital,

namely education, training, and health, and by HCD, she meant investing in these three components.

Integrating the above definitions with the essence of the human capital theory, HCD can be regarded as a framework to enabling employees promote their individual and organizational knowledge, skills, and abilities. Therefore, HCD is conceptually different from HRD in a way that while HRD only focuses on learning knowledge and skills disregarding employee health, HCD addresses almost every aspect of human life. From an organizational perspective, HCD can be conceptualized as a systematic way to prepare employees in all respect for their job to be effectively done to contributing to the organizational growth and success. More importantly, HCD has an inherent linkage with the implementation of TQM philosophy which itself is an evergreen research theme in the contemporary world derived from the Japanese-style management approach. The conceptualization of TQM philosophy presented in section 2.6 will facilitate understanding its innate nexus with the concept of HCD more clearly.

### **2.3 Major Interventions and Impacts of HCD:**

Research study on various aspects of human capital has been carried out for a long time, from which several interventions of HCD along with their components and potential impacts can be identified (see Appendix A). These interventions might facilitate organizations to generate expected outcomes in business operations. The commonly found HCD interventions or means include employee education, training, development, and healthcare facilities, wherein an organization should give necessary emphasis and make a prudent investment. Though in some research the first three terms, education, training, and development, are interchangeably used, they have a distinct meaning, role, and outcome at least in the organizational context

(McDowall and Saunders 2010; Masadeh 2012; Dai and Tymon 2016). Within the HRD literature, one common theme, 'learning', is found in most of the definitions of these three widely applied concepts (Garavan 1997; Wilson 2009; Tymon and Mackay 2016) and in the perspective of the learning dimensions these three terms have been distinguished (Nadler and Nadler 1990). Basically, learning serves as a glue to hold these three together (Analoui and Danquah 2017).

According to Nadler and Nadler (1990) education refers to learning that prepares an individual in a broader sense and not for a specific job. They defined training as learning which is more relevant to a specific job for which the employee is currently employed (Nadler and Nadler 1990). Finally, development is learning for an individual's overall growth in employment (Nadler and Nadler 1990). However, probably the most pivotal matter, is that they are all regarded as usable tools within the broader field of HRD to facilitate learning and depending on the learning requirement an organization needs to select appropriate tools for its employees (Tymon and Mackay 2016).

In the HRD literature, the HRD interventions are also classified into these three main categories (Armstrong 2001). McDowall and Saunders (2010) considered education, training, and development as distinct means of developing employees that are at the disposal of HRD professionals and individuals to facilitate learning. From the HR perspective, it is however also crucial for the organization to ensure that all the employees regardless of hierarchical position have the required functional literacy to adapt the workplace and function in it as rapidly and efficiently as possible (Ali et al. 2020). Functional literacy enables employees to socialize with the work environment, cope up with the changing conditions, as well as continue lifelong learning (Ali et al. 2020). The other instruments identified from the extant literature, such as self-directed learning, sustainability-related learning, mentoring, electronic learning, etc. can

be broadly categorized under these three major focused areas of learning. Besides, there is another crucial factor, which is a stable and pro-learning organizational infrastructure that needs to be established to foster overall employee learning. Establishing a conducive learning environment is a macro issue for any organization and obviously an essential prerequisite to facilitate HCD.

However, in HRD literature the issue of employee health is not taken into consideration at all as it is assumed that HRD is only concerned with enhanced employee performance within the working environment, and improving employees' health or their interpersonal relations with family is not a matter of concern for HRD (Frank 1988). However, in the literature of economics, investing in employee health is viewed as a means of producing human capital (Goldin 2016). Substantiating this viewpoint, Savu (2013) stated that human capital consists of both educational and biological capital, which necessitates investment in both employees' learning and health for strengthening their capabilities.

Human health was first regarded as one of the key factors of HCD by Irving Fisher in his book *The Nature of Capital and Income* (Fisher 1906). Fisher himself suffered from tuberculosis (Kolomiets and Petrushenko 2017), the same disease that caused his father's death. This exploratory research agrees from the standpoint that an organization should invest in its employees' health (both mental and physical) to enable them to perform job-related tasks more actively. Such active and competent employees are positively reinforced and rapidly promoted within the organization. Healthcare is, therefore, an HCD intervention that might subsequently affect employee retention. Thus, to be very specific, four instruments, namely education, training, development, and healthcare can be regarded as the major interventions that an organization can use for cultivating and developing human capital to ensure efficient and innovative employee performance and thereby turn its long-run vision into a reality.



In the next four subsections the widely regarded three learning interventions, along with the less focused issue of healthcare, which is also argued to be an essential means of HCD in this study, are elaborated.

### **2.3.1 HCD through Education:**

Schultz (1961) regarded education as an important element of human capital and emphasized its investment. It can be broadly viewed as a continuous and evolving process centered on an individual's intellectual capability (Eftimie 2013). In comparison to training or other means of HCD, it is broadly viewed as a more widespread, and less focused or hands-on approach to improving an individual's knowledge (Masadeh 2012). Analoui (2007) distinguished between education and training, suggesting that training focuses on developing and maintaining competency to accomplish job-specific tasks that take place after the placement of a newly hired employee, while education is more involved with the general growth and development of employee knowledge. According to Nyberg et al. (2014), the knowledge obtained through education is regarded as the factual or procedural information required to perform a particular job, which also serves as the basis on which skills and abilities are developed.

In today's competitive world its necessity cannot be overlooked as knowledge, the ultimate source of power, can be gained through proper education. According to scholars like Becker, Mincer, and Schultz, education remains one of the most effective means of developing human capital at both the organizational and national level. In a correlation study on tertiary education and HCD using survey research design from the perspective of higher education institutes in Nigeria, Mohammed et al. (2016) tested two hypotheses and found that there is a significantly positive and resilient correlation between tertiary education and HCD. They also concluded that HCD has a positive impact on the national development of Nigeria (Mohammed

et al. 2016). Finally, in their study, they plausibly established the fact that education is an essential means to develop human capital (Mohammed et al. 2016).

However, in a study on the role of education in developing human capital conducted by Jones and Ramchand (2013), it has been discovered that mere institutional enrolment ratios or rising mean years of schooling are not everything in boosting human capital. In the context of giant Asian countries like India, China, and Indonesia, their study revealed that two things are particularly crucial; one is quality, and another is the relevance of education (Jones and Ramchand 2013). They reiterated that these countries, having the economic opportunity of demographic dividends, can move forward further if they do invest in quality education relevant to the market needs (Jones and Ramchand 2013). Fagerland and Saha (1997) also emphasized the need for investment in education, particularly in developing countries and suggested that the cost incurred for education should be borne by those who will get the benefits out of it. It necessarily means that if an employer or an organization is the beneficiary of the education provided to its human capital, then it should bear the expenses and consider the associated cost as an investment, given that many employees after getting a job may still require informal, non-formal or even formal education to be organized and patronized by their employers.

In a qualitative study on the application of human capital theory, Olaniyan and Okemakinde (2008) emphasized that investment in quality education by addressing the skill gap is of great necessity for any employer in order to develop a productive workforce or human capital. Education is a productive investment in human capital as it increases the efficiency level of employees by enriching their knowledge or cognitive stock (Olaniyan and Okemakinde 2008). In an empirical-based article applying the Amartya Sen's capability approach, Flores-Crespo (2007) justified that investment in quality education makes actual human capital that

does not only guarantee economic growth or development, but rather ascertains people's capability to think out of the box. It can be concluded that education leads to innovation since without a sound cognitive stock people cannot think creatively.

Eftimie (2013) conducted quantitative research on the importance of continuing education by surveying managers of both public and private sectors in Romania and found that all the managers had a quite positive attitude towards it and recognized that integrating continuing education is a vital aim for any organization. However, the study also uncovered the fact that the managers usually do not take effective measures in this regard, perhaps due to financial deficiency, traditional culture or even the preset rigid productivity level, and, subsequently, the respective organizations perform poorly in the competitive market. Yet, none of the managers deny the need for education in promoting organizational prosperity. So, it is quite explicable that investing in employees' ongoing education is pivotal to organizational success. This investment not only makes employees smart, intelligent, knowledgeable, and innovative, but also induces them to be more loyal, enthusiastic, and engaged.

### **2.3.2 HCD through Training:**

Though the terms 'employee training' and 'employee development' are often used interchangeably in the literature, they have different connotations and are used as two separate and highly effective means of developing human capital (Hill and Stewart 2000; Armstrong 2001; Palmer 2009; McDowall and Saunders 2010; Dai and Tymon 2016). Training basically implies teaching technical and operational level employees on how to perform the jobs more productively for which they are hired. Training is present-day oriented and focuses on current job-related skills. The skill gained through training is defined as the individual's degree of proficiency and capability to carry out certain tasks of a given job (Nyberg et al. 2014). It can

be conceptualized as a planned effort undertaken to enable employees to learn job related new skills and anticipated behavior.

Employee training should be made an ongoing process to add value to the human capital of the organization and it can be either on-the-job or off-the-job (Obisi 2011). On-the-job training, according to Armstrong (1995), involves teaching or coaching employees by experienced supervisors, or managers at the desk or bench, to help them adapt to their job as well as the environment and equip them with necessary job-specific skills. In contrast, off-the-job training is training in which employees are taken away outside from their organization to be trained, and it includes different methods like a lecture, vestibule training, role-playing, case study, discussion, simulation, group exercises, team building, distance learning, outdoor, workshops, etc. (Armstrong 1995; Ejiogu 2000). No matter whether it is on-the-job or off-the-job, employee training is centered on the premise that employees' existing skills require to be enhanced for the organization to flourish well (Olaniyan and Ojo 2008).

To generate optimum output at work, Lock (1994) recommended that on-the-job training be conducted in precisely the same environment in which the employees work. This entails not only the same physical environment, but also the identical working conditions and surroundings, the same equipment and tools, materials, standards, and facilities that are utilized when the actual job is being performed. Lock (1994) insisted that on-the-job training is a more effective HCD intervention since, unlike off-the-job training, it cannot fail to be relevant, effective, and applied to the job. Providing training, particularly by line supervisors, is extremely effective as it creates a bond between worker and supervisor that subsequently develops a harmonious and effective work environment (Buick and Muthu 1997).

However, to make on-the-job training an effective tool for HCD, in-house trainers or supervisors need to be trained on a continuous basis so that they can better implement the

training plan within the organization (Obisi 2011). Buick and Muthu (1997) also suggested that departmental or line managers should always involve themselves in the employee training process even if they do not have adequate time for that. Lock (1994) concluded that an organization cannot become exceedingly competitive and accomplish high standards of efficiency and quality for its products without having a systematic approach to on-the-job training in all their sections and departments.

To investigate the impact of human capital on learning in the context of performing at factory level in the semi-conductor industry, Hatch and Dyer (2004) used proprietary and technology-specific information and concluded that firms placing greater emphasis on HCD, specifically through training around statistical process control, get more efficient employees who can contribute to organizational learning activities. For an individual employee, training increases not only the firm-specific human capital, but also generic human capital too, since the employer's sponsored training program usually has a general component or is portable across organizations (Veum 1999). It also reduces the supervision time and thereby improves the quality of work and increases the efficiency level of the employees (Olaniyan and Ojo 2008). Investment in human capital, particularly in job training, is also deemed to be the main reason for the wage rise of the employees (Veum 1999), which may in turn positively affect their motivation level and attitude towards the job.

In a quantitative study, Truitt (2011) discovered that positive job training necessarily predicts positive attitudes towards job proficiency. In an empirical study using structural equation modeling, Anis et al. (2011) investigated the impact of training on employee retention in which compensation acts as a mediating variable, and it was found that the impact is positive in a way as training increases human capital resulting in higher employee compensation, which in turn makes employees positive about their current job leading to prolonged retention. This

is also consistent with the findings of Blundell et al. (1999) that the likelihood of getting promotion of the trained employees is much higher, and consequently such personnel are less likely to leave their current job. Lengthier employee retention acts as a source of competitive advantage as it amplifies organizational performance and helps boost productivity (Anis et al. 2011).

Training serves as a cost-effective means of developing human capital in the sense that it shrinks the unnecessary time and money cost required to hire skilled people externally (Anis et al. 2011). Employees who receive regular training from the organization are found to be more committed at work and usually tend to stay with their current employer (Anis et al. 2011). This study, however, also subscribes to the fact that the role of the mediating variable (i.e., compensation or benefits) cannot be underemphasized since mere training not followed by any recognition tends to be ineffective. Especially when an organization advances into an era where employee knowledge and learning are a vital source of greater performance, integrating employee inducement is imperative (Wang and Wong 2012). However, training can be applied as a worthwhile instrument for HCD which is found to have a positive linkage with innovation, adoption, and adaptation of modern technology as well as competitiveness (Blundell et al. 1999).

### **2.3.3 HCD through Development:**

As discussed in a prior subsection, employee development is a fundamentally distinct instrument for developing human capital, which is aimed at enhancing an employee's future employability. Creating employability through development can be an effective alternative to retain devoted employees when job security cannot be promised (Benson 2006). Development means the acquisition of knowledge, skills, and behaviors for upgrading an employee's capability to meet future job requirements (Nda and Fard 2013). According to Armstrong

(2001), it is directed to future rather than current needs and focuses more on the career growth than immediate job-related behavior of the employees. Development takes place when the gain in experience is meaningfully incorporated with the conceptual understanding which can illustrate it, providing enhanced confidence to act as well as perceive how this type of action relates to its context (Bolton 1995).

Gansberghe (2003) viewed development as a long-term process which is designed and implemented to enrich an employee's potential and effectiveness or to grow and realize an employee's capability. The ability engendered through this process is considered as a more enduring capability (typically cognitive) that is needed for an individual to perform a job more judiciously (Nyberg et al. 2014). An organization should invest in this intervention on a regular basis to keep employees fit for future jobs, so that it can smoothly move forward (Jehanzeb and Bashir 2013). Like training, employee development is also an effective means that aid employees' human capital to explore their agility (Nda and Fard 2013). It has been found to have a positive correlation with employee attitude and commitment towards the organization (Benson 2006) since it impacts an employee's career growth and future employability.

Findings of several studies suggest that employee attitudes are significantly influenced by development (Birdi et al. 1997; Galunic and Anderson 2000; Bartlett 2001; Tansky and Cohen 2001), and one of the positive impacts of this intervention is found to be the enhanced commitment towards the organization (Feldman 1989; Tannenbaum et al. 1991; Birdi et al. 1997; Noe et al. 1997). Moreover, management development is an imperative on the ground that unless supervisors and managers themselves are expert enough, they can never be able to impart superior knowledge or advanced skills to their subordinates (Obisi 2011). However, it is important to clarify how employee development as an HCD intervention differs from employee training. The major differences are listed in the following table (see Table 2.1).

**Table 2.1: Differences between Training and Development**

<b>Training</b>	<b>Development</b>
Training can be defined as an organized process concerned with the acquisition of capability, or the maintenance of capability which is required for the present job of an employee	When the objective of acquiring capabilities is to equip an employee for performing the job in a predictable future, it can be conceptualized as development
Training is a type of learning which is usually provided to non-managers like technical workers, operational workers, etc.	Development is a type of learning which generally involves managerial people like supervisors, executives, etc.
It entails learning new skills relating to technical or mechanical operations	It is not primarily skills-oriented; rather knowledge-oriented, which includes theoretical or conceptual ideas
It is undertaken to share specific job-related information	It is undertaken to share broader knowledge
It is more time-bound	It is more obscure having a nurturing perspective
It is short term oriented	It is long term oriented
It can be considered as needs against current job requirements	It can be regarded as needs against future job requirements
It is more prescribed and clearer and produces skills-based outcomes	It is less prescribed and produces more flexible outcomes

Source: Adapted from Pepper (1984); Armstrong (2001); Palmer (2009); McDowall and Saunders (2010); Dai and Tymon (2016)



Development (frequently termed as career development) is, in fact, unique in terms of learning dimensions and it can certainly be used as a useful HCD intervention, which has increasingly come to be recognized as a vital element of successful management (Oakland 2014).

#### **2.3.4 HCD through Healthcare:**

One of the proponents of human capital theory, Jacob Mincer, did not consider health issues while analyzing human capital (Mincer 1974) and the HRD literature also disregarded it in the discussion on people's development at the workplace (Frank 1988). Conversely, American economist, Irving Fisher, for the first time recognized human health and made a significant contribution in comprising it as an essential ingredient of human capital (Fisher 1906) which has a substantial impact on productivity (Kolomiets and Petrushenko 2017). Schultz (1961) prioritized five areas in which investment must be made for building human capital and he identified health as the first and foremost one among these. While defining human capital, Becker (1964) also encompassed an individual's health as a pivotal component.

Providing a sound healthcare facility can be regarded as a prevailing means to cultivate a competent workforce for the organization given that human capital does not only consist of employee knowledge and skill, but also of physical abilities, which is frequently synthesized as health (Savu 2013). Though by the term health status Savu (2013) meant only physical health, Pacheco et al. (2014) contended that employee health status should be categorized into two potentially mutually inclusive categories, one is physical, and another is mental. Investing in both physical and mental healthcare is a crucial need for any organization, as Berger et al. (2003) asserted that the workforce effectiveness can be decreased by 5% to 10% due to just employee health-related problems. In their study, they argued that employee health should be

considered as a strategic issue to which top-level management needs to pay the necessary attention.

Berger et al. (2003) also expressed their belief that investing in employee health will certainly enable an organization to gain enormous productivity. Healthy workforce essentially means more productive workforce (Goldin 2016), while ill-health drastically diminishes the productivity (Pacheco et al. 2014). Employees having better physical and mental health can deliver instantaneous benefits to themselves as well as to their organization by attaining greater mental acuity, vigor, and resilience while performing the job (Gardner and Gardner 2012). Based on the findings of a study, Pacheco et al. (2014) claimed that an employee's likelihood of being in employment is significantly influenced by both physical and mental wellbeing.

Thus, how much an employee would be involved in the job depends on how much care the organization takes of his or her health. Health spending is justified on the ground that it does have a direct impact on human wellbeing (Bloom and Canning 2003). Moreover, Bloom and Canning (2003) also remarked that poor health conditions not only affect productivity negatively, but might also cause disability and even premature death, which subsequently lead to wasted outlay in human capital and thereby slash the incentive to invest in people. Healthcare is therefore not an expensive means; rather a cost-effective HCD intervention for any organization.

However, both learning and healthcare can significantly affect employee job related behavior at workplace, which is briefly discussed in the next section by integrating the behavioral theory into this study. The implications of this theory will be more clearly recognized later through the discussion on TQM.

## **2.4 Implications of Behavioral Theory:**

One of the three predominant psychological theories that supports HRD as a separate discipline is behavioral theory, known as behaviorism or behavioral psychology (Swanson and Holton 2001). This is basically a theory of learning in which learning is regarded as a change in behavior. It discusses “what can be seen, and therefore behavior is what is studied” (Swanson and Holton 2001: 97). The theory assumes that expected behavior can be acquired through conditioning or effective HCD interventions. Behavioral theory has significant implications in the study of HCD as it utters that the KSAO of each employee, work process owner, and enterprise leader must be developed by the psychologically framed organizations (Dubin 1976; Argyris 1993; Bereiter and Scardamalia 1993; Swanson and Holton 2001).

In this study on the role of HCD in implementing TQM philosophy, behavioral psychology theory acts as an ally of previously discussed human capital theory and RBV, given that employee learning through organized education, training, and development (including health) brings about positive changes in behavior. Such interventions are, therefore, keys to maintaining and fostering quality in every sphere of business operations. Besides, organizational performance can be improved in a sustained manner if the workplace system and employee learning experience can be designed methodically (Swanson and Holton 2001).

Moreover, in the literature of organizational behavior, issues like customer satisfaction, employee involvement and empowerment, innovation, and continuous improvement are given significant weight (Robbins and Judge 2013). All these variables are strongly linked with TQM philosophy that this study intends to encapsulate. Together with the human capital theory and the RBV, the behavioral theory also underpins this study to draw an inductive inference that employee’s human capital, when increased through systematized learning, results in deeper involvement with work, innovation, and improvement. These outcomes are keys to

organizational success; however, they are typically expressed in behavioral terms and cannot be measured.

In the next section, the benefits of HCD and the difficulties associated with measuring HCD implications are explained.

### **2.5 HCD Benefits and Measurement Difficulties:**

Investing in human capital is significantly beneficial for all stakeholders, both in financial and nonfinancial aspects that rationally justifies the indispensability of HCD (see Appendix A). Concerning who will be the beneficiary of HCD investment, Baron and Armstrong (2007) indicated it would be both employees and employers. For the employees, the anticipated returns include a higher level of earnings, greater job satisfaction, accelerated career mobility path, and at one time, but less so now, confidence that employment security is assured (Baron and Armstrong 2007). For the employers, the returns are expected to be a performance improvement, productivity gain, flexibility, and innovative capacity, which should result from broadening the skill base as well as enhancing the knowledge and competence levels (Baron and Armstrong 2007).

It has been argued that investment made in HCD yields higher-level personal income, (Smith 1776; Pigou 1932; Mincer, 1958) though even this income is also viewed as subjective by some economists, like Irving Fisher (Fisher 1906). Moreover, as human capital itself is the qualitative attribute of HR (Schultz 1961; Elliott 1991), the possibility of measuring or estimating the actual impact of investment in employee education, training, development, and healthcare is still not beyond question (Kolomiiets and Petrushenko 2017). There is also an economic reality facing the organizations that HRD professionals are usually disinclined to

express the value of their work in financial terms though working in financially driven organizations (Swanson and Holton 2001).

Though the importance of human capital in creating firm value is well established in the organizational behavior literature, a minimal level of emphasis is placed on its disclosure by financial analysts (Abhayawansa and Abeysekera 2008). This is perhaps due to the difficulties associated with measuring the monetary value of human capital which has been a fundamental shortcoming of the HRM accounting movement (Abhayawansa and Abeysekera 2008), and the intangible and socially complex nature of human capital itself (Wernerfelt 1984; Barney 1991; Peteraf 1993). HRM accounting fails to show it as an asset on the financial statements like balance sheet (Abhayawansa and Abeysekera 2008). Till now no system of human asset accounting has succeeded in creating a convincing and comprehensive method of attaching financial value to this intangible asset; rather in any case such efforts ultimately demean the more intangible added value delivered by people to the organization (Davenport 1999).

Bontis et al. (1999) mentioned three types of models used in HR accounting: cost model, HR value model, and monetary model. Cost models contemplate the historical, acquisition, replacement, or opportunity cost of human assets; HR value models amalgamate non-monetary behavioral value with monetary economic value models, and monetary models calculate discounted values of future earnings (Bontis et al. 1999). However, according to Bontis et al. (1999), all these models suffer from massive subjectivity and uncertainty, as well as lacking reliability in that the measures cannot be audited with a reasonable degree of assurance. Hence, accountants and financial analysts generally do not accept HR accounting (Baron and Armstrong 2007). Baron and Armstrong (2007) also strongly argued that it is

morally unacceptable to treat people like financial assets and, in any case, people are never owned by the company.

Even the RBV cannot accurately reflect the value creation potential of employees (Abhayawansa and Abeyssekera 2008), therefore, managers cannot confidently state the financial value of organizational human capital (Fulmer and Ployhart 2014). Moreover, an analysis of different measures of human capital stock used in empirical growth research uncovers that human capital is very poorly proxied (Woßmann 2003). Different specifications give rise to extremely contrasting measures of the human capital stock across nations, and the development-accounting findings reveal that mis-specified human capital measures might lead to an acute underestimation of the development effect of human capital (Woßmann 2003). Mincerian model is applied in estimating the value of investment made into HCD (Kolomiets and Petrushenko 2017) but there is no such model that can truly capture its real value (Schultz 1961). Though, according to human capital theory, the return on investment in HCD can be calculated (Becker 1993), reality implies the inapplicability of such endeavors.

This study agrees with the fact that how much is invested in HCD can be calculated but its normative outcomes, like the degree of quality enhancement, are impossible to measure. Extant literature tacitly indicates that some HCD interventions impact the quality improvement efforts at a workplace through implementing TQM philosophy that cannot be objectively assessed but can be explored and realized subjectively. Hence, a significant research gap exists there to identify the possible behavioral implications of HCD interventions that subsequently influence the implementation of TQM philosophy. However, the concept of TQM is explained in the next section in an effort to understand its link with HCD interventions.

## **2.6 Total Quality Management:**

### **2.6.1 Conceptualization of Total Quality Management:**

TQM implementation is an essential aspect of this study and can be regarded as an end goal, the fundamental means of which is argued to be the HCD interventions. The concept of TQM has gained widespread attention globally in the last few decades, particularly in the developed world and is being adopted in diverse sectors of the economy. It is now a much talked about issue and many researchers and scholars have made significant contributions towards the development of TQM as a diverse discipline (Silos 1999). Practically, the concept of TQM is rooted in Japan in the early 1970s because of the development of a wide variety of TQM methods, such as quality circle, cellular manufacturing, and just-in-time production (Ishikawa 1985; Akao 1991; Imeri et al. 2014) that were adopted for the first time in Japanese automotive and electronics industries with tremendous success (Yu et al. 2017). These methods and systems were later vigorously embraced by numerous American organizations (Prajogo and Sohal 2001), including Ford, Xerox, and Motorola (Ebrahimpour and Withers 1992). During 1980, several Japanese and American manufacturing, as well as service-oriented organizations, espoused the TQM concept after observing its massive impact on performance in terms of productivity (Ebrahimpour and Withers 1992; Yu et al. 2017).

The concept of TQM has evolved since the conventional techniques of quality control were not wholly successful in resolving the quality problems being faced by organizations (Oakland 2014). It thus integrates basic management techniques, current improvement efforts, and technical tools under a disciplined approach (Besterfield et al. 2003) for better prevention and effective solution of problems rather than mere detection (Hafeez et al. 2006). It can be holistically viewed as a philosophy of total integration of the business to achieve the expected outcome. This integration can be made possible when employees in the organization can work

effectively and efficiently. TQM is basically the enrichment of the traditional modus operandi of business.

Mannan and Ferdousi (2007) defined TQM as a management philosophy of continuous quality improvement in an environment of participative management and quality-supportive culture where skilled employees would focus on monitoring process variations by using necessary tools and techniques to gain competitive advantage through customer satisfaction. This viewpoint regarding TQM necessarily confirms that the implementation of TQM philosophy primarily relies on trained human resources who will play the key role throughout the improvement process. Most of the scholars fundamentally agree that TQM is a philosophy centered around people and thus it is perhaps justified to conceptualize it as a people-centric philosophy rather than the mass of so-called systems and techniques (Dale and Cooper 1992; Samson and Terziovski 1999; Mannan and Ferdousi 2007; Syduzzaman et al. 2014).

### **2.6.2 TQM as People-oriented Philosophy:**

TQM is characterized by several features, such as quality-related systems, procedures, tools, and techniques, but this concept depends mostly upon people who form the core of the business (Dale and Cooper 1992). Both a quality system and a quality culture are needed to implement TQM (Kisuju and Analoui 1999). Quality cannot be inspected in as a final, isolated function at the end of the process or sequence of processes (Kisuju and Analoui 1999). Quality, the quest for customer satisfaction, must be designed into all the organization systems and instilled into all its employees (Kisuju and Analoui 1999). TQM can be viewed as a culture rather than a system that is people-oriented and not just embedded in so-called methods and techniques (Dale and Cooper 1992; Syduzzaman et al. 2014). Hence, it is of great importance for an



organization to form, nurture, and unleash human capital in a constant manner given that employees can virtually create and keep a culture alive (Robbins and Judge 2013).

TQM is justifiably considered as a people-centric philosophy because people ultimately make TQM a reality as well as a success (Dale and Cooper 1992). TQM is not a composition of hard-core tools and statistical techniques; rather largely considered as a guiding management philosophy (see Appendix B). It does not only involve the application of quantitative methods but also human resources who improve all the processes within the organization as well as surpass both present and potential customer needs (Yu et al. 2017). Besides, the findings of the extant literature strongly justified that the soft aspects of TQM which are more people-centric, such as executive commitment, employee empowerment, and an open culture, can create competitive advantage more robustly than the hard TQM tools and techniques like benchmarking, process improvement, information, and analysis (Samson and Terziovski 1999). Hard TQM elements can impact performance substantially given that they are backed by soft TQM elements (Rahman and Bullock 2005).

## **2.7 TQM Philosophy: Themes**

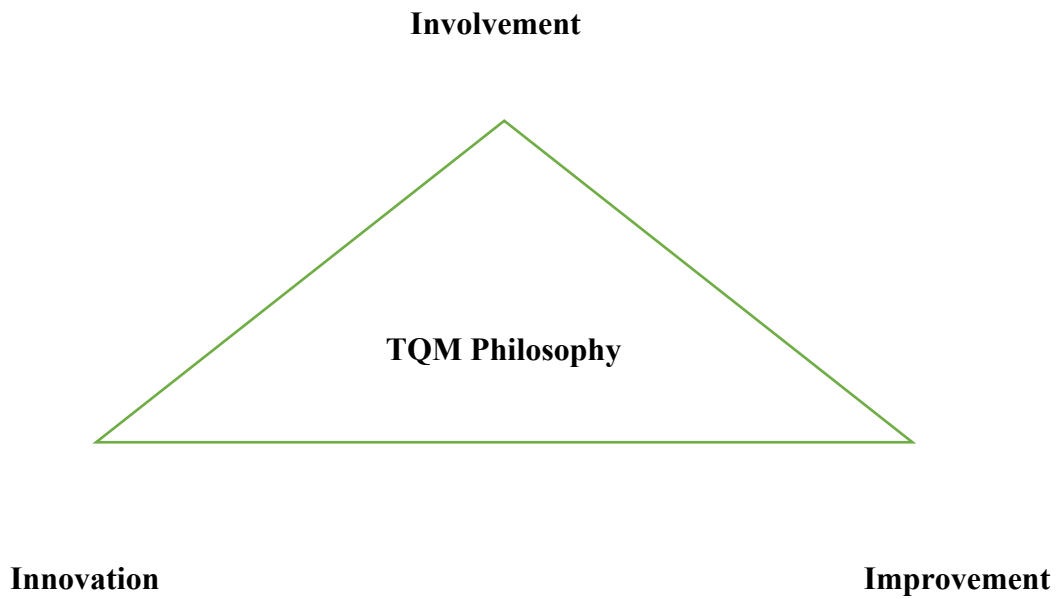
Across the organizational behavior discipline, researchers explain TQM philosophy from divergent perspectives, though all the views encompass certain common themes that may help define this philosophy acceptably. The most common themes of TQM derived from the extant literature are encapsulated in this study (see Appendix B). Based on these underlying themes of various perspectives of TQM, an operational and all-inclusive definition can be offered here:

*“TQM is a guiding management philosophy embedded in three key principles i.e., involvement, innovation and improvement which if, can be recognized and executed rightly,*

*the ultimate vision of an organization to gain market competitiveness and leadership through satisfying external customers will turn into a reality” (author’s construct).*

This definition tries to incorporate the eventual ends as well as the required means for the organization, though the guiding principles or means, such as involvement, innovation, and improvement are viewed as the ends in this study which can, however, be made functional through investing in HCD.

TQM researchers extensively investigated the impacts of TQM on firm performance (Douglas and Judge 2001; Kaynak 2003). However, when TQM as a philosophy or culture would be established and meticulously executed in the organization (i.e., when employees would be involved, empowered, and innovative) and thereby improvement as a constant process would take place, is not well guided in the literature. Addressing the soft human aspects of the organization, along with focused investment in training and development, HCD would be an obvious solution in realizing TQM philosophy (Wilkinson et al. 1992). In empirical research, it has been found that the stronger predictors of TQM implementation are soft factors, such as leadership, HRD, and customer focus, which are all broadly people-centric aspects of TQM and cannot be objectively assessed (Samson and Terziovski 1999). The so-called systems as well as the analytic oriented criteria including process analysis, strategic planning, statistical process control, information, and analysis, etc., can neither strongly predict TQM success nor be positively related to performance to the desirable extent (Samson and Terziovski 1999). The key principles constituting the TQM philosophy can be depicted in a triangle shape (see Figure 2.1).



**Figure 2.1: Principles of TQM Philosophy (Author's Construct)**

### **2.7.1 Conceptualization of Involvement:**

TQM is indeed a vital strategy for organizational development and wellbeing that can only be implemented through effective employee involvement (Kisuju and Analoui 1999). Employee involvement can thus be regarded as one of the fundamental principles of TQM philosophy which is, however, frequently obscured by rhetoric and technical jargon in the literature (Wilkinson et al. 1997). According to Silos (1999), it is a contradictory concept to the traditional management (TM) style in which managers make all the decisions, and workers simply follow them without even understanding. On the other hand, this concept assumes that, irrespective of hierarchical position, all the employees are at the core of the organization, and their utmost involvement enables the use of their latent talent for organizational benefits (Luburic 2014).

Though Antony et al. (2002) viewed increased employee involvement as one of the potential benefits of TQM, it is rather the reverse, since in practice it is employee involvement

that can ensure effective TQM practice. Employee involvement is considered as being basic to TQM (Oakland 1989) because it demands employees both take the responsibility of their work quality and participate actively in the improvement probing process (Wilkinson et al. 1997). Wilkinson et al. (1992) treated the tools and techniques used for measurement and control of quality as hard aspects of TQM which managers may use to meet short-run goals. Conversely, employee involvement and participation are viewed as soft aspects of TQM which, if neglected, will make the long run aim futile (Wilkinson et al.1992).

The issue of employee empowerment comes after involvement as unless employees are involved in their own decision making or problem-solving process, the question of empowerment is simply meaningless (Collins 1994; Wilkinson et al. 1997). Employee involvement is basically an elastic and multi-dimensional concept of TQM which is viewed as the beginning of participative management (Collins 1994; Wilkinson et al. 1997). Besides, some researchers argue that empowering people in the organization is not at all possible; rather creating a climate as well as structure conducive to them for taking their work responsibilities is viable for the organization which is the essence of employee empowerment (Oakland 2014). Employee involvement itself is regarded as an empowering process that aids all level employees to participate in decision making and development activities in relation to their levels (Zakuan et al. 2012).

For ensuring better employee involvement and thereby empowerment, successful organizations with impressive scores in customer satisfaction encourage their employees to set their goals, evaluate their own performance, take proprietorship of individual actions, and identify with the organization (Oakland 2014). According to Oakland (2014), successful organizations usually undertake three common initiatives to foster employee involvement and empowerment. First, the corporate employee suggestion scheme that provides a formalized

mechanism to promote participative management, involvement, and empowerment. Second, the company-wide culture change program which takes place in the form of workshops, ceremonies, and events for raising awareness as well as empowering employees and teams to participate in the continuous improvement process. Third, the measurement of key performance indicators (KPI) whereby the effectiveness of employee involvement and empowerment is assessed by improvement in human resource KPI, such as employee absenteeism, turnover, accident rate, etc.

Silos (1999) investigated the effectiveness of employee involvement in problem-solving in comparison to traditional management (TM) techniques and found that employee involvement is more effective, having superior effects on problem-solving and process improvement in the organization. This outcome of his research is highly consistent with that of other popular case studies undertaken at Ford, Saturn, AT&T Credit, IBM, Motorola, etc. (Silos 1999). Silos (1999) finally concluded that for an organization to become competitive it should shift the management paradigm from traditional scientific management style to participative management style, which is synthesized as involvement.

Adopting a participative management style is crucial since, without the involvement and wholehearted commitment of all level employees, TQM as a system cannot accurately function (Dale and Cooper 1992: 135). TQM as a policy will not be successful if an organization merely focuses on its hard aspects i.e., the systems and tools, rather than the soft side, like human capital (Wilkinson et al. 1992). Nevertheless, amplified employee involvement indicates higher responsibility on the part of the employees that subsequently necessitates a greater knowledge and skills base which can be attained only through HCD solutions (Zakuan et al. 2012).

### **2.7.2 Conceptualization of Innovation:**

The term innovation is broadly understood as the organizational capability to launch a new product into the market or the extent to which an organization emigrates from prevailing practices in the formation of newly marketed products efficaciously (Capon et al. 1992). Innovation initiatives need to be incorporated under the umbrella of TQM philosophy (Augusto et al. 2014) that can transform an organization from a follower into a market leader. The different perspectives of TQM philosophy consider it as one of the central principles to be established and exercised (see Appendix B). It involves both invention and design of completely new products, ideas, and process, as well as constant improvement of existing products or processes to facilitate performance and enhance quality (Oakland 2014).

Innovation also helps reduce manufacturing and operations costs throughout the product or process life cycle. Rapid innovation takes place in almost every industry and demands the organization to keep up with the changing landscape of business (Oakland 2014). It is instrumental in engendering superior organizational performance and thus many organizations nowadays are trying to make it a part of their strategic plan (Augusto et al. 2014). Using a grounded and compact mathematical procedure, Augusto et al. (2014) empirically investigated the impact of innovation (product, process and organizational-wide) on organizational performance and came to two specific conclusions.

Firstly, in a smaller organization, the impact of innovation on performance is more significant than that of larger ones, perhaps due to having a more flexible, organic, and informal structure. Secondly, in comparison to organization-wide innovation, specific product or process-related innovation has more significant effects on organizational performance. Strategically product innovation is required for developing new product ideas and, on the other hand, organizations shift their focus from product to process innovation when a product life

cycle (PLC) is in the growth phase and process innovation becomes the core category of innovation in the maturity stage (Karniouchina et al. 2013).

However, the emergent question here is what instigates an organization's innovation that will positively affect performance. By surveying extensive literature on innovation and HRD practices, Sheehan et al. (2014) revealed the fact that various HRD interventions, including even unconventional storytelling, can positively contribute to an organization's innovative capabilities. Likewise, Bornay-Barrachina et al. (2012) in a correlation study on 150 innovative firms found that human capital, when developed, is positively associated with innovative capacities and results. In a survey study on selected Spanish technological firms using the structural equation modeling technique, Donate et al. (2016) also found that human capital influenced by high profile HRM practices along with social capital backed by collaborative HRM practices affect a firm's innovation capacities leading to competitive advantage. More specifically, a well-designed continuous training and development program is found to be one of the vigorous stimulators of innovation in large companies in the Philippines (Edralin 2007).

### **2.7.3 Conceptualization of Improvement:**

A fundamental principle of TQM philosophy is continuous improvement of product and process on which customer satisfaction relies (Hill and Wilkinson 1995). Improvement is basically an ongoing journey, not a destination and henceforth it is frequently termed as continuous improvement in the literature in which TQM philosophy is largely embedded. The western concept of continuous improvement originated in Japan, where it is prevalently known as Kaizen (Kai for do / change and Zen for well) and it is not just used as a management notion there but applied in every sphere of life (Singh and Singh 2015).

Kaizen is a philosophy of continuous improvement of all the employees in the organization so that they can accomplish tasks at least a little better every day (Oakland 2014). Surveying the extant literature, Singh and Singh (2015) found an interdependent relationship between TQM and continuous improvement in which continuous improvement or Kaizen acts as a vital subset of TQM. According to them, it has evolved from a conventional manufacturing system which distillate on a mere production line for reducing wastage and enhancing quality, into a more sophisticated, inclusive, and systematic methodology that focuses on the whole organization. Successful TQM tactics are grounded in this concept (Walsh et al. 2002) and thus it has become a novel and acceptable management paradigm in every organization irrespective of type or size (Singh and Singh 2015).

Jørgensen et al. (2007), in a causal study on organization oriented HRM mechanisms and continuous improvement results, analyzed the data collected from a continuous improvement network survey of 2003 and concluded that HRM practices play a crucial role in supporting continuous improvement and subsequently improving performance. More specifically, successful execution of continuous improvement relies on the overall learning of the employees consisting of knowledge, skills, and attitudes (Jørgensen et al. 2007). Improving everything consistently that an organization does is always a tough job, and it requires robust HR efforts particularly with regard to employee capability development (Deming 1986). Arulrajah (2017) in this respect specifically argued that executing a quality-oriented training and development program at the workplace is strongly connected with TQM philosophy and can lead to continuous improvement in terms of productivity as well as quality.



## **2.8 The Nexus between HCD and TQM Philosophy:**

In today's global market, adopting TQM philosophy throughout the workplace can arguably be considered as a critical precondition for an organization to become competitive and gain market leadership, since it significantly affects the quality of processes and finished products (Yeung et al. 2006). Implementing this philosophy, which is embedded in employee involvement, innovation, and continuous improvement, can stimulate the effectiveness and flexibility of operations (Oakland 2014). It can shift the organization into a more market-driven one and help outperform competitors (Yeung et al. 2006). However, the successful execution of this philosophy largely relies on the adherence of employees to this philosophy (Limpiada 2016). More importantly, it is nearly impossible for an organization to apply, develop, and reinforce the TQM process without having an adaptable workforce and hence the role of HCD as a critical means cannot be overlooked in this regard (Wilson and Chapman 2009).

TQM has significant implications broadly for HR as it calls for a participative management style involving committed cooperation from all the employees of the organization (Kisuju and Analoui 1999). It is principally rooted in the supposition that quality is the consequence of every single activity performed by each employee, and thus one would necessarily anticipate that the whole workforce must actively participate in the quality improvement process (Kisuju and Analoui 1999). However, for enabling the employees to effectively participate, the organization must undertake HCD interventions like education and training (Zakuan et al. 2012). In empirical research on the critical success factors of TQM implementation, Antony et al. (2002) found that education and training act as the most crucial factors in effective TQM implementation in the context of Hong Kong industries.

TQM also requires innovative exercises to modify the prevailing practices and increase the organizational capability of launching new products into the market (Capon et al. 1992).

HCD interventions, like education, can be instrumental in this regard as they enrich employee's cognitive stock (Flores-Crespo 2007). In addition, constant training, development, and even unconventional storytelling can also trigger innovation (Edralin 2007; Sheehan et al. 2014). Continuous improvement is another vital TQM principle that can be made to happen only by providing employees with quality-oriented training and development (Arulrajah 2017). Besides, existing literature corroborates that developing and utilizing human capital is the most effective means of continuous improvement since employees in practice play the central role in identifying and implementing appropriate changes (Wilkinson et al. 1997). It is thus mostly attributed that competent employees (or put more precisely), human capital does the principal job in TQM implementation inside the organizational frontier (Pantouvakis and Karakasnaki 2017).

As TQM is found to be one of the functional means to improved product quality, productivity, and profitability (Hart and Schlesinger 1991), employers ought to invest heavily in HCD and managerial processes which will, in turn, lead to consumer satisfaction (Kisuju and Analoui 1999). Hafeez et al. (2006) in a comparative study on ten influential authors in the field of TQM (Crosby, Deming, Feigenbaum, Ishikawa, Juran, Kanji, Oakland, Shingo, Taguchi, and Ziari) commented that it is only when an organization creates a newfangled working atmosphere enabling people to learn new things, share their knowledge and views with coworkers and contribute, that TQM efforts can be truly viewed as high-yielding. From the guidelines provided by these renowned quality gurus, it is quite apparent that the implementation of TQM philosophy is significantly influenced by training and development (Kisuju and Analoui 1999; Wilson and Chapman 2009).

This viewpoint can be supported by Thomas (1992), who asserted that training and development have possibly the dominant role to play to translate quality into a reality. The

TQM system places huge responsibilities on the shoulders of employees and without proper learning, it will not be possible for them to play the required role of identifying and correcting quality problems (Syduzzaman et al. 2014). While applying the TQM philosophy in the electricity and public water sector, a consensus has been developed in a statistical study that employees working for this sector are required to be well trained in this management philosophy to make it purposeful (Al-Juboori and Al-Azemi 2016). In a survey study, Hafeez et al. (2006) discovered that most of the surveyed organizations experienced huge complexities in translating TQM theory into practice because of putting more emphasis on hard elements, like technology, than soft aspects of TQM, such as continued employee training. Moreover, Perdomo-Ortiz et al. (2009) found three HR-related functions that are highly attached to TQM principles developed by Crosby (1979), Deming (1986), and Juran (1989) and the first and foremost one is employee training.

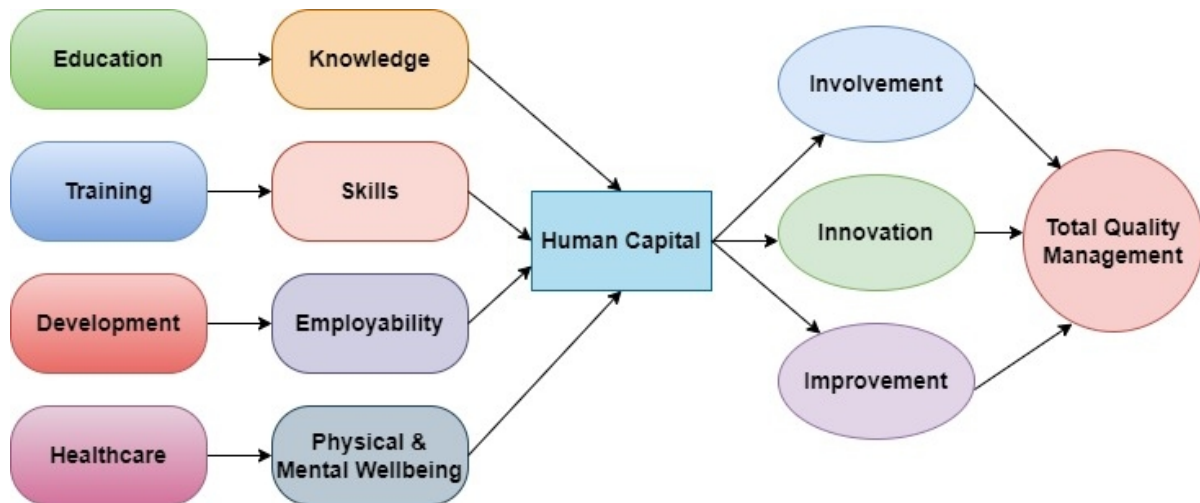
Though training is viewed as the single most vital factor in improving quality (Wilson and Chapman 2009), the true execution of TQM philosophy does not only require providing employees with job specific skills; rather employees should be educated thoroughly in TQM fundamentals and given necessary time so that they can put the broad-based theoretical learning into practice (Walsh et al. 2002). The need for education and its dissemination among the employees is critical in this respect (Deming 1982). It is evident in the extant literature that educational program conducted at the workplace can enhance an employee's functional literacy that results in improved communication, professional preparedness, and technological readiness (Ali et al. 2020). Apart from building educational capital, providing employees with improved healthcare facilities to form the biological capital is also crucial (Fisher 1906; Schultz 1961; Becker 1964; Berger et al. 2003; Bloom and Canning 2003; Gardner and Gardner 2012; Savu 2013; Pacheco et al. 2014; Goldin 2016; Kolomiiets and Petrushenko 2017). Without

caring much about employee health, which is a vital component of human capital, aiming to strengthen the organizational health would certainly be an unrealistic vision.

Conducting a correlational study in the context of a large number of manufacturing organizations, Samson and Terziovski (1999) found that the relationship between TQM practice and operational performance is significant, particularly when organizations put more efforts on soft factors like HR rather than improving hard aspects such as strategic planning, process management, information, and analysis. Moreover, Wilson and Chapman (2009) firmly purported that the change agents or consultants usually reside in the HR department, who often are the main handlers, maintainers, and implementers of TQM throughout the organization. Impetus from different sources may be required to make TQM initiatives a success, but perhaps the main responsibility in this regard lies with the HR department of the organization (Wilson and Chapman 2009), given that it is the HR department which is primarily responsible for initiating and executing HCD measures.

Therefore, an association between HCD and TQM can be implicitly presumed from the extant literature signifying the critical role of HCD interventions in the implementation of TQM philosophy. However, in the existent literature an overlap has been observed since HCD and the soft aspect of TQM share some common features like education and training (Talapatra et al. 2020). This study attempts to mitigate the overlap by viewing learning dimensions as HCD interventions causing the others soft aspects of TQM like effective participation or empowerment to be successfully established. Based on the literature it can be argued that organizations emphasizing on and investing in HCD are more successful in TQM implementation (Antony et al. 2002). However, it is not empirically proven whether and how HCD as a holistic framework can contribute to TQM implementation in an organization. To

represent a possible nexus between HCD and TQM philosophy, a conceptual framework is illustrated here that also informs the underlying theme of this exploratory study.



**Figure 2.2: Conceptual Framework of HCD – TQM Linkage: (Author’s Construct)**

The above conceptual framework illustrates what is anticipated to be discovered through this exploratory research. It maps out how the relevant variables identified from the extant literature relate to each other in a visual format. The pertinent concepts of three underpinning theories of this study namely the human capital theory, resource-based theory, and behavioral theory are used as analytical lens to constitute this framework. First of all, people or employees of the organization are viewed as human capital in this framework which is the central idea of the human capital theory (Nafukho et al. 2004). The possible means of developing human capital such as education, training, and even healthcare is also adopted in this framework from this theory (Becker 1964; Mincer 1974; Baron and Armstrong 2007). Secondly, the concept that human capital resource is the set of soft elements such as knowledge, skills, intelligence, and other important attributes is borrowed from the resource-based view (Barney 1991). Moreover, embracing the essence of resource-based view that valuable, rare,

inimitable, and non-substitutable human capital resource developed through rigorous HCD interventions can ensure success in TQM implementation (Powell 1995; Reed et al. 2000), this framework suggests a unidirectional relationship between HCD and TQM. Finally, corroborating the behavioral theory this conceptual framework also encapsulates the behavioral aspects or key principles of TQM philosophy such as involvement, innovation, and improvement (Robbins and Judge 2013).

However, it is evident in the existent literature that education, training, and development are three core dimensions of learning that can be regarded as HCD interventions (Nadler and Nadler 1990; Armstrong 2001; McDowall and Saunders 2010; Masadeh 2012; Dai and Tymon 2016). Education is primarily knowledge oriented that can be used as a distinct HCD intervention to expand employees' generic human capital (Masadeh 2012; Eftimie 2013; Nyberg et al. 2014). Training is fundamentally skills oriented and relevant to specific tasks in a given job (Nadler and Nadler 1990; Hatch and Dyer 2004; Nyberg et al. 2014). It is typically provided to generate firm specific human capital among employees (Hatch and Dyer 2004). Development is another vital learning dimension that is used as an HCD intervention, particularly for managerial employees, to enable them to meet future job requirements (Nda and Fard 2013). It can thus be stated that development is employability oriented (Benson 2006).

Apart from these three learning dimensions, health is also contemplated as an integral element of human capital (Fisher 1906; Schultz 1961; Becker 1964; Savu 2013; Goldin 2016) which is, however, disregarded in HRD literature (Frank 1988). This study, underpinned by the human capital theory, argues that healthcare is a pivotal HCD intervention which enables employees to work productively (Berger et al. 2003; Gardner and Gardner 2012; Kolomiets and Petrushenko 2017). Hence, it can be explicitly stated that education, training, development, and healthcare are four key HCD interventions that increase employee knowledge, skill,

employability, and capability respectively and thereby form required generic and firm specific human capital.

On the other hand, it is found in the extant literature that TQM philosophy is embedded in three major principles such as involvement, innovation, and improvement (Hill and Wilkinson 1995; Wilkinson et al. 1997; Augusto et al. 2014). Though not rigorously studied, an implicit linkage between these three TQM principles and the four HCD interventions highlighted above has been observed by many scholars (Deming 1986; Edralin 2007; Jørgensen et al. 2007; Bornay-Barrachina et al. 2012; Zakuan et al. 2012; Sheehan et al. 2014; Arulrajah 2017). The conceptual framework here demonstrates this possible nexus between HCD and TQM in which the HCD interventions and TQM principles act as independent and dependent variables respectively. This framework serves as an instrument in investigating the complex interactions among these variables to comprehend the phenomenon of this exploratory study.

## **2.9 Summary:**

This literature review presents the way in which HCD interventions might potentially contribute to the implementation of TQM philosophy. Based on this review, it can be argued that emphasizing employee learning and health can positively affect employee involvement, innovation, and continuous improvement at the workplace, which is shown in the conceptual framework (see Figure 2.2). The human capital theory was used as the central underpinning theory in this study since it informs the investment perspective of HCD, which was the essence of this research. However, the resource-based view (RBV) of human capital was also adopted to explicate the intrinsic and intangible value of human capital that can be developed through robust HCD interventions. Moreover, the behavioral theory was allied with the human capital theory and RBV theory to specifically comprehend the behavioral implications of HCD with

regard to TQM implementation. Combining the relevant aspects of these three underpinning theories, this study endeavored to address a specific contextual research gap regarding whether HCD as a holistic framework can play a critical role in materializing the soft or behavioral aspects of TQM and thereby facilitating a labor-intensive establishment to gain competitive edge in the international market. However, the specific research context is briefly discussed in the subsequent chapter.



## **Chapter Three: Ready-Made Garment Sector – Bangladesh Context**

### **3.1 Introduction:**

An overview of the Bangladesh RMG sector, which was used as the research site in this exploratory study, is presented in this chapter. The rationale behind choosing this sector for the case study is also explained by addressing the current status of HCD practices and the TQM application.

### **3.2 Background of the Bangladesh RMG Sector:**

Bangladesh is the eighth-most populous country in the world which is characterized by a developing market economy. As of 2019, its estimated population is around 163 million, which is huge in terms of its land area spanning 1,47,570 square kilometers. Though the land area is fixed in terms of quantity, the population is growing rapidly at a 1% annual rate. Yet, it is widely believed that this massive population is not a burden; rather, if armed with the right knowledge, skills, and other required competencies, it can be turned into the country's key resource. The present trend of declining fertility and mortality rates, along with the subsequent growing number of working-age populations, offers the country a great opportunity of accelerated economic development which the economists often term as a demographic dividend (Farid 2019). However, reaping this dividend, which is irrevocably connected with HRD, remains a big challenge for the nation (Farid 2019).

Bangladesh is one of the fastest-growing economies in the world, and is facing considerable challenges in the path of achieving sustainable development goals (SDGs). To keep the current (as of first quarter 2019) pace of economic growth (7.3% real GDP) and

achieve the targets set by United Nations (UN) and other influential international bodies, it must concentrate on the development of various sectors, particularly those that serve as the lifeblood of the national economy. The country is assumed to be an agro-based economy, though the three main crops produced here (namely rice, jute, and tea) are not helping to gain a significant competitive advantage from an international perspective.

However, there is perhaps only one sector in which the country consistently remains in a competitive position. This is the RMG, the main export-oriented industrial sector of Bangladesh, which is just forty years old and started its journey from scratch level (Uddin 2019). Looking back to the history of Bangladesh it can be seen that, since its liberation in 1971, the economy has gone through three major stages, which are, the phase of early years; the phase of de-nationalization and de-regulation; and currently the economic reformation (Ahmed and Sattar 2004; Kurpad 2014). Particularly during the phase of running economic reformation, the RMG sector grew tremendously in Bangladesh (Kurpad 2014). According to the World Trade Organization (WTO) statistics, the country still holds the second position globally, just behind China.

Another important fact is that, as of 2019, more than 84% of total export earnings came from RMG, which necessarily justifies the significance of the sector in boosting up the country's economic growth and wellbeing (BGMEA 2019). Experiencing exceptional growth during the last three decades, this sector occupies a distinct position in the country's overall economy (Chowdhury et al. 2014). Despite a recent fall by 3% in terms of GDP contribution, the averages of the RMG sector's contribution to the GDP from the fiscal year 2013/2014 – 2017/2018 is 12.47% (BGMEA 2019). Moreover, this sector has already created an enormous employment opportunity for millions of people, particularly those who are unskilled and semi-skilled. It has lifted millions of people from rural misery through momentous employment

generation (Kurpad 2014). At present, more than 4 million people are employed in this sector, which means RMG has become a major employment source in Bangladesh (Uddin, 2019). Thus, as a growing economy, Bangladesh must rely on this sector to a great extent considering its employment size and GDP contribution.

### **3.3 The TQM Application and HCD Practice in Bangladesh RMG Sector:**

The concept of TQM has huge applicability in a manufacturing sector like RMG as it can play a pivotal role in enhancing productivity and quality (Rahman and Masud 2011; Asif et al. 2013; Syduzzaman et al. 2014). Regrettably, except some RMG establishments the language and principles of this pressing concept is not well-conceived in the whole RMG sector of Bangladesh due to the limited awareness of the relevant stakeholders about its practical implications (Akhter 2016; Talapatra and Uddin 2017). Although few, the prior studies reveal severe problems associated with garment quality, which is because of less emphasis on TQM implementation (Rashid and Taibb 2016) and more on International Organization for Standardization (ISO) 9000 execution (Rashid and Taibb 2016). Realizing its strategic importance, many RMG companies started undertaking different quality improvement endeavors but failed to achieve anticipated benefits (Syduzzaman et al. 2014; Talapatra and Uddin 2018). Syduzzaman et al. (2014) argued that considering TQM as a short-term financial investment rather than a comprehensive philosophy, lack of top management involvement, over-dependence on statistical process control (SPC) are the major reasons behind this failure.

Besides, developing human capital which is a key factor in TQM implementation is not that much visible in the practice of most of the RMG establishments in Bangladesh. RMG employees remain underestimated, under-skilled, and underutilized despite the sector's rapid growth and expansion (Rashid et al. 2016). Employers often complain about the scarcity of

skilled employees in the employment market (Mahmood and Absar 2015) but they themselves do not follow ideal HRM practices either (Chowdhury 2015; Niluthpaul et al. 2016). To overcome the weakness of this sector, ILO (2017) emphasized training and development and regarded it as the top priority to compete successfully in the international market. Center for Policy Dialogue (CPD) (2014) also uttered that the sector is now in need of HRD to take the journey towards lifting the productivity for structural transformation of the country.

However, as specified earlier there are obviously some RMG establishments in this sector not yet explored that are evidenced to be exemplary in TQM implementation and arguably the underlying reason behind the success in terms of TQM implementation and market competitiveness lies in the intense focus on developing a dynamic and dedicated workforce rather than only assembling and utilizing physical or organizational capital resources. Though cheap labor is considered as the core competence and a distinctive feature of this sector, there are some manufacturers that do not merely rely on this factor and instead retain a sustained and profitable business relationship with leading international RMG buyers like Walmart, Next, George, H & M, Primark, etc. by emphasizing on methodical HCD practices to create a competent workforce and thereby implementing TQM philosophy effectively.

### **3.4 Rationale for Selecting Bangladesh RMG Sector:**

In RMG export, Bangladesh remains in a competitive position in the international market due to the strength of cost-effectiveness, though the low production cost is not always the outcome of operational efficiency, but the poor remuneration made to the employees (Kurpad 2014; Farhana et al. 2015; Talapatra et al. 2020). Since its inception, in comparison to other RMG manufacturing countries, the unit labor cost has been much lower in Bangladesh (Muhammed 2011). It is identified that there is a huge knowledge and skill gap among the employees leading

to this lower compensation (Farid 2019). Nevertheless, the existing unskilled workforce acts as the main constraint in achieving greater efficiency and further business growth (Farhana et al. 2015; Hashim 2015). Despite its current competitive position in the international market, the Bangladesh RMG sector is now challenged by its close competitors like Vietnam (Talapatra et al. 2020) since the value of wage in garment manufacturing has an increasing trend (BGMEA 2017).

However, the Directorate of Textile (DoT) reported that in the year 2014 this sector had a shortage of around 1,10,000 skilled people and predicted this shortage to be increased to around 1,80,000 by the year 2021. According to the report published by the Bangladesh Institute of Development Studies (BIDS), the demand for skilled labor by 2029 will be as high as one hundred and twenty-two percent. Within this period, if the RMG organizations fail to overcome this gap, the productivity level will be drastically hampered, and the country will lose its competitive edge drastically (Ishaque 2019). Moreover, enhancing employee capability has become a crucial issue for the sustainable growth of this sector since it is now transforming from labor-intensive to a more automotive approach (Ishaque 2019). It becomes necessary for RMG establishments to develop and optimize relevant skills of the employees (Ishaque 2019).

Different studies demonstrate that this sector already starts losing its market share due to the negligence of the need for upgrading employee capabilities. In a study, 87 percent of interviewed mid-level managers stated that due to the worker's lack of knowledge and skill, the quality of garments produced cannot meet global standards (Chowdhury et al. 2014). The quality of RMG, due to perhaps the skill gap, is now a considerable issue to worry about (Rashid and Taibb 2016). Regrettably, the situation is so bad that 80% of workers having more than 5 years' work experience do not get any form of training, making employee inefficiency a common phenomenon (Chowdhury et al. 2014). In fact, the lack of focus on developing

employees' human capital leads to poor business performance or in other words TQM failure. Consequently, the Bangladesh RMG sector is losing its market competitiveness internationally.

However, in this exploratory study, the Bangladesh RMG sector was used as the research site given that there is no primary study conducted to date on the role of HCD in implementing TQM philosophy, to the best knowledge of the researcher. Though in an empirical study Talapatra et al. (2020) found that various human resource-enabling factors including proper training and education are significant to the implementation of TQM philosophy in Bangladesh RMG sector, the issue of HCD remains underexplored. Whether and how HCD can impact TQM execution remains a poorly explored phenomenon in this context. The previous studies mostly discussed the HRM practices of RMG companies and their bottlenecks in a generalized manner (Miah and Hossain 2014; Seddiqe and Basak 2014; Chowdhury 2015; Akter 2016; Haq 2016; Niluthpaul et al. 2016; Rashid et al. 2016; Alam et al. 2017) overlooking the critical investment perspective of human capital. People are considered as a vibrant factor for business growth but (Mohiuddin 2012) when and how can they act as the key to unlocking TQM implementation is not rigorously researched (Seddiqe and Basak 2014).

Based on the case study findings of exemplary TQM practicing RMG establishments, this study intended to assert that rather than cheap and unskilled labor, a highly competent workforce by assuring greater customer satisfaction and loyalty can help an organization to gain sustainable competitive advantage in the volatile international market. Given the scarcity of skilled employees in the employment market, the significance of ideal HRM practices and more specifically comprehensive HCD practices in an RMG establishment with regard to TQM implementation cannot be underemphasized. This study would develop an understanding based on participants' responses about the role of HCD in implementing TQM philosophy. Through

inductive exploration on selected TQM practicing successful RMG establishments, it would establish the fact that HCD can be a solution to the problem associated with TQM implementation and thereby help to gain sustainable competitive advantages based on differentiation rather than low-cost leadership.

### **3.5 Summary:**

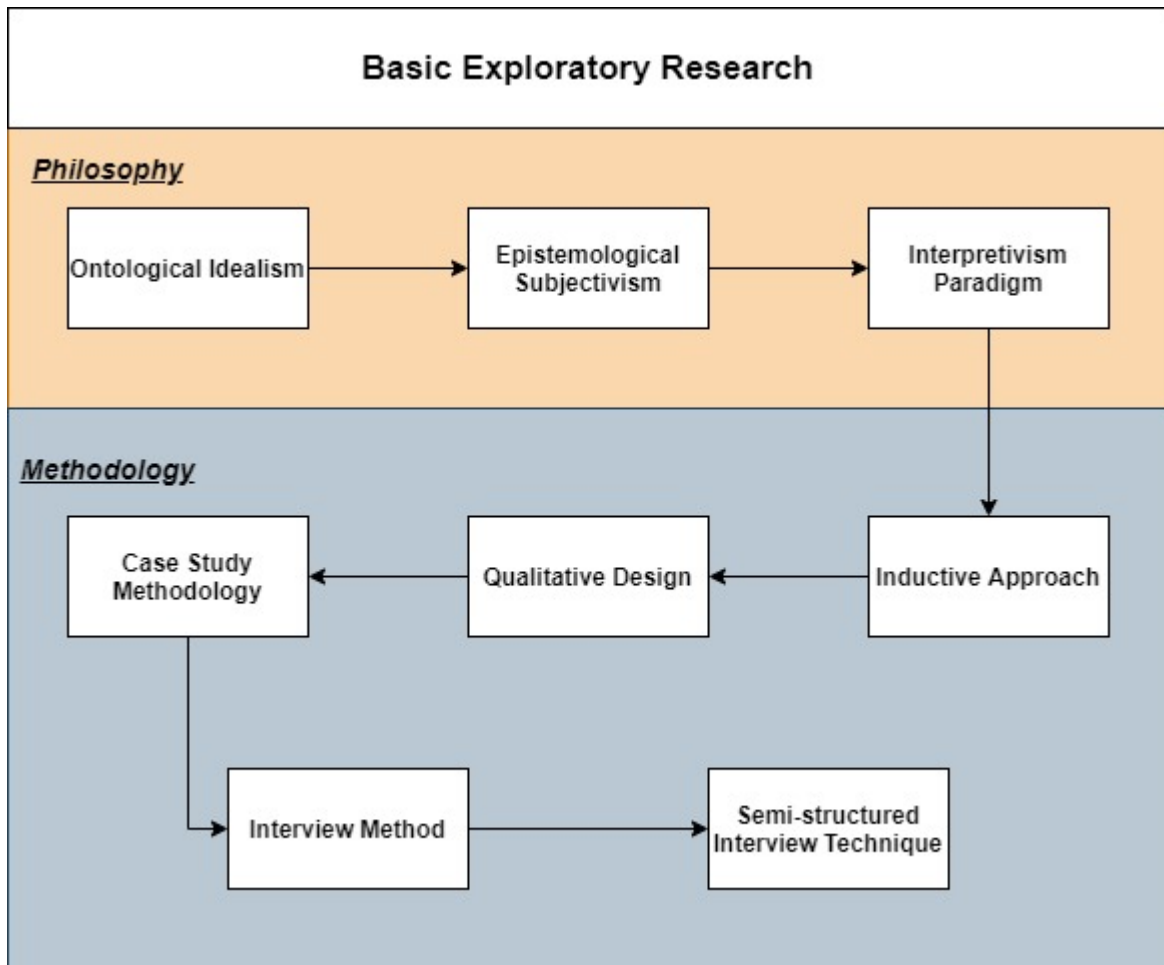
The Bangladesh RMG sector acts as the lifeblood of the national economy though it is currently losing its competitiveness in the international market. HCD can arguably play a vital role in implementing TQM philosophy and thereby help the sector to gain sustainable competitive advantage. This research aims to explore and understand this phenomenon explicitly by following a comprehensive research methodology that will be discussed in the next chapter.

## **Chapter Four: Research Philosophy and Methodology**

### **4.1 Introduction:**

This chapter discusses the philosophical stance adopted and research methodology used for achieving the aim of the study. It clarifies the researcher's ontological and epistemological position, and explains the type, nature, approach, design, methodology, method, and technique followed to address the specific research questions. Besides, the methodological elaborations include other relevant aspects, such as the pilot study, sampling method and sample size, data collection strategy and analysis process, research judging criteria, and the ethical considerations of this empirical research. The research framework is graphically presented as follows (see Figure 4.1):





**Figure 4.1: Research Framework**

#### **4.2 Research Philosophy:**

Philosophy is like a driving force or a roadmap for any research without which a researcher’s inquiry lacks illuminated direction (Sefotho 2015). Hamlin (2015) precisely defined the term ‘philosophy’ as the assumed ontology and epistemology that leads the research process. The philosophical position can, however, be described by the research paradigm or worldview that researchers use to generate knowledge (Levers 2013). Though paradigms are of different types and classes, two conflicting research paradigms predominately exist in social science and particularly in management research, namely positivism and interpretivism (Guba and Lincoln 1994; Swanson 2005; Aliyu et al. 2014; Sefotho 2015). Positivism as an organized

philosophical branch remains a dominant research paradigm (Morgan 2007) which assumes that the right way of providing certain knowledge can be established through quantification and objectivity (Kamil 2011; Swanson 2005). It is generally based on the postulation that the existence of reality can be apprehended, and that the researcher and researched object are independent entities meaning they do not influence each other while the investigation process is being conducted (Guba and Lincoln 1994).

On the other hand, interpretivism is a non-positivist research paradigm which originated largely from social science intends to develop innovative interpretations from observed multiple realities (De Villiers 2005; Leitch et al. 2010). It is referred to as the “anti-positivist” paradigm since it emerged as a reaction to positivism and is also known as constructivism, given that it accentuates the researcher’s capability to construct the meaning of reality (Mack 2010). Interpretivism assumes that reality can never be objective, and the understanding of reality varies from person to person as it is subjective in nature (Swanson 2005). Denzin and Lincoln (2005) stated that interpretivists accept multiple meanings of reality as well as various ways of knowing that reality, acknowledging the fact that objective reality can never be captured. Interpretivists believe that the underlying meaning of anything is socially constructed (Andrade 2009) and the interpretivism paradigm leads them to disclose the implied nature of the worldview (Roth and Mehta 2002). Interpretivists typically use qualitative research design along with an inductive reasoning approach to understand and explore specific events, processes, or cultures founded on the respondent's perception or perspective (Swanson 2005).

However, a research paradigm is primarily made up of ontological and epistemological assumptions (Mack 2010). Ontology from a philosophical perspective implies the study of reality or what exists (Gray 2009). Ponterotto (2005) specified two basic questions raised by ontology; the first one is ‘what is the type and nature of reality’, and another is ‘what we can

know about that reality'. Addressing the question of what the reality is, ontology investigates the nature of reality. The ontological issue thus mainly relates to the nature of reality and its characteristics (Creswell 2007). Over time, two key branches of philosophical ontology, namely ontological materialism and ontological idealism, have developed (Ormston et al. 2013).

Ontological materialism or critical realism is the assumption or belief that reality exists regardless of human observers (Bryman and Bell 2003). Hence, observation is not required to determine whether an entity exists or not (Levers 2013). The belief of a researcher conceiving ontological materialism is that truth can be achieved through reasoning rather than pure observation, given that only the effects of causal forces may be observed, not the causal forces themselves (Clark et al. 2007). In contrast, ontological idealism or relativism asserts that reality is constructed in the mind of the observer or in other words, the reality is essentially mind-dependent (Ormston et al. 2013). According to Levers (2013: 2), "reality is human experience and human experience is reality".

However, after determining the ontological position at the beginning of the study (Grix 2002) the next step for a researcher is to ascertain a congruent epistemological position. Epistemology addresses the basic question of how a researcher knows what the researcher knows (Creswell 2007). Epistemology aims to create knowledge and reflection (how, and what we can know) on diverse knowledge claimed about phenomena (Soini et al. 2011). The assumptions of epistemology are concerned with how researchers can acquire, create, and communicate knowledge (Sefotho 2015). According to Levers (2013), it is about how someone builds a meaningful sense of the world. There are two major contrasting epistemological beliefs or stances: epistemological objectivism and epistemological subjectivism (Levers 2013) which are logically confined by ontological beliefs or stances (Annells 1996; Crotty 1998).

Epistemological objectivism is the belief of a researcher that truth and meaning exist within an object which is independent of human subjectivity (Crotty 1998). The underlying assumption is that the exclusion of human bias directs to the creation of knowledge given that neither the observed nor the observer influence each other (Levers 2013). This epistemological stance believes that knowledge can be gained and crafted through a ‘top-down’ deductive process (Ormston et al. 2013). In contrast, epistemological subjectivism implies researcher’s assumption or belief that knowledge is value-laden (Levers 2013) generated through the lenses of language, gender, and other demographic and psychographic variables (Denzin and Lincoln 2005). The main idea is that without individual interpretations and manifestations it is not possible to gain and create universal knowledge of external reality because observation is affected by the observer and, similarly, the observer is also affected by the reality being observed (Levers 2013). According to this epistemological assumption, knowledge can be acquired and created through a ‘bottom-up’ inductive process (Ormston et al. 2013).

#### **4.3 Philosophical Stance of this Research:**

It is evident from the discussion of the previous section that there are alternative philosophical positions a researcher might adopt concerning the research paradigm, ontology, and epistemology. This philosophical position subsequently guides a researcher to choose appropriate research methodology, as Mack (2010) agreeably explained that a researcher’s ontological assumptions tell the epistemological assumptions, which in turn inform the research methodology and, finally, all these together give rise to the methods applied for collecting data. The choice regarding the philosophical position is broadly subject to the discipline of research and specifically to the aims, objectives, and questions of the research.

People concurrently live in a natural world as well as in a social world where one is fundamentally different from the other. Although some early critics believed that the social world is not different from the physical or natural world and could be governed by uniform causal laws, contemporary scholars argued that the social world has distinct features and therefore cannot be directed by the same causal laws (Giddens 1984; Hughes and Sharrock 1997; Patton 2002). The social world is open to subjective observation, judgment, and interpretation (Ormston et al. 2013), while the natural or physical world can be seen by deploying the fallacy of *ceteris paribus* given that it is not always possible to encapsulate every latent variable due to natural human limitations. In this study, the researcher assumed that the idea of stagnating all other variables except the investigated ones or considering that everything in the world will remain constant is not going to help in getting a true and conclusive worldview.

#### **4.3.1 Research Paradigm:**

This study was broadly conducted in the field of management under the social science discipline. In social science study, researchers adopt either positivism or interpretivism as the research paradigm to create new knowledge (Aliyu et al. 2014). The interpretivism worldview was espoused in this study since the research aim is to understand the role of HCD in TQM implementation as well as to develop a comprehensive HCD framework based on participants' subjective perceptions and opinions (Swanson 2005). Through rigorous exploration this study also attempted to contribute to the development of a solid theoretical base for future empirical research concerning the poorly explored linkage between HCD and TQM (De Villiers 2005; Leitch et al. 2010).

The researcher of this study philosophically agreed with the fact that the social world is completely different from the physical world and is subject to innovative interpretation (De Villiers 2005; Leitch et al. 2010). The subject matter of the study is human capital, which is an intangible asset (Wernerfelt 1984; Barney 1991; Peteraf 1993) and cannot be measured objectively (Davenport 1999; Abhayawansa and Abeysekera 2008). Moreover, from the organizational perspective the actual implications of HCD interventions are difficult to measure. The positivist paradigm does not work here as there is no room for quantification and objective assessment (Swanson 2005; Kamil 2011). This research thus intended to rely on the subjective understanding and responses of the participants regarding the impacts of HCD with respect to the implementation of TQM philosophy (Denzin and Lincoln 2005; Swanson 2005).

The interpretivism research paradigm was deemed to be appropriate for this study as the researcher had to be in direct touch with the researched object being observed for generating thick data and rich insights to draw enhanced conclusions. The researcher, as a social actor, (Saunders et al. 2007) could not stay apart from reality as the nature of the study required that he make observations from inside through direct experience, not from an exterior position (Guba and Lincoln 1994). To be very specific, the researcher had to rely on the perceived evaluation and comments of the participants regarding the issues like what role HCD plays in the implementation of TQM philosophy, how HCD can contribute to the implementation of TQM philosophy, what type of association does prevail between HCD and TQM, and finally how to develop an effective HCD framework for ensuring TQM implementation. These questions ('what' and 'how' type) in the perspective of Bangladesh RMG sector were unexplored and their answers were understandably subjective and supposed to differ from case to case (Denzin and Lincoln 2005). The fact that multiple realities might come out at the end of the study was thus accepted in this exploration (Denzin and Lincoln 2005).

Establishing a strong rapport with the research participants was crucial to carry out the interviews and elicit true responses regarding the linkage between HCD and TQM, which is another important characteristic of interpretivism (Mathews and Ross 2010). Moreover, the subjective responses received had to be analyzed and interpreted using the researcher's analytic skills, experience, insight, and introspection (Swanson 2005; Mathews and Ross 2010). The study broadly aimed to reveal the implied human mind, i.e., the feelings and pulses of the managerial employees (research participants) working in RMG establishments regarding the necessity of investment in HCD for ensuring organizational growth and success (Roth and Mehta 2002; Andrade 2009).

#### **4.3.2 Ontological Position:**

In terms of ontological position, this research adopted ontological idealism or relativism, which is congruent with the interpretivism paradigm (Guba and Lincoln 1994; Ponterotto 2005; Mack 2010; Aliyu et al. 2014; Antwi and Hamza 2015). The study was fundamentally based on the assumption that the perceiver influences the meaning of what is being perceived and therefore the truth is subjective (Levers 2013). Dealing with an issue like human capital, the study could not ignore the significance of the existence of the human observer, nor could it believe that truth can be known only through simple reasoning without uncontaminated observation. It, therefore, took a stance of ontological idealism asserting that reality is relative or subjective and does not exist independently; rather it is constructed in the human mind (Ormston et al. 2013).

### **4.3.3 Epistemological Position:**

As discussed in section 4.2, the epistemological stance is influenced by a researcher's ontological position (Annells 1996; Crotty 1998), and so this research espoused epistemological subjectivism in line with ontological idealism. It assumed that a deep and direct interaction between the researcher and the researched object is essentially required to unearth the subjective reality (Levers 2013). It also assumed that truth can be known through the researcher's lenses (Denzin and Lincoln 2005). The implementation of TQM philosophy through HCD interventions is a subjective reality that can be known by eliciting participants' opinions (Denzin and Lincoln 2005). Investment in human capital is necessarily different from that in physical capital and their consequences are, of course, distinct in nature. Therefore, knowing the invisible, intangible, and invaluable nature of human capital, the researcher needed to make an interpretive exploration. However, the methodological choices made in line with this philosophical stance are discussed in the following sections.

## **4.4 Methodological Choices of the Study:**

The philosophical stance of this study (see section 4.3) guided the researcher in making appropriate methodological choices (Easterby-Smith et al. 2002). The relevant methodological aspects of this study are discussed in the following subsections.

### **4.4.1 Research Type:**

Based on the study objectives and methods, research can be broadly categorized into two types: basic research and applied research. Basic research lays down the foundation for applied research. Familiar instances of basic research are human behavior, pure mathematics, or natural phenomenon (Saunders et al. 2003; Gray 2009). Applied research takes place in an everyday



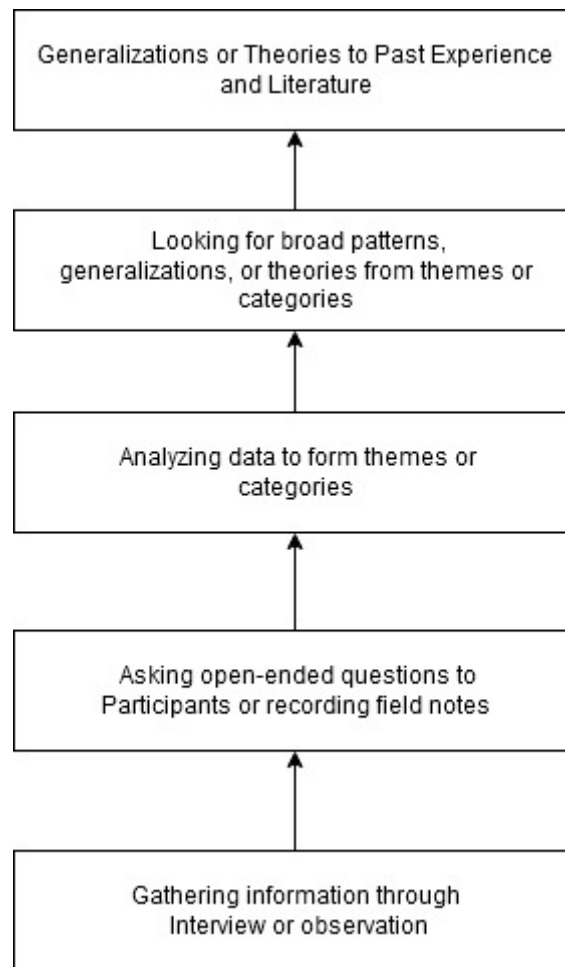
context to deal with and solve a practical issue or problem relating to an individual, organization and/or industry (Baimyrzaeva 2018). This three years of PhD study can be classified as basic research since it was conducted independently arising from the researcher's own academic interest, aiming to explore and understand the role of HCD in the implementation of TQM philosophy (Baimyrzaeva 2018). However, the nature of this basic research study is exemplified in the next subsection.

#### **4.4.2 Research Nature:**

Based on the nature, research can be broadly grouped into three categories: exploratory, descriptive, and explanatory research. This research is exploratory in nature since it aimed to understand and explore an issue on which no significant study has yet been conducted, especially in the chosen context (Gray 2009). Extensive research has been performed on human capital and TQM unconnectedly and some studies also looked at the role of training and development in TQM implementation but whether and how an all-encompassing set of HCD interventions can help a firm materialize the TQM philosophy is still not very much clear in the literature. Furthermore, this research was neither intended to explain any cause-effect relationship statistically nor had it a solid exploratory foundation (Gray 2009). Therefore, to develop a deeper understanding of the role of HCD, this study pursued an exploratory nature that seemed to be consistent with the interpretivism research paradigm being espoused (Swanson 2005). However, the choice regarding research approach was made based on the nature of research which is explained in the next subsection.

#### **4.4.3 Research Approach:**

Research approach can be conceptualized as a general plan and procedure that a researcher follows while conducting the study. Three popular approaches followed by researchers across different disciplines are the deductive, inductive, and abductive approaches. A researcher always needs to address a basic question regarding whether to begin the journey with a theory or the research itself would lead to the development of a new theory (Gray 2009). This exploratory research embedded in the interpretivism paradigm was intended to follow a bottom-up approach to draw a holistic conclusion from selected multiple cases through empiricism in a flexible manner (Walliman 2011). It was not at all interested to substantiate or falsify any established theory or viewpoint and, more importantly, no such established theory was found in the literature that could serve as a basis for this study. Whether or how HCD can act as an imperative in ascertaining TQM philosophy was the central phenomenon that this research aimed to understand, analyze, and interpret. This research undertook an inductive approach to construct an ideal framework of HCD that respective RMG establishments can put into practice for realizing expected outcomes. Future researchers can also use the exploratory findings of this study as a foundation in their work. The bottom-up approach demonstrated by Creswell (2003) and Jonker and Pennink (2010) was followed in this study (see Figure 4.2).



**Figure 4.2: Research Approach**

**Source:** Adapted from Creswell (2003); Jonker and Pennink (2010)

#### **4.4.4 Research Design:**

The choice regarding approach discussed in the previous subsection influences the selection of research design. Research design can be described as the set of methods and procedures which is used to collect and analyze measures of the variables (independent, dependent, and control) stated in a research problem. It is a comprehensive plan to choose the types and sources of required information for answering the research questions addressed. According to Zikmund (2003), it is a master plan that specifies the required information collection and analysis

methods. A researcher can follow either qualitative or quantitative or even a mixed method research design.

In this study, a qualitative research design was adopted, which is assumed to be consistent with the researcher's philosophical position, particularly in terms of ontological and epistemological assumptions (Bryman 2004; Bahari 2010; MacDonald and Headlam 2015; Bell et al. 2019). As an interpretivist, the researcher intended to collect subjective responses directly from the participants in an inductive way using a qualitative data collection method followed by qualitative data analysis (Swanson 2005; Bryman and Bell 2007; Greener 2008; Johnson and Christensen 2012; Maarouf 2019). Qualitative research design is especially useful while performing research within the organization (Jonker and Pennink 2010). Furthermore, it also gives the opportunity of freedom to contribute to the researcher's interpretation of the methodological elaboration of research (Jonker and Pennink 2010).

For this exploratory research, the quantitative research design could not be suitable at all since the study principally dealt with the unquantifiable human element of the organization, the most precious yet indemonstrable asset. The research questions formulated in light of the specific objectives and the broad aim of this study were 'what', and 'how' type rather than 'how many' type indicating the need for non-numerical data to be collected and analyzed (Ormston et al. 2013). Quantitative data analysis by using statistical software was not a requirement in this study given that the type of data the researcher dealt with was in the form of texts rather than numbers (Bryman and Bell 2007; Johnson and Christensen 2012; MacDonald and Headlam 2015). Moreover, as the study aimed to deepen the understanding of certain phenomenon through digging, a large sample size was neither manageable nor needed; rather concentrating on a few selected cases seemed to be appropriate to draw useful conclusions.

Mixed method design could be an alternative in this situation according to some researchers (Reason and Torbert 2001; Hanson et al. 2005) but it would be contradictory in the philosophical sense. The mixed-method study is based on the ‘pragmatism’ research paradigm that this study did not believe in. It blends quantitative and qualitative research methods which have conventionally been associated with conflicting research paradigms based upon opposite epistemological stances (Gray 2014). From a practical and methodical point of view, this design may not always yield expected outcomes at the end of the study (Fielding and Fielding 1986), and therefore should not be applied unless its potential total output is more than the sum of the individual quantitative and qualitative parts (Bryman 2007). Gathering both quantitative as well as qualitative data for in-depth analysis is an understandably more expensive and complicated process too (Krahn et al. 1995). Considering the philosophical contradictions, potential complexities, and the unavoidable shortcomings this study did not adopt a mixed-method research design.

Hence, this study adopted a qualitative research design to reap the advantages as summarized by Hammersley (2000); Shaw (2003); and Green and Thorogood (2004). The first one is the argument that qualitative design reaches certain parts that quantitative and even mixed method cannot. By using a quantitative method, it is quite impossible to elicit subjective responses from the participants, such as their feelings, experiences, and perceptions, for which semi-structured or even unstructured interviews are required to be conducted. Participants need to be given an open floor for ventilating their thoughts and ideas. Thus, purely qualitative research design presumes to reach the target participant’s inner perceptions. The second argument is that qualitative research design usually works better where the research questions are based on the assumptions of the existence of multiple realities rather than a single reality. In this research, it was assumed that participants’ perception may vary, resulting in the development of ‘plurality of truths’, and thus qualitative design seemed to be appropriate.

The final argument is that deploying a purely qualitative research design naturally gives useful directions for practitioners and policymakers. This study espoused qualitative research design as it was intended to provide the stakeholders of Bangladesh RMG sector with a viable and ideal HCD framework. Moreover, the role played by the researcher, including the perspective, was reflexive in nature demanding the researcher’s subjective analysis and interpretation of the reality being inquired. The research design followed in this study is represented in the following table (see Table 4.1):

**Table 4.1: Research Design Adapted for the Study**

<b>Design</b>	<b>Method</b>	<b>Purpose</b>
Mono-method:  Qualitative	Single qualitative component	Exploratory

Source: Extracted from Hamlin (2015)

#### **4.4.5 Research Methodology:**

After determining the research nature, approach, and design a researcher needs to pursue a robust research methodology or strategy that will indeed help accomplish the ultimate research aim. A researcher must follow a specific procedure to identify, select and analyze information about a topic which can be conceptualized as research methodology. Methodology is basically the way in which a researcher conducts his or her research or picks to deal with a specific issue or question (Jonker and Pennink 2010). Jonker and Pennink (2010) stated that it does not merely imply ‘conducting research’; rather it postulates the mode of acting with a clear aim in mind in a particular circumstance.

Gray (2014) suggested that a combination of several factors influences the choice of a right research methodology. The first factor is the belief of the researcher regarding the existence of an external truth that needs to be discovered. The second factor is the researcher's inclination towards a research paradigm like positivism or interpretivism. The third factor is the researcher's individual attitudes towards the way in which either deductive or inductive theory would be used in the study. Creswell (2007) explored five popular methodologies which are widely used, especially in qualitative research: narrative research, phenomenological research, grounded theory research, ethnographic research, and case study research.

**Justification for the Adoption of Qualitative Case Study Research:** As a research methodology, the case study was selected for this qualitative research (Merriam 1998; Yin 2003; Denzin and Lincoln 2005; Creswell 2007; Moriarty 2011) as it supports theory building rather than testing (Yin 2018), which is suitable in fields like HCD where theoretical and conceptual frameworks are scarce (Chetty 1996). In this research, no hypothesis was formulated; rather the research aim and specific questions were developed from the researcher's own 'general idea' and 'expectation' acting as the guide or roadmap of the study (Mouton 2001). The subsequent insights that emerged from this study can be used as working hypothesis or proposition by future researchers (Ponelis 2015). Addressing four specific questions (Benbasat et al. 1987) might help a researcher in determining the appropriateness of the case study methodology for a research situation.

The first issue is whether the phenomena of interest can be researched outside its natural setting and in this research, it was not possible because the study was highly contextual, demanding the researcher directly interact with the participants for exploring and understanding the role of HCD in implementing the TQM philosophy. The second issue is whether the research is essentially required to highlight the contemporary events and, in this

study, focusing on them was a necessity to draw a rich conclusion based on thick, current, and relevant data. The third question to be answered is whether control or manipulation of events or subject is needed, and, in this case, the answer is it was not at all possible as the study was directed by an interpretivism research paradigm which relies on the interpretation of free and subjective evaluation of the participants on the given topic.

The last question to check the suitability of case study for a research situation is whether the phenomenon of interest enjoys any established theoretical base, and the answer is that the theoretical knowledge about the role of HCD in TQM implementation in the context of the Bangladesh RMG sector was limited and yet to be explored. All these four answers inevitably justified the use of the case study methodology for this research. In fact, obtaining the participants' description and interpretation was essential in this study, which are the two principal uses of the case study research (Stake 1995).

Besides, in terms of intent, the multiple case study methodology was followed in this research as studying multiple cases to understand the phenomena under inquiry might offer valuable opportunities to collect rich, deep, and thick data as well as to verify the findings derived from multiple sources of evidence (Eisenhardt 1989; Miles and Huberman 1994). Rather than researching a single RMG establishment, it was deemed more appropriate to study five RMG establishments as case organizations to give a more representative picture of the sector and help the researcher to make a comparative case analysis (Eisenhardt 1989). Furthermore, investigating multiple cases might subsequently lead to robust theory development (Eisenhardt 1989; Miles and Huberman 1994).



#### **4.4.6 Research Method:**

In the academic literature, the terminology ‘method’ has been bewilderingly named as methodology, though they are unique terms having distinct connotations (Jonker and Pennink 2010). Research method implies certain action steps needed to be taken vigorously to make the required data available for analysis (Jonker and Pennink 2010). There is a wide range of research methods available but the most commonly used ones for collecting primary data from participants are observation, interview, and questionnaire (Kumar 2011).

**Reasons for Adopting Interview Method:** Considering the unique aspects of each of the above three mentioned primary data collection methods, the interview method was chosen for this research (Lee 2004) since it facilitates collecting primary data directly from the participants through guided conversations (Matthews and Ross 2010; Pandey and Pandey 2015; Yin 2018) which was a basic requirement of this case study research. It helped especially by advocating explanations (i.e., ‘how’) of key events in this study and the insights reflecting the relativist perspectives of participants (Yin 2018). This study was intended to derive the advantages of flexibility in collecting data (Kothari 2004; Moriarty 2011; Rubin and Rubin 2011), the capacity of exploring and understanding the meaning in more depth than with structured queries (Kothari 2004; Yin 2018), and the direct interface between the interviewer and interviewee (King 2004).

Moreover, qualitative researchers generally intend to take pride in discovering and depicting multiple views of the case, and in this regard, the interview is the central route to multiple realities (Stake 1995). Data collected in both oral and written form through using this method facilitated the analysis process and made the interpretations robust. There was also a scope of gathering rich insights and unasked responses from the participants through a reflexive fashion which improved understanding of the phenomena being inquired (Kothari 2004).

Besides, the interview is considered as one of the most important sources of case study information (Yin 2018) as well as it proving to be quite effective, hence is perhaps the most widely used method of data-gathering in qualitative exploratory research (King 2004; Moriarty 2011; MacDonald and Headlam 2015).

Yin (2018) discussed six sources of evidence that are generally found in case study research: documentation, archival records, interviews, direct observations, participant-observation, and physical artifacts. Yin (2018) made a rigorous comparative study on their strengths and weaknesses. From the comparative discussion, the interview method was found quite effective, having some unique strengths, such as it can focus on the topic of the case study research directly and provide explanations as well as individual opinions (such as attitudes, perceptions, meanings) (Yin 2018). Though the method has some weaknesses, like bias of questions and responses, recall limitations, and reflexivity, as a more target-oriented and insightful research method it appeared to be a handier and more effective one for this study (Yin 2018). Gray (2009) also considered the interview as the most logical research method to be used in an exploratory study like this one. Furthermore, studying the extant research extensively, Tosey (2015) suggested more specifically that, at least in HRD research, the interview is the most frequently applied method by researchers.

Concerning the type of interview, this study selected the participant interview method rather than informant interview to exercise certain level of autonomy and control in the fieldwork for executing the interview process with the help of a prepared semi-structured interview guide (see section 4.4.8).

**Selection of the Type of Case Study Interview:** Yin (2018) identified three alternative types of case study interview that a researcher may want to appreciate: survey case study interview, prolonged case study interview, and shorter case study interview. In this multiple case study research, shorter case study interview was conducted in line with the choice of interview type explained previously. To make the most efficient utilization of limited time and effectively handle the fieldwork with a degree of control and precision, shorter case study interview seemed to be a more feasible option than the prolonged case study interview (Yin 2018). The specific reasons for choosing shorter case study interview in this multiple case study research are: 1) manageable duration of interview session (one hour or so); 2) more focused than prolonged case study interview that takes place in a single setting; 3) conversational and open ended in nature (Yin 2018).

#### **4.4.7 Research Technique:**

There are three clearly identifiable techniques of interview namely, structured, semi-structured, and unstructured (Bryman and Bell 2007; MacDonald and Headlam 2015: 40) that qualitative researchers can apply to collect primary data. Structured interview technique follows a predetermined set of questions, typically applied when the researcher intends to acquire required information where the responses are immediately comparable (Kumar 2011; MacDonald and Headlam 2015: 40). Conversely, in unstructured interviews, the researcher does not follow any such specific pattern of themes or questions; rather addresses the issues as they naturally emerge during the interview session (Kumar 2011; MacDonald and Headlam 2015: 40).

Semi structured interview lies in between these two extremes and is a more frequently used technique which follows a framework to address certain major themes, not specific

questions, while it also allows the required flexibility for the researcher to reply to the answers given by participants (MacDonald and Headlam 2015: 40). Qualitative interview is mostly described as being semi structured or in-depth (Moriarty 2011), which was applied in this research to generate rich and thick primary data from the selected participants.

In this exploratory study, the semi-structured interview technique was used as a primary data collection instrument since there has been very little research on the role of HCD in TQM implementation, especially in the context of the Bangladesh RMG sector (Mathews and Ross 2010). Being a qualitative case study research, it necessitated an in-depth semi-structured interview technique to be employed for generating rich and thick data (Moriarty 2011). Moreover, this technique offers certain advantages as elaborated by Mathews and Ross (2010) that this study was intended to reap. It is very effective for exploring topics with participants as well as experiences and feelings in-depth (Mathews and Ross 2010). It helps a researcher to be in direct interaction with the research participants in a flexible manner and thereby encourages participants to share their thoughts and ideas about the research topic in a natural way (Mathews and Ross 2010). Raw data (participant's words) can be gathered more effectively by applying this technique (Mathews and Ross 2010). Moreover, with cautious groundwork, sensitive issues can be explored in a pleasant and protected atmosphere by using this technique (Mathews and Ross 2010).

#### **4.4.8 Semi-structured Interview Guide and Pilot Study:**

A semi-structured interview guide consisting of eight open-ended questions centering on the theme of the study was followed during the fieldwork. Primarily following the research questions, these interview questions emerged from the literature review for designing which the suggestions of Kvale (1996) were followed. During the interview session, introductory,

follow-up, probing, specifying, direct, indirect, and interpreting questions were asked to the participants (Kvale 1996). Moreover, issues like wording and phrasing of questions were given cautious consideration (Patton 2002; Sekaran 2003).

However, a pilot study was carried out before the actual fieldwork through Skype meeting, email, and telephone conversation to identify vague and inappropriate interview questions, reduce the incidence of non-responses, and ensure the proper functioning of the interview schedule (Patton 2002; Gray 2009; Bryman and Bell 2011). The initial draft questions were first reviewed by three colleague researchers who are currently doing their Ph.D. in a relevant field at the University of Bradford. After receiving their constructive opinions and making suggested changes, the interview schedules were sent to five senior HR policymakers working in the Bangladesh RMG sector and seven HR academics working in the University of Cranfield, University of Edinburgh, University of Lincoln, and the University of Dhaka. They had provided thorough and critical feedback, which was accommodated in the interview schedule. This is how the feasibility and appropriateness of the interview questions were tested. Besides, a convenience sampling method was used in the pilot study as it allows accessing participants from wherever is convenient. However, the modifications made in the semi-structured interview guide through piloting are illustrated in the table 4.2.

**Table 4.2: Modifications Made Based on the Pilot Study**

<b>Interview questions before piloting</b>	<b>Interview questions after piloting</b>	<b>Modifications made through piloting</b>
How would you explain the concept of HCD?	How would you explain the concept of employee development?	a) The term ‘HCD’ is replaced by ‘employee

<p>In your opinion, how important is it for your organization to invest in HCD?</p>	<p>In your opinion, how important is it to invest in the development of employees working in your organization?</p>	<p>development’ to facilitate better understanding.</p> <p>b) The question is enlarged to make it easier for participants to comprehend.</p>
<p>What measures are typically undertaken by your organization for employee development?</p> <p>What else do you think can be instrumental in overcoming the existing knowledge, skill, employability, or other capability gaps of employees working in your organization?</p>	<p>What sort of initiatives are typically undertaken in your organization for employee development?</p> <p>What else do you think can be instrumental in this regard?</p>	<p>a) Paraphrasing of the question to eliminate ambiguity.</p> <p>b) The unnecessary part of the question is deleted.</p>
<p>Can employee health, other than the learning, be regarded as an HCD tool?</p> <p>Would you explain how?</p>	<p>Can improved healthcare (physical and mental) be regarded as a tool for ensuring employee development?</p> <p>What do you think about it?</p>	<p>a) The question is simplified and specified.</p> <p>b) The question of ‘how’ is replaced by the question of ‘what’ to elicit a detailed explanation from</p>

		participants regarding healthcare.
<p>What sort of theme first comes into your mind when thinking about TQM?</p> <p>In your opinion, is the philosophy of TQM more about people or systems? Why do you think so?</p>	<p>How would you assess the total quality management practices in your organization?</p> <p>Which one do you consider is more pivotal for implementing total quality management? Employee development or system/technology development?</p> <p>Can you please explain your stance with an instance?</p>	<p>a) The first part of the question is deleted. A new question is added to know about the participant's evaluation of TQM.</p> <p>b) The question is paraphrased and simplified to get a thorough idea about the phenomenon from participant's perspective.</p>
<p>How vital is implementing TQM philosophy for your organization to achieve competitiveness in the international market?</p>	<p>How does total quality management help your organization in gaining a competitive advantage in the international market?</p>	<p>a) The question is rephrased to make more sense.</p>
<p>What role can HCD play in adopting TQM philosophy and how can HCD help</p>	<p>What role do the employee development initiatives play in ensuring total quality</p>	<p>a) The double-barreled question is broken down into two separate questions to remove confusion.</p>

<p>implement TQM philosophy?</p>	<p>management at your organization?</p> <p>Can you please describe from your experience how do they do so?</p>	
<p>How are these two interlinked with each other at your workplace?</p>	<p>In your opinion, what type of relationship does prevail between the employee development initiatives taken in your organization and total quality management?</p>	<p>a) The question is paraphrased to let the participants stay focused on the linkage between the two vital aspects of the study.</p>
<p>What suggestions would you make for your organization or broadly for the RMG sector of Bangladesh concerning employee development that you believe might drive all level employees to be better involved, empowered, innovative, and contribute to the continuous improvement process?</p>	<p>What suggestions would you make on employee development that could enhance quality everywhere in your organization, leading in turn to the progress of the whole RMG sector?</p>	<p>a) Paraphrasing of the question to eliminate ambiguity and facilitate improved understanding.</p>



#### **4.4.9 Sampling Method and Sample Size:**

In this exploratory case study research, the nonprobability purposive sampling technique was used for selecting exemplary cases and within case participants as well (Mathews and Ross 2010; Kumar 2011). In a purposive sampling approach, the aim is not to draw statistically representative samples from the total population; rather to choose cases or people ‘with purpose’ for enabling the researcher in exploring the research questions or developing a theory (Mathews and Ross 2010). The information-rich cases concerning the theme under inquiry should be given preference in qualitative case study research while trying to select appropriate cases, hence using purposive sampling and snowball sampling is justified (Patton 2002). Accordingly, five (5) RMG establishments from Bangladesh RMG sector, three located in Dhaka (capital city) and two in Chittagong (commercial hub), were selected as cases based on their characteristics that directly relate to the motivation and questions of this research and importantly their approval for conducting an in-depth exploration (Creswell 2007; Mathews and Ross 2010). Besides, the following criteria for purposive sampling were used in selecting the five case organizations:

- RMG establishment having the potential of being a rich case to explore the linkage between HCD and TQM
- RMG establishment proving excellence with regard to TQM implementation
- RMG establishment having systematic HCD practices
- RMG establishment having compliant factory
- RMG establishment experiencing significant increase in annual export turnover
- Large, medium, as well as small RMG establishment in terms of production capacity and employment size
- Both old and new generation RMG establishments

- RMG establishment having experts in different functional areas capable of comprehending and responding to the research questions on the role of HCD in TQM implementation
- Diversity in location (Dhaka and Chittagong)

A brief introduction about the case organizations explored is illustrated here (see Table 4.3).

**Table 4.3: Brief Profile of Selected RMG Establishments**

Serial No.	Anonymous Name	Location	Year of Establishment	Number of Employees	Annual Export Turnover
1	RMG A	Dhaka	2004	7000	\$72 million
2	RMG B	Dhaka	1996	2100	\$36 million
3	RMG C	Dhaka	2018	700	\$5 million
4	RMG D	Chittagong	1986	6000	\$50 million
5	RMG E	Chittagong	1983	18000	\$250 million

However, a total number of thirty (30) participants, six (6) from each case organization were selected based on their functional relevance to the research topic and by following an initial purposive sampling and subsequent snowballing approach (Patton 2002). The snowballing approach was adopted to elicit suggestions from the known participants about the unknown potential participants for this study (Mathews and Ross 2010). Besides, maximum variation sampling strategy was followed using some predetermined criteria such as, area of operation, level of managerial position, year of job experience, and gender to select participants within case organizations (Creswell and Poth 2018). The participants selected for this study included top managers, middle managers, and first-line managers having varied length of job experience

who are involved in different functional areas, such as HR and Admin, Compliance, Merchandizing and Marketing, Production, Planning, Finance and Accounts, Quality Control, and Operations related departments. It was, however, seen that the number of female employees working in managerial positions in RMG establishments is very few. However, in RMG B and RMG C representative female participants were found and thus selected. Maximum variation sampling method was used to increase the possibility that the findings will eventually reflect divergent perspectives (Creswell and Poth 2018). Moreover, the rationale behind using a smaller (30) sample size for data collection was that the subsequent analysis phase required multiple reading of a large amount of transcribed data, which was time consuming (Braun and Clarke 2006). However, a detail of the interviews conducted for this multiple case study research will be illustrated in a tabular format (see Appendix F).

#### **4.4.10 Primary Data Collection:**

The fieldwork of this study was carried out in two major phases. In the first phase, a total number of thirty (30) semi-structured interviews were conducted to collect primary data from the selected participants of chosen cases. A semi-structured interview guide (see Appendix E) was followed, while ensuring the interview kept focused on the research topic. Face-to-face communication method was used, to gather the participants' verbal expressions as well as nonverbal clues. These collected raw data were qualitative in nature as the participants shared their opinions and ideas on the research topic in their own manner (Mathews and Ross 2010). On positive consent of every participant, the whole conversation was audio recorded during the interview using a digital voice recorder to provide a more accurate rendition (Brinkmann and Kvale 2015; Yin 2018). This audio recording facilitated retaining a complete, uninterpreted record of what was discussed between the researcher and the participant (Walliman 2011). In addition, important notes were also taken during each interview. The second phase of the fieldwork was a follow-up phase at which the recorded interviews were translated from Bengali to English as and where required and then transcribed manually by the researcher. However, the accuracy of the translation was checked and verified by a professor of English department who himself is Bangladeshi and serve at a public university in Bangladesh. The draft of each transcribed interview (both English and Bangla version) was subsequently sent back to the respective participant through email for credibility purpose. All the participants validated the transcribed data and confirmed it through a feedback email.

#### **4.4.11 Secondary Sources:**

In addition to the primary data generated through semi-structured interviews, some organizational documents were also collected and used to enrich this study. These documents

provided the researcher with valuable insights and contextual information about the case organizations studied (Bell et al. 2019). During the fieldwork, the researcher was given the access to see and examine research pertinent official documents like job description, skill matrix, training modules and schedules, employee health records, organogram, replacement charts, buyer's Code of Conduct (COC), productivity data, Overall Quality Level (OQL) sheet, defect rate database, product shipment records, etc. Moreover, the official website of every case organization was visited to collect secondary data like company history, corporate profile, mission statement, supplier and buyer lists, product categories, export turnover, etc. Though these secondary data did not address the research questions of this study directly, by combining them with interview data, the researcher gained greater depth and understanding about the research topic (Mathews and Ross 2010). More importantly, using these archival records in conjunction with the interview data helped the researcher to form five comprehensive cases and make robust arguments (Miles and Huberman 1994; Yin 2018).

#### **4.4.12 Data Analysis:**

Thematic analysis method was used in this exploratory research to analyze the transcribed data and interpret the engendered themes of thirty semi-structured in-depth interviews conducted in five case organizations (Braun and Clarke 2006). The data analysis part of this research was embedded on the fundamental guidelines provided in a seminal psychology paper on thematic analysis by Braun and Clarke (2006). Though the study primarily followed the six phases of analysis outlined in 2006 paper, the reflexive version of thematic analysis was adopted in this study to retain the researcher's influence on the recursive analysis process (Braun and Clarke 2019). The researcher did not follow the six-steps procedure in a typical sequential manner; rather moved back and forth between the phases to facilitate a meticulous data interrogation and engagement process (Braun and Clarke 2019). To ensure the quality of analysis, the

researcher maintained a reflective engagement with the raw interview data and a reflexive espousal with the analytic procedure (Braun and Clarke 2019).

However, there were certain reasons for choosing thematic analysis as a data analysis technique in this exploratory study. Thematic analysis is considered as one of the most popular and widely used data analysis approaches in qualitative research (Bell et al. 2019). This analytic approach is extensively used by case study researchers across different paradigms (Mills et al. 2010) and hence also embraced in this research. This technique facilitates to analyze the large data set created after conducting in-depth interviews (Clarke and Braun 2017). However, the distinguishing aspect of thematic analysis is its flexibility that instigated the researcher to apply this method in generating the meaning of assembled qualitative data (Clarke and Braun 2017; Bell et al. 2019). Besides, there are some other advantages of applying thematic approach that this study sought to avail, such as, being easier and quicker to learn and apply; comprehensible for a researcher with little experience in qualitative research; findings are mostly accessible to general educated people; thick description of data set can be presented; comparison can be made among the cases studied; unpredicted insights can be generated (Braun and Clarke 2006).

As mentioned earlier, to identify, analyze and interpret the patterns of meaning within the qualitative interview data gathered, this research recursively followed the six steps of reflexive thematic analysis (Braun and Clarke 2006; 2019) which are briefly elucidated as follows:

**Phase 1 – Familiarization with interview data:** In this study, the researcher collected the primary data himself through conducting face-to-face interview and subsequently came to the analysis with prior understanding of the data, as well as some preliminary analytic views (Braun and Clarke 2006). English language was entirely used only in seven (7) interviews, whereas the rest of the twenty-three (23) interviews were conducted in Bengali language as per

the preference of the participants. The researcher attentively listened to the recorded English interviews and simultaneously transcribed the verbal data into written form manually. On the other hand, the recorded Bengali interviews were first translated into English and subsequently transcribed by the researcher. Afterwards, the researcher listened to the voice recordings again to check the accuracy of the manual transcription of every single interview (Brinkmann and Kvale 2015). The researcher did not merely put the spoken sounds on the papers; rather viewed translation and transcription as critical interpretative acts that he performed by active hand to create the meaning of qualitative data (Lapadat and Lindsay 1999). Both the verbal speeches and nonverbal expressions were thoroughly and rigorously transcribed (Braun and Clarke 2006). Though this transcription process took almost four months to complete, it informed the early phases of analysis and helped the researcher develop a comprehensive understanding of the transcribed data (Braun and Clarke 2006). Moreover, repeated listening to the recorded voice and reading of the written text made the researcher immersed in the data and deeply acquainted with every aspect of data (Braun and Clarke 2006). To ease the next phase of formal coding, the researcher took important notes and marked relevant ideas (Braun and Clarke 2006). Before commencing the coding process, he skeptically read each interview transcript twice to search meaning and find potential patterns (Braun and Clarke 2006).

**Phase 2 – Initial coding:** Coding the data is one of the major stages in the qualitative data analysis process (Miles and Huberman 1994; Bell et al. 2019). It entails creating sense of the interview text, aggregating the contents into information categories, seeking proof for each code, and finally naming the codes (Creswell and Poth 2018). In this study, the researcher approached the transcribed data with specific research questions in mind that he wished to code around and accordingly generated pithy labels explaining the key aspects of the data (Braun and Clarke 2006). Coding was performed manually on an organized table of coded transcription in MS word file. The researcher coded the data by writing notes in a separate

column just after the transcribed data column on the table and highlighted the pertinent words of the data extract by using a different color (Braun and Clarke 2006). This is how all the data extracts were coded and subsequently collated together within specific code for later phases of analysis (Braun and Clarke 2006). Though Braun and Clarke (2006) suggested to develop initial codes for as many potential themes as feasible, the researcher followed the lean coding approach (Creswell and Poth 2018). He proceeded with a short list of eight categories and during analysis expanded this list into approximately one hundred initial codes across five cases through reviewing and re-reviewing the database (Creswell and Poth 2018). Moreover, some extracts of data were coded twice as found relevant at this stage (Braun and Clarke 2006). However, an illustration of transcribed data with code applied in this research is shown as follows:

**Table 4.4: Sample Coding Process**

<b>Transcribed data</b>	<b>Code</b>
<p>We are strengthening our research and development team, merchandizing team, design development team, we train them. We are now <b>creating customer requirements</b> smartly. We develop options from which they can easily choose one. We tell our buyers “We can <b>make design</b> for you”. We <b>create design</b> as per the environment, climate. And we essentially need to develop smart people to do this smart job.</p>	<p>Creativity</p>



**Phase 3 – Generating themes:** After coding and collating the interview data and developing a list of codes across the data set, the researcher started analyzing the collated data and the codes at this stage to identify the initial themes (Braun and Clarke 2006). The identification of significant patterns of meaning or initial themes was followed by assembling data pertinent to individual candidate theme for reviewing each aspirant theme's viability. The themes of this research did not passively arise from any codebook, or the data set; rather they were generated at the intersection of the coded data, theoretical suppositions of this study and the researcher's analytic skills and resources (Braun and Clarke 2019). These themes were basically the innovative and interpretative stories about the rich and thick data provided by the participants of five case organizations (Braun and Clarke 2019).

**Phase 4 – Reviewing themes:** At this stage, all the primarily generated themes were reviewed and refined (Braun and Clarke 2006). The researcher followed twofold criteria namely internal homogeneity and external heterogeneity (Patton 1990) to ensure that data within each theme are coherent and that there are obvious distinctions between the themes (Braun and Clarke 2006). Besides, the review and refinement of the generated themes was performed in two levels (Braun and Clarke 2006). At the first level, the researcher critically read every assembled data extract for each theme and determined whether all the collated extracts seem to constitute a coherent pattern of meaning (Braun and Clarke 2006). Since the initially generated candidate themes appeared to form a consistent pattern, the researcher moved on to the next level (Braun and Clarke 2006). At the second level, the researcher checked the validity of each candidate theme with reference to the data set through rereading the complete data set (Braun and Clarke 2006). This is how the relevance between the data and themes was ascertained.

**Phase 5 – Defining and naming themes:** At this phase, the researcher defined and refined eight themes and wrote a thorough analysis around every single theme (Braun and Clarke

2006). The contents of coded extracts were not merely paraphrased; rather interesting and relevant concepts and instances were identified and explained in a detailed manner (Braun and Clarke 2006). The scope, focus and tale of every theme was determined (Braun and Clarke 2006). Moreover, the researcher concisely named the themes with an aim to give readers an immediate sense of what each theme is talking about (Braun and Clarke 2006).

**Phase 6 – Writing up:** Finally, the researcher blended the analytic narrative with the most appropriate and vivid data extracts and contextualized the analysis relating to the extant literature (Braun and Clarke 2006). Data were not simply described in the narrative; rather arguments were made with reference to specific research questions of this study (Braun and Clarke 2006). In the analysis and findings chapter, within-case analysis was presented for each individual case organization to demonstrate the analytic narrative with supporting evidence or excerpts. In the discussion chapter, the interpretation of the key findings was elucidated considering the research questions (Lincoln and Guba 1985). Besides, the linear-analytic structure was followed to compose the final thesis of this multiple case study research (Yin 2018).

#### **4.5 Criteria Used for Judging the Research:**

Though validity and reliability are considered as key criteria in judging the quality of any research, there has been controversy among qualitative researchers regarding the relevance of these two measures (Bell et al. 2019). These criteria carry the connotations of measurement that seem to have limited applicability in qualitative study (Bell et al. 2019). Whether validity or reliability can be and even should be applied remains a debatable issue. Moreover, it is practically unfeasible to determine the validity and reliability of research design since qualitative researchers typically use flexible, unstructured, and evolving methods and

procedures for exploring the answers to research questions (Kumar 2011). However, scholars have tried to overcome this constraint by defining and establishing validity and reliability in the qualitative research perspective. For instance, Guba and Lincoln (1994) proposed two major criteria that can be used as alternatives to validity and reliability for judging qualitative research such as, trustworthiness and authenticity. Guba and Lincoln (1994) decomposed trustworthiness into four criteria, which are credibility, transferability, dependability, and confirmability having corresponding criteria in quantitative research. Besides, contemplating case study research as a part of empirical social research, Yin (2018) claimed that four common tests, namely construct validity, internal validity, external validity, and reliability are applicable in case study research as well. However, the following three criteria were used in assessing and establishing the quality of this qualitative case study research:

**Credibility:** Credibility is one of the major judging criteria of qualitative research that parallels internal validity (Trochim and Donnelly 2007; Bell et al. 2019). According to Trochim and Donnelly (2007: 149), ‘credibility involves establishing that the results of qualitative research are credible or believable from the perspective of the participant in the research’. It implies the validity of a qualitative research, which is assessed by the degree of participants’ concordance whereby a researcher takes his or her findings to those who participated in the data collection phase for gaining the participants’ confirmation, congruence, validation, and approval since the study explores their subjective perceptions, feelings, experiences, and beliefs (Kumar 2011). It is generally assumed that participants can best judge whether the researcher’s findings accurately reflect their opinions and feelings (Kumar 2011).

The respondent validation technique was applied to establish the credibility of this research (Bell et al. 2019). This technique was adopted since the researcher wanted to confirm that there is a good correspondence of interview findings with the perspectives and

understandings of the research participants (Bell et al. 2019). In this process, the research participants were provided with a greater level of immersion in the study and authority to check the accuracy of initial findings. After returning from the primary fieldwork, the researcher provided individual research participants of each case organization with transcribed data through email and requested them to authenticate the draft findings. Participants validated the respective transcription and confirmed validation with the researcher through a feedback email. However, the subsequent thematic analysis made on the transcribed data were not presented to them, given the fact that research participants cannot truly authenticate the scientific legitimacy of such analysis (Bell et al. 2019). Nevertheless, respondent validation provided a means of verifying the individual accounts and thereby established credibility of this qualitative research (Bell et al. 2019).

**Transferability:** Transferability is equivalent to the external validity of quantitative research (Bell et al. 2019). It demonstrates whether and how the findings of case study research can be generalized (Yin 2018). According to Trochim and Donnelly (2007: 149), ‘Transferability refers to the degree to which the results of qualitative research can be generalized or transferred to other contexts or settings’. It is quite challenging to generalize the findings of qualitative research due to the research approach (Kumar 2011). However, transferability to some extent can be attained if the researcher comprehensively and thoroughly explains the process being adopted for other researchers to pursue and replicate (Kumar 2011). In this qualitative research, a thick description about the process of data collection and thematic analysis was presented for ensuring transferability or establishing the external validity of the research (Guba and Lincoln 1994). The research design of this study was augmented with pressing “how” and “what” questions and enriched by supplementary data collection to arrive at an analytic generalization (Yin 2018).

**Dependability:** According to Trochim and Donnelly (2007: 149), “Dependability is concerned with whether we would obtain the same results if we could observe the same thing twice”. Dependability is parallel to the concept of reliability in quantitative research (Guba and Lincoln 1994). Establishing dependability in qualitative research which supports greater flexibility and freedom, is another crucial job for a researcher, though might be possible if a thorough record of the total research process is properly kept for the purpose of replication or repetition in future (Kumar 2011). Though the chances for replicating a case study rarely occur (Yin 2018), an ‘auditing’ approach was adopted to ascertain a greater extent of dependability of this qualitative case study research (Bell et al. 2019). The researcher explicitly documented every procedure followed throughout the case study (Yin 2018).

A complete record of every research phase, including problem identification, participants selection, fieldwork notes collection, recorded interview transcription, thematic analysis and discussion was kept in an accessible manner for later researchers (Bell et al. 2019). Participant information sheet, consent form, and semi-structured interview guide were used (see the Appendices C, D, and E) as case study protocol, which is one of the popular tactics to deal with the documentation problems in depth (Yin 2018). Moreover, another desirable tactic, i.e., a case study database, was also developed by organizing and documenting the interview data to establish the dependability of this qualitative case study research (Yin 2018). Separate computer folders and MS Word files were used to keep the records of the voice data, transcribed data, coded data, and the account of the researcher’s thematic analysis (Yin 2018).

#### **4.6 Ethical Considerations:**

The term ethics refers to a set of rules followed by individuals and societies to maintain moral standards in their lives (Mathews and Ross 2010). The ethics of social research is about creating a mutually respectful, win-win relationship in which participants are pleased to respond candidly, valid results are obtained, and the community considers the conclusions constructive (McAuley 2003: 95). The key ethical principles rigorously followed in this qualitative case study research, which is essentially a type of social research, were informed consent, confidentiality, and anonymity. Throughout the data collection, analysis, and presentation process, these three issues were critically taken into consideration (Creswell 2007; Matthews and Ross 2010; Kumar 2011).

**Voluntary Informed Consent:** This ethical principle seeks to ensure that potential research participants are provided with adequate information regarding the research topic so that they can make an informed decision on whether they desire to participate in the study (Creswell 2007; Matthews and Ross 2010; Kumar 2011; Bell et al. 2019). The process followed in this study to obtain such voluntary informed consent from the target participants were: 1) The potential participants of chosen case organizations were provided with as much information as possible regarding the broad theme and aim of this research. The issues that might arise during the interview were conveyed to them. A participant information sheet was used in this regard; 2) Adequate time and opportunity was given to the potential participants to consider the options; 3) The queries of the potential participant were answered with detailed explanation; 4) Whether the contacted participant had clearly understood the provided information and answers were ensured; and 5) The voluntary consent of the potential participants with signature was obtained on printed consent forms. Prior to conducting the fieldwork, formal consent forms were sent to the potential participants through the concerned authority of the respective organizations. However, every participant was given the full right to withdraw himself/ herself

from the study at any stage without prior notice and / or explanation. Participants were also given the authority to ask for removing or extinguishing data provided earlier.

**Confidentiality:** Disclosing the participant's provided information to others for other than research purposes is an unethical practice (Kumar 2011). In a research study like this, that involves human interaction to generate information, the maintenance of confidentiality becomes a major ethical concern. Since this study used a semi-structured interview technique to elicit participants' opinions and suggestions, necessary care was taken for ensuring that the interview data is confidential and unable to be accessed by anyone other than the researcher himself (Matthews and Ross 2010). The notes taken during the interview were kept in a secured lockable cabinet and both the recorded and transcribed interview data were kept in digital archive in a password protected file to ensure confidentiality of this research (Creswell 2007; Matthews and Ross 2010; Kumar 2011).

**Anonymity:** Identifying a research participant with the data provided by him or her is considered as an unethical conduct (Kumar 2011). In this study, the researcher took utmost care to exclude any sign of identification of the research participants so that nowhere in the thesis can they be recognized (Matthews and Ross 2010; Kumar 2011). To ensure the anonymity of the case organizations and the research participants, anonymous codes were used in this study.

Moreover, prior to conducting fieldwork, the researcher's ethics application and documents were reviewed and approved by the research ethics panel of the University of Bradford. The authenticity of research findings was ensured in every phase of thematic analysis and subsequent discussion regardless of the anticipated outcomes.

#### **4.7 Summary:**

The researcher's philosophical stance, along with the methodological choice is elaborated in this chapter in a detailed manner. In this empirical research, the phenomenon under inquiry was seen from an interpretivist outlook since the researcher adopted interpretivism as the worldview. This study firmly took the stance of ontological idealism, believing that reality is relative and constructed in the human mind. The study was espoused by epistemological subjectivism assuming that truth can be known through the researcher's relativist lenses. This basic research is exploratory in nature as the subject matter of the study remains unexplored in the literature, especially in the perspective of Bangladesh RMG sector.

An inductive reasoning approach following bottom-up direction was adopted to lead the study from data to the development of a new theory based on empirical evidence in a flexible manner. In this study a purely qualitative research design was followed in line with the researcher's philosophical position, as well as the nature and approach of the research to collect and analyze the required qualitative data. As a research methodology, a qualitative case study was used, and particularly multiple cases were investigated for generating rich and thick data and making comparative case analysis. Specifically, five exemplary RMG establishments were selected as case organizations by using a nonprobability purposive sampling method.

The interview method was employed in this case study research to assemble description of lifeworld of the target research participants regarding interpretation of the meaning of described phenomena in more depth. A total number of thirty participants (six from each RMG establishment) was selected for interview based on their functional relevance to the research topic and by following an initial purposive sampling and a subsequent snowballing sampling approach. Maximum variation sampling strategy was applied in this regard. Considering certain factors like time limitation and required degree of control, a shorter case study interview



was undertaken. A non-standardized and in-depth semi-structured interview technique was used as a tool for collecting raw primary data (participant's words) and in conducting each interview session, an interview guide was followed for more organized and efficient rendition.

The fieldwork of this study was carried out in two major phases. In the first stage, thirty semi-structured interviews were conducted to collect qualitative primary data from the selected participants of chosen cases. The second phase was a follow-up phase at which the recorded interviews were translated from Bengali to English as and where required and then transcribed manually. The draft of each transcribed interview was subsequently sent back to the respective participant through email to authenticate the written script. Moreover, secondary sources were also utilized for collecting pertinent data to form five comprehensive cases and craft robust arguments. Thematic analysis was performed manually to analyze the interview data in a reflexive manner. Three criteria such as credibility, transferability, and dependability were used in establishing the quality of this research. Moreover, ethical principles relating to informed consent, confidentiality, and anonymity were rigorously followed throughout the data collection, analysis, and presentation process.

## **Chapter Five: Analysis and Findings**

### **5.1 Introduction:**

This empirical chapter anonymously introduces five RMG establishments that were used as case organizations in this multiple case study research. It aims to present the interview data and provide an account of reflexive thematic analysis for each case organization. This chapter provides within-case analysis and findings under eight broad thematic areas encompassing the codes, patterns, and themes emerged in this exploratory study. It serves as the basis for the discussion presented in the next chapter with a focus on specific research questions. The key findings relating to individual case organization are summarized in a tabular format at the end of this chapter.

### **5.2 Case Study: RMG A**

RMG A is an advanced state of the art technology Garments establishment having a full range of manufacturing facilities and is situated at Gazipur in Dhaka. It is one of the leading conglomerates in the RMG sector of Bangladesh. Since its inception in 2004 as a fully export oriented private company, it has been catering to the shifting market demands steadily. It has an impressive list of buyers, including H & M, Next, Target Australia, Kmart Australia, Lindex, Mothercare, and America Today. This rich directory of buyers is an indication of the business excellence that RMG A achieves through robust implementation of TQM principles and stringent adherence to compliance standards. Exporting garments regularly to USA, Australia and European countries for a long time necessarily implies that RMG A maintains standards of operation as well as quality of finished garments.

RMG A is basically a knit composite factory producing items like jackets, hoodies, shorts, trousers, t-shirts, polo shirts, tank tops, and many other outfits which are in huge demand in the international market. It has a vertical operational setup that integrates knitting, dyeing, washing, sewing, jacquard, embroidery, and printing, as well as a modern lab facility. Moreover, RMG A is capable of sustaining its supply-chain flexibly and thereby can enjoy the advantage of shorter lead time. Consequently, RMG A experiences annual export turnover of around 72 million USD, which is much higher than many other RMG exporters of the country. However, it has achieved business success primarily through cultivating a dynamic workforce consisting of seven thousand skilled employees in total. This manpower is its main strength and performs an excellent job in a coordinated approach to meet the buyer's expectations.

### **5.3 Reflexive Thematic Analysis:**

#### **5.3.1 Investment Perspective of HCD:**

In RMA A the participants' responses imply that human capital is the differentiating factor in labor-intensive RMG sector and that HCD is the most vital area of investment for the business. Most of the participants perceive that human capital is the principal factor determining the quality of operations. It is hence presumed that the more resources an organization deploys in HCD, the greater significant impacts it will have on business operations in terms of productivity and quality. Meeting the continually changing requirements of buyers like H & M, Next, Target Australia, Kmart Australia, Lindex, Mothercare, and America Today is obviously a tough job and demands the creation of a dynamic and dedicated workforce that can creatively engage in evolving and operating a quality system. RMG A-2 argued that it is imperative for the organization to educate and train its employees so that they can perform their present job competently and get prepared for future job responsibilities as well. He also commented that

investing in HCD is a fundamental prerequisite to meet the specifications of reputed international buyers. Moreover, participants contended that it is the employer's responsibility to discover, nourish and utilize the unique potentials that every employee has, given that employees form the core of business. The following excerpt demonstrates this perspective:

*“Every person has a resource that management should discover and determine how to utilize, how to improve and how to implement. It's very important for an organization to transform its people into skilled human resources. The whole organizational system is run by its people and so if people are not qualified or skilled or capable enough, the system will not run properly. I think to make the system functional organization should invest in employee development.”* **(RMG A-6, Merchandizer, Merchandising and Marketing)**

The above quote implies that investment in HCD should be given the highest precedence for effective functioning of the organizational system. However, which functional team from an organizational perspective is primarily responsible to execute the HCD interventions can be an issue to determine. Acquiring, developing, and maintaining an effective workforce are generally regarded as the principal responsibilities of the HR department and HCD is perceived to be so in RMG A as well. However, participants stated that HR requires the assistance from other departments in this regard, even in identifying the actual learning needs of employees. RMG A-1 therefore asserted that a collective effort from relevant departments is necessary for potent HCD, though HR obviously plays the key role in designing and implementing the HCD plans.

### **5.3.2 Methodical HCD Practices:**

RMG A has a specialized HR department to look after issues beyond typical hiring and firing activities. The HR team undertakes diverse HCD programs and interventions to enhance the expertise of factory workers and managerial staff. Initially, the newly recruited employees undergo a formal induction that facilitates them to smoothly cope with their assigned job and team, as well as to clearly comprehend job specific duties and responsibilities. A written job description is provided as a tangible guide for job incumbents. The HR team, in association with the relevant functional department, also conducts training needs assessment (TNA). Based on the TNA outcomes, HR adopts required interventions to overcome any performance gap of employees.

RMG A-5 stated that HR arranges a training and development program for every employee from helper to executive position. HR offers routine training throughout the year in an in-house training center and organizes on-the-job training for the factory workers in production floors. RMG A-5 also informed that in addition to the in-house training center, there is an arrangement for knowledge exchange among the employees on the 8<sup>th</sup> and 2<sup>nd</sup> floor in the corporate building. There is a separate room on the 8<sup>th</sup> floor in which senior managers generally exchange work-related ideas, views, and experiences with junior colleagues. Inexperienced job incumbents are guided on how to work in a team productively. It is found that employees are systematically taught, trained, and promoted in RMG A, which is reflected in the following excerpts:

*“Basically, our garments sector is no longer the same as before. Once upon a time, there was no HR department, IE department, R and D department. Now our HR department hires people, places them, trains them in a systematic way. At first, HR conducts exams or tests to understand their competency level and identify the*

*requirements for further development. Accordingly, they are provided training. When an employee develops as a competent one, he is given a placement. We have a training center, and we have post-training evaluation system here as well. HR explains the JD (Job Description) clearly to a newly hired employee.” (RMG A–1, AGM, Head of Merchandising and Marketing)*

*“First of all, we do the TNA of employees from HR department. Then based on the need, we train them internally. And this is for both managers and workers. Next, we evaluate how effective the training was. We retrain our employees if they still have performance problem, I mean, if there is any lacking or gap in their performance. Moreover, we keep a backup person in each position, so that the employee gets a support or help from the backup person if face any difficulty or problem. As a result, no work gets stopped.” (RMG A–3, Senior Executive, HR and Compliance)*

The above verbatims imply that the HR department follows HR practices methodically and particularly the HCD function encompasses gap identification and fulfilment in terms of employee knowledge, skills, and abilities. The participants, however, argued that HR alone cannot execute HCD interventions without the support of other functional teams. RMG A–2 informed that the HR department employs specialists to train on HR and pertinent issues, but he thinks the heads of other functional teams have certain responsibilities to train and develop the departmental staff. He shared his own experience regarding this aspect in the following way:

*“For example, as I am the head of the quality team, I usually do this job. I choose the relevant topics, prepare all the lecture materials relating to quality issues, develop power point slides to facilitate better employee learning. Then I arrange a session with*

*my junior colleagues. I usually offer a lecture. I use slides so that they can easily understand the topics.” (RMG A–2, Manager, Quality)*

This is how the departmental heads in RMG A educate and guide employees under their span of supervision. On the other hand, the HR department regularly organizes diverse learning programs to build safety and environmental awareness. Moreover, developing soft skills, like language or communication, is also given precedence. Employees working in RMG A are also provided with the opportunity to learn how to lead a soothing personal and family life given that family life has profound impacts on employees’ self-determination and inspiration that in turn enables them to be more productive. In fact, HR plays a significant role with respect to HCD, which is evident in the following excerpts:

*“Well, most of the garment employees working here came from underprivileged social background and don’t have enough knowledge about materials and tools we use here. Our HR provides training to all to make them fit for the job. Employees learn English terms often used here such as, seizer, thread, full sleeve, half sleeve, etc. HR introduces them with machineries and tools, tells them how to use those in right way, how to keep safety. Employees are trained on how to adopt the environment too.” (RMG A–6, Merchandizer, Merchandising and Marketing)*

*“Even employees are trained here on family planning, budget planning. They learn how to take their family to the rich level, how to make children better people, how to save money for the future of the family, etc. We are not just insuring how well they are doing here, rather we are building them in such a way so that they can also manage their family well. We do believe that if a person is fine in his family, he will do better when he comes here.” (RMG A–3, Senior Executive, HR and Compliance)*

However, participants informed that many qualified graduates who have the credentials to embark on higher order job responsibility nowadays come to this sector and work in lower positions. RMG A–2 reported that every year HR forms a team consisting of such potential employees who work at lower-level positions. In the year 2019, such a team of seventeen employees had been formed, who were later promoted to upper positions. They were given rotational training across different departments for three months. This intervention facilitated them to gain holistic concepts in diverse functional areas, such as knitting, dying, cutting. HR had set a comprehensive schedule on how long an employee will learn a job in an operational area. After three-month long training, HR critically assessed the employees' improvement in terms of knowledge and skills through an interview and accordingly made promotion decisions. This phenomenon is manifested in the excerpt below:

*“Say for example, despite having qualifications, many are not getting jobs in other sectors, and they are doing normal job here. Many master’s degree holders are working in the line of quality here who could have worked in a better position if they had an opportunity. Circulars are issued every three months from the HR department to identify and promote those who have master’s qualification. Many hide it, because their overqualification is a barrier to get the job they do here. They are doing such lower-level job due to having financial crisis. Our HR is trying to find out such people and grow them up. We are trying to make better use of our young generation, particularly those who have talents. After identifying such qualified employees HR tries to prepare them, groom them, provide them specific job-related training. They are given training in different areas of operation, say, 15 days in merchandizing, 15 days in quality, 15 days in cutting, 15 days in swing. I have done such training myself.” (RMG A–1, AGM, Head of Merchandising and Marketing)*



The above findings indicate that RMG A has adopted several learning interventions in the form of induction, education, training, awareness building, and management development to create both firm specific and generic human capital.

### **5.3.3 Healthcare – An HCD Intervention:**

Employee health is given the utmost importance in RMG A. The research participants stated that there is a separate medical center within the factory premise where every employee has equal access for preliminary treatment. A certified MBBS doctor and a nutritionist serve there as fulltime employees. There is a health check-up arrangement for employees so that preventive measures could be taken well ahead. Every year employees undergo health examinations like eye vision test. However, if an employee confronts serious health complications, he or she is immediately taken to a nearby clinic for better treatment. In that case, the company bears the necessary expenses.

Moreover, employees are made aware of health and safety. They get relevant training, such as fire training, safety training, and environmental training so that they can understand the potential health hazards and handle the hazardous materials and equipment cautiously. The HR department regularly organizes health related workshops for factory workers and managerial staff. Not only their physical wellbeing, but also employee's mental health is also taken care of in RMG A. There is an arrangement of one-to-one counselling for employees experiencing mental shock, frustration, or disappointment.

All the participants of RMG A, when asked about their health, firmly replied that they are happy with the healthcare facilities as highlighted above. They strongly argued that health is an essential component of human capital, and that healthcare is a great means of HCD since physical or mental sickness of employees cause serious interruption at work. An employee's

illness does not only affect individual job performance; rather it disrupts team performance. Poor health is like poor knowledge or poor skill as it results in similar poor performance. In fact, any intervention that can enable employees to work productively should be regarded as a means of HCD and this notion is reflected in the following excerpts:

*“I think Yes it can be. Health is the main driving force for a person. If you do not feel good either physically or mentally, you cannot work productively. So, providing employees a sound healthcare facility is mandatory for the employer to keep the employees fit and capable. And I believe without it, employee development is simply impossible.”* **(RMG A-6, Merchandizer, Merchandising and Marketing)**

*“Yes, of course. If the employees are not healthy, how can they work well? So, it is important to ensure their good health. I think employer should take the responsibility in this regard. If employees are physically and mentally well, they will perform better, production quality will be ensured, and our plan will be successfully executed. So, yes, having an improved healthcare facility is a big tool for employee development.”* **(RMG A-4, Senior Executive, Planning)**

*“Our production manager has been ill for the last seven days. Our production has decreased, which you saw here by yourself. And this is due to the illness of our production manager. He could not respond to our call, there was a delay in decision making. So, health is the most important thing, not only for a production manager but for all from security guard to the top-level executive. If our security guard gets sick, it will be seen that he will be late to open the gate. In that case our vehicle of garments will not reach the destination in time, and we know time is money. If our workers are not efficient or healthy, they will not be able to give 100% in their work.”* **(RMG A-1, AGM, Head of Merchandising and Marketing)**

The above quotes rationalize that healthcare is one of the vital HCD interventions for an RMG establishment. It is evident that ill health causes higher absenteeism, lack of attention, delayed decisions, poor quality production, shipment failure, and thereby loss of business. In RMG A both learning and healthcare are equally perceived as the vital means of HCD that can subsequently impact quality management.

#### **5.3.4 Evaluation on TQM:**

The various aspects and overall standards of TQM implementation in RMG A were clearly reflected through the research participants' responses. During the interview participants commented satisfactorily on the quality of cutting, sewing, printing, dying, knitting, and support managerial activities. RMG A-6 stated that the biggest responsibility for them is to provide the buyers with 100% quality garments and service. In fact, quality comes from a total quality system that RMG A implanted with a state-of-the-art technological setup. More importantly, employees driving this quality system are highly skilled and committed. However, the following excerpts are few instances of how RMG A endeavors to retain quality in the operations:

*“...for example, we have a pull of suppliers, and we regularly judge them. We judge our suppliers in every six months on three criteria such as delivery, commitment, and quality. We grade them and accordingly place orders for raw materials. We examine the quality of our finished goods critically before exporting them to buyers. We also appraise the performance of our employees every six months by using KPI (Key Performance Indicator) method. We use and maintain MS Excel chart for both workers and managerial employees.” (RMG A-6, Merchandizer, Merchandising and Marketing)*

*“Here our target is to satisfy the ultimate users, not the police (quality inspectors). Our fabrics team, quality team, cutting team and all other teams do their level best to ensure optimum quality to ensure customer satisfaction. We test the quality of yarn critically at the time of purchase. Later we test the yarn again. We have an independent quality team working in the sampling stage who do not have any shipment date. They will just give data and based on their feedback, the materials team will say that – ok, we can use this material as it complies both the buyer requirements and our standards. Then there is knitting, fabrics. The chemicals we use are hazard free, world class. We have our own testing lab, which is fantastic, I must say. Besides, even if you test our fabrics in an outside lab, no problem will be found. There is evaluation too. We believe in continual improvement.” (RMG A–2, Manager, Quality)*

*“We have developed a database that shows how many inspections failures we had in the last season. The database shows the total defect percentage, the number of rejections out of thousand pieces garments checked. Later we try to find out the root causes behind the quality related problems and then we determine how to solve the problems. So, you understand that we proceed the materials for production after testing. We ensure the quality before starting the production. Besides, we use a special board in the production line that highlights the number of errors a worker commits in a day. The use of such board helps them to correct the errors and perform a better job. It is called DHU (Defect per Hundred Unit). Even we set a DNA board in which the details of the whole year are listed. This is our invention, which is very uncommon in garments sector. Through this DNA board a comprehensive analysis of work is made to ensure the quality of garments. The person who is liable for any defect of the garments can be traced out through this DNA board. Where the fault exactly lies can*

*be identified through this board and hence the solution is easy to find.” (RMG A–1, AGM, Head of Merchandising and Marketing)*

These kind of systematic practices and procedures across the operation are essential requirements, without which finished products will fail to satisfy the quality criteria in the inspection and remain unsold. Even if the goods are sold otherwise, the post-shipment customer feedback will certainly be negative, affecting the market reputation. RMG A–2 reported that buyers are not only concerned about the quality of finished garments, rather they also critically monitor whether quality is maintained in every single task. RMG A–3 highlighted the current covid pandemic and informed that even during this difficult time, their buyers, like H & M, seek day to day updates from them through virtual meetings. They are now performing the inspection online. H & M has created a self-inspection team at the workplace. The members of this team are the employees of RMG A, but they are working as the representatives of H & M. They are known as nominated quality controller (NQC). This NQC team regularly inspects the work and gives H & M thorough feedback on the quality of work. They do it in a very transparent manner through virtual meetings. Cartons are opened in front of them so that they can accurately check the items and accordingly report to H & M. After getting positive feedback from the NQC team, H & M places purchase orders.

Generally, it is thought that quality has an inverse relation with the price but RMG A–5 exclaimed that TQM helps them reducing wastage and rework, increasing production quality as well as quantity, and ensuring zero defects. Since they use quality raw materials, advanced technology, and skilled manpower in the operation, the work efficiency is very high; that reduces their cost of operation. Though their buyers pay more attention to quality rather than price, RMG A successfully controls the cost and offers reasonable price for products. The

following excerpt demonstrates how TQM helps RMG A to reduce the cost and survive in the competitive market:

*“I can give you another example. 130 liters of water were used earlier for dying 1 kg garment. Say the price for those 130 liters of water is 130 BDT. But now we need only 30 liters of water for dying the same quality garment as we use some quality chemicals. Consequently, now the cost is only 30 BDT instead of 130 BDT. So, we can now save 100 BDT. If we now spend 80/90 BDT out of that 100 BDT for developing our employees, we still have 10 BDT in our hand. And we survive well in the market.”*

**(RMG A–5, Officer, Production)**

### **5.3.5 Soft vs Hard TQM Aspects:**

All the research participants of RMG A uniformly contemplated that HCD is the precondition for effective TQM implementation and successful business operations; however, none of them disregarded the necessity of hard TQM elements like technology or automation. RMG A–1 stated that developing soft element (people) should be given greater emphasis than automation since the need for a skilled workforce is more crucial to lead the quality system that exists in RMG A. He argued that the functional use of the sophisticated technology adopted in their establishment largely depends on skilled manpower that they have. RMG A–4 deem human capital as their core area of strength. Therefore, RMG A–3 emphasized on developing the existing workforce robustly before implanting newer technology into operations so that the organization can reap the absolute benefits from a high-tech system. However, RMG A–2 opined a bit differently that focus should be given only on HCD, as embracing a modern technology involves much higher investment. He treated HCD as an alternative to automation, while other participants asserted that hard elements are necessary for TQM implementation

though their utilization largely depends on human capital. The following excerpts explain the importance of soft aspect over hard elements in relation to TQM implementation:

*“I think we must focus more on employee development if we want to keep and improve quality. No matter how efficient the system or technology is, if people do not understand their work, then only wastage will be increased. Before adopting a new system or technology, people need to be prepared for that.” (RMG A–5, Officer, Production)*

*“I will go for employee development at first for sure. I think if we don’t care for employee development, it won’t be possible to run a highly advanced system or technology. In my opinion, skilled human resources can change the organization better than high technology. High technology does not run automatically by itself. It is rather run by human beings. Right. Now if employees are not technically sound, the system will not run automatically.” (RMG A–6, Merchandizer, Merchandising and Marketing)*

### **5.3.6 HCD Implications for TQM:**

As illustrated in the previous subsection, soft elements (people) have greater importance than hard aspects in TQM success, and HCD has been found as a more substantial factor in TQM implementation. According to RMG A–1, employees working in different functional teams have a keen sense of understanding about job-related duties and responsibilities that are generated through HCD measures. Consequently, they can perform a job in a time effective manner. RMG A–6 has an identical viewpoint in this respect and contended that if he were given advanced training on merchandizing skills, he would be capable to finish a task in 30 minutes that takes now almost two hours. It is essentially the span of time that can be saved by

having enhanced knowledge and efficacy. Participants argued that TQM cannot be implemented without effective time management, and it is HCD that plays a critical role in ensuring effective time management at work. Another aspect is that when employees gather the right professional knowledge and skills, the need for supervision naturally decreases. The following excerpt explained this aspect of time management:

*“Actually, if you educate your people, if you train them up, if they are actually ready for the job to do, then you need not supervise them all the time because they become really expert in their area. So, you can save your time. As a superior I typically give my subordinates the right weapon, I show them how to fight, then they are made free to fight in the battlefield with their insight and tools. That’s it.” (RMG A–6, Merchandizer, Merchandising and Marketing)*

Besides, both RMG A–6 and RMG A–1 contended that when employees receive constant guidance on job assignments, they become capable to work confidently and effectively. They argued that continuous learning is instrumental for specialization, and it brings about a positive attitudinal change among employees towards their job as well as the organization. It makes them feel that the employer cares for their capability enhancement and subsequent career development. HCD interventions in the form of learning and healthcare have profound impacts on increased commitment and loyalty resulted in quality accomplishment, which is reflected in the following excerpts:

*“As an outcome of employee development, I have noticed that migration has decreased a lot. I mean it help us in retaining qualified people. Few employees may leave as they get attractive job offer in other companies. But we typically promote our employees to the right place and right position when they become fully competent by means of*



*employee development measures. That's why they become more loyal to their job and to our company. And they never leave us.” (RMG A–2, Manager, Quality)*

*“I have seen that, employees here who have been built as human resources by our management are more loyal not only to their job but also to (RMG A). They understand our language, they understand the language of the factory. Their level of commitment is very high. More importantly, I have seen such employees trying to develop others at the workplace too.” (RMG A–4, Senior Executive, Planning)*

*“My boss always teaches me, tells me how to do my job more efficiently, shows me the right way. It changes my way of thinking, my way of doing, my attitude and manner. I now feel my boss is not my boss; he is rather my teacher from whom every time I can learn something new with care. Sometimes I feel like I am in a college or university, not in a factory. This kind of learning environment here makes us competent and dedicated; that in turn helps implement a quality system.” (RMG A–6, Merchandizer, Merchandising and Marketing)*

So, it is apparent that HCD does not merely remove knowledge or skill gaps; rather it creates a positive mindset among employees. A strong team spirit subsequently develops among the employees, and they learn how to behave in a participative work environment. HCD interventions make the employees tailored to work as an effective team member. Such measures also improve employee relations that are required for participative management. So, on the one hand, managerial employees and factory workers gain the required expertise to get involved and empowered in a professional manner and on the other hand, the cordial labor-management relation itself acts as a stimulator to exercise participative management system. In fact, participative management, which is a fundamental pillar of TQM, demands employee involvement and empowerment that can be boosted up through HCD interventions.

Participative management system prevails in RMG A since the employees have the required capabilities, which is exhibited in the following excerpts:

*“I think employee development initiatives play a great role in boosting industrial relations. I mean the relations between labor, management, and all. The capability of employees to participate in problem solving and decision-making enhances when they get such training and development. They come to understand how to share their opinions with higher authority. We follow a participative management style here in our organization. We give ideas to our subordinates, we also take ideas from them, and we have a policy on that. After judging the merit of their idea, if we realize that, yes, it might be effective, we really accept that. Now if our employees did not have that kind of qualification or capability, they could not participate in various activities with us. They even could not exchange ideas with us. If we did not take those employee development measures, it is certain that we could not run the participative management style well, which is essential for ensuring quality.”* **(RMG A-3, Senior Executive, HR and Compliance)**

*“I also supervise and guide my subordinates. I never try to clip their wings; I rather make them free. I show them the right path, show them how they will do the job in an efficient manner. Of course, I make them free does not mean they will not be made accountable. So, you can say its restricted or controlled freedom. I teach and then encourage them to think creatively. I experienced that my subordinates work better in such a flexible environment where the boss is not dictating or dominating them all the time; rather the boss acts as a mentor. I see they are doing their part quite nicely.”* **(RMG A-6, Merchandizer, Merchandising and Marketing)**

So, RMG A successfully follows participative management style since they have a dedicated and competent workforce which subsequently facilitates TQM implementation. On the other hand, innovation is perceived as a rudimentary prerequisite for effective TQM in RMG A. HCD can play a critical role in this respect since it is reported that employees working in different functional wings share creative ideas with co-workers. They are now pushing their creative product design into their buyers rather than pulling ideas from the market. Previously buyers provided them with the design specifications, whereas they now proactively work on design development and offer a comprehensive list of product designs to the market from which buyers can select. RMG A-1 therefore claimed that they do not merely follow buyer's specification, rather they themselves create specifications. Knowledge-centric HCD measures trigger creativity given that people can think and work innovatively when their cognitive stock increases. The following excerpt shows how creativity is instigated by HCD measures in RMG A:

*“We are now creating customer requirements smartly. We develop options from which they can easily choose one. We tell our buyers “We can make design for you”. We create design as per the environment, climate of the buyer's country. Moreover, I have also noticed that now the members of my quality team can give me new ideas, they can work more creatively than before. And do you know what is the mystery behind this? It's nothing but the initiatives taken here to upgrade our knowledge, to enrich our thought process.” (RMG A-2, Manager, Quality)*

### **5.3.7 HCD – TQM Linkage:**

The perceived nature of relation between HCD and TQM has been found explicitly positive in RMG A. The quality manager RMG A-2 reported that HCD measures have a strong link with

the quality of RMG operations and subsequent finished goods. He underwent that everywhere in the factory operation from yarn to composite, wastage and alteration decreases significantly as outcomes of different HCD interventions. RMG A-6 explained this association more patently considering HCD and TQM as independent and dependent variable respectively. He explained that TQM is contingent on HCD because it is the people who assure and deliver quality in practice. Hence, the functionality of the whole organizational system mostly depends on the effectiveness of HCD interventions.

Participants shared various instances while explaining the overt linkage between HCD and TQM. For an instance, RMG A-4 was sent outside from the HR department to participate in an off-the-job training session. Joining that training he learned several new skills and ideas that he later applied into his work and found the implications highly positive. He can now deal with planning issues much better than before because of that learning experience. RMG A-5 experienced similar connection between HCD and TQM as the ongoing HCD interventions like education, training, and development, enabled him to perform more efficiently in the production unit. In fact, successful TQM implementation depends on how efficiently and coherently employees are performing in their team.

While hiring new employees, the HR department critically examines the suitability of each candidate and accordingly makes the selection decision. After the placement, the job incumbents are nurtured in such a way that they can contribute to the quality enhancement. For example, employees are shown relevant work procedures in a detailed manner through power point presentation in a special arrangement that helps them to know about how something could be wrong before they commit that. Accordingly, they can prevent themselves from doing the wrong by following the specified guidelines provided by the trainers and supervisors. The excerpt below implies the connection between HCD measures and TQM implementation.

*“...say for example, there was a new style of bra item which was bit critical for many of our workers to follow. When employees were given thorough ideas on it through a workshop, it became easy for all to follow the style. In that workshop I made a presentation on it, I showed the potential defects, type of defects that might occur. I taught the participants coming from the total line. I taught them how to resolve the problems, how to correct the defects. It has now become very simple and easy for our workers to deal with the new bra style. Our alteration has decreased a lot. Rate of defects has decreased, productivity has increased, and quality has improved.” (RMG A–2, Manager, Quality)*

#### **5.3.8 Suggested Measures:**

Participants suggested that the Bangladesh RMG sector faces tremendous challenges posed by its major competitors like China, Vietnam, India, and Myanmar. This sector is characterized by some fundamental limitations hindering the pace of its growth. RMG A–6 identified some underlying limitations, such as low skilled labor, inadequate power supply, raw materials dependency, lack of product diversification, but he stressed that unskilled labor is mainly responsible for the current stagnancy. The participants of RMG A shared their personal opinions on what HCD actions can be taken by different stakeholders in the RMG sector to retain and strengthen market competitiveness. They suggested many useful measures to the Bangladesh government, BGMEA, BKMEA, concerned RMG owners and management that might help implement TQM through HCD. The following excerpts present participants’ suggestions in this respect:

*“Government can establish a technical institute for providing training and sector specific knowledge. Quality related issues will be taught in that institute. Knitting,*

*dying, cutting, production etc. will be the subjects or modules of learning there. There will be extensive research on yarn in that institute. Then you will see tremendous growth and improvement of our sector.” (RMG A–1, AGM, Head of Merchandising and Marketing)*

*“I think BGMEA, BKMEA should sit together with the government and formulate some effective manpower development policies for this sector. They can also create more opportunities for our competency development. I think our government should increase surveillance in this case. I mean there should be a combined effort.” (RMG A–2, Manager, Quality)*

*“BGMEA and BKMEA mostly work for the workers. They should take more initiatives for the development of managerial employees. Selected employees from every RMG company can be sent abroad say 2 to 3 times each year for learning new things. Once they return from foreign training, they can share their knowledge, experience, exposure with their co-workers. BGMEA and our government should invest in this regard.” (RMG A–6, Merchandizer, Merchandising and Marketing)*

*“It is very much necessary to properly identify the employees’ knowledge gap, or skill gap, and I think the effectiveness of training and development depends on that. My job performance can be improved if you take me to the top RMG companies for 2/3 days and give me the opportunity to watch their practices. I know about our practices well but if I can observe the practices of top practitioners, I will certainly learn a lot from there and that will of course help to perform a smarter job.” (RMG A–5, Officer, Production)*

So, according to the participants opinions, as explicated in the above quotes, the Bangladesh government has a big role to play here for HCD and thereby TQM implementation. Government can undertake special initiatives to facilitate learning and research for the RMG sector. BGMEA and BKMEA should work together with the government in formulating a sound HCD policy. A collective effort is required since government alone cannot implement all the policies it devised. It is also uncovered that, different initiatives are often undertaken for garments workers, but the issue of developing managerial employees is not given due importance. Thus, the umbrella institutes, like BGMEA in association with government, should take some measures like sending core management staff abroad from each company every year for advanced management training and development so that they can bring back knowledge from abroad and apply the acquired expertise to stimulate the progress of this sector. The higher authority of the concerned RMG company can also facilitate learning for its executives and managers by granting them the opportunity to practically observe the operations and managerial practices of the leading RMG companies. Participants of RMG A also highlighted the significance of institutional literacy in developing a vibrant workforce for the future. RMG A-4 placed importance on devising and incorporating RMG related subjects in the curriculum at college and university level education. Besides, RMG A-5 recommended that RMG enterprises can offer internship opportunities to graduate level college or university students for three to six months as there is a chance that they might come to serve this sector in the immediate future. Such internship experience will expand their understanding level regarding RMG business and might interest them in working in this leading sector.

#### **5.4 Case Study: RMG B**

RMG B was founded in 1996 as a private limited company which has been wholly controlled by Korean management. It is located at Konabari in Dhaka. This completely export oriented knit composite factory is having vertical integration that involves knitting, dyeing, cutting, sewing, and finishing activities. Various types of garments like polo shirt, tee shirt, hoody, apparel are typically manufactured in its factory and exported mainly to North America and European countries, including the UK. The yearly export turnover of RMG B is around 30 million USD. It now works relentlessly to achieve the yearly target of 36 million USD. The major buyers it has been dealing with for a long time are Mind Bridge, Twinkids, OVS Kids, Matalan, C & A, Basic House, and TBJ. The reason behind maintaining a sustained business relationship with these top brands lies in the quality of fabrics it serves. Moreover, it has an alliance with Bangladesh ACCORD that regularly monitors its facilities and quality of operations. At present, 2100 full time employees, including both managerial staff and factory workers, are employed in RMG B.

#### **5.5 Reflexive Thematic Analysis:**

##### **5.5.1 Investment Perspective of HCD:**

Investment in HCD is perceived as a fundamental prerequisite for profitability and growth in RMG B. RMG B-6 shared his experience that the return of such investment is sometimes higher than expectations in terms of performance and productivity. As explained by RMG B-2 and RMG B-4, the HR department hires relatively unskilled or semi-skilled people as helpers at a lower pay, who are then given three months intense training. Once they become fully competent to work independently, HR promotes them to the junior operator position. So, instead of recruiting skilled employees at a higher pay, the company tends to invest in



developing its existing manpower. RMG B-1 viewed this make strategy as a more cost-effective approach than buy strategy. He illustrated this phenomenon in the following way:

*“Currently, if we want to hire a skilled operator, we have to offer at least 8000 taka (70 GBP) and the highest grade in this job position is 10000 takas (88 GBP). But we usually don't hire such; rather we recruit low skilled people as either trainee or helper and give them only 6000-taka (53 GBP) salary. Then money is invested by the company for their skill development and when they become capable to work as an operator, we promote them to that position and give them 8000 salaries. So, we spend money for employee development and try to save cost in this way.” (RMG B-1, GM, Production)*

The research participants firmly believed that investment in HCD is a cost effective yet more value generating activity, hence should be given the highest priority by the owner.

### **5.5.2 Methodical HCD Practices:**

Once upon a time the HR and compliance issues were extremely neglected in the Bangladesh RMG sector, which, according to RMG B-6, caused serious chaos at the workplace and repulsed many international buyers in turn. However, the situation has improved a lot recently and like many other companies, RMG B has also established a separate HR department. This department, as described by RMG B-5, has been engaged in HCD related activities. In his opinion, the HR team has been trying to develop the existing workforce in line with the government and company rules. In addition to the systematic HR interventions, all other functional departments also play an active role in HCD which is illustrated in the following excerpt:

*“Well, we know that when a boy gets admitted into a new school, all the teachers take necessary cares together so that the boy can do really well in his study. Similarly, in our factory, we care and build our people in such a way so that they can do well in their work.” (RMG B–2, Manager, Finishing)*

A group wise formal induction is organized for newly recruited factory workers by the HR employees as a routine work. This induction session usually runs for an hour. During this time, concerned HR staff briefs the workers on pertinent matters such as, how long the working hours would be; what would be the nature of the working environment; how many days will the factory workers be entitled to get as sick leave, causal leave, maternity leave, or earned leave; how long the lunch break would be; what would be their salary package and when will they get it; what benefits will they receive; what would be the nature of work of different committees formed at workplace; how they will have to participate in their work actively. Basically, during this one-hour induction, a lecture is given on the job-related affairs as well as different rules and regulations of the company. An induction program is also informally arranged for newly hired managerial staff. Entry level management employees get oriented with their colleagues, as well as job-related matters, and organizational rules. The following excerpt is an example of such informal induction:

*“Of course, it is nowhere in the written form. I can give you my own example here. There was an induction for me when I first joined here and that was conducted by a person from the higher authority. So, the thing is, induction for factory workers is managed by us, I mean, the HR department and that for managers is handled by higher authority.” (RMG B–4, Senior Officer, HR and Compliance)*

Besides, RMG B has a separate training center under the HR department that conducts regular training and development for both newly hired and senior employees. Freshers are

given three months mandatory training in which they are required to work with waste raw materials. After such programmed training, they are given a placement as junior operators. RMG B-1 claimed that the production employees of his department are coached in the training center in such a way that ensures their prospective career mobility path. In addition, on-the-job training facility is available in every floor of the operations. Explaining the nature of on-the-job training, RMG B-2 mentioned that in the finishing department, workers are shown how to do a job practically. Later, a post evaluation is conducted to see whether workers are performing the job to the desired standards. During the follow up phase, if anybody is found committing errors, a line supervisor further instructs him on how to correct the errors. RMG B-3 also highlighted the role of the line supervisors in educating the workers on various English terminologies used in the factory. RMG B-1 stated that the common terminologies they use at their workplace are English, an example of which is given below:

*“For instance, we say sleeve rather than hata. Therefore, without developing the English literacy of our poorly educated workers, we cannot expect them to understand and do the work properly.” (RMG B-1, GM, Production)*

Apart from language education, various training programs are conducted in RMG B throughout the year, which include Personal Protective Equipment (PPE) training, Business Social Compliance training, Chemicals Handling training, Physical Demand training, Grievance Handling training, Health and Safety training, First Aid training, Pregnancy Awareness training, etc. Moreover, fire training is compulsory for all the employees. Employees are made aware of buyers’ code of conduct, legal rights, and such issues. These measures are primarily undertaken by the HR department. In RMG B, the HR department basically follows a methodical approach for HCD which is evident in the following excerpt:

*“I have been working here for many years. Since joining, I see that HR department calls for a meeting every month, usually on the first Thursday of every month. Separate meeting is organized for factory workers and managerial employees where HR raises different work-related problems for critical discussion. HR seeks for suggestions from both factory workers and us on how to develop a strong workforce for solving the performance problems. Through discussion with both the parties, the HR decides on how to enhance our capacity. The HR prepares a monthly report and works on that for our development, which I have not seen anywhere else. From such meeting it becomes clear to the HR what can be done for enabling us to give the maximum output.” (RMG B–5, Merchandizer, Merchandizing and Marketing)*

### **5.5.3 Healthcare – An HCD Intervention:**

Every participant of RMG B firmly argued that healthcare is a vital means of HCD like any other learning intervention discussed in the previous subsection. Managing a conducive healthcare facility is perceived as a fundamental requisite. RMG B–3 opined that human capital is the composition of health and learning in which both are equally important. RMG B–4 added that developing human capital with only education or training is impossible given that health is an integral component of an individual. RMG B–1 and RMG B–2 illustrated that management cannot expect productive behavior from an employee who is suffering from either physical or mental illness. In addition to physical health, it is also necessary to pay attention to employees’ mental health. They both expressed in a similar way that an employee’s sickness and subsequent absence or mindlessness causes serious problems in the entire operation. RMG B–1 pronounced that it is more problematic when a competent employee remains absent from his job due to personal illness. It is actually very difficult to find an immediate replacement of

such an employee to continue even routine works. How ill health of employees might create operational disruption is demonstrated in the excerpt below:

*“To achieve 100% quality and quantity, say 20 workers are needed to work and all on a sudden it is seen that 2 workers go for sick leave due to ill health conditions. In that case, there will be a shortage of 2 labor that will badly hamper our production. Production will be delayed and on time shipment will be disrupted. Moreover, if the work of 20 people is done by 18 people, the quality of work will be lost for sure.”*

**(RMG B-1, Manager, Finishing)**

In this case, RMG B-6 agreed that employee healthcare is a part of their HR responsibility. He stated that if anybody falls sick while working, it is the HR who needs to take immediate actions for recovery. However, he confessed that HR is yet to accommodate this critical aspect in practice. Although a medical center was established long ago for providing physical healthcare to the employees, most of the participants believe that this facility needs to be improved a lot. RMG B-1 elaborated that the medical unit should be enriched by employing a certified MBBS doctor and trained nurses who will serve as full-time employees. He also emphasized on recruiting at least one certified female doctor since most of the factory workers are female and cannot always share health complications with a male doctor spontaneously. On the other hand, RMG B-2 claimed that there should be a health check-up arrangement for the employees as early diagnosis might help prevent more severe conditions. Besides RMG B-5 added that given the current COVID situation, it is of great necessity to implement the safety rules everywhere in the organization.

In RMG B, management provides tiffin or food stuff like egg, banana, fresh water for factory workers when they continue working after 7 p.m. to keep them productive. However, considering its potential health risks RMG B-1 feels that lengthy working hours or regular

overtime duty is not an ideal practice. He believes an employee should not be allowed to work for more than 10 hours in a day. RMG B-2 placed a great importance on formulating transparent rules for overtime duty because he had experienced that, workers doing overtime on a regular basis seriously suffer from fatigue, insomnia, and other health problems. This phenomenon is reflected in the following excerpt:

*“Our workplace is like a prison. It is a prison. A worker does general works from 8 to 5 and then does overtime till 8 to 10 pm. As a result, many of them doing excessive overtime become physically ill. Many of them cannot take sufficient food even due to the busy working hours. Well, if I cannot eat or sleep properly, I am not supposed to stay healthy. I think HR should fix this issue. It is not right for management to allow a worker to do excess overtime even if he wants.” (RMG B-2, Manager, Finishing)*

Synthesizing the participants’ opinions and viewpoints it can be understood that to gain optimum productive output from the existing workforce, RMG B should pay more attention to employee healthcare.

#### **5.5.4 Evaluation on TQM:**

Gaining competitive advantages in the international market heavily relies on how efficiently TQM is executed in an RMG establishment. RMG B-3 explained this aspect in a detailed manner. He narrated that when buyers come to visit the factory, they critically inspect the overall working conditions, operational procedures, payment and benefit system, security system, and quality control mechanism. They place a purchase order only when they find everything in compliant manner. Besides on time shipment is also crucial in this respect. So, an RMG company cannot sustain internationally unless it meets all the quality criteria. It means a quality management system must be established to ensure survival and growth of business.

Moreover, as RMG B is a composite factory having knitting, dyeing, cutting, sewing, and finishing operations, it is crucial to secure quality in the integrated processes. RMG B-5 asserted that they attract and retain buyers and gain market competitiveness by managing quality in the entire vertical system. The following excerpt explains this phenomenon:

*“When buyers don’t have any complaint regarding our product quality and they are satisfied with the delivery, it is seen that, say, a buyer who placed 2 lakh pieces order this year, will place 5 lakh pieces order next year. So, this is due to both the quality of our garments and on time shipment. Those who buy once from us come for repeat purchase. This is how we are retaining our buyers.” (RMG B-2, Manager, Finishing)*

However, participants shared diverse viewpoints on TQM, though they all remarked that the business performance of RMG B in terms of export growth is satisfactory. It necessarily indicates that quality is maintained in the overall supply chain. RMG B-4 was one who was a little displeased regarding the TQM status. She stated that, due to the shortage of competent employees, they are yet to implement quality management. Being a responsible HR personnel, she acknowledged that they have not been able to develop and place the right people in every position, which she thinks is a precondition for TQM success. On the other hand, RMG B-6, who is also an HR personnel, expressed that he is satisfied with the TQM status which can, however, be improved if the entire workforce exhibits superior performance. So, transparently both RMG B-4 and RMG B-6 contemplate HCD as an essential requirement for effective TQM implementation. An identical notion can be drawn from the following excerpt as well:

*“Frankly speaking, I am not 100% happy with it. There are many things to improve here. Our HR team is trying to support us but if they could take more initiatives for our managerial capability development, I think we would be able to ensure better quality*

*everywhere in a more organized way.*” (RMG B–5, Merchandizer, Merchandizing and Marketing)

On the other hand, the head of the production department RMG B–1 considered the existing backdated factory layout and environmental constraints as some critical barriers in the path of TQM implementation. He reported that the dependency on other countries for yarn import is also a major limitation in this respect. However, he argued that their products have growing market demand in North America and European countries because of excellent quality. Dealing with buyer’s complaints is a rare event, which also implies that quality is well maintained in operations. RMG B–1 strongly uttered that it is not the state-of-the-art factory; rather the workforce that made it happen.

#### **5.5.5 Soft vs Hard TQM Aspects:**

According to the participants’ opinions, both hard elements like technology, machines, automated system and soft element or people are required to ensure quality at workplace. None of them disregarded the necessity of hard or soft aspect. However, all the participants strongly argued that HCD is more critical than automation in the context of RMG B and the national economy. RMG B–1 took a philanthropic approach in this regard contending that complete automation in the RMG sector might cause huge unemployment problems in Bangladesh since men will be replaced by machines and the need for labor in production will be drastically reduced. RMG B does not still embrace advanced technological setup. However, RMG B–1 opined that it does not cause any significant problem in the quality of production. Despite having a relatively backdated technological arrangement, RMG B retains its quality in a consistent manner and thereby operates profitably in the market. This is perhaps due to the fact



that the HCD interventions undertaken by the HR results in expected employee behavior, which is manifested in the following excerpt:

*“I told you earlier that we are maintaining quality successfully despite having relatively old technological setup at factory and it was possible as we have the right people in the right place.” (RMG B–6, Assistant Manager, HR and Compliance)*

However, HCD is not necessarily an alternative to automation; rather the outcome of HCD i.e., a skilled workforce is essential for effective utilization of an automated system. The participants working in different functional areas uttered that these two are inextricably linked with each other and RMG B needs both for its business growth. At the same time, they strongly argued that HCD needs to be assured first and then the management can attempt to upgrade technological setup. They all emphasized on transforming unskilled and semiskilled people into a competent workforce that can be followed by the adoption of appropriate technology. RMG B–5 specifically mentioned that for effective TQM implementation, what is more crucial is to address developing the competency of existing workforce. RMG B–2 justifiably uttered that unless employees can genuinely involve themselves in the system, there is no benefit of using that newfangled mechanism given the fact that it is human beings that work behind every single machine and system. This phenomenon is clearly demonstrated in the following excerpts:

*“...say, a manager has a smart laptop or PC on his desk for official use, but he does not know at all how to operate it. In that case, there will be no benefit of investing in a laptop for the company.” (RMG B–3, Manager, Admin and Accounts)*

*“If we only use the best technology but don’t have the best people, do you think that technology will work? ... (Smiling) ... I don’t think so.”* (RMG B–4, Senior Officer, HR and Compliance)

So, without HCD, automation alone cannot implement the quality functioning. For instance, RMG B has recently launched a new CAD (Computer-aided machine) section where a person skilled in IT is essentially needed to operate the CAD machine. Of course, it is not always possible to hire skilled people for every position and thus HCD is the only solution. RMG B–4 explained that management may decide to replace all the running Bangla machines by high tech machines to save the cost, but simultaneously they will have to place skilled employees to reap the maximum benefits of automation. All the research participants of RMG B feel that before embracing automation, bringing sophisticated technology, or fixing modern machineries, it is imperative to improve the capability of the existing workforce.

#### **5.5.6 HCD Implications for TQM:**

As discussed in the previous subsections, it is the human capital, not high-tech system, that ensures quality in RMG B and so all the research participants emphasized on HCD. HCD in the form of learning and healthcare plays a significantly critical role in assuring quality management in numerous ways. RMG B–3 elucidated the concept of HCD as an attempt to build managers and workers in such a manner so that they can work together competently, which is necessary for TQM execution. HCD means keeping employees fit for a participative management system in which everyone’s active involvement is indispensable. RMG B–1, RMG B–2 and RMG B–5 reported that the HCD interventions undertaken in RMG B not only increased the employability of the trained employees, but also increased their level of interest, involvement, and commitment in the work as they feel more secure in their job. Enhanced

competency has an obvious correlation with greater job security and opportunity. RMG B-2 stated that employees have now become more aware of their roles and responsibilities and learned how to behave constructively in the workplace. He argued that this is the principal reason for not having the buyer complain about their quality of service. As a matter of fact, TQM implementation requires the creation of a capable, committed, and loyal workforce that can serve the organizational purpose in the best possible way that RMG B has, which is reflected in the excerpt below:

*“Well, there is a demand for our employees in the job market, but nobody is leaving. As we are getting motivation and opportunity to develop our credentials, we are not leaving. I can tell you, yes, there are people here who have been working since 1995 and they did not leave amid hundreds of adversities. Obviously, they still stay as they got such a positive work environment, training, and motivation.”* **(RMG B-5, Merchandizer, Merchandizing and Marketing)**

In fact, effective HCD interventions can have considerable impacts on employee behavior. RMG B-4 highlighted this issue of behavioral development, which she thinks is very critical for TQM implementation. She explained that she works in such an environment where diverse types of people are working together. From the HR, they always guide the staff to behave properly and ask them to avoid undesirable practices like discrimination, corruption, and confrontation. As a result, employees become aware of expected job behavior and conscious about how to deal with co-workers. It greatly affects the work environment and subsequently the overall functioning of RMG B.

Besides, RMG B-5 described how the HCD interventions foster innovation at the workplace. Both the managerial staff and factory workers can share constructive thoughts and ideas with each other in the regular monthly meetings (quoted in 5.5.2). They are empowered

to actively participate in such meetings as they have the required understanding level. They can generate new ideas and offer imaginative solutions to different problems encountered, which is not possible unless they have the right professional knowledge. Moreover, RMG B–3 informed that the trained team of design development continuously generates innovative product designs that attracts their existing and potential customers.

Furthermore, RMG B–1 stated that HCD intervention in the form of hands-on training converts the trainees into skilled operators in his production department, from whom the company is receiving greater output in relation to the HCD investment. The wastage cost and need for rework decreases significantly. RMG B–2 mentioned that since the workers in the finishing department have the opportunity to learn the work through watching the standard operating procedure (SOP) on the projector screen, they can better put the learning into practice. He described that respective employee of RMG B gets engaged in meeting with buyers to know about the specifications and specific guidelines. Such HCD measures are instrumental for continuous improvement that eventually facilitate to meet buyers' requirements.

#### **5.5.7 HCD - TQM Linkage:**

The participants of RMG B discern an intense connection between HCD and TQM. RMG B–5 noticed that after attending different HCD programs, the level of employee competency in the merchandizing department increased significantly. The HCD interventions in the form of knowledge and skill sharing resulted in reduced wastage, increased production, and decreased overtime schedule. RMG B–2 similarly observed that the labor efficiency in the finishing department increased, and employees can perform their job with greater accuracy due to learning new skills constantly. It helps RMG B to conduct business with higher profit margins

given that increased productivity leads to increased profitability. RMG B–2 highlighted the spiral effects of HCD by explaining that employees get financial rewards from the company because of productivity gains that subsequently boosts up their degree of involvement, enthusiasm, and commitment to the organization as well. The linkage between HCD and TQM is evident in the following excerpt:

*“As I am involved in the HR department, which relates to all other functional areas, I know how quality is maintained in production or merchandizing or other departments. So, based on my experience, I can tell you that the measures we undertake for employee development from HR affect the quality of work of all other departments. This is certain. When we continuously educate, train, and motivate employees, we see a positive change in their behavior, their involvement goes up. In fact, due to our constant effort in this regard the minor problems that used to happen in our factory earlier are no longer happening. Our work environment is also improving.”* **(RMG B–4, Senior Officer, HR and Compliance)**

Participants of RMG B stated that most of the factory workers are either semiliterate or illiterate and have limited knowledge about job related matters. After joining the work, they come to learn the code of conduct and receive relevant training from the HR. Sometimes buyers even train them, and eventually positive changes take place in their mindset. They come to realize the expected job behavior and can demonstrate themselves accordingly, which is vital for TQM implementation. Certain HCD measures are found to be quite effective for behavioral modifications. Without behavioral development, it is evidently difficult to maintain an ideal work environment and quality operations. RMG B–4 thus addressed the need for learning how to control anger and work productively under stress. The following excerpt explains how learning such things helps to ensure greater productivity at the workplace:

*“Suppose after being scolded by a GM, a supervisor becomes bad tempered and started showing anger to a worker in the floor. Now if the worker also starts quarrelling with his line supervisor, it will be seen that production is hampered or the quality of production falls. But, if the worker can stay calm and cool, behave politely with the line supervisor, at the end of the day you will see both are gainers. The line supervisor might say sorry to that worker.” (RMG B–6, Assistant Manager, HR and Compliance)*

#### **5.5.8 Suggested Measures:**

The participants of RMG B proposed several actions on HCD to be taken by relevant stakeholders that they presume are essential for effective TQM implementation and subsequent growth of the Bangladesh RMG sector. Since there are still many companies in this sector not having an HR department, RMG B–6 stressed on this elementary issue of establishing a specialized HR department in every RMG company that will be primarily responsible for HCD. However, it is found that the HR team in RMG B arranges planned induction for factory workers, but the induction of managerial employees is very unplanned and unstructured, which should be improved according to RMG B–4. Besides, RMG B–6 suggested the top management address the need for promoting the managerial capacity of those like him who are involved in critical administrative job. He uttered that worker’s skill development is a much talked about issue nowadays but that of managers is not given due attention. The higher authority, therefore, should have specified plans and policies for management development programs in this respect. RMG B–2 thinks that bringing practitioners from leading RMG companies to share views and ideas with them or alternatively sending them to experience the SOP and disciplines of those companies will be significantly instrumental for HCD. In this perspective, RMG B–5, however, suggested that bringing expert management trainers will be

a more feasible and better option for developing their managerial competency, which is reflected in his following quote:

*“Here almost 60 mid-level managers like me are working. If experts from outside, say from abroad can be brought here to teach us management skills, it would be very helpful. It would be nice if the trainer guides us by setting practical examples. It will make the learning more effective, and we can apply our understanding into our job. Such initiatives will make us suitable for senior position. It is good for our personal career as well as for the future replacement in our organization.”* **(RMG B–5, Merchandizer, Merchandizing and Marketing)**

So, from the above excerpt it can be realized that in-house management development initiatives by bringing management experts can create future leaders from within mid-level management, which is pivotal for any organization to function smoothly. RMG B–3 in this perspective recommended a specific training program on Six Sigma and Kaizen that he feels might be quite effective, particularly for TQM implementation. On the other hand, some participants conveyed their anticipations that the employer could sponsor the different off-the-job workshop, education, training, and management development programs they attend voluntarily at their own expense. Such an illustration can be found in the following excerpt:

*“Franky speaking to you, it would be great for me if I can do an MBA, but I just can’t afford the cost right now. If my employer sponsors this, I could learn many things and I am sure I could handle my HR job in a much better way. I think how much I can give my employer depends on what my employer is doing for my development.”* **(RMG B–4, Senior Officer, HR and Compliance)**

Moreover, from the participants' responses it has been evident that the healthcare facility is not adequate in RMG B, which they all considered as a vital tool for HCD. RMG B-1 objected that the service provided in their medical unit is very limited compared to the demand. He emphasized on improving this service to a greater extent. Notifying the fact that most of the employees are female, RMG B-4 suggested to recruit at least one female doctor for them in the medical unit. Besides, most of the participants stated that, though preliminary physical health care is available in the medical unit, employee mental health is not well taken care of. RMG B-3 believes that mental health is sometimes more critical than physical health and if not adequately taken care of, can cause greater distraction at work. Highlighting the same fact RMG B-6 explained that if a childcare facility can be set up within the workplace, female workers can bring their child with them and do their job without stress while keeping their little ones in that facility. She believes that this kind of initiative can substantially improve employee mental health. If an employee's mental health can be nurtured in this way, management can expect to extract the optimum output. Having a childcare facility can certainly help female employees to concentrate on work and perform more efficiently. It can help strengthen their mental health and, thereby, occupational competence. This aspect is demonstrated in the following excerpt:

*“Suppose my baby is sick today, and I left him at home and come here to work. Now if my boss forces me for more work, he will not get 100% from me today for sure. But if there is a good child-care facility here for our kids, and an attendant to look after them, well, I can bring my child here and do my work productively with full peace of mind.”*

**(RMG B-4, Senior Officer, HR and Compliance)**

Besides, there are external stakeholders, such as Bangladesh Government, BGMEA, BKMEA that can play a key role in developing the current and potential workforce for the



RMG sector. RMG B–1 advocated establishing government funded specialized training centers in different parts of the country. He also highlighted that BGMEA and BKMEA need to assist the government to run these centers as they represent the sector and have the required expertise as well. Lack of coordination among these stakeholders is a probable cause behind the current stagnancy of the RMG sector and so he thinks that collective initiatives will be effective in this respect. RMG B–5 similarly advocated that in order to convert the huge number of incompetent labor force into skilled human capital, these stakeholders should formulate a long term HCD plan and work collaboratively to implement that.

RMG B–6 made specific recommendations that BGMEA along with the government can nominate potential management executives from each company and send them abroad to gain valuable knowledge and international exposure. It will not only benefit them, but also their employer and the whole sector in turn. Besides, RMG B–3 uttered that BGMEA can organize workshops and seminars on issues like how to handle the collective bargaining process and manage the factory workers professionally; how to design a compelling pay structure; how to deal with maternity issues, etc. He stated that BGMEA can guide them on how to train their subordinates. It seems particularly crucial in RMG B because there is a scarcity of competent trainers, which can be understood from the excerpt below:

*“Finally, I would like to mention that we need craftsmen to develop our staff. We have a training center here, but there is a need to watch critically whether we have right trainers there.” (RMG B–1, GM, Production)*

Given the fact that the RMG sector creates substantial employment opportunities in the national economy, academic institutions from primary to higher level should incorporate RMG as a special subject in the curriculum so that interested students can have the opportunity to learn about RMG business and prepare themselves for this sector. RMG B–1 and RMG B–2

stated that education is essential for HCD, which an employer cannot always provide to employees, but educational institutions can play a pivotal role by spreading RMG related knowledge among future generations.

## **5.6 Case Study: RMG C**

RMG C was established in 2018 as a fully export oriented RMG company located at Bagherbazar in Gazipur district. The total number of managerial and nonmanagerial staff currently employed in RMG C is only seven hundred. Besides, its yearly export turnover is only 5 million USD, which is, however, not insignificant in relation to the size of this fledgling RMG establishment. The various apparel items like polo shirt, tee shirt, hoodie, trouser, jacket, tank top is typically manufactured in RMG C, having huge market demand, particularly in Japan, USA, and European countries. Despite having limited resources, RMG C operates its business satisfactorily with respect to quality management.

## **5.7 Reflexive Thematic Analysis:**

### **5.7.1 Investment Perspective of HCD:**

RMG C-6 stated that in a broader spectrum the advancement of the Bangladesh RMG sector principally relies on the development of human capital necessitating massive investment in this regard. From the participants' responses, it has become apparent that investment is needed everywhere in RMG C for its future growth and expansion; however, they all gave special emphasis on HCD in this respect. RMG C-1 opined that financial investment at this stage is more required in HCD interventions like employee training and development, given the fact

that the existing workforce is mostly inexperienced and need more skill and exposure to deliver better quality output. Without sufficient fund allocation, HCD measures cannot be initiated and implemented by HR and relevant departments in RMG C. Besides, RMG C-5 mentioned about time that must be invested prudently behind HCD measures. In RMG C, the factory workers are mostly semiliterate, which often makes it more challenging for trainers and supervisors to impart relevant knowledge and skills to them promptly. The following excerpt illustrates this reality of RMG C:

*“If I just take an hour to train a managerial staff here, I need to spend two to three hours on the training of a factory worker. Because our factory workers are mostly uneducated, they have very limited knowledge. I don’t have to spend that much time to train a graduate employee. But training an illiterate worker is very time-consuming.”*

**(RMG C-1, Manager, HR and Compliance)**

RMG C-3 elaborated the same fact that, not only the factory workers, but also the managerial employees have shortcomings in terms of generic and firm specific knowledge. There are many employees working in RMG C who have poor academic backgrounds that necessitates investment in HCD. RMG C-3, however, also uttered that it won’t be sensible to anticipate that an academically qualified person will understand everything at an RMG setup and work competently without having further training and development. He contended that educational qualification does not always reflect an individual’s work efficiency at the workplace. In his opinion it happens quite often that educated people coming to work in the RMG sector face difficulties to cope up with the nature of job. So, investment in HCD is the vital issue in this respect.

### 5.7.2 Methodical HCD Practices:

RMG C-1 reported that ideal HR practices were a rare phenomenon in the Bangladesh RMG sector, even a decade ago. Mere hiring and firing types of job were poorly handled by the RMG owners themselves. However, over the last ten years this scenario has significantly changed and specifically the HR and compliance issues have gained noticeable attention. Many RMG companies have been bound to establish separate HR departments for managing HR related functions. For example, employee selection process in RMG C, as explained by RMG C-1 and RMG C-3, is conducted by the HR department. Even for hiring a helper in the factory production unit, which is the lowest position, the HR department must be made informed, and the HR policy and procedures need to be meticulously maintained. While hiring someone in that position, HR assesses the skill level, checks educational qualification, tests physical and mental fitness, and, based on that, selects someone. An interesting feature was shared by RMG C-1 in this regard that internship opportunities are provided to graduate level students and there is also a provision for recruiting promising interns in vacant positions. However, RMG C-3 described that, after the placement there is an immediate arrangement of formal induction for every employee regardless of hierarchical position or functional area. This induction is perceived as a useful HCD measure of the HR since it covers many aspects to educate a newly hired, not only about the assigned job, but rather on a broader organizational perspective too. The nature of this induction can be illustrated by the following excerpt:

*“This orientation is for all. This November, we divided the employees we recruited into different groups, and we are now giving them orientation training group wise. We are telling them about our company’s internal policies and procedures. We take feedback from them and ask them to give suggestions. If they share any problem we try to solve or if they suggest any thing, we try to accommodate that. We brief them everything*

*about their facilities and benefits, rules regulations and actions plans.” (RMG C–3, Executive, HR)*

After the formal induction, there is a probation system for managerial employees as well as for factory workers in RMG C. For example, a probation period of three months is mandatory for all the factory workers. In the knitting section it is also for three months by rule, though a helper is typically not assigned to operate a knitting machine just after the completion of the probation period. RMG C–6 clarified the reason is that the knitting machines are automated, and one cannot learn to operate such a complex machine within the stipulated three months. He explained that a helper of the sewing section can fairly learn how to use the sewing machine within a three months’ probation period but in the knitting section the machines in use are expensive and complex. That is why before placing a helper to operate such a machine, prolonged technical training is needed. The following excerpt justifies the longer probation and the need for long-term training in the knitting section:

*“The price of a single machine used in our knitting section is around 30 lakh Taka. So, I cannot leave it in the hands of a helper just after three-month probation who is not yet well prepared to use that. In that case what I do is, I give him full one-year learning opportunity. If he can serve here as a skilled helper, gets trained up, then I review his salary. For a year I try to develop him at work. After one year we interview him to understand his progress and based on the viva performance, we recommend that he is now ready to use a knitting machine in full capacity as an operator.” (RMG C–6, Manager, Knitting)*

RMG C–3 also stated that from the HR, they organize sessions for sharing technical knowledge with those who are directly involved in the factory production. There are many issues a worker is required to deal with, such as machine, light, seating arrangement,

temperature, air ventilation system. A worker must have keen understanding and technical know-how on handling all these industrial elements. After clearly knowing these things in detail, he or she can work safely, responsibly, and productively. For instance, RMG C manufactures organic products and that's why employees are given GOTS organic training so that they can learn how to perform a job in an environmentally friendly manner. Moreover, RMG C-3 explained that the quality manager generally trains employees on quality issues. Quality supervisors also teach employees the basic issues relating to quality of raw materials, operations, finished garments, etc. The line supervisor or manager in-charge always guides operators on how to reduce the amount of alteration. A supervisor demonstrates to operators how to reduce wastages practically. Moreover, HR tends to make a development plan for the employees so that they can excel in their job and take up a higher order job responsibility in future. The following excerpt explains this practice of RMG C:

*“For example, we do not want to keep a person in helper position for more than three months but try to train him up so that he can be promoted to operator and senior operator position gradually. This is our HR development policy. After hiring a person, we believe it is our responsibility to build him up. It is the responsibility of the HR department.” (RMG C-1, Manager, HR and Compliance)*

Despite having limited capacity, various HCD interventions are systematically undertaken by HR in RMG C. The internal trainers of the HR department are engaged in providing continuous training on work process, quality management, quality inspection, buyer's specifications. These internal trainings are conducted in a separate unit within the factory premise. There is also opportunity of external training conducted by trainers from BGMEA and BKMEA. These institutions generally train the management staff on issues like health and safety, labor law, employee rights and responsibilities, organizational rules, and

regulations, etc. Again, when there comes an amendment in the labor law, the HR updates all the employees about that so that they can comply with the revised labor law. The training on the labor law of Bangladesh is usually conducted by BGMEA. Besides, by joining different groups on the internet, the HR team nowadays creates an online platform for virtual learning. The internet has now become a great place for knowledge sharing that the HR adopts successfully.

RMG C-3 indicated that satisfying the buyer requirements or the third-party inspection is impossible without such knowledge sharing. RMG C-1 stated that buyers have a distinct Code of Conduct (COC) that must be followed in operations. Unless employees know the buyer's COC or requirements, sustaining the business with international buyers is almost unfeasible. He added that the buyers perform an audit frequently in the factory for which having a transparent conception regarding COC is necessary to satisfy the inspection and confirm purchase orders. RMG C therefore organizes COC training for employees at different times. Besides, RMG C-2 stated that buyers have predefined criteria on quality to meet, for which the HR team organizes special training and management development programs for the staff of quality control department by bringing in experts particularly from Japan. RMG C-1 stated that similar types of interventions are adopted by the merchandizing department. RMG C-4 also mentioned about on-the-job training provided to his staff of the finishing department. He described how he himself gives hands on training to his staff for meeting the buyer requirements, which is depicted in the following excerpt:

*“You know, buyers have some specific requirements. Suppose we must make folding for this shirt. Now how to do this, say a tissue needs to be used inside the shirt, clip has to be used on two sides of the shoulder. Buyers have some specific instructions on product folding and packing. To satisfy their needs, I train my subordinates working in finishing*

*department. When a buyer gives me a file of what to use while manufacturing, I call my colleagues and tell them what to do and how to follow the buyer's instructions. I show them everything practically. And I have seen the head of each department teaches their juniors in this way.” (RMG C–4, Manager, Finishing)*

So, both on-the-job and off-the-job training is provided to employees in RMG C. Employees are sent into ITS, BGMEA, BKMEA and many other institutes to participate in seminars, symposiums, workshops, and training sessions for learning new skills and knowledge relevant to their job which is sponsored by the company. Particularly managerial staff are often given such opportunity to learn about strategic HR practices, compliance practices, information communication technology, labor law, worker rights, ILO related issues and so on. RMG C–5 mentioned about disciplinary training, which is provided by the HR and compliance staff to every employee. Besides, if an employee wants to participate in a workshop or training pertinent to the job, HR usually approves it and arranges company sponsorship for such engagement. RMG C–3 uttered that RMG C always extends its hands of cooperation in this regard since its philosophy is that if an employee becomes proficient by learning something, the company will be the ultimate beneficiary.

### **5.7.3 Healthcare – An HCD Intervention:**

Participants of RMG C commonly opined that healthcare facility is an effective HCD intervention as they consider health as an indispensable element of human capital. RMG C–3 acknowledged the fact that it is not the high-tech system; rather the workforce capacity that is the core strength of RMG C. He explained that if an employee becomes ill, either physically or mentally, getting the job done with only a sewing or knitting machine will be impossible. RMG C–5 also contemplates employee health as the most pivotal factor for operation. He



believes that health conditions have substantial impacts on an employee's behavior and productivity level. RMG C-2 similarly described that healthcare facility is directly related to enhanced employee capability and better-quality output and so pondering it as a means of HCD is justified. RMG C-6 firmly opined that healthcare is as vital as employee training and development to keep employees fit and capable for work. The following excerpt indicates this phenomenon in a brief manner:

*“The question is how our workers can give us quality production if they themselves fail to lead a quality life due to ill health, no matter how skilled they are.”* (RMG C-3, Executive, HR)

So, based on the participants' opinions it can be enunciated that healthcare is one of the vital HCD interventions without undertaking which an employer cannot expect to fully utilize an employee's knowledge or skills. Addressing the need for healthcare, RMG C has set up a separate medical center where preliminary treatment is offered for sick employees. RMG C-1 informed that 70 managerial staff and 650 factory workers are presently working in RMG C who have equal access to this medical service. There are few beds and therapeutic instruments available in the medical unit. However, he also reported that in comparison to large RMG establishments these facilities are not sufficient. RMG C-3 informed that an appointed full-time doctor and few nurses serve in the medical center. Besides, a dedicated nurse remains always present in the center, except for holidays.

Moreover, a regular health check-up facility is also available for the employees at free of cost. A sick employee can even get free medicine from the center. A skilled team of ten first aiders are always engaged in providing a first aid service. There are first aid kits in different places on the production floor and administrative office. The photo of two first aiders can be seen over the box. If someone is injured while working on the floor, he can open the first aid

box himself or herself and take necessary medicines with the help of a first aider. Alternatively, the injured or sick employee can go directly to the medical center for better treatment. RMG C-4 stated that when the doctor in the medical center prescribes complete bed rest for an employee, the HR generally grants a sick leave. Besides, to protect employees from the life-threatening corona virus during the current pandemic, senior management undertakes certain measures at the workplace, like providing employees with face mask, hand sanitizer, and disinfectant spray.

Moreover, there are appointed fire fighters, fire rescue team, and a fire safety officer in RMG C. The fire safety officer regularly delivers mandatory fire training. Besides, senior management hires experts from civil defense to provide robust fire training. Such fire training helps employees to save their own lives and that of others from fire if an accident occurs. There are fire extinguishers installed in every floor, using which employees can protect life and save company resources as well. RMG C-5 informed that 18% of their total workforce are fire fighters. All these logistic supports and training facilities are instrumental in safeguarding employees' physical health.

In addition to physical health, employee mental health is also duly taken care of by the management. RMG C-1 pronounced that getting productive output from factory workers or management staff is not possible unless they are mentally sound. A mentally healthy and emotionally stable person can effectively concentrate on work. RMG C-5 thus emphasized the need for paying attention to mental health, which according to RMG C-6 is appropriately given at their workplace. Besides, RMG C-6 explained that management gives mental support and encouragement to the staff under their supervision. He uttered that the senior management is extremely supportive and stimulates subordinates for more efficient performance, which can be reflected from the excerpt below:

*“Moreover, our director sirs give us huge mental support, they tell us – not to take unnecessary stress, they encourage us at work. If I face any problem, they support me a lot to overcome that. Not only me but every manager working here gets huge mental support from our top management.” (RMG C–6, Manager, Knitting)*

Moreover, learning the expected job-related attitude and behavior is given prime importance. RMG C has an appointed counsellor whose primary responsibility is to provide employees with behavioral counselling on a regular basis in order to alter employee behavioral patterns positively through using various learning techniques. RMG C–3 reported that behavioral defects and inertia are sometimes observed among the employees and in that case such counselling facility serves as an effective HCD measure in overcoming these behavioral complications. RMG C–3 explained how this HCD measure works at their workplace in the following way:

*“Well, suppose an employee comes here from a remote area who did not learn how to express a grievance. In that case, we should teach him how to make a complaint. We have complaint boxes here in our factory. An employee can submit a written complaint into the box. Once in a week our welfare officer pick all the complaints and call a meeting to resolve that. Through counselling, employees are taught about complaint handling in a step-by-step fashion by our appointed counsellor.” (RMG C–3, Executive, HR)*

From the above findings it can be concluded that healthcare measures are adequately taken in RMG C, though RMG C–3 feels that it would be better if such measures can be organized under the direct supervision and direction of the HR department.

#### **5.7.4 Evaluation on TQM:**

RMG business is intensely competitive around the world since the exporters deal with international buyers like H & M and Primark, who never compromise with the quality of operations as well as finished garments. RMG C-6 stated that an RMG manufacturer gains sustainable competitive advantage and obtains repeat purchase orders only if it can maintain quality consistently. According to RMG C-3, TQM can play a critical role in this respect. RMG C-4 contended that sustaining and gaining competitive advantage in RMG business wholly hinges on the excellence of TQM. He particularly emphasized on one critical aspect in this regard, which is on-time shipment or delivery. RMG C-5 reported that they have always been very conscious about how the finished goods can be delivered to buyers on time. However, he feels that it might not be prudent to expect outstanding TQM practices from RMG C given that it just started its journey in 2018 and has a relatively less experienced workforce.

Nevertheless, RMG C has already branded itself as an exemplary TQM practicing company, despite being a newly formed establishment. Though RMG C-1 viewed TQM practice as average standard, the rest of the participants argued that excellence prevails in every single operation from backward to forward integration. RMG C-5, though initially seemed not to be very pleased, later remarked that they are not lagging in terms of quality management compared to many of their competitors. The manager of finishing department RMG C-4 explained that his department has a connection with all other functional areas and that quality is maintained in every domain within the organization. He added that a resilient coordination among the functional units is essentially required to maintain quality of work which is existent in RMG C. He also shared his experience that in case they face any trouble in coordination, an instantaneous interaction is made with the head of the relevant department in an effort to resolve the issue. The manager of quality control department RMG C-2 described this phenomenon in a similar way and commented that the utmost quality is maintained in the entire

supply chain. The following excerpt exemplifies participants viewpoints regarding TQM in RMG C:

*“If you compare us with other RMG companies, you will see that we are not far behind in terms of product quality, job performance, work environment, health, and safety conditions. Its good. As a matter of fact, improvement is an ongoing process, and we are in that process.” (RMG C–1, Manager, HR and Compliance)*

Though tiny in size, a suitable work environment is maintained in RMG C, which according to RMG C–3, is a proof of TQM. In recognition of that, the company has already obtained an environment certificate. RMG C–3 described that the vertical operations, including dying, washing, and printing, release various types of chemical wastages that are harmful for the environment. To clean such industrial effluents, an Effluent Treatment Plant (ETP) has been set up in RMG C, through which polluted water can be recycled into pure water. There is also an arrangement for minimizing the sound noise problem inside the factory. RMG C–6 mentioned that some of the staff work in hazardous areas, such as the color room and washroom, where harmful chemicals are being used to add or spot out color on the garments. To minimize the potential perils, management ensures the presence of safety data sheets in such places. In addition, employees who are engaged in verifying the garments quality have their eyesight regularly tested to make sure that they do not have any eye problems. RMG C–3 commented that by maintaining a safe and neat environment, RMG C has impressed its existing and potential buyers.

RMG C–4 reported that the management of RMG C does not prefer excessive overtime duty because of its potential negative effects on health. Instead, management wants to get the job done efficiently within the stipulated work schedule. It tries to ensure on-time product shipment following the principle “work less but productively”. Management appreciates doing

a job in less time but more efficiently because it helps the company to remain competitive in the market. RMG C-6 stated that this is the main reason why their buyers are highly satisfied and maintaining a sustained relation with them. RMG C-6 gladly reported that they have now more than 10 lakh pieces of order in hand, which are all Japanese orders. They are receiving new product orders from other countries as well. The following excerpt explains how TQM helps RMG C to remain competitive in the market:

*“We work mostly for Japanese buyers, and you might know they are very picky about quality. They do not trust us that much. They nominate certain firms to inspect our activities and production quality critically, which we call third party inspection. Not every factory can work for Japanese buyers. It’s very tough. But we have four Japanese buyers. You know they have zero tolerance regarding quality. I mean, they always want to get 100 out of 100. And the reason why we are getting so many orders from them is that we maintain a consistent standard. And I hope within three to five years we will go much further.” (RMG C-6, Manager, Knitting)*

#### **5.7.5 Soft vs Hard TQM Aspects:**

The participants’ responses revealed that hard and soft aspects of TQM are both indispensable in RMG C to foster quality. RMG C-1, RMG C-2, RMG C-3 and RMG C-6 uttered that HCD, and automation are equally necessary since it is not feasible to sustain quality unless there is a robust workforce as well as an integrated and automated system in the workplace. They argued that the missing of any of these two elements might result in TQM failure. RMG C-5, on the other hand, placed a greater emphasis on HCD than automation considering the present labor-intensive nature of RMG sector and the potential impacts of full automation on employment. She firmly believes that a competent workforce alone can ensure quality production, hence

HCD is a better alternative for RMG C to focus on and invest in. RMG C-4, though not having contemplated HCD as an alternative, prioritized it over automation with justification. He thinks that RMG C should first address the need for HCD, given that employees will ultimately use the technology and lead the automated system. He opined that human capital is a more critical factor than advanced technology or system at least for the RMG sector. The following excerpt illuminates this supposition with a reality being observed by a participant:

*“...even I can share my honest belief with you, that without having world class technology in a factory, it is possible to ensure quality if there is a capable and competent workforce involved in the operation. In today’s world, it may not be that possible to improve quality without using sophisticated technology, but I have seen here in my factory that we can deliver something really good to the market with a manual working method run by our skilled people.” (RMG C-4, Manager, Finishing)*

However, RMG C-6 stated that they are now moving slowly towards automation as the use of technology has increased dramatically in the RMG sector. While in the past they had to deploy a helper to operate a sewing machine, it is no longer needed since the machines they now use are automatic. Machines used in the cutting section can cut the threads without human touch. While it used to take ten people earlier to make a lay, now just three people can do the same job with the support of an automatic machine. RMG C-3 highlighted a reality in this perspective that there are certain machineries that must be used to meet the order specifications. Buyers want to see whether RMG C uses those machines from which they can anticipate decent quality outputs. Besides, the volume of garments that international buyers typically order is large. RMG C-3 acknowledged that production capacity increases due to the use of advanced technology. Nevertheless, all the participants commented in a similar way that technology or pure automation does not work by itself; rather it depends on human capital for its effective

and meaningful utilization. The following excerpt represents the participants' viewpoint in this respect:

*“So far as I know, the robot can work on its own. But it is human that makes robot and that operates robot from behind. So, you first need men for machine.”* (RMG C–6, **Manager, Knitting**)

#### **5.7.6 HCD Implications for TQM:**

According to the participants' views and thoughts, HCD plays the principal role in TQM execution at RMG C, though none of them undermined the necessity of hard elements in this respect. RMG C–4 perceives that if employees acquire the right knowledge, skill, and ability, management can expect them to act diligently, and when everyone performs the assigned tasks in the right manner, TQM will truly be implemented. RMG C–6 argued that HCD interventions can and do play a critical role in TQM implementation by creating a positive mindset among the employees towards management and broadly the organization. The manager of HR and Compliance department RMG C–1 explained this aspect in more detail, arguing that the HCD measures in the form of training and development evidently enable and stimulate employees to demonstrate responsible behavior that has several positive implications at the workplace. An important effect, he thinks, is the decreased need for monitoring and supervision. Since employees are made sensitized and competent to judge their own performance, it can save unnecessary supervision time of the respective supervisor or manager. Besides, the need for alteration in the manufacturing process also decreases significantly as efficient and responsible workers themselves can ensure right quality and quantity production. The following excerpt illustrates these aspects of RMG C:



*“What I usually do, is to assign the trained employee an additional job responsibility of quality inspection beyond their regular workload. Usually, I choose those operators who seem more responsible. I try to reduce the work pressure of quality inspectors this way. Again, say, a quality inspector can check 200 pieces of garment in an hour. But as we have highly skilled operators, the inspector needs to check only 100 or 50 pieces for accurate verification and I noticed almost 100% are found quite ok. Again, it may happen, you must know, an operator sewed 100 pieces out of which 50 pieces were returned for alteration. But if the operator knew in advance which one is right or not, he could sew only the right one. If he feels that it is not right, he will open it himself and sew it again. I mean the faulty item will not go to the end of the line, neither it will be rejected and returned from there. It reduces the bottleneck in our process.” (RMG C-2, Manager, Quality Control)*

It is here apparent that in RMG C, HCD interventions enabled employees to perform assigned jobs more responsibly and cautiously. RMG C-5 described another behavioral facet that HCD has a profound effect on enthusiasm and empowerment at work. RMG C-3 shared his experience of participating in an HR-Compliance carnival organized by one of the directors of RMG C that took place at Gazipur. He argued that the experience he gathered there made him feel more interested and assertive in HR and carry out the HR role competently. However, competent employees, according to RMG C-1, are generally more confident. Such motivated, competent, and confident workforce can meaningfully participate in problem solving and decision-making situations, and they can involve themselves in the work process in a more articulated way. They can even easily adapt to changing circumstances and advanced technology. RMG C-5 uttered that HCD measures make employees understand how to do a job, how to behave with co-workers, how to improve performance for bringing optimum output for business. The concern and consciousness regarding quality increases. The following excerpt

explains how HCD measures like company sponsored training enable an HR manager to be involved in another area of operations eloquently:

*“I still do it myself. Recently I did a training at ITS on ISO 9000 and ISO 14000. ISO 14000 training, as you perhaps know, is related to quality management. It was fortunately sponsored by our company. By attending this training, I learned a lot about production related issues. Although I am an HR person, I sometimes engage in other areas. I need to know about the quality system since I face audit on this. If I do not have the right idea, I will not be able to face the audit. And if I don’t know something, how can I guide my subordinates on that. Participating in various management development programs and seminars, I feel now more confident that, yes, I can take the charge, I can involve myself anywhere in the operation successfully.” (RMG C–1, Manager, HR and Compliance)*

Moreover, due to the existence of a learning environment in RMG C, even poorly educated factory workers coming from an underprivileged social background can quickly learn English terminologies that are frequently used at the workplace. RMG C–1 stated that, though no formal session is conducted to teach them terms like seizer, needle, yarn, they unconsciously come to learn from the surroundings. It helps workers understand the factory language and communicate with each other effectively. Besides, RMG C–2 uttered that there is a culture of knowledge sharing in his quality team that inspires many employees think and work creatively to improve the operations. A similar phenomenon exists in the HR department as well. RMG C–1 described how knowledge sharing and pertinent training help continuous improvement at work. This is reflected in the following excerpt:

*“When I joined here, there was a payroll officer in HR. At that time, our management launched a system I mean a software for payroll management, but the payroll officer*

*was not comfortable with that. I saw him bit reluctant to use that. Then, I sent him to an IT institute for training. I had some basic knowledge on that software that I shared with him. I tried to show him how to use the software. Now he has become an expert on that.” (RMG C–1, Manager, HR and Compliance)*

### **5.7.7 HCD – TQM Linkage:**

The participants of RMG C perceive that an explicit connection exists between HCD and TQM. RMG C–6 specifically mentioned that the quality of the finished garments relies on the quality of the workforce involved in the business processes. RMG C–2 sees a linear relationship between HCD and TQM as he found that training and development programs help the staff of his quality control department to be better equipped for testing and verifying the quality of finished product against the predetermined benchmarks. RMG C–3 has also identified such a link between HCD and quality improvement in his HR department. He contended that quality can be guaranteed only when there is a competent employee in every position within the organizational hierarchy.

RMG C–5, however, provided a somewhat different explanation in this regard. Though he addressed a positive linkage between HCD interventions and TQM implementation, he also added that no matter whether the HR adopts a make strategy or buy strategy, it is ultimately skilled people who are the key to TQM success. He explained that if an RMG company fails to develop a strong workforce by taking the right measures or if there is no such opportunity available internally to develop the existing workforce, the company then needs to hire skilled people externally. On the contrary, RMG C–4 and RMG C–5 argued that hiring competent employees for all positions is not at all a feasible option; moreover, this type of bought

employees are alleged to be less committed. Therefore, RMG C-1 and RMG C-5 emphasized on HCD and disregarded the buy strategy in TQM perspective.

In fact, if an employee does not have in-depth knowledge about the job, he will not be able to generate quality output at work. In RMG C, as explained by RMG C-1, HR systematically introduces newly hired employees with the job through an induction and undertakes necessary HCD interventions to equip them for performing the assigned job efficiently. Such interventions result in decreased wastage, increased productivity, improved quality, and thereby enhanced export turnover. HCD intervention in the form of knowledge sharing with subordinates can bring positive changes at the workplace through creating a learning environment. This phenomenon is reflected in the excerpt below:

*“As I told you earlier, I had picked up our payroll officer successfully. I shared my little knowledge about the payroll software with him and sent him for advanced training from our HR. Well, he is now managing the payroll work very efficiently using that software. And I think if he continues to work here, one day he will become an expert on that. And even he can train and develop others. Already he is training our new recruits on how to use the payroll software.” (RMG C-1, Manager, HR and Compliance)*

#### **5.7.8 Suggested Measures:**

Participants of RMG C made some specific recommendations concerning HCD that they believe will be useful in materializing the TQM principles at workplace. RMG C-2 suggested that HR should create more off-the-job training opportunities specifically for managerial staff so that they can develop soft skills. In this respect, RMG C-1 emphasized the need for inclusive behavioral training to let everyone know what deviant workplace behavior is and how to avoid this kind of behavior sensibly. In his opinion, learning the expected mannerism is critical for

improved performance. Though numerous training and development programs are carried out throughout the year in RMG C with the direct support of HR, there is no separate training center for running the modules. RMG C-5 thus strongly advocated for setting up a distinct training center under the supervision of HR department to facilitate undertaking the HCD measures in a more structured way. In-house learning can be ensured by establishing this type of center. On the other hand, RMG C-2 noted the possibility that internal trainers may not have the required exposure and skill to train others; hence sending management staff to observe the advanced management practices and operational procedures of leading and giant RMG companies might be beneficial. He uttered that they can later put the experiences into practice.

Furthermore, RMG C-3 uttered that government could cooperate with the RMG owner in this case to send prospective executives abroad for acquiring advanced credentials. He believes that for an individual RMG company it might be difficult to arrange such foreign training without government assistance. If the government becomes a patron and formulates a holistic plan for foreign training and development, it will ease the process of knowledge transfer and eventually impact TQM implementation. RMG C-4 suggested that government, through its education ministry, can devise a policy to develop and incorporate RMG related practical subjects into the existing curriculum at higher secondary and even graduate level. He stated that it will facilitate crafting needed human capital for the future of RMG sector. Other than the government, there are other external stakeholders, like BGMEA and BKMEA, that have the resources and capacity to assist RMG companies with regard to HCD. RMG C-3 stated that these institutions can arrange management development programs, workshops, seminars, conferences at macro level. He particularly suggested for training of trainers (ToT) scheme to be arranged by BGMEA. RMG C-6 expressed his expectations that a combined effort from researchers, government, BGMEA, BKMEA, and top management of the

concerned RMG establishment is required to design an effective HCD plan. The following excerpt illustrates his anticipations:

*“I think if those of you who are doing research on RMG come forward a little further and in collaboration with our top management, BGMEA, and BKMEA show us a way in this regard, it would be then very helpful for the whole RMG sector. Government should also join in this collective effort. You can suggest us how we can build up our human resources more vigorously, how we can increase production, and how we can improve quality.” (RMG C–6, Manager, Knitting)*

Apart from learning, as discussed in subsection 5.7.3, participants of RMG C acknowledged that health is an integral component of human capital, and that healthcare is a vital means of HCD. Employee health, including both physical and mental, is adequately taken care of in RMG C. RMG C–5 uttered that this is one of the reasons why they have a committed and competent workforce. RMG C–5, however, suggested that employees, especially factory workers, need to be counselled and made more aware of physical fitness. Besides, RMG C–2 emphasized on mental health and argued that developing only the technical skills is not good enough; rather bringing positive behavioral changes among the employees through offering mental healthcare is also crucial. An example of how to nurture an employee’s mental health can be found in the excerpt below:

*“Suppose my subordinate makes a mistake which is very normal. Now without reprimanding him if I just tell how to do the job accurately, if I put my hand on his head, it will certainly boost him up mentally.” (RMG C–2, Manager, Quality Control)*

## **5.8 Case Study: RMG D**

RMG D is a well renowned garment manufacturing establishment of Bangladesh that has launched its business in 1986. The factory of this fully export oriented RMG establishment is situated in Chittagong. It is equipped with 6500 advanced and high-tech PLC controlled auto machineries operated by a competent and dedicated workforce. At present, around 6000 full-time employees, including managerial staff and factory workers, are employed within its vertical operational setup. The vertically integrated in-house units, such as yarn sourcing, manufacturing, washing, printing, and embroidery are fully compliant. RMG D typically manufactures cargo shorts, swimming trunk, girls swim wear, fleece tops, bottoms, etc. In addition, it manufactures outer wear, such as trousers, vests, children's sportswear, skirts, shorts, tops, plain jackets, reversible jackets, padded shirts, and aprons.

RMG D has an impressive list of buyers across the USA and Europe such as, Walmart, Next, George, Primark, NKD, Meijer, JCPenney, Fecsa, LC Waikiki, etc. From the company records it has been revealed that RMG D experiences higher long-term margins, less inventory in markdowns, increased customer satisfaction and a value-added supply chain. Moreover, its yearly export turnover is 50 million USD, which also indicates that RMG D has been maintaining consistent quality operations and serving the buyers with quality garments successfully. In fact, the combination of a skilled workforce and state of the art system made it an exemplary TQM practicing RMG company. In recognition of its performance excellence, RMG D is certified by Walmart, Wrap, Target, Adidas Reebok, ISO 9001:2008, ISO 14001:2004, and GSV.

## **5.9 Reflexive Thematic Analysis:**

### **5.9.1 Investment Perspective of HCD:**

According to RMG D–6, both the rise and fall of an organization depend on one single factor, which is its workforce. In his opinion, a dedicated and competent workforce, or precisely put, human capital, is the most vital asset and main driving force for any organization. RMG D–4 stated that the role of human capital is more critical than physical capital, specifically in a labor-intensive industry like RMG. Both RMG D–4 and RMG D–6 thus contended that investment in HCD should be given the highest priority in every RMR establishment, including RMG D. RMG D–1 similarly opined that the pivotal job for them at the current stage is not to experiment with more mechanization; rather to transform the extant employees into a more knowledgeable, responsible, and committed workforce through HCD. RMG D is well equipped with advanced technologies and PLC controlled auto machineries, but its production capacity cannot be fully utilized due to the shortage of skilled labor in the factory. Skilled labor for the RMG sector is scarce in the labor market of Bangladesh. RMG D–4 hence uttered that buy strategy is not applicable here; rather they should adopt the make strategy or in other words invest in HCD. The present scenario prevailing in RMG D can be understood from the following excerpt:

*“At present, the capacity of our factory is 63 sewing lines, whereas we are using only 50% of our capacity. Only 30 lines are used for production. There are some reasons behind it, but the most significant reason perhaps is shortage of skilled operators. At present, around 2000 workers are working in 30 production lines here. To utilize the full capacity of our factory we need around 3900 operators in total. We will not get those people from the existing labor market and so we have only one option now, which is to hire unskilled people and then train them for productive operation.” (RMG D–2, General Manager, Engineering)*



For the factory operations, workers are typically hired in RMG D without posting any formal job circular and such job incumbents are mostly unskilled and inexperienced. Some are semiskilled or have little work experience in an RMG setup. RMG D-2 explained that management never likes to take the risk of handling a costly machine with such incompetent employees. Comprehending the standard operating procedure (SOP) and process associated complexities, which cannot be expected from a fresher, is essential to work. RMG companies thus need to arrange in-house training for developing skilled operators to get the job done productively. RMG D-4 reported that from their HR team, they run in-house operators training throughout the year in a separate training center within the factory premise. The necessity for investment in such training is reflected in the following excerpt:

*“We need skilled operators. I am working here; you see Mr. X (another participant) is working here. But we are not directly involved in production. As long as the machine will operate, needle will operate, our company will earn. The needle is not working means we are not earning. Now the fact is, an operator uses the needle. When a sewing operator starts the swing machine, there will be production, otherwise not. To run a sewing machine, we need a skilled operator. We do not use traditional machine that you might see in tailor’s shop or at home. We use high-tech PLC controlled machines in our factory. So, an ordinary tailor cannot operate our sewing machines. He will not understand anything. An operator must be trained on our PLC based machine first, he has to be made learned the rules of using it.” (RMG D-5, General Manager, Quality Assurance)*

From the participants’ responses, it has become evident that the senior management recognizes the implications of investment in HCD and accordingly interventions are judiciously undertaken in this regard by the HR team with the assistance of all the functional

areas. Despite treating human capital as a mobile resource, RMG D-6 feels that there is no true risk involved in its investment as being proved in RMG D where voluntary turnover is minimal. He explained that the HCD interventions undertaken for both factory workers and managerial employees are followed by a robustly designed retention policy which is the underlying reason behind a nominal turnover rate. Besides, career growth opportunity exists in RMG D that stimulates competent employees to stay loyal. RMG D-6 argued that prudent investment in HCD results in the creation of a loyal and competent workforce from which the company can easily realize expected return for a long time. How the potential risk involved in HCD investment has been minimized in RMG D is illustrated in the excerpt below:

*“Suppose I have invested 5 lakh Taka behind him, then he said at one point that, “Sir, I get a better offer another company”. I should then ask him, “how much will you get there?” He tells me the amount. Then I can tell him “Ok, look, you have been here for long time, you need not to go, I will give you a promotion, I will give you that much salary and other benefits”. Yes. I think he will not leave us when he will see his better future here.” (RMG D-6, Senior Vice President, Finance and Accounts)*

However, RMG D-6 opined that before investing in HCD for managerial executives, it is always wise to consider whether the company will benefit from this in the long run. He also stated that recruiting the right people in the right place, and then investing in HCD is perhaps an ideal strategy.

### **5.9.2 Methodical HCD Practices:**

In RMG D, HR and particularly the HCD functions, are robustly designed and aligned with the company’s strategic objectives. While hiring managerial employees, the HR department

skeptically judge the candidate's academic background to ensure the person-job fit. However, RMG D-1 feels that theoretical knowledge gained in student life needs to be welded and reinforced through on-the-job learning. At the very initial stage, the HR thus organizes a formal induction for every employee to share basic ideas about the organizational rules and regulations, reporting relationships, and the specific job responsibilities. This induction program is instrumental for new job incumbents to clearly understand the job description. Besides, employees are granted opportunities to acquire new knowledge outside. RMG D-5 stated that he has participated in several company sponsored short courses on lean manufacturing, productivity management, and TQM. These short courses are run by InterTech Service (ITS) with whom RMG D has a corporate agreement. Moreover, the management of RMG D financially supports those managerial employees who are yet to finish their graduation so that they can be promoted to assume higher order job responsibility. RMG D-1 mentioned about some employees who are undertaking their engineering education with the company aid. Besides, these employees are given a certain number of paid leaves to attend the classes and exams. The following excerpt is a brief indication of such support towards education:

*“That’s a paid leave. That we do. If somebody says – Sir, I have classes, I can be only half day today – ok, fine we don’t deduct the salary or we don’t deduct their leaves. We allow them – you go, attend the classes. That’s support we give on the education.”*

**(RMG D-1, Senior Vice President)**

Though the selection process of the factory workers is not as rigorous as that of the management staff, RMG D-5 explained that while hiring, preference is given to those candidates who are young and energetic having some literacy, intelligence, and skills. Every department, with the support and instruction of HR, performs training needs assessments (TNA) for its employees on a regular basis to identify if there is any gap in terms of skill or

knowledge that might be the potential cause of performance deficiency. Based on the need, employees are provided with the required training so that they can perform the assigned job accurately. RMG D-5 uttered that such TNA followed training arrangement enables his subordinates working in the quality assurance team to identify and correct the product defects appropriately.

Besides, the head of HR, RMG D-4, explained that there is a separate training center within the factory premise under the control of the HR team to organize and coordinate weekly and monthly training on a regular basis. There are few appointed internal trainers in the HR to run such training and development programs. In addition, the executives of the Industrial Engineering department are also engaged in providing training. RMG D-1 also mentioned about training of trainers (ToT) scheme in this regard to get more in-house trainers. Besides, to run a specialized training program like “Sudokkho”, technical experts and consultants are hired from outside, who visit RMG D frequently to guide and advise the trainees.

“Sudokkho” is a skill upgrading training program organized for newly recruited female workers with the aim to convert them into skilled operators within a fifteen-day tenure. This training scheme is sponsored by the UK aid, Swiss development authority, BGMEA and Bangladesh government. RMG D-1 stated that they have participated in this scheme and so far, more than 200 female workers have become fully skilled through this short, yet holistic training program. Though guided by external experts, this training is virtually provided by some previously trained senior female operators. RMG D-4 narrated that this training encompasses providing new recruits a detailed idea about manufacturing related processes and standard operating procedures (SOP); arranging to take them in every working floor; assessing the acquired skill level; and assigning to a specific job in the production floor. After being assessed in different workplaces and machineries, a fresher is assigned to that job where she

exhibits her optimum potentials as a skilled operator. However, RMG D–1 stated that the length of this training is sometimes enlarged since some of the trainees fail to demonstrate the expected performance.

On the other hand, on-the-job training and development programs are also undertaken for managerial employees. For example, training on industrial law and HR activities are arranged for HR staff. Likewise, relevant training is organized in every department, including IE, quality assurance, finance and accounts, merchandizing, as informed by the interviewed participants. RMG D–5 narrated that in his quality assurance department, employees are made aware of the possible product defects and trained on how to perform monitoring more critically to ensure superior quality. Senior managers are typically engaged in delivering this type of hands-on training. RMG D–2 explained that newly joined engineers in his department irrespective of having previous job experience have been taught about electrical and mechanical processes. RMG D–2 himself plays the role of an experienced trainer in this case. An illustration of the module of such a training is explained in the following excerpt:

*“It would take an experienced man like us to train the freshers. Like, once upon a time I was trained by a senior manager, I can remember. So, I have to train my subordinates no matter whether they are freshers or experienced individuals having work experience in other factories. I have to train them. What type of machineries do we have here, how to operate these machineries, how to do maintenance of these machineries and at what time, at what time interval do we have to do this maintenance, which parts are fast moving, and which are slow moving, which stock to maintain, which has more priority, what is the source of which? They must learn these. And we cover all these things.”*

**(RMG D–2, General Manager, Engineering)**

Apart from this sort of routine training, innovative HCD measures like the ‘Women Empowerment Program’ is organized by HR in RMG D. It is also a kind of on-the-job training in which experts from NGOs and world-renowned specialist firms are brought to mentor and counsel the female employees on empowerment and health. RMG D–4 explained that how a female employee will behave with her family members; how she will make an ideal balance between work and family life; how she will adapt the work environment and keep her fit in that, are all addressed in this program. RMG D–1 argued that this program already proved to be incredibly effective in resolving work-family conflicts. Besides, regular counselling is provided by the HR team on work family issues. In RMG D, NGOs and specialist firms have been invited to offer specialized training that indirectly helps create in-house trainers and facilities, which is elucidated in the except below:

*“The fact is, we first engage world renowned third parties to teach our staff. Then when we see the benefits of such program, we try to develop trainers from among us. For example, HR welfare officer is first trained in such a way so that he can become a trainer later, he can train his colleagues. Simply speaking, we are developing them as teachers, as trainers. Now they train us. And we have also arranged the required equipment, facility, zone, everything at our workplace so that they can train our other staff continuously.” (RMG D–4, Head, HR and Compliance)*

In addition to on-the-job training, BGMEA and BKMEA arranges various training that they inform through sending letters to the HR department. RMG D–2 explained that, considering the potential benefits, the HR then nominates and sends few managers and executives to participate in those off-the-job training, which are mostly on health and safety topics. Moreover, to ensure career progression, a management development program is conducted by top level executives for tactical and operational level managers. Even, one of the

top executives, RMG D–1 himself, uttered that he participated in such a program on 7 habits of highly effective people to foster his career mobility by enriching leadership traits. So, it can be comprehended that HCD interventions in the form of employee education, training, and development are methodically and vigorously practiced in RMG D.

### **5.9.3 Healthcare – An HCD Intervention:**

The interviewed participants regarded health as one of the vital elements of human capital. While discussing different HCD interventions, they all highlighted this issue and firmly argued that conventional HCD practice without in-house healthcare facility cannot generate human capital, at least in the RMG sector where the working environment itself poses threats to employee health. Moreover, as explained by RMG D–5, the jobs in quality assurance department are such that a quality checker is required to stand all day long, which is almost 8 to 10 hours, to verify the quality of every single produced item. Without having a healthy physical condition, a checker cannot bear this intense workload. RMG D–3 thus uttered that healthcare could play a big role as an HCD tool in enabling employees to perform their jobs adeptly. In his opinion, acquired skills or knowledge can be exerted once an employee feels fit and healthy in all respects. It implies that healthcare is a precondition for training or development to be effective as an HCD intervention. RMG D–5 contended that it should be rather treated as a mandatory HCD measure because an ill employee can never work efficiently. The significance of healthcare, particularly for factory workers, can be comprehended from the following excerpts:

*“Now, suppose in a work process, the first worker in the line works very quickly, the third worker is also a very prompt worker, but the second worker is very slow due to*

*his sickness or say injury. In that case, the whole process will be affected, disrupted, downgraded.” (RMG D–4, Head, HR and Compliance)*

*“Of course. Of course. I will say healthcare is of course needed, essentially needed. My employee has ill health today means the health of my business will get worse tomorrow. Why? If a worker’s health condition is not good, if she does not have the strength, she will be working very slowly and unproductively, and not only that, even her hand could go the bottom of the machine, she might be badly injured. She will then need immediate treatment. If a worker’s health condition is not alright, you will not get production from her, no matter how skilled she is. If you are supposed to get 100 units from her, you will get only 40. Then, why not? You spent on her skill development but it’s not working as she is not capable to use that skill.” (RMG D–6, Senior Vice President, Finance and Accounts)*

So, unless a safe work environment and inclusive healthcare facility can be maintained, it is difficult to get productive output from the employees. RMG D–6 explained that certain things are necessary to improve the business, one of which is to establish a secure arrangement for ensuring improved health. However, he uttered that the main role should be played by the HR department as he considers healthcare as an HCD intervention. RMG D–1 and RMG D–5 reported that there is a separate medical center with several healthcare facilities within the RMG D campus. An MBBS qualified doctor has been always serving there as a full-time employee. Two appointed nurses serve the sick or injured employees in that medical center. Depending on the circumstance, free medicine is provided to the employees as well. Besides, five to seven trained first aiders who are equipped with first aid kits work in every floor.

During the Covid outbreak, several health and safety measures have been undertaken by the senior management in RMG D. They have established an automated dispensing system



to avoid the risk of infection. RMG D-1 informed that they did not buy this dispensing unit; rather developed it by themselves as the situation demanded. The sanitization has been seriously taken care of at the entry and exit points in every floor. Wearing mask has been made mandatory for every employee. Masks are provided every day for free. A temperature unit has been fixed in both the factory and the office for employees to monitor their temperature by themselves. Management even grants paid sick leave if anybody is found to have covid symptoms, like high body temperature or continuous cough. Moreover, covid infected employees are provided with the necessary medicines and food. RMG D-4 argued that their HR team has been playing an active role in awareness building about this life-threatening disease. The HR has been arranging frequent training on hygiene and safety measures during this ongoing pandemic.

However, as discussed earlier, a safe and suitable work environment must be maintained to keep employees fit for work. RMG D-2 stated that before placing an order, buyers typically examine whether there is sufficient lighting, ventilation, fire alarm system, and other facilities available in the factory. Buyers critically verify whether the workers know about the fire safety rules; and whether there is any demarcation for the workers to leave the risky place in case of fire in the factory area. RMG D-2 uttered that these have now become compliance issues without assuring which, business is even impossible to continue with picky buyers. Having fire extinguishers is not everything; rather buyers check whether trained employees are there to use those fire extinguishers in need. In RMG D, a newly recruited worker is given thorough training on fire safety for the first three days. They are practically coached on how to use a fire extinguisher safely. Trainers from the fire department of government come to conduct this kind of training. Besides, RMG D has a separate fire department consisting of a skilled firefighting team headed by a fire manager who is

responsible to train employees on fire safety. All these measures are taken to protect and improve the physical health of employees.

However, RMG D-3 uttered that mental health is also critical in the RMG sector since employees often work hard under tremendous pressure to sustain their job. He argued that mental healthcare, like counselling, acts as an HCD intervention that is successfully practiced at their workplace. RMG D-2 opined that mental wellbeing significantly depends on the management system. He contended that misbehavior from superior or co-workers creates frustration and alienation among employees that in turn makes them less productive at work. He corroborated that the management system is extremely participative in RMG D, and it always tries to protect and promote employee mental health specifically through the interventions of HR and welfare team. The welfare team reports to the HR manager and ensures employees' mental wellbeing by resolving their grievances if there is any such thing.

RMG D-3 and RMG D-5 emphasized on childcare facilities that can have considerable impacts on female employees' mental wellbeing. RMG D-5 has seen that when a female employee's child gets sick, she fails to give concentration on work as she is feeling stressed. RMG D has a suitable childcare facility for female employees that is instrumental to keep them mentally quiet, attentive, and productive. RMG D-3 also explained that it matters what arrangements they have for pregnant women. In RMG D, a pregnant employee is entitled to get six months paid maternity leave. Besides, the senior management is found to be extremely caring about employee health and safety, which is reflected in the following excerpt:

*“For example, yesterday I saw a person going down the stairs by pressing his mobile phone continuously. I noticed the way he was moving; he could go down after slipping. His waist could break, his head could break. I immediately told him “Don't do this while on the stair. Don't use your mobile”. I told him that. Why? If you are injured, if*

*your hand is broken down, I might give you 10 or 20 thousand Taka. But it will take 5 years, 5 lakh Taka to fix the broken arm and leg.” (RMG D–6, Senior Vice President, Finance and Accounts)*

#### **5.9.4 Evaluation on TQM:**

A rigorous TQM system which has been erected as an outcome of thirty years incessant endeavor, is existent in RMG D. RMG D continues business with world leading buyers including Walmart, Next, George, and Primark, that are all top brands of RMG products. Such prominent buyers are extremely concerned about quality and compliance issues and usually have rigorous requirements which are challenging for many RMG manufacturers to satisfy. RMG D has been able to consistently meet its buyer specifications and thereby retains the top brands. In this perspective, RMG D–4 explained that they have developed a comprehensive standard operating procedure (SOP) over the years through trading with highly reputed and fussy buyers that facilitates providing superior quality products in the market. In his opinion, the experience of dealing with top buyers has enabled RMG D to excel in TQM. The merchandizing manager, RMG D–3, stated that they are competitive in the market since they know how to strategically bargain and negotiate with the buyers and meet the requirements. He argued that while in trading, RMG D is never dictated by the buyers; rather dominates the market through performance excellence. He identified three specific criteria of TQM, such as quality garments, competitive price, and on time shipment that can assure buyer attraction and retention. RMG D–3 and RMG D–4 stated that they are enjoying competitive advantage in the market by meeting all these three criteria.

On the contrary, RMG D–6 noticed lapses in a few areas, like product shipment and came to hear about some rejections and reworks. He complained that even after several

communications from his corner, he failed to get the right information about rejection rate. He thinks negligence of the concerned staff to their duty causes delayed delivery and product rejection. He thus showed disappointment regarding TQM and uttered that it needs to be improved a lot to sustain the business in future. RMG D-5 also feels that there is still room for improvement, particularly with respect to managerial skills development. However, the facts and figures RMG D-5 supplied during the interview evidently gives a contrasting perspective regarding rejection rate and delivery performance. The recorded documents he showed as evidence indicate that the inspection failure is always less than 2% in RMG D. Besides, the shipment data he shared suggests that they consistently deliver the finished products to their buyers on time. The lead time they usually take in the whole supply chain process is quite reasonable and competitive. This is how RMG D-5 from quality assurance team opposed the complaint of RMG D-6 and assured the excellence of the TQM practice. The following excerpt summarizes his viewpoint:

*“However, I think having less than 2% inspection failure certainly indicates that we are maintaining quality. And I think it helps us to remain competitive in the international market. In fact, it is common to have some failures, even factories like Youngone have inspection failures.”* (RMG D-5, General Manager, Quality Assurance)

RMG D-2 elucidated that inspection is always carried out by the buyer’s nominated third party before product shipment. Generally, the nominated third party is skeptical in judging the quality and performs the inspection randomly. RMG D-2 has the experience of closely monitoring such inspection and based on personal observation he commented that inspectors are mostly satisfied since quality is utmost ensured in the operations. He mentioned that a skilled workforce is deployed in the factory to run the PLC-based auto machines to meet the

inspection requirements. However, RMG D-1 elaborately explained the TQM practices that facilitates meeting buyer's criteria. He classified the TQM relevant functions into two categories, one of which is core functions, and the other is support functions. The core functions include raw materials sourcing, cutting, sewing, washing, finishing, etc., while the support functions are HR, finance, planning, commercial, and administration related tasks. According to RMG D-1, TQM principles are well executed in all the core functions within the vertically integrated operational system. However, he feels that there is still opportunity for support functions to get into the TQM aspect. This notion can be reinforced by the supposition of RMG D-5 that support functions require managerial skills development.

Nevertheless, several TQM tools and techniques are applied in the operations at RMG D. For example, to identify the defects and trace out the root causes, they use root cause analysis like pareto principle. They strive to detect why a particular defect happens and who is responsible for that. They also apply an 8D problem solving tool to identify the root causes of a problem and develop control measures for the future to avert its repetition. They use a lot of data sheets, tally sheets, and spread sheets to capture the data, and then perform the required analyses. There is a use Ishikawa diagram for exhibiting the potential areas of quality control and ascertaining the required resources for production. This diagram assists them to understand the cause effect relationship in the process. In case of any shipment failure, an A3 problem solving tool is also utilized for embarking on proper corrective actions. All these TQM tools are deployed in RMG D as the management does not usually accept flaws. However, hard TQM elements might only trace out the root cause of a defect but be unable to resolve that. It is rather people who have the capability to fix the problem. This notion is manifested in the excerpt below:

*“Well, at the end of the day, I cannot do anything, he cannot do anything. Only the person who is making a defect can correct it. So, from here we started taking that, ok, if one person is making 100 pieces per hour and working 10 hours per day, 26 days in a month, that means he has made 26000 operations per month and if somebody is there who has not made a single defect, he is a Zero-defect operator, that we need. That’s the biggest tool.” (RMG D–1, Senior Vice President)*

From the above quote it is evident that there is a use of a noticeable number of hard TQM tools and techniques in RMG D, though the key role is played by human capital in TQM execution. RMG D–3 uttered that they have the right people in the right places that he contemplated as the prime condition for effective TQM. He argued that in many RMG companies, employee turnover rate is high due to the lack of HCD measures and career growth opportunities as well as the absence of conducive working environment, which are the principle causes behind TQM failure. On the other hand, in his opinion, human capital is well nurtured in RMG D and subsequently resulted in effective TQM implementation.

#### **5.9.5 Soft vs Hard TQM Aspects:**

*“If your driver is not competent, he will cause an accident no matter whether the car he drives is Toyota or Mercedes-Benz. So, the more necessary issue here is the skill of the driver.” (RMG D–2, General Manager, Engineering)*

The above quote briefly signifies the importance of HCD over automation, which has also proved to be a fact in RMG D. The interviewed participants proclaimed that unless human capital is well cultivated, mere focus on mechanization cannot bring expected outcomes for the organization. Describing the past thirty years history of the Bangladesh RMG sector, RMG D–4 asserted that many large RMG companies bought expensive and sophisticated

technologies to boost up operations, but their attempts were futile. He explained the underlying reason that employees were unable to adapt to the advanced setup, leading to poor performance and unproductivity. So, it can be attributed that expected benefits of having a modern system might not be derived if necessary HCD interventions are not assumed. Employees need to gain the required knowledge and relevant skills before performing their tasks to fully capitalize on automation. It is sometimes perceived that automation is an alternative to HCD and investment in technology might result in downsizing need for manpower. However, the fact is that a comprehensive TQM system requires more skilled people in the operation for the effective use of that system. The following excerpt exemplifies the necessity of HCD in RMG D:

*“For example, we use auto cutter machine for cutting fabric. Now if my operators are not used to with this auto machine, if they do not know about its operation or way of using the machine, then there will be no work with this. I should give proper training to them on that machine. This is called system, a quality system.”* **(RMG D–2, General Manager, Engineering)**

A consensus can be developed based on the participants’ views and opinions that soft aspects (i.e., human capital) must be prioritized first in the perspective of TQM implementation, though none of them disdain the role of hard elements. RMG D–4, rather, stated that human capital, and hard tools and technologies are essentially connected with each other and play a complementary role in TQM execution. RMG D–5 explained that those who are employed in his quality assurance team are more or less experienced; however, they do not possess the advanced skills needed to run more complex technologies that the management intends to bring in the immediate future. He thinks that it would be wiser to focus on developing the existing workforce before making any further investment in hard elements or resources. In

his opinion, the system or technology RMG D currently has is rigorous enough but there still exists a need for investment in HCD to augment the employee expertise.

In fact, RMG is a labor-intensive sector across the world, hence demands more emphasis on human aspect than any hard aspect. RMG D-2 who has always been dealing with hard TQM elements provided an example from his Engineering department that if the air compressor is inefficiently handled, there will be a sudden breakdown and the production will be acutely interrupted. The production target will be failed, and the incurred cost will be a massive loss for the company. It implies that the utility of the air compressor is contingent on the efficiency of the respective operator. Similarly, if an electrician does not know how to operate an electrical substation, there will be a disaster. He needs to know how to restore power immediately from other sources in case of power outage in the factory. Periodic maintenance should also be done, even where there is an auto system. In that case, an employee needs to understand the methods of preventive maintenance. He needs to know the schedule, i.e., what to do when. RMG D-2 explained that the first critical thing for employees is to learn the system properly and then management can expect them to make the system functional for the organizational betterment. Though RMG D-6 initially responded that he prefers his employer to adopt automation if financially feasible, he later argued that human capital is more pivotal and demands strategic attention. He clarified that considering the current organizational, sectoral, and country context, HCD has greater significance than automation. RMG D-1, though at first uttered that a composition between hard and soft aspects is necessary, finally concluded that soft elements should be given greater emphasis for TQM implementation. A justification of why HCD is perceived to be more critical in RMG D, can be found in the excerpt below:



*“...unless you marry these both, that technical aspects and the psychological aspects, nothing will go up. That technical or technologies are already there, but who will implement the technology? And you need human. Second, implementing the technology with the positive note is human development. Because only human can implement both positive and negative. Technology or technical aspect will only give you the tools which is in the books and that’s readily available. The human will implement it and human development will make it positive.” (RMG D–1, Senior Vice President)*

The above quote implies that hard TQM aspects are readily available in the market and can be imitated. Hence, they cannot be treated as a source of competitive advantage. On the other hand, HCD interventions result in the creation of inimitable human capital that can subsequently give an enterprise competitive advantage.

#### **5.9.6 HCD Implications for TQM:**

HCD, as viewed by the participants of RMG D, plays a critical role in implementing TQM at the workplace. RMG D–1 described that HCD interventions like training and development improve their process capability. It helps them in identifying and reducing the wastages and thereby gives an added cost advantage. The competent employees control the rejection levels through their dedicated and accurate performance. RMG D–1 uttered that the HCD initiatives are enabling the employees to make sure that the wastages are cut, process capability is improved, and the quality of the finished product is enhanced. In RMG D, it is found that the power they utilize is of their own generation and there is a trained person serving as the one in-charge of that generator. He had been given a prolonged technical training before placement in that position. Consequently, he has been able to operate and maintain the power generator efficiently and there has occurred neither any production disruption nor any serious accident

so far in the factory. However, the following excerpt illustrates what might happen in case of the absence of such an HCD intervention like training:

*“You see we have our own power generating system here. If the person responsible to use this generator does not have thorough technical skill and idea of handling this, over voltage will be created in the generator that in turn will burn everything. Quality is a long way off; our whole production system will be destroyed. If he does not know how to set up the voltage properly, there will be disaster. If the frequency is not set rightly, if it is a bit higher or lower than needed, our expensive PLC machines will be burned.”*

**(RMG D–2, General Manager, Engineering)**

As mentioned earlier, such a conducive working environment has been established in RMG D that an employee can immediately rectify any mistake with the assistance of the supervisor. RMG D–5 uttered that they always assess whether an employee has any deficiency in terms of skill or knowledge that might be the potential cause of defects. They also monitor whether an employee can himself recognize the defect as it might happen that he does not know where the root cause lies. The employee might not have clear conceptions regarding the various types of defects. RMG D–5 explained how this problem is resolved through an HCD intervention in his quality team. It is reflected in the excerpt below:

*“Sometimes our workers make mistakes, which is very usual, I think. In that case, his supervisor calls him, shows the defect book, and guides him how to correct the fault. We always have a defect book with us where there is an explanation of the defect with a picture. The supervisor opens the defect book and shows it to the staff concerned. There are different types of defects such as, skip, broken, damage, overstain, etc.”*

**(RMG D–5, General Manager, Quality Assurance)**

HCD does not merely help employees perform more efficient and accurate job as an individual; rather the interventions like education, training, and development foster the creation of an effective and dedicated team within the workplace. RMG D-4 stated that through the ongoing HCD measures, they have found some people in each functional area who developed themselves as competent trainers and are contributing as mentors in their respective team. RMG D-6 strongly uttered that HCD enables employees to work in a team environment, which he believes is the secret behind the successful functioning of RMG D. He stated that the constant learning opportunity and healthcare facility have made his subordinates feel that RMG D is their own family. A sense of belongingness and commitment has been built among the employees for their organization. RMG D-2 commented in similar ways that trained employees are usually found to be more committed to their job and the employer as well. They have both the capability and devotion to participate in teamwork. They are found so involved and engaged that they can put their maximum effort into resolving any problem being encountered in the team. The following excerpt illustrates this phenomenon:

*“Just a few days ago, I had a conversation with one of my junior colleagues who recently came back from a foreign training. We sponsored it as he is found talented in my Finance team. I asked him – You may have to jump into the Bay of Bengal in need of our organization. I would say – Jump, my goods are floating, so jump. He boldly replied to me Yes, sir. I will jump if necessary. I need this thing. This is positive attitude. I will try. If he said, how can I jump, there is crocodile there, there are many things dangerous there. This is what we call negative attitude. I don’t really appreciate it. I need two things, positive attitude, and dedication.” (RMG D-6, Senior Vice President, Finance and Accounts)*

Moreover, according to the participants' opinions and information, it is evident that HCD has profound impacts on employee voluntary turnover and absenteeism. RMG D-2 and RMG D-6 informed that employees are less likely to quit their job and they can be retained since they feel that they have learning and subsequent career growth opportunities within the establishment. Besides, RMG D-4 shared the impacts of the "Women Empowerment Program" which is a special HCD measure undertaken by the HR department particularly for female employees. He explained that most of the female employees working in the factory are not adequately aware of personal hygiene issues like menstruation. As a result, they silently suffer from many health complications, having impacts on their work. The Women Empowerment Program had an awareness development aspect on this health issue. During this program, the HR team revealed the interesting finding that menstruation is the main reason behind the frequent absenteeism of many female workers in the factory. The Women Empowerment Program, as an HCD intervention, did not only help identifying the root cause but also resolved this absenteeism problem through the exchange of expert knowledge with the female employees. This is evident in the following excerpt:

*"After attending the Women Empowerment Program, our female workers have become more aware of their period. They have got a clear hygiene related guideline. Now by following those guidelines they are handling their personal affairs well. And they stay fit and as a result what happens here is that their absenteeism rate has fallen substantially. They can now give more attention on their work even during their critical time and work more productively than before. After attending that program, they have also come to learn how to behave with their family members, with their colleagues, how to behave in a shop. They have come to understand how to handle their personal life and job together."* (RMG D-4, Head, HR and Compliance)

It can be noted from the above quote that HCD measures like counselling can be instrumental in resolving work - family conflict since an employee comes to learn how to handle both spheres of life together. In RMG D, the HR frequently coordinates workshops and counselling to share the tricks and strategies on work - family balance with the employees, as the management supposes that if an employee is unhappy or in distress at home, he cannot work intently at the workplace. While work - family management is relevant to employee mental health, physical health is also critical for exhibiting anticipated job behavior. The healthcare offered in RMG D empowers employees to work relentlessly to assure quality performance in their respective domain. This is evident in the excerpt below:

*“The jobs in our quality assurance department are such that a quality checker must stand all day long to check the quality of the items. So, if he does not have good health, how will he do the work standing like this? Physical fitness and mental alertness are a must, and I am happy to tell you that we have a nice healthcare facility here for staff. So, our checkers have no problem to work so hard in testing the product quality.”*

**(RMG D-5, General Manager, Quality Assurance)**

Finally, innovation has been found to be another significant consequence of HCD interventions in RMG D, which is deemed as an accelerating factor for TQM execution. RMG D-2 and RMG D-3 argued that HCD does not merely foster creativity in new product development. Rather RMG D-3 contended that in his merchandizing team, HCD enhances the creativity of the merchandizers in appealing to the foreign buyers and pricing the product more strategically. They can now attract more buyers through using their creative promotional strategies. HCD improves their creative negotiation skills that they apply while dealing with the picky buyers. RMG D-2 explained that innovation is required to perform every single task for continuous progress. He stated that dealing with unpredictable circumstance is a regular

phenomenon in RMG operations, requiring innovation that can be engendered only through HCD. The following excerpt illustrates this aspect:

*“Again, in my field, I have to ensure creativity. There is no simple, easy, and straight path here in this sector. Now that you have gone to work with this plan, you will see that everything is upside down. The situation does not match with the plan. Then I have to use my head. I have to develop something new here. I need a new approach to take. I must solve the problem there in a creative way. And yes, I can do that as I have the know-how.” (RMG D–2, General Manager, Engineering)*

#### **5.9.7 HCD – TQM Linkage:**

The participants of RMG D experienced an overt linkage between HCD and TQM at their workplace and consider HCD as an essential precondition for TQM implementation. RMG D–3 explained TQM as a broad issue that cannot be executed by merely addressing and investing in physical or organizational resources. He argued that TQM is contingent on the accumulation of human capital. RMG D–4 also contended that without HCD, there is no true way to the path of TQM implementation. He described that for effective TQM execution, employee healthcare should be prioritized; skill level should be continually upgraded; and a conducive learning environment should be created. RMG D–6, who previously worked for the pharmaceutical sector, mentioned that irrespective of business type, every organization needs to undertake HCD measures to implement TQM; however, he stressed that in the labor intensive RMG sector the inherent linkage between HCD and TQM is much stronger and more explicit.

The head of the quality assurance team, RMG D–5, stated that the HCD interventions undertaken so far in the form of both learning and healthcare resulted in optimum quality output

in his department. RMG D-1 specifically mentioned about the “Sudokkho” training program that brought about significant positive changes in the operations. In his opinion, RMG D reached to the economies of scale through this fresher’s training program. The program had been so robust and comprehensive that it converted inexperienced job incumbents into a dynamic and proficient workforce whose efficient performance resulted in reduced wastage, decreased cost, improved quality, and fewer rejections. Hence, in RMG D, the buyer’s feedback on product quality as reported by the participants is quite impressive. The following excerpts explain how an HCD intervention is positively connected with the underlying assumption of TQM:

*“Well, I will give you the example of “Sudokkho” which I said that training, I mean training for our operators. Those operators after training, they go into the line, and they perform the operations as a skilled operator. When I say skilled operator, it means their production is high and their rejections are very low. Right. So, when a person is producing like in one hour, I am paying an operator, let’s say “X” amount, let’s say I am paying an operator 60 bucks in one hour and the guy is producing 60 units. That means, 1 buck for a unit but if the same person is producing 100 units, my cost per pieces going down and that’s what this, the TQM. And you make them – this is our investment we do in training them and when we make them get into this thing and when I say production, production means whatever is already passed by quality. Quality holds it for certain rejections, it’s not counted as production. So, that means the quality of the product improves, what customer gets is better, and what we get is also better in terms of cost.” (RMG D-1, Senior Vice President)*

*“When you select a right person and invest in his development, you see he will have a positive attitude; he alone will work for three persons. Now you give a worker 12000*

*Taka (106 GBP) salary who is not that skilled. He is making 100, out of which 30 are useless. So, rework will be needed. Rejection and rework. Ultimately if you have skilled people of positive attitude, your cost will be decreased. You will get benefits everywhere. Your product will get more acceptability from the buyers.” (RMG D–6, Senior Vice President, Finance and Accounts)*

#### **5.9.8 Suggested Measures:**

*“Now it has become like a political issue that we have been hearing for twenty years that, a lot will be done for human resource development, whereas we do not even have a separate ministry for human resource development in our country. Many things were said to be done which were not done. As a result, particularly our RMG sector is struggling a lot due to not having sufficient skilled employees.” (RMG D–4, Head, HR and Compliance)*

The above quote indicates one of the root causes behind the recent fall of the RMG business of Bangladesh in the international market. Despite the significant role of this sector in the national economy, RMG D–3 feels that the Bangladesh government has not yet initiated any effective action plan regarding HCD where unskilled labor is the major obstacle in the path of this sector’s growth. Government has minimal participation in the endeavors made by BGMEA, BKMEA and RMG owners in this regard. He suggested that government should come forward with visionary HR policies to boost up further expansion of this major sector. BGMEA and BKMEA can also work together with government in formulating long term HR policies since they have the resources and sector specific information. RMG D–4, as quoted above, specifically addressed the necessity for establishing a separate ministry to look after the various aspects of HR development. RMG D–3 suggested that since most of the garment



factories are city centered, government can establish some technical institutions near city areas to offer off-the-job training facilities. In this case, RMG D-4 thinks that government alone cannot implement this and hence a collaboration is required with BGMEA and BKMEA to make the technical training more effectual for the trainees. He, however, added that these institutions should aim to develop both skilled workers for production and expert executives for efficient management.

Moreover, RMG D-3 commented that competent merchandizers who can play a key role in promoting RMG business are scarce. Many people working in the merchandizing team do not have the required soft skills. He uttered that BGMEA can launch a managerial skills development program especially for merchandizers so that their communication skills, negotiation skills, and bargaining capacity can be enhanced. He believes that enabling merchandizers will help attract and retain international buyers in RMG business. He also suggested that government sponsored foreign training for selected managers of each RMG company will be instrumental in developing their expertise that in turn will benefit the concerned organization and the sector. He argued that such initiative is difficult to undertake for many private owners and thus government support is essential. He emphasized on a coordination between government, BGMEA, and RMG owners in this regard. Visiting the world class factories in China, Vietnam, or El Salvador with the aid of these stakeholders will enlighten the local managers and stimulate them to perform with a bigger landscape. On the other hand, RMG D-4 suggested that BGMEA can bring expert trainers from China to train local employees. In his opinion, long training courses should be offered to the trainees to derive the expected benefits.

On the contrary, RMG D-1 stated that nothing can be expected from government or BGMEA with respect to HCD; rather the industry itself should take the necessary initiatives.

He explained that the unskilled people working in this sector are becoming more unproductive by working hard throughout the day and night, which is the outcome of weak labor law. In similar tone, RMG D-2 uttered that instead of waiting for the government or BGMEA, the respective RMG owners should make the necessary arrangements to execute HCD measures. He explained that every RMG establishment should have the required in-house training and development facilities. However, RMG D-6 strongly opined that individual RMG owners can never afford the investment required for full-fledged HCD, neither have they the expertise to develop a visionary HCD plan and implement that. He stated that government and BGMEA can even make the RMG owners more aware of HCD and guide them on how to adopt effective measures in this regard. He added that the government, particularly the ministry of education, can initiate to develop and incorporate RMG relevant subjects in the academic curriculum at different educational levels. BGMEA can arrange seminars and symposium to exchange knowledge among RMG employees. He specifically recommended that BGMEA should organize management development programs for top level executives like him as they have less opportunity than mid-level and first-line managers to learn new things and even get a proper induction inside the organization. He suggested that an expert can deliver lectures with power point presentation on critical management aspects and sector specific issues. He believes it will enable them to make better policies and plans for the industry's future growth.

However, RMG owners can have their own distinct HCD programs and policies for employees. RMG D-4 argued that HCD should be made obligatory, like compliance in every RMG establishment as unskilled labor has become a problematic feature of this sector. RMG D-2 highlighted an important aspect of Bangladesh RMG sector that they are getting volume-driven or low-price orders rather than value-driven orders from the buyers. International buyers still hold the idea that Bangladesh is not yet ready to manufacture value-driven, trendy, and expensive garments. RMG D-5 thus proposed that every RMG establishment should have a

separate training center for continuous employee training and a healthcare center for free diagnosis, treatment, and medicines. RMG D-3 suggested that HCD measure like workshops can be regularly organized in every functional department, by participating in which an employee will learn job related skills and earn a certificate as well. He believes it will be then more encouraging for employees.

RMG D-5 recommended bringing a third party or institution into the workplace to offer both short or long certificate and diploma courses to selected employees as it might ease the process and save time. So instead of pushing employees to participate in training and development programs outside, pulling in a unit from academic and professional institutes can facilitate developing human capital inside the workplace. Besides, RMG D-1 suggested that HR should identify the star performers or potential leaders from within the workforce and then should develop a comprehensive career progression plan for them so that replacement in critical positions can be made internally. He stated that he has a clear skill matrix for every factory worker but there is no such knowledge matrix for managerial employees. He strongly uttered that to be considered for promotion into a higher-level managerial position, an employee must have exposure in every functional area for which a management development program should be rigorously initiated within the organization.

Moreover, according to RMG D-3, higher academic institutions offering BBA and MBA programs can include RMG management as a major subject since job opportunities are more in the RMG sector than other fields like tourism and hospitality. He also suggested that RMG companies could also provide internship opportunities to graduate level students like banks, FMCG, or pharmaceutical companies so that they can learn many things about this sector as an intern before entering as an employee. However, most of the suggested courses of

action relating to RMG owner and management have already been implemented in RMG D, though there are numerous RMG companies yet to adopt these.

### **5.10 Case Study: RMG E**

RMG E is an export-oriented conglomerate consisting of five modern RMG factories located in Chittagong. It commenced business operations in 1983 as one of the first garments manufacturers of Bangladesh. At present, it serves twenty-one leading international buyers across the world including Target USA, Target Australia, Walmart, George, Tesco, Primark, KMART, Fila with its superior quality outfits. It exports all the basic and some fashionable clothing items of women, men, and kids. RMG E has been successfully meeting the shifting market demands and strictly adhering to compliance requirements as well. Consequently, it has already achieved annual export turnover of 250 million USD, which is one of the highest in the Bangladesh RMG sector. In recognition of its outstanding performance and substantial export turnover, it has won national awards eleven times. Besides, it has received several international awards and certifications in USA, UK, Spain, and many other countries.

RMG E follows participative management system. It values its human capital the most and intends to acquire, groom, and retain the top talents for assuring independent governance by professional experts. It does not only offer attractive remuneration and fringe benefits to attract and keep talents rather consistently invests in developing human capital. Besides, Ernst & Young which is a globally reputed organization development (OD) consultancy firm has been involved with RMG E for designing its HR practices. The robust HR policies and practices along with the automated and vertically integrated operational system enables RMG E to be a leading RMG manufacturer. The innovative, dynamic, dedicated, and untiring endeavor brings exponential growth in its business in terms of both revenues and well as assets

sometimes even over 500% per annum. Moreover, RMG E engages itself in numerous community and social development activities for the wellbeing of its dynamic workforce comprising around 18000 managerial employees and factory workers.

## **5.11 Reflexive Thematic Analysis:**

### **5.11.1 Investment Perspective of HCD:**

*“I basically feel that the investment in the machineries, investment in the technology, investment in the equipment will depreciate, whereas the investment in the human capital will not depreciate but it can only appreciate. It’s very, very important to take the human capital not as an expenditure but it should be taken as an investment wherein the people will be going to bring the returns for the organization.” (RMG E–6, Vice President, Corporate and Factory)*

The above excerpt implies that human capital is not a conventional depreciable asset; rather its intrinsic value raises over time if nurtured properly. RMG E–2 contended that when prudent investment is made in its development, it can consistently add value to the whole supply chain of the business. He firmly stated that investing in assets other than human capital can never secure sustainable development. In his opinion, company owners should therefore prioritize building a dynamic workforce to accomplish the survival and growth objectives. RMG E–6 addressed another aspect of HCD investment that it does not only generate reciprocal monetary or transactional commitment among employees but creates an emotional commitment towards the employer as well. He perceives that a competitive remuneration package might not create a loyal workforce, but a strategic HR development policy and

investment in HCD could necessarily enhance employability and facilitate retaining people to serve for a long period.

The participants of RMG E hence deem HCD as the most vital area of investment, which can bring about inestimable returns in the form of consistent quality improvement in the business by a competent and loyal workforce. RMG E-3 argued that the owners of any RMG establishment should focus more on human capital rather than financial capital, given the fact that the manufacturing process is mostly labor driven. RMG E-4 uttered that investment in HCD is crucial, particularly for augmenting the skill level of workers who are directly involved in the manufacturing process, as unless they are technically competent enough, efficient production is unfeasible, no matter what technologies or machineries are deployed in the production floor. According to RMG E-3, an employee essentially needs to have the right knowledge and skills set to assure both the right quality and quantity production and for that reason the employer should make necessary investment in this regard. However, RMG E-1 contended that HCD investment will be fruitful if they could recruit the right person having the prerequisite generic human capital like literacy, cognitive ability, personality, and others. In that case, the employer will invest in developing firm specific human capital required for the relevant job to be competently performed. He informed that the owners of RMG E are not reluctant in this regard; rather they always intend to acquire and nurture talents as they want their establishment to be independently run by a devoted and dexterous workforce with a keen sense of responsibility. According to RMG E-1, this kind of leadership attitude is required for HCD investment to be effective and profitable.

### **5.11.2 Methodical HCD Practices:**

Despite being a locally owned establishment, RMG E is on a par with any reputed international company in terms of managerial professionalism. A learning conducive work environment has been implanted there as the top-level management believes that knowledge is the most powerful asset and employees' knowledge can act as the key driver in accomplishing the company's mission and vision. RMG E-6 stated that the right choice of team leaders and members having the right knowledge, skills and professional attitudes gives them the strength to compete in the global market. He informed that they have all-inclusive HR policies and practices for acquiring, developing, and retaining skilled employees. However, he argued that developing human capital is the most crucial task since it requires massive managerial efforts and investment to make this ongoing process a success. Through this HCD process, RMG E seeks to bind its people for a long time to realize the expected performance returns.

RMG E-2 stated that the company owner always prioritizes human capital over everything and has a visionary approach to its development for promoting true employee empowerment. However, the major role is played by the HR team in this respect because the owner himself cannot turn this vision into reality. The HR team follows a systematic procedure while planning and executing HCD interventions for managerial employees and factory workers. The HR and Admin department is primarily responsible for budgeting, scheduling, and organizing the HCD initiatives. Moreover, RMG E has a corporate agreement with a leading HR consultancy firm named Ernst & Young. They guide the HR team on what kind of initiatives are needed and how to accomplish that for developing a dedicated and competent workforce. They also design innovative HCD measures to enhance soft skills as well as technical skills of employees.

In RMG E, employee selection is followed by an immediate formal induction that takes place for factory workers as well as for managerial employees. RMG E-1 explained that a newly hired employee in his department is given induction through a video presentation to inform him about work environment, reporting relationship, job related duties and responsibilities and company rules and regulations. After such orientation, the employee is asked to provide feedback in the form of a formal report. RMG E-4 stated that within the HR department, one day induction is arranged in which new entrants get formally oriented with senior colleagues and this is a common practice in other departments too. However, depending on the situation, 14 to 15 days long induction is also organized to ease the encounter phase of new employees so that they can smoothly cope with the work setting. Moreover, RMG E-1 stated that after placement a job incumbent is informally mentored by senior level departmental colleagues. A written Job Description explaining what to do and how to do is also provided to understand the job relevant assignments, duties, and responsibilities.

Moreover, for every managerial and nonmanagerial employee, a training needs assessment (TNA) is critically performed by the HR team in association with the concerned departmental or sectional head. RMG E-4 explained that the first thing they always do before undertaking HCD interventions is TNA, based on which they can understand what kind of training is required. They can accordingly select the right methodology and prepare the learning materials for the employees. There are four training schools in five factories for workers' skill development which are equipped with all practical facilities. RMG E-3 stated that before placing inexperienced workers into a particular operational area like knitting, cutting, sewing, or washing, they are given two to three months hands-on training in the training school which is, however, different from induction and aimed to prevent technical mistakes. He explained that both segregated and combined training is organized in the training school for production workers and production related office staffs depending on the learning topic. The various HCD



interventions conducted within these internal training schools facilitate overcoming the performance deficiencies rapidly, which is evident in the excerpt below:

*“What they do – say one sewing operator – she is not capable on expected way – so, then she is sent for two days to the school – ok, you join the sewing operations 2 days later, you learn – something like that. In total we have 4 schools for 5 factories – mainly for factory workers. Our production people are the trainers there. When it is actually seen that a worker has a performance deficiency, then she is sent to the training school so that she can overcome her shortcomings. If you put her in a training school for 2 days, she will be perfectly ok.” (RMG E-4, AGM and Head, HR and Admin)*

Though internal trainers are generally engaged in such HCD measures, sometimes trainers are hired externally even from overseas to disseminate advanced learning. RMG E-3 uttered that professional expert are usually hired to train employees though academic experts are also sometimes invited to teach, particularly on different aspects of management and administration. Besides, expert trainers are brought from countries like China to conduct training of trainers (ToT) programs for creating skilled trainers internally. In RMG E, the heads of most of the functional teams are found to have strong academic credentials and professional expertise who are actively involved in educating and guiding their respective team members. For example, the head of Finance, Accounts and Commercial division, RMG E-1, is a senior chartered accountant who himself is engaged in tutoring his staffs on financial analysis and reporting, minutes writing, graphical presentation, etc. RMG E-5, who is a quality assurance expert, regularly trains his team members on quality tools and techniques. The HR team itself is wholly occupied throughout the year in organizing various HCD interventions and within the department the head of HR also coaches and guides the HR people so that they can

strategically manage employee life cycle, i.e., acquisition, development, and retention. The following excerpt illustrates how it happens in RMG E:

*“In my HR, I provide some training unofficially. Because my HR colleagues work with me very closely, sits here – so, time to time I keep involved in everywhere – showing them how to do what. I train my own HR staff on HR policies and practices. It’s kind of, you know, demonstration – we sit in a conference room – I give them a time earlier – tomorrow we will discuss on this.” (RMG E-4, AGM and Head, HR and Admin)*

RMG E-3 asserted that HCD interventions assumed in different functional areas of RMG E are aimed at enhancing not only the job specific technical skills, but also soft skills encompassing communication skills, personality traits, attitudes, and manners. In this perspective, RMG E-2 highlighted the training of 7 habits of highly effective people, a course that is conducted for managerial employees on a regular basis. He informed that this HCD initiative was earlier inaugurated by their HR consultancy firm, Ernst & Young, and now every team leader within the organization adopted this training strategy. For instance, RMG E-2 who is the leader of the merchandizing team, provides this 7 habits training to all the merchandizers. RMG E-4 reported that in the last two years around 300 managerial employees participated in this educational program and learned the ways of leading their life in an effective way. RMG E-2 thinks that it is their responsibility to share knowledge with co-workers about how to lead a better life at and beyond the workplace.

However, as discussed earlier, there are on-the-job training facilities for employees in RMG E. Factory workers are placed in the training school for acquiring the required job specific skills. Besides, every worker gets mandatory fire training, which is scheduled and run by HR and Compliance team collectively. On the other hand, RMG E-6 stated that from the position of management trainee to vice president, every managerial employee gets a certain

amount of training and development within the workplace. He explained that in case of senior level executives, it is more like the acquaintance of policies and procedures, strategies, ethics, mission, and vision of the company while in case of management trainee it becomes more like a full-fledged training on different functional aspects. At the initial stage, management trainees are typically rotated in different departments to know about the basic functions of finance, HR, compliance, production, merchandizing, etc. RMG E-2 asserted that a merchandizer may not know how to prepare a balance sheet in the Accounts department but understands the basic functions of finance and accounts due to this kind of all-encompassing learning measures. RMG E-6 argued that many RMG companies in Bangladesh do not have this kind of practice which gives them a competitive advantage in professional management. He also mentioned about ethics training for management level employees, which is another distinct HCD measure undertaken in RMG E. In this respect, he uttered that their aim is to develop human capital in such a way that they will have people who will not be just technically sound, but ethically bound as well. He remarked that they have such a dedicated workforce that goes along with the ethics and core values of the company.

However, apart from on-the-job training, employees are sent outside to participate in off-the-job training and development programs as well, which are sometimes recommended by the international buyers like Walmart or George. RMG E-4 mentioned that HR team selects employees to attend company sponsored workshops, training, and management development programs that are usually held in Dhaka. He also explained that government sometimes alters or amends the clauses in the export rules, labor act, VAT act, which requires them to know about the new rules and regulations by participating in BGMEA organized training and seminars. RMG E-4 also informed that, based on the need, they sponsor selected employees to attend English language training and even short diploma courses; however, in that case the subject must be relevant to the job as well as company interest. RMG E-1 uttered that during

the Covid pandemic they have been trying more to explore the online training opportunities. Besides, the top-level executives get company sponsorship on regular basis to go abroad for advanced training and exposure. However, mid-level and first-line managerial employees do not have this opportunity yet due to budget constraints. The senior management is planning to create this opportunity for all level management staffs in future, which is reflected in the following excerpt:

*“We have a plan to arrange more foreign training for our management staff. I myself got training in Japan and some other countries several times. Last year I participated in a training at Indian Institute of Management, Ahmedabad. These were all our company sponsored training that I got abroad. Actually, many of our top management executives are getting such foreign training. Now we are planning to send our second line management, I mean mid-level managers, abroad for their skill development. We also participate in training, which is held locally on issues like costing, project finance, LC issues of commercial, supply chain, tax, VAT, etc. We participate in training on motivation and leadership as well.”* **(RMG E–1, CFO, Finance, Accounts and Commercial)**

Moreover, the senior management seems to be highly concerned about leadership development for the future growth of the company through employee empowerment. RMG E–2 uttered that for implementing true empowerment it is essential to enable employees to assume higher job responsibilities and exercise greater authority. RMG E–3 asserted that management and leadership development measures are thus undertaken which seek to implement the ‘promote from within’ concept at the workplace. He argued that management cannot always fill the critical vacant positions through recruiting people externally; rather creating the right candidates internally for that job through HCD intervention like management

development is a more feasible alternative. The top management views that buy strategy does not work well everywhere, specifically in case of senior managerial positions and thus make strategy is given greater emphasis in RMG E. This phenomenon is evident in the excerpt below:

*“...because our Chairman Sir, MD Sir always keep telling that – Hi X (RMG E-2), I can hire and I can buy and I can build a building like a 7 star hotel, I can – I can purchase the most sophisticated and the state of the art – machines or the software – but overnight I can’t build X (RMG E-2), I can’t build Y (RMG E-1). It takes time. Because what our management believes in – that I am a position – I am a Managing Director – I am not a person – I am a position. If today I am here – company is running well and tomorrow I am not here – company is going to collapse – that’s not the way. Even if I am not here, somebody else is coming, system will run the company. That’s why I always focus on developing new leaders who will run my company when I will not be here.” (RMG E-2, Manager, Sales and Marketing)*

### **5.11.3 Healthcare – An HCD Intervention:**

Healthcare for employees is given the utmost value in RMG E. The head of HR and Admin, RMG E-4, explained that healthcare is a great means of HCD, which is as important as learning interventions like education, training or coaching since expected job behavior does not merely depend on professional knowledge or skill; rather it relies on physical and mental wellbeing of job incumbents too. All the research participants have similar views regarding this aspect. RMG E-1 stated that their top management is highly concerned about employee health and always intended to provide maximum benefits in this respect. RMG E has made corporate agreements with some renowned hospitals and diagnostic centers, including Apollo, Imperial, and Chevron where its managerial staffs have access for free diagnosis and treatment. Besides,

it has a separate healthcare center within the factory premise to provide employees with immediate treatment, which is however an unavoidable compliance issue in RMG business. A certified MBBS doctor and some trained nurses who are full-time company employees serve the sick or injured staffs in that center. Like the head of HR and Admin, the participants from other functional teams also contended that this kind of facility is necessary not only to enable employees to work productively, but also to ensure their regular attendance at the workplace. The following excerpt illustrates this phenomenon:

*“Suppose one line, 3 major operators did not come one day, our production drastically drops. Like, in garments, suppose 3 main operators in one line did not come – it’s very big problem for us. If people are sick, then how can they? – their skill will not make anything.” (RMG E–5, Senior Manager, Quality Assurance)*

The top management of RMG E believes that mental wellbeing is as imperative as physical fitness for employees to work efficiently. RMG E–3 assumes that promoting employees’ physical as well as mental health can create a win-win situation as the company will subsequently receive a greater quality output from its healthy workforce. In his opinion, mental health is a matter of concern, particularly in the perspective of the Bangladesh RMG sector. RMG E–2 explained that people employed in this sector usually work under immense stress and suffer from job related anxiety and insecurity, leading to productivity loss. He contended that mental healthcare (like counselling) can be a solution to this problem, which can help build human capital robustly.

In this perspective, RMG E–1 shared his personal experience that when he became mentally sick due to facing some severe form of financial anomalies in his department, the top executives i.e., the Chairman and Managing Director, gave him enormous mental support. He had to visit Thailand at that time for better treatment, which was also partly sponsored by the

company. Moreover, RMG E-1 argued that recreation and refreshment that they frequently arrange at both factory and management level is quite stimulating for mental wellbeing. RMG E-6 uttered that during regular office hour employees in RMG E are generally pushed to work hard and exert optimum efforts. However, beyond that, activities like short picnic tours are organized for fun and amusement. Within the RMG E campus, sports facilities have been made available for staff to play football, cricket, and badminton as well. According to RMG E-6, this sort of recreation helps employees to remain productive at work.

Besides, RMG E-3 mentioned the childcare facility, which is found in every factory of RMG E for the female workers where they can safely keep their child during working hours. The children are served there with dairy foods and some learning and indoor game materials as well. RMG E-4 stated that there is a separate breast-feeding area in that facility where mothers can meet and feed their child. RMG E-1 opined that this childcare arrangement facilitates female employees to work more attentively without having mental stress. Moreover, RMG E-3 stated that around 80% of factory workers are female, and they have little knowledge about health and safety issues. That's why the HR frequently organizes health and safety training to make them more aware of healthiness.

In this context, RMG E-6 explained about Health Enables Returns (HER) program that was previously conducted in RMG E for female employees to learn about issues like health and hygiene, personal budgeting, etc. That three months long and comprehensive program was jointly sponsored by Primark, a UK based company along with an NGO. Moreover, in RMG E, the HR and Compliance team collectively undertakes various community development initiatives like eve teasing prevention movement, which according to RMG E-3 has been found useful in controlling female workers' harassment both inside and outside the factory. Such initiative is instrumental in reducing their mental strain. According to RMG E-6, an

employee's mental wellbeing usually gets affected either because of work and work-related surroundings or due to external reasons like family problems. He uttered that though management can easily control the internal causes, it is not always possible to have influence over what happens outside the workplace, for example in the family or society. He reported that most of the time what happens is that female garment workers get badly treated by family members at home.

Realizing the root cause of such exploitation, the management of RMG E revoked the cash payment method and introduced a new system of paying wages to the workers. The HR made it obligatory to create a bank account for factory workers like managerial staff so that their wages can be directly transferred to their bank account at the end of each month. In that case, their dominating family member, like husband or son, cannot forcefully take the cash money away since it is safe in the bank and depending on the personal or family needs, the concerned workers can withdraw money as and when they feel it is required. This is how management seeks to mitigate the external factors causing employees' mental problems. In fact, the philosophy of top management is that the vision of RMG E will be successfully accomplished if they can create a healthy and skilled workforce through proper nurturing. This is evident in the excerpt below:

*“Actually, many times it is not necessary for you to just take the dollars and give it in their hands but many a times you don't even put your hand in the pocket, but you just give them a hug, saying that – I am there – right – I care for you – it works, it definitely works. That thing we are trying, and I still feel that there is long way to go, and we need to work on that.”* (RMG E–6, Vice President, Corporate and Factory)



#### **5.11.4 Evaluation on TQM:**

The participants' explanations and illustrations imply that TQM is robustly existent in RMG E, which gives the business a sustainable advantage over its competitors. RMG E-6 remarked that the key success factor (KSF) is not simply the quality of finished products manufactured; rather the excellence of policies, processes, procedures, and overall management has made RMG E a Triple A company evidencing its financial strength, transparent transactional records, and ethical business practices. RMG E-6 uttered that a robustly articulated TQM policy document is followed by the entire workforce in five factories and the office unit to ensure quality in every functional domain. RMG E-5, who is the quality assurance manager, explained that a TQM system along with standard operating procedure (SOP) is embedded in the whole supply chain stemming from raw materials sourcing to product shipment.

However, RMG E-4 argued that it is the human capital they nurtured over the years that acts as the driving force in executing the implanted TQM system and related procedures. He stated that SOP is not merely embedded in the production department but rather for every department, including planning, industrial engineering, HR, finance, and merchandizing, there is a distinct, yet integrated SOP to guide their actions. He illustrated that in the HR department they follow such SOP while recruiting, remunerating, promoting, developing, and even terminating people. He contended that Job Description (JD) is an essential component of SOP, which can guide employees to perform job in a compliant manner and thereby facilitate to implement TQM at the workplace. In RMG E, JD is rigorously designed for every employee to clearly comprehend job related duties, responsibilities, and assignments. RMG E-4 reported that JD has been used for the factory workers and supervisors for more than twenty years to facilitate quality manufacturing. JD has been provided to management staff as well for the past couple of years in RMG E.

RMG E-6 stated that the company has been regulated by professional and independent management since JD provides employees a clear idea about what role to play to turn the owner's vision into reality. He explained that every employee has certain Key Responsibility Areas (KRAs) and every defined KRA is translated into Key Performance Indicators (KPI), which are critically measured afterwards. RMG E-6 uttered that this performance evaluation procedure has vented them to the ethics and core values of the company and helped achieve the expected performance target. Comparing and contrasting their management practices with that of Hong Kong based and Korean based RMG establishments, he remarked that, despite being a locally owned RMG company, they are excelling much better in terms of quality management. The following excerpts validate that RMG E is truly a TQM practicing company which has an expert and independent management system:

*“Almost 70 percent, we are there. The balance 30 percent can definitely be changed, and the policies have been created. That's the reason why we have Head of HR who is independent, we have Head of compliance who is independent. How many companies in Bangladesh has an independent department of HR and Compliance which does not have to report to any of the VPs but only to the top man? Its finger countable. So, these all show that the professionalism and commitment that management has, the ownership has, the leadership has, towards running the business in a more complaint manner. So, yes, I mean there are certain areas where there can be development but it's an ongoing process.” (RMG E-6, Vice President, Corporate and Factory)*

*“MD sir told me – X (RMG E-2), if I put my nose into your activities, right – then you should not be here – your service is no longer required. Because I give you everything – right – now you have to run. Why should you come to me? Why should? You know – what to do, what is the greater objective – right – you achieve that. That's what it is.*

*That's what we believe. And I feel proud being the part of the (RMG E) family and you know that's what it is. We are happy here to work. We have got the pride.” (RMG E–2, Manager, Sales and Marketing)*

Apart from having a professional management setup, advanced software instead of a manual system is used in office work for generating quality output. RMG E–1 mentioned about such a system that was installed in the finance department to expedite comprehensive financial analysis and reporting. He described that there are few clerical jobs in his department like inserting data into the computer system that are manually done, but other than that, digital technologies are utilized in all the finance and accounts related activities so that right decisions can be promptly made. RMG E–2 commented that one of the major benefits of such system he has experienced in his 15 years career in RMG E is that there is not a single day's delay in employee payment, which is an uncommon feature at least in the Bangladesh RMG sector. RMG E–1 also uttered that he has also been in RMG E for 15 years and throughout this period he never experienced a single cheque being dishonored. He asserted that the finance and accounts department always make sure that every bill is cleared on time.

RMG E–2 opined that in comparison to other RMG companies, RMG E is well ahead in business operations because of having advanced in-house system executed by expert management. Most of the TQM tools and techniques, including Integrated System, Enterprise Resource Planning (ERP), Overall Quality Level (OQL), Six Sigma, 3D, UTS, etc. are in use. Moreover, in the operational processes automated machineries are used to increase the productivity level. For example, workers in the cutting section previously performed cutting manually whereas they now use an auto-cutter machine. A thousand pieces of materials can be cut at a time effortlessly but accurately with the help of such machines. As a result, RMG E achieves almost 98 to 99 percent pass rate consistently in both internal and third-party

inspection, as reported by RMG E-5. Adhering to the buyer's instruction strictly, it has also reduced the defective percentage from 5% to 2.5%. RMG E-4 argued that meeting the buyer specifications and exact requirements can be made possible when employees perform their tasks using the tools and techniques efficiently, which regularly happens in RMG E. In this perspective, RMG E-1 expressed an interesting fact, that during the Covid pandemic their efficiency level has increased significantly from 56% to 70%. He also mentioned that the absenteeism rate has also reduced. In his opinion, employees have now become more sensible and devoted to work as they have been observing job loss and crisis everywhere in the world.

However, by vigorously practicing TQM system, RMG E has been able to survive in the competitive market and expand business across Europe and America. RMG E-1 attributed two TQM features in this regard, one is quality; and another is on time product delivery that he thinks are utterly maintained. In addition to garments quality, RMG E-1 emphasized on delivery time because if an RMG exporter repeatedly fails to meet the shipment deadline or takes more lead time than expected, it will then lose its competitiveness. He reported that it took almost 180 days to open an LC earlier which has recently come down to 90 days. On the other hand, RMG E-2 mentioned about three factors: price, quality and on time shipment, that are the keys to gain competitive advantages. As a merchandizer, he believes that as they offer competitive price to the buyers, they are getting repetitive as well as new purchase orders. However, RMG E-3 mentioned another issue, which is compliance. In his opinion, the elementary thing to gain buyer orders is to be a complaint factory. RMG E has compliant factories producing superior quality garments and, more importantly, it has embedded a TQM culture consisting of advanced technological setup and dynamic workforce that acts as its core competence.

### 5.11.5 Soft vs Hard TQM Aspects:

The interviewed participants RMG E-5 and RMG E-6 opined that HCD, and automation are two critical aspects of TQM which are complementary to each other. An effective combination between the soft and hard aspects can enable an RMG establishment to survive and expand its business in the competitive global market. In this context, RMG E-6 placed a little bit greater emphasis on automation as he feels that their operational performance is not yet outstanding due to not having many of the latest technologies in the operations. However, RMG E-5 views were somewhat different from this utterance, and he argued that a TQM system firmly prevails in their establishment. He explained that the required tools and techniques are all available at workplace and they should now focus more on HCD in the current organizational perspective to execute the existent TQM system. He further stated that the HCD initiatives can be followed by higher extent of technology adoption since employees will meanwhile become adequately capable to fully capitalize on that automation. Moreover, in his opinion, employees who have the right professional knowledge and technical skills usually never resist change; rather they appreciate and accept innovative technology wholeheartedly. The following excerpt also indicates this phenomenon of RMG E:

*“To efficiently use the technology that we have now, we just need to focus more on our HR development. Right. The system we already have here in RMG E and the technology we have already adopted. But for running this system and using this technology we need smart and skilled people who can easily cope with these and handle everything efficiently. So, yes, I think the first and foremost thing we need to address is HR development. Then we can go for more automation because it is people who will use the automation. They will actually implement the automation.” (RMG E-1, CFO, Finance, Accounts and Commercial)*

Though RMG E-3 stated that human capital and advanced technology are both critical requirements for smooth organizational functioning, he strongly argued that skilled workforce is more crucial in the context of labor intensive RMG sector. A statement of RMG E-2 also supports this assumption that RMG sector is not capital intensive; rather it is typically labor intensive, necessitating to emphasize more on the employee aspect. If employees cannot deal with the sophisticated technologies and machinery because of their incompetency, high-yielding operation will not be viable. Moreover, RMG E-3 contended that the changing pattern of buyers' requirements cannot be satisfied without building a productive and adaptable workforce.

However, the head of HR team, RMG E-4, reported that they have the right set of people in every functional wing who have been adequately trained and developed for effective TQM practices. He stated that the management is now planning to fix robotic technology in the manufacturing process in the immediate future, which might be challenging for few employees to cope up with. However, he believes that the HCD interventions are so rigorously conducted within the establishment that most of the employees will easily fit themselves into that high-tech system. He explained his anticipated process of adopting such system in a way that they will prepare employees first through HCD; determine the budget; completely secure the position where they are now; and implant the new system or install the robotic technology. He stressed that employees must be made adequately informed and knowledgeable about the new system or technology if the management expects them to accept rather than resist it. Otherwise, in his opinion, it would be a risky venture to invest in high-tech system before creating a competent workforce. He made an interesting example to explain this phenomenon, which is given below:

*“...because I cannot involve in such a business which are at risk if I don't have people. It's similar to like if I send some soldiers in a war without a training, that means they will get killed. First, they need to be trained, they need to be informed that this is the war, so I need to prepare my soldiers first, then they can be sent to the battlefield. And, new technology is like a war, we have to make employees ready to win that.” (RMG E-4, AGM and Head, HR and Admin)*

So, from the above excerpt it is evident that HCD is pivotal since weapons or hard tools alone can never ensure victory. Moreover, RMG E-2 agreed with the stance of RMG E-4 that it is mandatory to address HCD before automation because of the time factor. He proclaimed that HCD is a continuous process and typically involves more time to invest. It is not possible to craft human capital overnight while within a short time span an advanced technological setup can be built by monetary investment. He thinks that soft skills development is not a single day event and needs prudent planning and execution. Besides, different people have different learning capability and adaptability that makes the process more complicated and time consuming. Thus, RMG E-4 uttered that without critical post HCD evaluation, no organization should go for investment in automation. So, it is apparent from the participants' views and opinions that, though both the aspects are vital, the soft element or human capital should be given priority in relation to TQM implementation. It is also evident that the usage of hard TQM elements depends on how robustly human capital is developed at the workplace, which is reflected in the following excerpt:

*“So, TQM – who are going to maintain the quality? Who are? Even if you be in the automation but that machine doesn't know what to achieve. Behind each and every machine, every software, there is a programmer. So, the machine is the output of the thought process of that engineer. And the product is the output of the operator who give*

*the input to the machines. Right. So, again even in the automation, even it is completely robotic, right, still to operate the robot, behind every robot there is a person sitting there to control, right, or to write that software. So, again you have to come to human resource development to have better output from the robots or the automation, from the machines. So, you can't ignore it, first and foremost is – the human development. That's for sure.” (RMG E–2, Manager, Sales and Marketing)*

#### **5.11.6 HCD Implications for TQM:**

Serving the market in a compliant manner with superior quality products, reasonable price, and on time delivery reflects the excellence of TQM practices in RMG E. This giant RMG establishment has been consistently demonstrating this credibility and retaining a sustained nexus with world leading buyers. In recognition, RMG E is certified by Quality Management System International, UK. However, the research participants assume that the underlying reason behind this accomplishment lies in the HCD measures adopted for employees who act as the core driving force in the whole supply chain of business. RMG E–1 elucidated that HCD interventions enable employees to perform their job with greater dexterity and responsibility, having positive impacts on the quality of finished products. In his opinion, the educational contents and training modules designed by Ernst & Young helped them in enriching expertise, which in turn influenced the way they perform routine and nonroutine tasks. Moreover, hands-on training substantially improved workers' skills, which resulted in decreased wastage and rework in the factories.

RMG E–4 opined that if employees are not actively involved in problem solving or decision making, quality management system cannot run by itself. He argued that learning initiatives like coaching, guiding, and training are fundamental for enabling employees to add



value to the work process through their meaningful involvement. He reported that from the HR team they always methodically identify gaps in terms of employee knowledge and skills and accordingly apply required HCD interventions to ensure an ideal person-job fit. Consequently, managers as well as workers are mostly empowered to perform their job in an engaged manner. They can easily comprehend what goals they need to accomplish; what kind of improvements are expected; what sort of challenges they might encounter; and how to apply the tools and techniques of TQM at work to confront the challenges. RMG E-4 remarked that they are successful in materializing TQM principles because of having such an empowered, entangled, and energetic workforce. Moreover, the senior management always forces subordinates to learn the job holistically to get them wholly involved with the assigned tasks that subsequently help them remove performance defects and prevent potential errors. The existing workforce of RMG E has been trained and developed in such a way that they can understand and demonstrate the expected behavior to serve the market eloquently. This phenomenon is evident in the following excerpts:

*“If anything comes to me, any file or work – I tend to ask my subordinate – what is this? – how much do you know about this? If he fails to answer, I just send him back – tell him ‘Learn it and then get it signed from me’. If he wants to know, I understand, he has to take the help from senior colleagues. He has to engage himself in knowledge sharing with others. It works. They know each and everything what they do, and it helps me get quality report, quality output.” (RMG E-1, CFO, Finance, Accounts and Commercial)*

*“So, buyers don’t prefer to make you understand the simple topics by spending their time. So, they prefer somebody who has got better set of communication skills and you know – one click – can understand what buyer is asking for, someone who can read the*

*buyer well. We have produced such merchandizers among us and that's how we are doing business with Walmart, George, Target.” (RMG E-2, Manager, Sales and Marketing)*

*“I would say even in writing an email to a customer – right – even that also has got a kind of a methodology to do it, in the sense it should reflect the company's philosophy and company's ethics and core values. Our officers are educated but still we practically teach them how to write an email, a report or something to convince the reader, boss, or our client. The HR has like this kind of thing, they train. We are leading in the market because we just not maintain only the garments quality, we do it everywhere.” (RMG E-6, Vice President, Corporate and Factory)*

However, the RMG business is highly volatile as the end users' taste and demand changes rapidly. To meet the changing requirements of buyers, an RMG establishment must develop new capabilities for offering creative product features and qualities. RMG E-1 informed that apart from an internal product development department, they also have a four-member product development team in the UK that aims to research and develop new product ideas through discussing with existent and potential buyers. Unlike many other RMG companies, they do not merely follow the buyer specifications; rather they offer their self-crafted product designs and thereby create buyer needs and specifications proactively. However, RMG E-1 contended that they are providing the market with innovative product features since they have innovative people. He also explained that it is the outcome of consistent HCD efforts that have made employees working both in the factory and office capable of performing ground-breaking works. The managers gained the capability to solve problems and make decisions in creative ways. The factory workers acquired the required skills to operate in the vertically integrated work processes and SOPs that have been shifting

precipitously. RMG E-1 reported that on average they are dealing with 160 design alterations every month, and this has not been made feasible by the advanced technological setup they have; rather by the innovative and smart workforce that always makes it happen.

Moreover, HCD interventions, like company sponsored foreign training, can enrich the views, insights, and thought process of the employees and hence they can think out of the box and work more creatively. In this perspective, RMG E-4 made a self-assessment that after attending the Marshall Goldsmith's lecture in India in January 2020, he can now perform HR functions in a more innovative way. He uttered that he did not perhaps grab the whole lecture materials from that training session, but that learning experience gave him the courage and command to do his routine job inventively and face the unpredictable circumstances prudently. He now feels that he can solve complex HR problems, applying the learned tricks with an innovative mind. RMG E-1 thus opined that HCD interventions play an invaluable role in creating an innovative workforce within their establishment that goes along with the shifting trends of business. The following excerpt explains how HCD helps an employee to think in a broader spectrum:

*“As I said, when I joined in a training at IIT, India, first I found that – I was the most junior participant there and the interesting thing in that I found – they had given us a lot of materials for study, but they were unsure what kind of participants they are going to meet. Like there were some very experienced professionals, doctorate degree holders, retired government officials I met there who I feel came to see how IIM is doing, not to learn there. I was there to learn everything. There, the whole three days – those senior participants were explaining what happen to their industry, when their share price came down – how they took this up. So, that kind of knowledge and experience sharing was there and what they did when TATA was falling in Calcutta.*

*So, I found that – that training what happens – I realized that – first, I had a chance to visit IIM, it's really a prestigious university. So, that kind of feelings I got. Actually, 'developing leadership pipeline' I am not sure I gathered that time anything or not from the training. But I felt that I have a lot of things to learn. I am so small compared to the people came there and IIM is a different experience for me. So, then right away, maybe we learned one or two things clearly from those sessions. The whole thing we didn't get. But we get the courage. Ok. When I came back, I start thinking big. I start thinking more imaginatively than before.” (RMG E-4, AGM and Head, HR and Admin)*

TMQ implementation is fundamentally contingent on how creatively people can think and do their jobs, for which HCD interventions are indispensable to embark on. Moreover, TQM is also embedded in the principle of continuous improvement, which demands changing the SOPs, work processes, and techniques with the pace of changing market dynamics, but unless employees develop new capabilities, product or process improvement is not at all feasible. RMG E-5 stated that it's not like that once a SOP is set, it must be followed rigidly. He explained that a specific SOP may seem appropriate for today's operation, but it may become obsolete tomorrow. He uttered that each update in SOP makes it compulsory to provide employees with new training. RMG E-6 opined that continuous improvement of SOPs depends on continuous HCD which is evident in the excerpt below:

*“When the people will get proper training, learn proper techniques, then it is possible to implement all the SOPs, and techniques. This is possible only from your human development. Identify the people, their capabilities, and accordingly train them, promote them. We do so in our company continuously. And that's why, you see the continuous improvement in our operations.” (RMG E-5, Senior Manager, Quality Assurance)*

Apart from learning interventions, participants argued that healthcare is also an effective HCD means that has significant implications for TQM implementation. RMG E-6 reported that the healthcare facility provided in their workplace has tremendously increased the level of productivity and involvement of employees at work. He uttered that it's not only the physical fitness of employees that is nurtured but also the mental support and counselling offered that bind employees emotionally with the employer. In his observation, managerial employees show greater loyalty and commitment towards work as well as the company, since they value the healthcare services received. RMG E-4 explained that healthcare is given utmost importance since it is directly related to employee capability, which is a mandatory factor for productive performance. The system they developed for nurturing physical and mental wellbeing not only enables employees to perform effectively, but it also gives them a sense of security and confidence. Moreover, an organized healthcare system within the establishment facilitates in developing succession plan or replacement chart. So RMG E has the opportunity to select future leaders from within, which can be instrumental for quality enhancement. The following excerpt reflects this perspective:

*“So, as we are giving healthcare, we know about the health condition of our staff, that you know helps us to have a succession plan – how fit an employee is – it’s important to determine where the employee can be placed in future. Like if you are ill, if you have major health problem, I cannot expect you to be a future Vice President of this company probably. I think succession plan can help us to practice TQM in a sustained fashion.”*

**(RMG E-4, AGM and Head, HR and Admin)**

In a nutshell, RMG E-3 asserted that by fulfilling employee learning needs, reducing the deficiency in terms of skills and knowledge, and nurturing employee health, they have achieved excellence in business operations. He opined that TQM has been successfully

implemented as they have developed a dedicated and competent workforce through various HCD interventions. The significance of HCD in the perspective of TQM implementation can be briefly grasped from the following excerpt:

*“See – the houses need a lot of bricks and cements, but it gets converted into a home only by the people who are inside. You can bring a beautiful automatic cutting machine also but even for feeding the cutting machine inside and doing the start – to press the start button also, you still need a human inside. You still need to develop it.”* (RMG E-6, Vice President, Corporate and Factory)

#### **5.11.7 HCD – TQM Linkage:**

An innate linkage was observed between HCD and TQM in RMG E. All the interviewed participants elucidated from their functional perspectives that HCD is directly connected with TQM. According to the opinions of RMG E-4, the concept of TQM itself implies that quality output can never be expected from an isolated mechanistic system rather from human capital since qualified employees virtually lead the operations through the application of their acquired expertise. RMG E-5 uttered that HCD interventions are directly interrelated with TQM practices because competent employees can contribute to new product development, process improvement or reengineering, and participative management. RMG E-4 explained that the local employment market for the RMG sector is yet not mature enough, hence recruiting highly skilled managers or workers may not always be feasible. Unqualified or unskilled employees can never make the optimum utilization of the hard tools and techniques required for TQM execution. In that case, he stated that overcoming the employees’ knowledge, skill, and fitness gaps through HCD interventions is the only solution for effective TQM. In his observation, HCD interventions like coaching, training, management development programs, and healthcare

have brought about significant behavioral changes among employees in RMG E that are preconditions for TQM success. RMG E-3 described that employee working in the factories as well as the office receive regular training and education. Moreover, the healthcare system for employees is impeccably managed at the workplace. These endeavors enable them to positively contribute to the continuous improvement process with enhanced efficiency and creativity. In fact, every research participant views that without undertaking necessary HCD measures at the workplace, TQM implementation is simply impossible, which is evident in the following excerpt:

*“Well. So, ultimately who will make sure the quality? It is we who will make that happen. Now, if people are not capable enough, quality output will never come out for sure. So, employee development and total quality management is clearly related with each other. Yes, of course. I think, unless we continuously focus on building our manpower, it won’t be possible to have TQM at the workplace.”* **(RMG E-1, CFO, Finance, Accounts and Commercial)**

#### **5.11.8 Suggested Measures:**

*“On the other side, considering the risk of losing trained employees, if you don’t train them, maybe they will stay with you but as a junk. We have to train them. Some of them will go, but they will tell outside good about us – I have learned these things from (RMG E).”* **(RMG E-4, AGM and Head, HR and Admin)**

The above excerpt implies that human capital, though mobile in nature, should be developed in a continuous manner contemplating the potential drawbacks of an incompetent workforce running the operations. Despite having a separate HR and Admin department

responsible for HCD, the participants of RMG E feel that a specialized team could be formed for more organized employee learning. For example, RMG E-5 strongly uttered that they could have a separate training and development department under the HR division. He argued that qualified trainers or instructors having relevant expertise in different operational areas should be recruited in this department. In his opinion, if trainers themselves are not trained on how to guide trainees' behavior, HCD interventions will end in failure.

In this perspective, RMG E-4 stated that he had already suggested a proposal to the highest authority of the company to establish a management training school for providing managerial employees with the required soft skills in a programmed approach. He believes an RMG company can reap long term benefits by founding such a permanent in-house setup. He explained that this school needs to be equipped with necessary training facilities and materials. It will be situated in a separate zone within their campus in which the head of every department will have equal access to book a slot to train departmental staff. Besides, regular training on language and communication skills development will run throughout the year for employees so that they can overcome their limitations and effectively maintain upward, lateral, and downward communications. An illustration of how this internal management school will be used to foster learning can be found in the following excerpt:

*“I said it should be a proper school and we can use that time to time, say I will book a slot for 2 hours for training and management development. When you have such a ground, I could put some basic training – ok, there is an English training we want every day 7 to 8 am, who have lacking English – you go there. There are some other trainings we need like communication training, every week two days – those who are struggling – ok, just put him or her there for 2 hours training weekly. So, it’s a fixed process. We*



*don't need to make the budget and this thing. If that is not covering, then you can send people outside.” (RMG E-4, AGM and Head, HR and Admin)*

It is evident from the above excerpt that a permanent in-house management school will decrease the need for sending employees to external institutes or even abroad, which will in turn save time and cost. However, RMG E-5 thinks that they have required number of technical trainers internally but there is still a need to hire behavioral trainers from outside who can bring positive behavioral changes among employees. He informed that they have a plan to embrace lean manufacturing system in the immediate future to minimize lead time and operating costs as well as to improve product quality, but to fully adopt this system they need to develop multiskilled people. He explained that a multiskilled operator is someone who can, for instance, handle single needle machine, overlap machine, multi needle machine i.e., he is proficient in every type of machine used in the sewing process.

However, participants also uttered that the existent education system in Bangladesh is not suitable for the future of the RMG sector and needs to be substantially modified. RMG E-2 suggested that the education system should be aligned with the needs of the employment market which RMG E-1 termed as career-oriented education system. Highlighting the major limitations of higher education, RMG E-2 proposed that RMG management should be included as a major subject in bachelor and master's programs at university level. On the other hand, RMG E-1 opined that it is imperative to develop brainstorming, creative writing, and presentation skills among students from the elementary level. He also recommended that industrial tour could be incorporated in the curriculum to facilitate broadening the practical knowledge of the students. Besides, he also thinks that every RMG company should provide graduate level students with internship opportunities that RMG E regularly does. He believes

a strong industry-academia alliance will be instrumental in creating a competent workforce for this sector.

The interviewed participants also believe that government is the most powerful stakeholder, which can play a big role in converting the huge number of unskilled people employed in the RMG sector into a competent workforce. RMG E-1 stated that government can foster technical and vocational education more widely across the country. RMG E-2 stated that RMG companies in Bangladesh are still producing basic garment items with which the sector cannot reach the target of \$50 billion of annual export. In his opinion, a collaborative effort from government and BGMEA is essentially required to develop a multiskilled workforce without which manufacturing embellished garment items i.e., attracting value-driven orders will not be possible. RMG E-6 suggested the government take necessary measures for creating more technically sound people who can upskill themselves with the modern technology and automation. RMG E-2, however, placed greater emphasis on developing leaders from within the organization through effective and visionary HCD interventions.

## 5.12 Summary:

**Table 5.1: Summary of Key Findings**

<b>Thematic area (TA)</b>	<b>Case: RMG A</b>	<b>Case: RMG B</b>	<b>Case: RMG C</b>	<b>Case: RMG D</b>	<b>Case: RMG E</b>
<b>TA 1: Investment Perspective of HCD</b>	HCD investment is perceived as the most significant spending.	HCD / make strategy is viewed as more cost effective than buy strategy.	For a newly formed RMG establishment HCD investment is the most crucial need.	Adopting make strategy is imperative since skilled people are scarce in the sector.	The return on HCD investment is incalculable yet the most significant.
<b>TA 2: Methodical HCD Practices</b>	Specialized HR team; TNA; Formal induction; Use of written JD; In-house training center; On-the-job training; Separate arrangement for knowledge exchange; Rotational training; Retraining and redevelopment.	Separate HR department; Group wise formal induction for workers; Casual induction for managerial staff; In-house training center; Continuous training and development; Post learning evaluation.	HR department; Placement through internship; Induction; Probation; Prolonged technical training; Employee development plan; Internal training arrangement; Virtual learning; COC training;	HR team; Formal induction; Company sponsored learning; TNA; Training center; TOT scheme; “Sudokkho” program; On-the-job and off-the-job training; Women empowerment program; Management development.	HR team; Learning conducive environment; Formal induction and feedback; Use of written JD; TNA; 4 training schools; local and foreign trainers; TOT; On-the-job and off-the-job training; Leadership development.

			Company sponsored learning.		
<b>TA 3: Healthcare – An HCD Intervention</b>	Anything enabling employees to work productively should be regarded as HCD. Healthcare as an enabler can thus be considered as a means of HCD.	Human capital is viewed as the composition of knowledge, skills as well as health and healthcare is essentially a vital means of HCD.	Health conditions have crucial impacts on individual job performance and organizational goal attainment, hence pondering healthcare as a means of HCD is justified.	Health is perceived as a key element of human capital and that healthcare is regarded as an essential HCD intervention.	It is commonly perceived that healthcare is a fundamental means of HCD.
<b>TA 4: Evaluation on TQM</b>	Exemplary TQM involving: Quality system; Advanced technology; Rich sources of materials; Skilled and committed workforce; KPI;	Exemplary TQM involving: Skilled and experienced employees; Quality control mechanism; Good working conditions; Strict adherence to buyer's compliance.	Exemplary TQM involving: Resilient coordination among functional units; Appropriate environment; ETP; Safety data sheet; Less overtime.	Exemplary TQM involving: Comprehensive SOP; Strategic negotiation; PLC-based operations; 8D problem solving tool; data sheets; tally sheets; spread sheets;	Exemplary TQM involving: TQM policy document; Embedded TQM system with SOP in the whole supply chain; Independent management;

	DNA board; Presence of NQC.			Ishikawa diagram; A3 problem solving tool.	Computerized system; ERP; OQL; Six Sigma; 3D.
<b>TA 5: Soft vs Hard TQM Aspects</b>	Though the necessity of hard TQM elements cannot be ignored, there has been a growing consensus that HCD is a more critical precondition for effective TQM implementation.	Hard (automation, technology, machines) and soft (workforce) aspects of TQM are inextricably linked with each other. However, before crafting the hard aspects, the first and foremost thing to do is to prepare workforce (HCD) in order to reap the optimum benefits of automation.	The lack of either hard or soft aspects might result in TQM failure. However, greater emphasis must be placed on HCD (soft) than automation (hard) as it is proved that without having state of art technology a labor intensive RMG establishment can experience TQM success if it does have a competent and committed workforce.	Hard aspects (tools, techniques, systems) and soft aspects (human capital) play complementary roles in TQM execution. However, developing human capital is viewed to be more pivotal given that hard tools can only detect problems, but it is people that can solve problems.	Both soft (human capital) and hard (technology) aspects are critical. However, HCD should be given priority which can later be followed by technology adoption in a labor-intensive setup like RMG.

<p><b>TA 6: HCD Implications for TQM</b></p>	<p><b>What:</b> Increased product quality; Reduced wastage and cost / reasonable price.</p> <p><b>How:</b> Effective time management; Less supervision requirement; Job specialization; Increased commitment and loyalty / positive attitudinal change; Participative management / active involvement and empowerment; Innovation.</p>	<p><b>What:</b> Quality of garments; On-time shipment; Decreased wastage cost.</p> <p><b>How:</b> Participative management / active involvement; Empowerment; Constructive behavior; Innovation; Job specialization; Continuous improvement.</p>	<p><b>What:</b> On-time product delivery; Quality of finished garments; Decreased cost / price.</p> <p><b>How:</b> Responsible behavior; Curtailed unnecessary supervision time; Job specialization; Reduced bottleneck; Empowerment; Involvement; Continuous improvement; Creativity.</p>	<p><b>What:</b> Quality garments; Competitive price; On time shipment.</p> <p><b>How:</b> Improved process capability/continuous improvement; Job specialization; Positive behavioral change; Teamwork/participative management; Innovation in product development and promotion.</p>	<p><b>What:</b> Superior quality products; Reasonable price; On time delivery.</p> <p><b>How:</b> Person-job fit; Meaningful involvement; Empowerment; Demonstration of anticipated behavior; Enhanced innovation capability; Continuous improvement.</p>
<p><b>TA 7: HCD - TQM Linkage</b></p>	<p>The perceived nature of linkage between HCD and TQM is</p>	<p>An intense association between</p>	<p>A linear relationship explicitly exists</p>	<p>TQM is contingent on the accumulation of human capital and in</p>	<p>HCD interventions are found to be vitally</p>

	explicitly positive. HCD and TQM acts as independent and dependent variable respectively.	HCD and TQM is vividly found.	between HCD and TQM.	RMG business the nexus between HCD and TQM is much stronger and more explicit.	connected with TQM implementation.
<b>TA 8: Suggested Measures</b>	Interventions from external stakeholders such as BGMEA, BKMEA, educational institutions with respect to HCD.	HR department as strategic business partner; Induction for all; Management development policies; leadership development; Training on Six Sigma and Kaizen; Healthcare.	Soft skills development; Separate in-house training center; collective measures from internal and external stakeholders.	Measures from external stakeholders such as Government; In-house training center; Management development; Healthcare center.	Separate training and development department; Management training school.

The above are the major research findings generated across eight thematic areas which will be discussed and interpreted in the next chapter with the aim to answer four specific research questions addressed in this exploratory study.

## **Chapter Six: Discussion**

### **6.1 Introduction:**

This chapter intends to discuss the major findings transpiring from the within-case analysis presented in the preceding chapter. To reiterate, this research was aimed at exploring and understanding the critical role of HCD in the implementation of TQM philosophy in the Bangladesh RMG sector perspective and developing a comprehensive framework of HCD for improved quality management. Moreover, four research questions were developed to accomplish this research aim. The discussion will follow the sequence of the research questions in this chapter. Firstly, the findings relating to thematic areas one, two, three, four, five, and six (TA1, TA2, TA3, TA4, TA5, and TA6) will be discussed to explore and understand the role of HCD in implementing TQM philosophy. Secondly, the findings concerning thematic area six (TA6) will be discussed to investigate how HCD affects the implementation of TQM philosophy. Thirdly, findings covering the thematic area seven (TA7) will be discussed to further elucidate the linkage between HCD and TQM philosophy. Finally, the findings encompassing the thematic areas two, three, and eight (TA2, TA3, and TA8) will be discussed to develop an HCD framework for the implementation of TQM philosophy.

### **6.2 Role of HCD in TQM Implementation:**

This exploratory research principally aimed to investigate the role of HCD in the implementation of TQM philosophy based on the evidence of five exemplary case organizations. The study provides empirical support for the notion that HCD plays a significantly critical role to accomplish zero defects in every business operation and thereby



ensures greater customer satisfaction, which is the underlying motive of TQM philosophy. On integrating and synthesizing the key findings of this multiple case study research it can be comprehended that the cost of doing business, quality of finished products, and on-time product shipment is greatly impacted by HCD interventions in RMG operations (see TA6 in Table 5.1). This result contributes to the HRD literature by seeking to recognize the potential benefits of HCD practices with respect to TQM philosophy.

As the evidence showed in TA1 (see Table 5.1), the case organizations place greater emphasis on developing their existing workforce and employing make strategy (i.e., assume measures to boost up managerial talent and physical labor to get things efficiently accomplished), (Samson and Terziovski 1999; Hafeez et al. 2006). Employees, irrespective of functional area or hierarchical position, acquire the competencies necessary to perform their assigned jobs in an anticipated manner. The policies and strategies formulated at the management level are effectively implemented in the factories by the operating employees, regardless of having robust technological assistance. Consequently, quality garments are produced and distributed in a cost and time effective way. It is thus evident that HCD encompassing learning and healthcare interventions can essentially equip employees to meet individual and group performance targets of the company (Baron and Armstrong 2007) and, thereby, yield superior quality product, competitive price, and less lead time, which in turn leads the business to gain competitive advantage (Powell 1995; Reed et al. 2000).

Findings show that each case organization has a separate HR department which runs independently and is responsible to initiate and reinforce HCD measures systematically in order to empower employees to comply with the performance requirements as well as to deliver innovative outputs (see TA2 in Table 5.1). Though all other functional teams have some sort of engagement in HCD practices, HR is found to be primarily responsible to ensure not only

the effective learning, but also the physical and mental wellbeing of the employees. It is found that this role of HR as change agents significantly affects the way TQM is executed in case organizations (Wilson and Chapman 2009). The findings of this study, however, contradict the traditional view of HRD (Frank 1988) in a way that healthcare is explicitly connected with enhanced employee capability, affecting job related behavior and, hence, must be regarded as a necessary means of HCD (see TA3 in Table 5.1). This finding is consistent with the fundamental theme of Human capital theory (Fisher 1906; Schultz 1961; Becker 1964; Berger et al. 2003; Bloom and Canning 2003; Goldin 2016; Kolomiets and Petrushenko 2017). Moreover, findings relating to TA3 suggest that healthcare is as needed as learning knowledge or skills since illness of employees causes poor concentration on work, higher rate of absenteeism, delayed decision making, and even inability to use the acquired skills. It is also evident that healthcare is a precondition for any learning intervention to be effective (see subsection 5.9.3). It is empirically proven that effective decision, quality production, and on time business operations throughout the supply chain can be made to happen only when employees possess the right knowledge, skills, as well as good health.

Moreover, empirical evidence also suggests that, though both the soft and hard aspects of TQM are critical for effective business functioning, success in TQM execution largely depends on the soft or people related element, particularly in a labor-intensive sector like RMG (see TA5 in Table 5.1). The underlying reason is that the exploitation of hard elements like technology or problem-solving techniques relies on how competent employees are in their workplace and, consequently, HCD has a greater significance than automation. The extant literature supports this finding in a way that soft elements related to organizational workforce directly impact the diffusion of hard elements in TQM implementation (Rahman and Bullock 2005) and that an organization should duly ponder people-related elements before adopting TQM-related technology (Hafeez et al. 2006). Moreover, research findings evidently imply

that even without having a high-tech system, an RMG establishment can achieve customer satisfaction through continuous improvement if it can form and nurture a dynamic workforce and strategically capitalize on that (see subsection 5.5.5 and 5.7.5). It is noteworthy that the prior studies emphasized more on the hard elements, such as structural control, statistical process control, exploration, and merely explained them as complementary variables in respect of TQM implementation (Douglas and Judge 2001). This study contributes to the knowledge by recognizing the people-centric soft element as the elementary factor in TQM implementation on which even the functionality of hard elements relies.

This study reveals three case organizations, coded as RMG A, RMG D, and RMG E, that are successful in TQM implementation through effective amalgamation between human capital and automation. However, it is perceived that human capital acts as the key and constant factor in this combination (Fulmer and Ployhart 2014). On the other hand, RMG B and RMG C are found to be less technologically driven yet demonstrates exemplary TQM practices, which is mostly based on human capital as well. It is thus evident that the way human capital is developed and nurtured by the organization is the key to enhanced and prolonged organizational performance (Oakland 2014). The findings of this study corroborate the resource-based theory that human capital resource is valuable, rare, inimitable, and non-substitutable (Wernerfelt 1984; Barney 1991; Peteraf 1993; Hatch and Dyer 2004; Delery and Roumpi 2017; Gerrard and Lockett 2018) and that HCD can secure effective TQM implementation and thereby facilitate an organization to achieve sustainable competitive advantages (Powell 1995; Reed et al. 2000; Wright and McMahan 2011; Nyberg et al. 2014; Delery and Roumpi 2017). However, the major findings of each case specifically relating to the role of HCD in TQM implementation are discussed here to substantiate the notion that emerged in this study.

### **6.2.1 Case: RMG A**

Findings suggest that RMG A is an exemplary TQM practicing conglomerate that consistently meets buyer expectations (see subsection 5.3.4). The rising demand for its garment products and annual export turnover of 72 million USD are some indications of efficient business operations (see section 5.2). Throughout the vertically integrated operational system, RMG A shows deep concern for quality. The zero-defect operations and wastage minimization strategy make it possible for RMG A to curtail cost and thereby offer quality products at a competitive price and in a compliant manner (see subsection 5.3.4). Moreover, its capability to efficiently manage the supply-chain network facilitates capturing market share.

However, empirical evidence implies that the culture of cultivating a dynamic and dedicated workforce affects the capability of RMG A to implement its zero-defect operations and wastage minimization strategy (see subsection 5.3.6). Human capital is perceived to be the core competence for RMG A and investment in HCD, such as employee learning and healthcare, is thought to have substantial impacts on total business integrations (see subsection 5.3.1). Satisfying the changing buyer specifications makes it compulsory to develop firm-specific human capital. Synthesizing the research findings, it becomes apparent that RMG A gains competitive advantages not just due to having state of art technology or using superior quality raw materials; but rather the robustly designed HCD practices play the central role in this respect.

However, it is noticed that the hard elements of TQM, such as inspection failure database, root cause analysis, and problem-solving tools are rigorously existent in operations, but the management of RMG A prioritizes the soft element and, accordingly, places more emphasis on developing human capital to secure effective business performance (see subsection 5.3.5). The reason is perhaps that top-level management perceives that realizing the

benefits from these hard tools and techniques depends on how capable the workforce is to rightly utilize the allocated physical and organizational resources (Mortita 1982). The strategy RMG A applies is to prepare the workforce before embracing new technology. Findings suggest that, no matter how advanced the system or technology is, wastage or cost minimization is virtually unfeasible if employees do not have the required capabilities (see subsection 5.3.5).

### **6.2.2 Case: RMG B**

Despite having some infrastructural shortcomings, RMG B experiences sustained growth in terms of export turnover. It is reported that RMG B does not invest much in automation; rather accentuates more on HCD (see subsection 5.5.1). Its factory layout and technological setup cannot be regarded as modern as the current state demands. However, the garments produced by RMG B have a growing market demand in North America and European countries. By consistently maintaining high standards throughout the vertically integrated operations, upgrading garment quality, and delivering finished products at the right time, it retains a sustainable relationship with buyers and achieves competitive advantage (see subsection 5.5.4). Moreover, confronting complaints from international buyers like Mind Bridge, Twinkids, OVS Kids, and Matalan is a rare phenomenon that indicates its potency in implementing the TQM philosophy (see subsection 5.5.4).

Though a disagreement is found to some extent among the participants' viewpoints regarding the assessment of TQM implementation, the central message is evident that HCD is the key to handling the whole supply chain of the business smoothly, enhancing product quality and ensuring on time delivery, given that the activation and utilization of all other physical and organizational resources largely depends on employee capability (Mortita 1982). The research

participants who are not pleased with the extent of TQM implementation feel that rigorous HCD interventions (specifically management development programs) can be instrumental in implementing TQM philosophy. On the other hand, research participants who perceive that TQM is effectively accomplished similarly contemplate HCD as the underlying reason behind the success. The point is emphasis and investment in HCD is pivotal and results in better business performance and greater customer satisfaction. Moreover, findings imply that the HR department in RMG B adopts make strategy for HCD rather than buy strategy, i.e., they hire relatively unskilled people and then train them up so the job is competently performed, which is perceived to be more cost effective as well (see subsection 5.5.1).

Nevertheless, the management of RMG B thinks that both the hard (technology, machineries) and soft elements (people) of TQM are vital to promote quality of operations (see subsection 5.5.5). However, considering the current organizational and national economy perspective, management prioritizes HCD over automation since complete automation in RMG operations might result in reduced demand for labor, leading to an unemployment crisis. Despite having a relatively unmodern factory layout and system, RMG B consistently maintains their quality of production based on skilled labor and efficient management (Arulrajah 2017). It is noteworthy that hiring expert people for every key position is neither cost effective nor at all feasible, hence HCD interventions for the existing workforce is the solution. However, findings imply that HCD is not an alternative; rather a precondition of automation, since it is human beings that work behind every single machine and leads the system (see subsection 5.5.5). Without developing human capital, automation alone cannot implement TQM at the workplace (Rahman and Bullock 2005).

### **6.2.3 Case: RMG C**

RMG C is a small new generation establishment, but it already creates an impact in the international market through excellent quality management practices in business operation. The demand for its apparel items has seen a rising trend in Japan, USA, and European countries for two major reasons, one of which is on time shipment and the other is the quality of finished products (see subsection 5.7.4). Findings suggest that RMG C deals mostly with Japanese buyers who are zero tolerant and assess not only the quality of finally delivered items, but also the factory environment, manufacturing process, standard operating procedures (SOP) and the whole business operations critically (see subsection 5.7.4). The workplace health and safety conditions, resilient coordination among functional teams, and reduced overtime schedule of factory workers make it feasible for RMG C to meet the challenging requirements of picky Japanese buyers and, subsequently, gain sustained competitive advantages. The enduring relationship it maintains with its target buyers indicates that TQM philosophy which is centered around the notion of customer satisfaction, is effectively implemented.

The management of RMG C adopts the principle of ‘work less but work efficiently’ to ensure quality production and on time delivery. However, this principle, as perceived by the research participants, cannot be established in the workplace without having a skilled and capable workforce for which investment in HCD is mandatory (Baron and Armstrong 2007). It is found that most of the employees, including both managerial staff and factory workers, employed in RMG C are not adequately experienced, hence HCD is essential to equip the existing workforce to exerting quality inputs into the system (see subsection 5.7.1). Empirical evidence suggests that the meticulous HCD practices, such as formal induction, on-the-job and off-the-job training, and healthcare services are contributory to securing quality production and on time shipment, thereby satisfying the buyers (see subsection 5.7.2 and 5.7.3).

However, findings suggest that hard and soft aspects of TQM are perceived to be equally important to sustain quality as the missing of any of these elements might result in TQM failure (see subsection 5.7.5). It is, however, noticed that a competent workforce alone can run the labor intensive RMG operations, whereas an isolated system without having efficient employees can never operate functionally (Dale and Cooper 1992).

#### **6.2.4 Case: RMG D**

RMG D is one of few garment manufacturing establishments in Bangladesh that enjoys sustained competitive advantage in the international market through blending the soft TQM aspects with the hard TQM elements vigorously (see subsection 5.9.4). The impressive list of buyers; considerable export turnover (around 50 million USD); nominal rate of inspection failure (less than 2%); and higher profitability imply that it has been a competitive garments exporter in the world and a leading one in the Bangladesh RMG sector. The vertical operational setup, high-tech PLC controlled manufacturing system, rigorous standard operating procedures (SOP), and compliant business practices facilitate RMG D in ensuring quality. However, the research findings strongly suggest that RMG D becomes an exemplary TQM practicing establishment because of its consistent endeavor of developing a skilled and dedicated workforce capable to execute the quality improvement initiatives (see subsection 5.9.4).

Data implies that the advanced in-house technological setup has a secondary role in achieving greater effectiveness and efficiency. The use of numerous tools and techniques in RMG D, such as pareto principle, 8D problem solving tool, A3 problem solving tool, data sheets, tally sheets, spread sheets, and Ishikawa diagram, are found to be effective in accomplishing flawless, zero-defect operations. However, it is evident that these tools and techniques can only trace out the defects or root causes of a problem but are incapable to resolve



the issues by themselves (see subsection 5.9.4). It is in fact the managerial talent and productive labor that can and do eradicate the root causes and fix the problem. It is, however, worth mentioning here that skilled labor for RMG operations is not readily available in the market, hence RMG D massively focuses on transforming its unskilled and semiskilled workers into a competent workforce through assuming different HCD interventions like ‘Sudokkho’ skill upgrading program (see subsection 5.9.2). The hands-on training opportunities enable factory workers to operate the PLC based auto machines efficiently, impacting the zero-defect policy of the management. Besides, findings suggest that RMG D still cannot fully capitalize on its massive production capacity due to the shortage of skilled labor in some operation lines which further substantiates the inference that HCD is critical to the fullest use of physical resources (see subsection 5.9.1).

Though competent managerial employees are not as scarce as skilled operators, the HR mostly prefers adopting a make strategy, developing managers internally rather than hiring expert managers externally. It is evidently a cost-effective strategy and, more importantly, HCD interventions facilitate enhancing capability as well as loyalty that subsequently impacts quality and consistency of administration (see subsection 5.9.1). Besides, the strategically designed HCD measures enhance the soft skills among the managerial employees, hence, for instance the merchandizers can effectively handle the buyers and meet the specifications in a compliant manner. Empirical evidence clearly implies that human capital involving technical know-how, soft skills, physical stamina, and mental wellbeing, is diligently formed and nurtured in RMG D through several HCD interventions (see subsection 5.9.2 and 5.9.3) which in turn affect cost, quality, and lead time in operations (see subsection 5.9.4).

Moreover, it is evident that hard TQM aspects can be imitated as they are readily available, but human capital generated through HCD is inimitable and can give business

sustained competitive advantages in the long run (Wernerfelt 1984; Barney 1991; Peteraf 1993). Integrating and synthesizing the key findings of this study, it can also be stated that RMG D implements TQM philosophy consistently and thereby gains competitive advantage in the international market, mostly due to the rigorous HCD interventions assumed by the HR with support of other functional teams (Powell 1995; Reed et al. 2000).

### **6.2.5 Case: RMG E**

Exemplary implementation of TQM philosophy facilitates RMG E to consistently meet buyers' expectations and, thereby, achieve competitive advantage in the international market. The use of sophisticated tools and techniques, such as enterprise resource planning (ERP), overall quality level, Six Sigma, 3D, UTS at workplace and highly automated vertical operations, result in a nominal defective rate of less than 2.5% and quality pass rate of almost 99% in both internal and third-party inspection (see subsection 5.11.4). However, empirical evidence suggests that it is the professional management and efficient labor that acts as the driving force for all the instruments and technologies to be functional in RMG E (see subsection 5.11.6). It is found that employees involved both in factory operations as well as office management have the required capabilities and skills to utilize the allocated resources efficaciously, hence it becomes viable to implement the TQM philosophy.

Forming the firm-specific human capital and developing leaders from within the existing workforce are given the highest priority since the corporate strategy of RMG E is to run the business by independent management and productive labor (see subsection 5.11.1). RMG E is perhaps one of very few garment exporting organizations in Bangladesh that has well-crafted job descriptions (JD) for all the factory workers as well as for managerial employees (see subsection 5.11.4). The HR team is responsible for designing and organizing

HCD interventions as suggested by the HR consultancy firm, Ernst & Young (see subsection 5.11.2). Moreover, the departmental heads or team leaders in the management are mostly found to be functional specialists, such as a Chartered Accountant, who undertake innovative and self-directed HCD measures for team members to enhance the relevant skills.

The TNA based comprehensive HCD interventions in RMG E enable managers and executives to operate advanced computerized systems and, thereby, make quick decisions and deliver the anticipated outputs swiftly (see subsection 5.11.4). Besides, HCD measures, such as training on 7 habits of highly effective people, promote leadership that subsequently facilitates forming the backbone of improvement strategies (see subsection 5.11.6). The operational, financial, product pricing, negotiation, buyer retention and all other functional strategies are greatly impacted by HCD in RMG E. The possible explanation is that HCD enhances the knowledge level of the managers so they can formulate and implement appropriate actions plans that lead to TQM implementation (Flores-Crespo 2007).

Findings also imply that both on-the-job and off-the-job training facilities help production employees overcome their skill gaps and work in the vertically integrated system more efficiently (see subsection 5.11.2). Consequently, quality products can be delivered to the buyers on time (Arulrajah 2017). However, data indicate that the effective blending between HCD and automation, which are two critical aspects of TQM, enables RMG E to survive and grow business (see subsection 5.11.4 and 5.11.5). RMG E establishes a conducive work environment with continuous HCD measures so that employees never feel reluctant to cope up with the improvement initiatives. It develops a robust workforce that makes it possible to meet the rapidly changing requirements of buyers.

Besides, it is perceived that without creating an adaptable workforce, adopting a computerized system in the office or high-tech operations in the factory is indeed a precarious

venture (see subsection 5.11.5). It is apparent that the use of hard TQM elements is contingent on how well prepared and adaptable employees are. Since RMG E has developed such a workforce for managing business operations, it enjoys capitalizing on hard aspects and achieves continual improvement in buyer satisfaction (Yu et al. 2017).

From the above case specific discussions, it can be thus encapsulated that an organization cannot successfully translate quality into reality without robust HCD practices. Though this phenomenon is inadequately explored, the existing literature to some extent supports this generalization (Thomas 1992; Kisuju and Analoui 1999; Wilson and Chapman 2009; Syduzzaman et al. 2014).

### **6.3 HCD Impacting TQM Philosophy Implementation:**

As discussed in the previous section, HCD plays a substantially important role in the implementation of TQM philosophy. However, this research also sought to explore the ways in which HCD impacts TQM philosophy to implement in an organizational context. Based on the empirical evidence derived from analyzing five exemplary case organizations, this exploratory research provides support for the notion that HCD interventions through creating and nurturing a learned and healthy workforce, trigger employees' involvement and empowerment, innovation capability, and adaptability to continuous improvement and, thereby, contribute to the implementation of TQM philosophy (see TA6 in Table 5.1). Findings relating to TA6 also suggest that HCD interventions ensure effective time management, enhance specialization at work, and, importantly, bring about positive behavioral changes among employees, such as increased enthusiasm, commitment, and loyalty, which, in combination, facilitate accomplishing the goal of TQM i.e., meeting the buyer's specifications.

The extant literature obscurely demonstrates the propensity of HCD to impact the fundamentals of TQM, such as employee participation, creative exercises, and continuous improvement (Edralin 2007; Jørgensen et al. 2007; Bornay-Barrachina et al. 2012; Zakuan et al. 2012). Moreover, it is not empirically proven how HCD as an organized framework can contribute to the implementation of TQM philosophy. The results of this research contribute to the knowledge by identifying and explaining the ways in which HCD virtually affects the implementation of TQM philosophy in a labor-intensive organizational perspective. Besides, the human capital theory underpinning this study as the focal theory merely clarifies the economic implications of HCD interventions, but the potential behavioral impacts that relate to the philosophical facet of TQM are not encompassed (Becker 1964; Mincer 1974; Strober 1990; Becker 1993). This study, by exploring the nonquantifiable implications of HCD principally with respect to TQM philosophy, integrates human capital theory with behavioral theory and in so doing contributes to the literature (Dubin 1976; Argyris 1993; Bereiter and Scardamalia 1993; Swanson and Holton 2001; Robbins and Judge 2013). However, the key mechanisms by which HCD affects the implementation of TQM philosophy are discussed in the following sub-sections.

### **6.3.1 Fostering Employee Involvement and Empowerment:**

Empirical evidence relating to TA6 suggests that HCD interventions enhance the firm specific knowledge and skills of the employees and enable them to work as an effective team member rather than as an isolated individual. Employees acquire not only their job-related expertise, but also comprehend how to act in a participative work environment. They can deal with other team members more skillfully and perform assigned tasks with greater responsibility and efficiency. An interesting finding of this study is that increased competency is associated with

higher level of confidence and motivation. It is found that HCD induced intrinsic motivation has potentially deep impacts on employee retention and thereby on business performance (see subsection 5.3.6, 5.5.6, 5.9.1 and 5.11.2), which to some extent is also apparent in the extant literature (Anis et al. 2011). It is perhaps due to the fact that when employees have the right knowledge of the results and considerable autonomy on their work, they feel intrinsically motivated that subsequently instigate them to remain loyal to their existing employer and contribute to the organizational goal attainment. Findings reveal that such a competent, motivated, and confident workforce created through HCD can effectively participate in problem solving and decision-making contingencies and articulately involve itself in the whole work process. Irrespective of managerial level or functional area, every employee can actively engage in the views exchange process with others within the hierarchy (Luburic 2014).

A possible explanation of this finding is that they have both the devotion and required capability to add value to the organizational functioning. Learning the job holistically necessarily facilitates employees to eliminate performance deficiencies. Moreover, HCD measures, when undertaken prudently by identifying the actual knowledge and skill gap, can make ideal person-job compatibility, hence employees instinctively get empowered at their work and perform their jobs with greater involvement and command. Findings imply that empowered employees themselves can understand the work challenges and performance requirements, and utilize the allocated resources to achieve broader organizational objectives.

However, the extant literature advocates that implementing the TQM philosophy requires an organization to pursue a participative management style (Silos 1999) for which employee involvement as well as empowerment is fundamental (Oakland 1989; Wilkinson et al. 1997; Kisuju and Analoui 1999). Empirical evidence implies that the case organizations successfully adopt participative management style by ensuring effective involvement, which

itself is an empowering process, and, thereby, implement TQM philosophy. The underlying reason behind the success in establishing participative management through meaningful employee involvement is that HCD interventions make the entire workforce eligible and dedicated for assuming higher responsibilities at work. This explanation is consistent with the proposition found in the existing literature (Zakuan et al. 2012). However, this study contributes to the existing literature by clarifying the fact, with testimony, that HCD fosters involvement through enhancing capabilities and, thereby, facilitates implementing the TQM philosophy in organizational context.

### **6.3.2 Enhancing Innovation Capabilities:**

This multiple case study research provides convincing evidence for the notion that HCD has profound impacts on an organization's innovation capabilities that subsequently accelerates the execution of TQM philosophy (see TA6 in Table 5.1). Findings suggest that one of the major consequences of HCD interventions at the workplace is the enhanced innovation capability of the employees. Across the five case organizations explored in this study, it is found that both managerial and nonmanagerial employees working in different functional areas and levels are able to generate new product and process ideas that they can exchange with associates due to the presence of a participative management system. Hence, instead of merely following and customizing the buyer's specifications, the case organizations can proactively generate creative product designs for their buyers. Creating a wide list of embellished product design specifications (PDS) in accordance with the market demands enables them to attract the buyers and, thereby, to sustain and grow the business in the competitive market.

Besides, innovative negotiation, promotion and pricing strategies also assist them to attract and retain international buyers. Findings reveal that employees of the case organizations

provide imaginative yet effective solutions to the work process related problems they confront. Moreover, data suggest that adopting contingency management approach to cope up with the volatile market becomes a necessity in RMG business and that the case organizations always steer successfully through applying innovation capabilities. It is, however, evident that the innovation capability is provoked by HCD, particularly the learning interventions. Now a possible exposition for this finding is that innovation is contingent on intangible human capital and that HCD has critical implications for innovation capabilities of an organization (Bornay-Barrachina et al. 2012; Donate et al. 2016).

It can be explicated that learning new knowledge and ideas in an organized manner enriches employees' cognitive stock and thought process, enabling them to think and do the job with greater creativity, which is rudimentary to TQM philosophy (Edralin 2007; Flores-Crespo 2007; Sheehan et al. 2014). With the support of empirical evidence this study contributes to the existing literature by theorizing that the true execution of TQM philosophy depends on the creation of an innovative workforce for which HCD is an essential prerequisite. The more comprehensively the HCD interventions are assumed, the more innovative efforts employees will be able to exert that will eventually expedite implementing the TQM philosophy.

### **6.3.3 Steering Continuous Improvement:**

The findings of case analysis relating to TA6 reveal that HCD interventions have significant implications for the continuous improvement of standard operating procedures (SOPs), processes and finished products in the case organizations, leading to the implementation of TQM philosophy. Empirical evidence suggests that HCD is instrumental in driving the constant improvement of all the vertically integrated processes involved in the business operations in an



RMG setup. In the buyer centric market each RMG buyer has distinct requirements that, however, change precipitously, obliging the manufacturer to modify the existing modus operandi. The changing market dynamics force the RMG manufacturer to consistently improve everything it does, has and offers, without which survival is more than difficult. However, the research findings imply that such improvement relies mostly on human endeavors (Watson 1986) that can be generated and stimulated through HCD, including both learning and healthcare interventions (Deming 1986; Jørgensen et al. 2007; Arulrajah 2017).

The case organizations exhibit excellence in bringing organizational changes on many levels of manufacturing operations in a consistent manner (Singh and Singh 2015). They have flexible operations system that can be altered as and when required, depending on the varied needs of the buyers and shifting paradigms in business. Moreover, to remain competitive in the market, adopting sophisticated technology or automation is found to be a typical strategy in almost every case organization, particularly in the larger ones like RMG A, RMG D, and RMG E. Though having a relatively small factory size and limited manufacturing capacity, RMG B and RMG C also employ new technology, at least to some extent, for meeting their buyer requirements. Nevertheless, the secret to success in capitalizing on the changes lies in the fact that the case organizations have created an adaptable and vibrant workforce through pursuing robust HCD efforts incessantly. This compliant workforce is able to cope up with the frequently changing SOPs and contribute to the process and product improvement measures. For instance, RMG E experiences around 160 design alterations in every month, which can only happen because of having a competent workforce adaptable to perform assigned duties in any operational setup.

However, empirical evidence suggests that the role of HCD is crucial, not only in incremental changes in the product design or manufacturing process, but also in every working

practices, including writing an email to a buyer. Any refinement in business operations requires embracing appropriate HCD intervention for employees so that they can gain new capabilities and work effectively in the modified *modus operandi*. The concept of Kaizen or continuous improvement, which is fundamental to TQM philosophy, therefore greatly relies on the continuous HCD measures. Extant literature is consistent with this idea that the most effective means of continuous improvement is HCD because it enables the total workforce to play the key role in detecting and executing the appropriate changes (Wilkinson et al. 1997; Arulrajah 2017). This study, however, contributes to the existing literature by corroborating this notion with empirical evidence.

#### **6.3.4 Effective Time Management:**

Findings of this multiple case study research imply that one of the various positive implications of HCD is effective time management at work that evidently affects the implementation of TQM philosophy in the case organizations (see subsection 5.3.6 and 5.7.6). HCD interventions increase an employee's capability to perform the given job without much need of supervision. Since most of the employees, including both managerial and nonmanagerial, employed in the case organizations are made aware of their duties and responsibilities as well as competent to evaluate own performance, the need for constant monitoring substantially diminishes. HCD interventions in the form of learning and healthcare from one angle enables employees to finish assigned job on the right time and, viewed from another side, saves unnecessary supervision time of respective managers or line supervisors. The extant literature supports this research finding that HCD reduces manager's workload in terms of close supervision, thereby enhances both productivity and quality of work (Olaniyan and Ojo 2008).

In RMG business across the world, lead time acts as a critical factor to satisfy the international buyers and gain competitive advantages in the market. Empirical evidence suggests that TQM philosophy cannot be implemented without compressing the lead time, for which efficient use of time in every function is crucial (Kannan and Tan 2005). Extant literature indicates that employee incapability leads to higher lead time, affecting the RMG export drastically (Hossain et al. 2019). Findings suggest that HCD interventions by intensifying the level of understanding, efficacy, physical stamina, and mental acuity, help employees of the case organizations to make the best utilization of their time at work and in this way ensure on time decision making and product shipment. However, the strategic linkage between TQM philosophy and just in time (JIT) is established in the TQM literature (Kannan and Tan 2005) but the role of HCD in provoking the JIT principle is not empirically explored. This research, by explicating the implications of HCD on effective time management or precisely JIT principle and consequent implementation of TQM philosophy, contributes to the existing literature with empirical evidence.

### **6.3.5 Job Specialization:**

One of the key findings of this exploratory study in relation to TA6 is that HCD has significant impacts on job specialization. The case organizations do not usually insist their employees focus on doing diverse tasks but rather undertake HCD measures systematically to let them learn how to perform job specific tasks more proficiently. Consequently, a pool of experts has been developed there in almost every functional area contributing to TQM execution as the principal actor (Pantouvakis and Karakasnaki 2017). A possible explanation for this finding is that providing job incumbents with firm-specific knowledge and skills relevant to the job description transforms them into masters in specific jobs. Such employees are capable of

carrying out assigned duties and responsibilities with greater precision. As a result, quality of operations and finished products increases, and on the other side, the rate of wastages and defects reduces significantly. An instance from this study can be illustrated here in this regard that the ‘Sudokkho’ training program assumed by the HR team in RMG D converts many inexperienced job incumbents into competent executives and workers whose collaborative productive performance results in reduced wastage, lessened cost, enhanced quality, and minimal rejections.

This finding is consistent with the central idea of human capital theory that the productive capacity of human beings can be increased through HCD interventions like education and training (Becker 1964; Mincer 1974; Nafukho et al. 2004). Another interesting finding of this study is that the ongoing HCD interventions always support developing some expert trainers inside the organization who can be used as mentors to develop co-workers, which is a more cost-effective strategy than hiring professional trainers externally or sending employees outside for learning new skills. Besides, developing human capital within the organization by involving internal experts specialized in certain functional area, has been proven to be extremely effective since it creates a bond among employees and, subsequently, builds a congenial work environment (Lock 1994; Buick and Muthu 1997). Job specialization driven by frequent HCD measures, thereby, facilitates an organization in implementing the TQM philosophy through cost reduction and quality enhancement.

### **6.3.6 Behavioral Modifications:**

Findings suggest that HCD endeavor does not only produce specialized people in different functional areas; rather it creates a sensible, dedicated, and loyal workforce across the organization by bringing about positive attitudinal change towards the job as well as towards

the employer (see TA6 in Table 5.1). The existing literature supports this notion that HCD is fundamentally aimed at producing meaningful behavioral change (Nadler and Nadler 1970). Learning and healthcare measures undertaken by the respective HR team of case organizations evidently urge employees to exhibit responsible and constructive behavior at the workplace. It improves the working relationship among the employees, hence if a fault occurs an employee can easily sort that out with the assistance of others. Besides, the case of deviant workplace behavior in those organizations as reported by the research participants is very insignificant, which is, of course, not a common phenomenon in the whole RMG sector of Bangladesh. The reason is perhaps that the HCD interventions, like rigorous induction with the organizational rules and regulations at the beginning of employment, shape employees' behavior in such a way that they grasp how to evade unexpected behavior on their part.

However, an interesting finding of this study is that HCD measures, though primarily aimed at preparing people for superior job performance, also result in greater interest, motivation, commitment, and loyalty (see subsection 5.5.6 and 5.9.6). Empirical evidence suggests that HCD increases the employees' future employability or job prospects both within and outside the current organization and, thereby, stimulate and retain employees (Benson 2006). Findings imply that the rate of voluntary turnover in case organizations is negligible, even though many employees have attractive job offers from competing organizations (see subsection 5.5.6 and 5.9.6). The possible reason is that organizational endeavors in developing their existing workforce make employees feel that their employer is not merely anticipating better inputs from them, but is also concerned about their future career progression. The case organizations experience higher employee retention since they have suitable promotion and replacement policies aligned with HCD, making employees more committed and loyal to the employer. Findings understandably indicate that career growth opportunities are contingent on learning opportunities that employees naturally care about. More importantly, enhanced

competency generated through HCD is found to be deeply associated with increased job security. When employees feel more secure in their work and see a smooth career progression within the organizational hierarchy, they naturally show greater dedication to the job and the employer as well.

Findings of this exploratory study also imply that HCD interventions, when designed inventively and robustly, cause employees to feel more confident and enthusiastic about their jobs, leading to improved performance. An instance can be drawn here in this perspective from RMG E, which frequently sends its top-level executives abroad to attend advanced management training and development (see subsection 5.11.6). Such HCD initiatives boost their expertise as well as confidence and so they are found to be bold in decision making, problem solving, and leading the organization from the front. This is how the top-level executives contribute to TQM implementation (Dale and Cooper 1992). Empirical evidence also suggests that HCD measures such as counselling enable employees to overcome job induced stress, anxiety, and work-family conflict (see subsection 5.9.6). Consequently, employees can concentrate on the given job with a positive mindset. It is also evident from the findings that healthcare facilities have significant effects on employee behavior. By providing healthcare facilities, the case organizations bind employees emotionally and induce them to show committed and loyal behavior that in turn assures gaining greater productivity and quality in the operations (Berger et al. 2003; Bloom and Canning 2003; Gardner and Gardner 2012; Pacheco et al. 2014; Goldin 2016). Thus, integrating and synthesizing the findings from five cases, it can be enunciated that through employee behavioral modifications, HCD interventions on the one hand minimize deviations and employee exit costs, and on the other hand, ensure efficient operations and thereby implement TQM philosophy.

#### **6.4 Explicit Connection between HCD and TQM:**

This research was designed to examine the association between HCD and TQM philosophy in an explicit manner through conducting multiple case studies inductively. Based on the findings it can be asserted that all the five RMG establishments investigated in this research are exemplary in terms of TQM implementation given that the core values of TQM concerning people, organization, and change process have been successfully installed at the workplace. The case organizations pay intense focus on identifying and meeting the changing requirements of their existing as well as potential customers, select suppliers based on quality rather than price, use cross functional teams having access to the required data, apply statistical tools to monitor and analyze work processes and leverage performance, and consistently improve all the processes in the whole supply chain (see subsection 5.3.4, 5.3.6, 5.5.6, 5.7.4, 5.7.6, 5.9.2, 5.9.4, 5.9.7, 5.11.4 and 5.11.6). However, findings also imply that HCD has a crucial role in this regard.

The empirical evidence suggests that HCD has an explicitly positive connection with TQM, regardless of any internal or external conditions to the organization. The findings relating to TA7 specifically illuminate the nature of this relationship, recognizing HCD as an independent variable and TQM as a dependent one (see subsection 5.3.7). The extant literature implicitly recognizes a fuzzy connection between them presuming that a capable workforce can evocatively contribute to the application, development, and persistent reinforcement of the TQM process (Kisujū and Analoui 1999; Wilson and Chapman 2009). This exploratory research contributes to the existing literature of HCD and TQM by establishing a distinct and translucent linkage between them in the context of the Bangladesh RMG sector. Though this study clarifies the nature of linkage between HCD and TQM, such a study can be replicated in other contexts and the extent of their correlation can be researched in future as well.

Integrating and synthesizing the participants' viewpoints across multiple cases, it can be summarized that the empirical relationship between HCD and TQM in a labor intensive RMG setup is overt and strong. It implies that HCD is a precondition and that labor intensive organizations need to invest and emphasize more on developing human capital, rather than physical or organizational resources, to remain productive and competitive in the market. This inference is consistent with the resource-based view of human capital that nurturing the soft human element of the organization through robust HCD interventions facilitates TQM implementation and, in turn, leads to sustainable competitive advantages (Barney 1991; Dale and Cooper 1992; Powell 1995; Samson and Terziovski 1999; Reed et al. 2000; Yu et al. 2017). Based on the findings, it can be stated that TQM is contingent on the accumulation of valuable, rare, inimitable, and non-substitutable human capital that, according to the resource-based view, can act as the core competence for the organization (Wright and McMahan 2011; Nyberg et al. 2014; Delery and Roumpi 2017).

Across all the five case organizations studied, causal relationships are observed between HCD interventions and the critical indicators of TQM implementation. HCD is found to be associated with reduced wastage, decreased cost, diminished rate of rejections, lessened alterations, less overtime schedule, and lower lead time. It becomes evident from the research findings that rigorous learning of relevant work procedures is instrumental for employees to perform their jobs well that significantly reduces deviations and rejections. Data from all the five cases also revealed the fact that healthy employees can work with deeper awareness and involvement and, therefore, commit fewer mistakes. Consequently, cost of operations, wastage, rate of defects, number of reworks, unnecessary inspection, overtime requirement, as well as lead time, decreases. TQM literature tacitly supports this proposition (Oakland 2014; Syduzzaman et al. 2014).



Findings relating to TA7 also stipulate that HCD is innately linked with enhanced planning, improved operations, increased productivity, and optimum quality finished goods (see subsection 5.3.7). Planning is a vital phase of TQM implementation (Fitriani 2019), which is explicitly associated with HCD, particularly the learning interventions. Empirical evidence indicates that the experience of learning new knowledge and skills enables employees to deal with prediction and planning tasks in a more credible way, hence executing TQM at work becomes quite feasible. To develop and deploy the right policies and strategies; set up applicable alliances and resources; and design garments quality, involvement of the right employees in vertically integrated processes is an essential prerequisite (Oakland 2014). Based on cross-case synthesis this study determines that HCD is unequivocally connected with the planning aspect of TQM since HCD is the means of forming firm-specific human capital inside the organizational frontier (Harris et al. 2019).

HCD, including both learning and healthcare measures, manifestly equips employees of the case organizations to perform the assigned job proficiently, having impacts on improved operations in every work process, greater productivity, and, finally, superior quality exportable garments. Both the extant literature of HCD and TQM agrees with this finding that HCD can stimulate productivity and quality in numerous ways without which TQM cannot be said to be truly executed (Hart and Schlesinger 1991; Tamimi and Sebastianelli 1998; Arulrajah 2017; Hossain et al. 2019). Learning job related skills enhances the efficiency of individual employees and, in turn, the total productivity in the operations, which is established in the literature (Becker 1964; Mincer 1974; Hatch and Dyer 2004; Delery and Roumpi 2017). This study also reveals the fact that employee health has substantial impacts on productivity as well (Berger et al. 2003; Bloom and Canning 2003; Goldin 2016; Kolomiets and Petrushenko 2017). Interestingly the HRD literature does not recognize healthcare as a means of developing human capital and, accordingly, disregards the connection between HCD and productivity

(Frank 1988). However, this study principally underpinned by the human capital theory identifies that health is an essential component of human capital (Fisher 1906; Schultz 1961; Becker 1964) and that healthcare is a critically important HCD intervention, having deep connections with productivity at the workplace (Berger et al. 2003; Bloom and Canning 2003; Goldin 2016; Kolomiets and Petrushenko 2017). This study contributes to the HRD literature by integrating educational elements with the healthcare aspect to develop a holistic view of HCD and recognize its explicit connection with TQM.

However, findings of this study also suggest that HCD interventions in turn cause export turnover, profitability and, more importantly, buyer satisfaction, to rise, which are all positive implications and signals of effective TQM execution. It is, however, worthy of mention that a spiral effect of HCD is observed in this study (see subsection 5.5.7). HCD causes productivity to increase, which subsequently leads to higher profitability. Higher profitability again leads to higher productivity, given that employees receive incentives as a reward for efficient performance which again stimulates them to work with greater accuracy and dedication. The behavioral theories, specifically the operant conditioning theory of learning, supports this generalization that employee job related behavior or performance has a connection with the consequence (Robbins and Judge 2013).

Empirical data imply that, irrespective of factory size or capacity, every case organization experienced increased export turnover, which is perceived to be strongly associated with the HCD measures. Moreover, all the five case organizations consistently receive positive feedback from leading international buyers since they are meeting the buyer specifications impeccably. The picky giant buyers are satisfied with the quality of finished product and related services delivered by a skilled and dedicated workforce. Hence, an apparent linkage is again found here between HCD and TQM because HCD interventions create such a

workforce that can satisfy the market through rendering superior customer value. In practice, the functionality of the total organizational system and effective integration of the business is fundamentally linked with HCD. This study, through exploring multiple cases, envisages a causal relationship between HCD and TQM and, thereby, contributes to the development of an innate linkage between the HRD and TQM literature (see TA7 in Table 5.1).

### **6.5 HCD Framework:**

The reason why the Bangladesh RMG sector still fails to receive value-driven orders from international buyers lies in the capability of workforce involved in this sector. Findings of this study suggest that in order to accelerate the future growth of this sector it is pivotal to accentuate HCD and every RMG establishment needs to rigorously follow a guiding framework in this regard (see subsection 5.3.8, 5.5.8, and 5.9.8). The findings relating to TA2, TA3, and TA8 provide an outline for developing an HCD framework, which was one of the key objectives of this study. The results of the exploration contribute to the HRD literature by explicitly identifying the required interventions to be incorporated in an HCD framework (Garavan et al. 2000). Based on the reported findings (see TA2 and TA3 in Table 5.1) this study also categorizes HCD into two major types of intervention, one of which principally relates to learning (Nadler and Nadler 1990; Armstrong 2001; Wilson 2009) and the other is linked with employee physical and mental wellbeing (Fisher 1906; Schultz 1961; Becker 1964; Savu 2013; Goldin 2016). Though the study was conducted in the context of the Bangladesh RMG sector, it can be argued that in any organization education, training, development, and healthcare can form and nurture a robust workforce having generic as well as firm-specific human capital (see TA2 and TA3 in Table 5.1). This inference is congruent with the existing literature (Schultz 1961; Hatch and Dyer 2004; Tetteh et al. 2017).

### **6.5.1 Primary Responsibility for HCD:**

Findings suggest that the HR department in any organization is primarily responsible for HCD initiatives that involve identifying employee knowledge and skills gap at an initial stage through a comprehensive learning needs analysis or assessment (LNA) (see subsection 5.3.2, 5.9.2, and 5.11.2). Besides, HR is responsible for designing; structuring; and delivering the required HCD interventions. Data implies that every case organization has a separate HR team dedicated not only to managing the employee selection, compensation, or termination processes, but also to performing a more strategic and systematic job with respect to the formation of human capital (see TA2 in Table 5.1). Moreover, in the context of RMG operations, HR has bigger responsibility to assume the appropriate HCD measures for managerial employees as well as factory workers. However, findings indicate that the HR team requires support from line managers of other functional teams, such as procurement, production, marketing, finance, to make the HCD endeavors effective for the entire workforce (see subsection 5.3.2 and 5.9.2). Besides, establishing a specialized training and development team under the HR can be instrumental to assure that each employee performs at his or her peak. Individual and organizational effectiveness can be fostered by such a team, hence an RMG establishment needs to set up this to promote employee learning. Synthesizing the research findings, it can be asserted that creating a conducive learning environment at the workplace is essential to instigate the employees learn and apply required knowledge and skills (see subsection 5.3.6, 5.7.6, 5.7.7, and 5.9.7), which is also evident in the existent literature (Stiles and Kulvisaechana 2003).

### **6.5.2 Induction:**

Findings indicate that an induction program is arranged after the completion of selection process in every case organization as an important HCD measure. This is typically a form of systematic orientation for newly hired job incumbents for enabling them to carry out the assigned duties and responsibilities more informedly at the workplace (see TA2 in Table 5.1). It is a not a mere introduction with the job specific aspects like reporting relationships within the hierarchy; rather it covers broad issues, such as vision, mission, and values of the company; organizational rules and regulations relating to working hours, leave, compensation, benefits, etc. Therefore, it enables new entrants to cope up with the job and work environment smoothly as well as helping them to overcome any reality shock being encountered. Data suggests that induction is particularly useful for employees to clearly comprehend the job description provided by the employer during the job placement phase (see subsection 5.9.2). However, findings imply that to fully realize the benefits, induction should be formally organized by the HR team for both the managerial employees and factory workers. It is also evident that induction followed by a feedback system in the form of a formal report, specifically in the case of management employees, is beneficial for effective organizational functioning (see subsection 5.11.2).

### **6.5.3 Assessment of Learning Needs:**

This study uses the phrase ‘learning needs assessment’ to enfold the spectrum of the needs analysis of the three distinct dimensions of learning, such as education, training and development (Palmer 2009). Findings relating to TA2 suggest that assessing the employees’ actual learning need or identifying the performance gap helps the HR team to put the right HCD intervention into practice. The HR team can choose the appropriate learning tools and methodologies to form firm-specific human capital rigorously. This learning needs assessment (LNA) is principally performed by the HR professionals in the case organizations. However,

the line managers play a support role in this regard by appraising the job performance and agreeing the employee development plans. Data indicates that HCD practices in case organizations follow the outcome of LNA that subsequently enable employees to overcome the knowledge or skill deficiencies and perform their job as expected. Hence, this study contemplates LNA as an important basis for HCD, which is supported by the extant literature as well (Palmer 2009).

#### **6.5.4 Learning Interventions:**

The finding of this study relating to TA2 is consistent with the extant literature that education is an essential means of developing human capital at the workplace (Schultz 1961; Flores-Crespo 2007; Olaniyan and Okemakinde 2008; Jones and Ramchand 2013; Mohammed et al. 2016). Data implies that the employees of case organizations acquire theory based broad knowledge relevant to functional areas on a regular basis which might not directly relate to their present job but facilitates them to perform diverse roles competently (Nadler and Nadler 1990). Empirical evidence suggests that this kind of HCD intervention in the form of education, such as learning on strategic HRM, compliance, buyer's code of conduct (COC), information technology, labor law, employee rights and responsibilities, discipline, and ethics, creates generic human capital. Findings imply that educating employees on soft skills like language and communication; fire safety, health, and hygiene, first aid, personal protective equipment (PPE), chemical handling, physical demand, grievance handling; and even work-family issues can create a highly productive workforce in diverse ways. For instance, gaining knowledge regarding how to make a balance between work and family life is instrumental for employees to minimize stress and inhibit burnout at the workplace and thereby foster effective job performance. It is also noticed that company sponsored degree courses can help nurturing generic human capital (see subsection 5.9.2 and 5.11.2). Behavioral education is also found to

be effective in this regard, enabling employees to demonstrate expected behavior with co-workers and prevent deviant workplace conduct (Robbins and Judge 2013). Moreover, based on the perception of the research participants, it can be contended that learning about six sigma and Kaizen can be effective for managers and executives in contributing towards quality management (see subsection 5.5.8).

However, this study corroborates the HRD literature that training as an HCD intervention is distinct from education and development that particularly can form firm-specific human capital (Veum 1999; Hill and Stewart 2000; Armstrong 2001; Hatch and Dyer 2004; Palmer 2009; McDowall and Saunders 2010; Anis et al. 2011; Obisi 2011; Dai and Tymon 2016). To enhance the job specific technical skills of nonmanagerial employees or factory workers both on-the-job and off-the-job training programs are typically arranged by the case organizations, enabling them to perform their present job in an efficient manner. It is obvious that acquiring firm specific technical know-how is critical and an essential prerequisite for production employees involved in RMG operations, without which management can never anticipate responsible and productive behavior from them (Veum 1999; Olaniyan and Ojo 2008). However, the study reveals the fact that under the HR department an in-house training center with trained internal trainers and adequate resources is necessary to expedite hands-on training in different operational areas, like knitting, dying, cutting, etc., which is both time and cost effective for the organization. Nevertheless, training of trainers (ToT) is found to be an imperative, perhaps due to the fact that unless the internal trainers themselves are skilled enough, they cannot impart respective training to trainees effectively (see subsection 5.9.2 and 5.11.2). Though the target group for training is usually the nonmanagerial people or factory workers, findings suggest that managers, particularly entry level executives, need to be trained in management as well, which can be done either through bringing management trainers or practitioners from leading RMG companies or sending employees to agreed leading companies

where they can practically observe and learn professional management practices. However, it is presumed that in most of the cases bringing experts to the workplace for internal training is a more feasible option to increase managerial proficiencies. Besides, internship program which is a form of job training is found to be an effective way of developing potential workforce for the organization.

Moreover, empirical evidence suggests that the future employability of managerial employees can be enhanced through management or leadership development (Armstrong 2001; Gansberghe 2003; Benson 2006; Jehanzeb and Bashir 2013; Nda and Fard 2013; Nyberg et al. 2014). The case study findings advocate that the overall personality and social skills of managerial employees can be improved by HCD interventions, like the learning program on 7 habits of highly effective people. It is evident that those who actively participate in such development initiatives taken by the HR later experience smooth career mobility and assume higher order job responsibilities. This study uncovers that it is of great necessity for a management employee to have leadership traits and conceptual skills before he or she can be considered for promotion. An interesting proposition is found in this regard that a management training school can be permanently set up at the workplace for arranging management development initiatives so that soft skills can be learned in a systematic approach (see subsection 5.11.8), which might, however, not be possible for small or medium RMG establishments. Having an in-house management school decreases the need for management development externally, which is both time and cost effective for the business. Findings suggest that for the sake of future growth of the business, empowering employees is an essential requisite that can be ensured through organizing leadership development programs specifically for mid-level and first-line managers. The difficulty the HR team are often confronted with is the unavailability of senior managers in the employment market, hence developing future leaders from within is considered as an effective alternative. It can thus be interpreted that make



strategy is more applicable than buy strategy specifically with respect to the placement in managerial positions (see subsection 5.11.2).

It is evident that generic and firm specific human capital can be created and leveraged through education, training and development that subsequently turns into positive outcomes for the organization as well as for employees (Wright and McMahan 2011; Nyberg et al. 2014; Delery and Roumpi 2017). Apart from these learning interventions, workshops, seminars, and foreign tours are also found to be effective HCD measures that can help employees think in a bigger spectrum and do the assigned job with greater expertise.

#### **6.5.5 Healthcare Measures:**

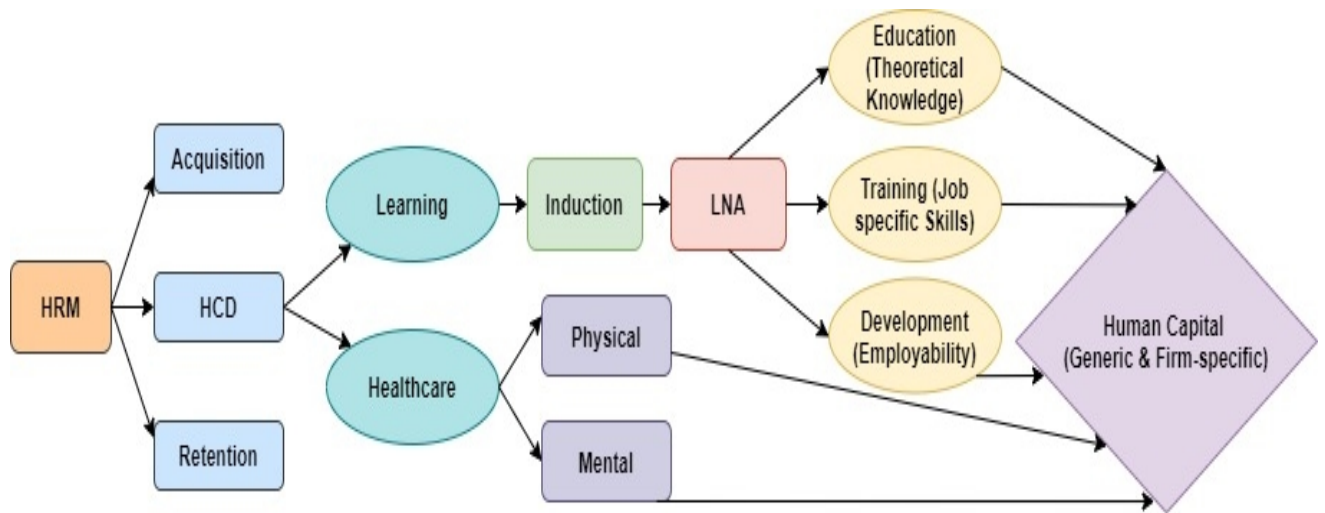
Results of this study evidently suggest that healthcare is a vital HCD intervention that affects employees' job-related behavior (see TA3 in Table 5.1). Findings are congruent with the human capital theory that human capital comprises both learning and health (Fisher 1906; Schultz 1961; Becker 1964; Savu 2013; Goldin 2016) and nullify the traditional view of HRD that employee health is not a matter for HRD (Frank 1988). Empirical evidence is consistent with the extant literature that nurturing employees' physical and mental wellbeing results in improved job performance and enhanced loyalty (Berger et al. 2003; Gardner and Gardner 2012; Pacheco et al. 2014). Integrating and synthesizing the findings of multiple cases, it can be elucidated that having an in-house healthcare center; first aid arrangement; corporate agreement with hospitals and diagnostic centers; company sponsored treatment; and free medications necessarily facilitate fostering biological capital, which is an integral component of human capital (Savu 2013). Besides, it is found that employing female doctors in the healthcare center for female majority workforce; embedding a fire extinguishing system in the entire organization; and establishing a safe working environment are conducive to assure

improved employee health. Findings even imply that providing employees with food and drink while they are on long working hours or overtime can be stimulating, though overtime duty should be minimized considering the potential health hazards.

However, data also suggests that, in addition to physical wellbeing, mental health is also crucial at the workplace given the fact that RMG employees in Bangladesh work hard under tremendous stress to sustain the job (Pacheco et al. 2014). Findings suggest that a counselling facility at workplace is instrumental in helping employees manage and reduce work induced stress, anxiety, and frustration (see subsection 5.3.3, 5.7.3, 5.9.3 and 5.11.3). Moreover, it is evident that an in-house childcare facility has significant positive impacts on the mental wellbeing and subsequent work efficiency of female employees (see subsection 5.5.8, 5.9.3 and 5.11.3). Findings also suggest that arranging recreational activities for employees, such as sports or picnics, can boost employees' mentally as well as physically. Hence, these can be regarded as support HCD interventions.

However, like training or development, providing employees with necessary healthcare is perceived as a major responsibility for HR in the case organizations. Findings reveal that the key role with respect to ensuring occupational health and safety should be played by the HR department of the concerned organization since it becomes evident that health is an integral component of human capital, and that healthcare is a critical HCD intervention. This exploratory study, underpinned by the human capital theory, contributes to the HRD literature by revealing healthcare as a major HCD intervention for organizations that should be given strategic importance by top-level management (Berger et al. 2003).

However, an HCD framework based on the above discussion is demonstrated here from a holistic perspective:



**Figure 6.1: Proposed HCD Framework (Author's Construct)**

Here in this proposed HCD framework HRM is viewed as a set of organizational activities directed at attracting, developing, and retaining an effective workforce (Griffin 2017). HCD is conceptualized as a broad and distinct functional domain of HRM that consists of two specific types of interventions, such as learning and healthcare (see TA2 and TA3). Learning begins at the workplace when a newly hired job incumbent gets formally oriented with the organizational rules, regulations, culture, and pertinent tasks. A formal induction followed by feedback can be seen as a critical learning point for every employee (see TA2). However, to prepare an employee robustly for assigned duties and responsibilities the subsequent vital task that HR and respective department should collectively perform is to assess the actual learning needs so that appropriate HCD intervention can be prudently undertaken (Palmer 2009). Based on the outcome of LNA required intervention needs to be pursued.

However, findings relating to TA2 explicitly categorize learning intervention into three categories, such as education, training, and development. These three learning interventions are respectively tailored to knowledge, job specific skills, and future employability facilitating the development of both generic as well as firm specific human capital among employees (see

subsection 6.5.4). Moreover, healthcare can also be explicitly recognized as an HCD intervention consisting of physical and mental healthcare that also helps form and nurture human capital at workplace (see subsection 6.5.5).

This proposed HCD framework tries to demonstrate what needs to be done to create a dynamic and resolute workforce for efficient organizational functioning. Classifying the broad functional domains of HRM it specifically concentrates on two distinct types of HCD interventions and subsequently categorizes both that can form either generic or firm-specific human capital. However, the anticipated process of learning from the organizational HR perspective is also illustrated in this framework. Induction is considered as the beginning of the learning process that should be followed by undertaking three different categories of learning interventions based on the actual learning needs assessment. This framework presents a comprehensive structure that the HR department of RMG establishments in Bangladesh can follow as a basis for HCD. Regardless of the type of organization, it can potentially guide HR practitioners since the core interventions relating to HCD are encapsulated here. It might serve as a roadmap for managerial actions. Nevertheless, investment is essential to initiate and execute any HCD related endeavor, hence RMG owners need to consider this perspective sensibly (see subsection 6.5.6).

#### **6.5.6 Role of RMG Owners for HCD:**

Empirical evidence suggests that investment in HCD is crucial in a labor-intensive operation like RMG manufacturing since human capital acts as the key factor to drive the integrated quality system (see TA1 in Table 5.1). Without adequate financial investment on the part of the owner, HCD plans and policies cannot be executed in any true sense, regardless of how visionary and committed the top-management is in this respect. Findings also imply that, though human capital is a mobile resource owned by the employee, business owners should

emphasize more on its development rather than financial resources, considering its potential impacts on value generation to the business. It is evident in the extant literature that being the beneficiary of human capital, business owners are responsible for providing employees with the required knowledge, skills, employability, and healthcare facilities (Stone 2002; Marimuthu et al. 2009), albeit not owning that human capital (Wright and McMahan 2011). Data indicates that investment in HCD is not as risky as often alleged. Rather, it is observed that employee turnover rate is significantly minimal in organizations that invest largely in HCD. Moreover, it is evident that human capital is a resource that never depreciates but appreciates over the time if nurtured and leveraged through necessary HCD investment.

However, this study reveals that the roles and responsibilities of external stakeholders in crafting a dynamic workforce for the Bangladesh RMG sector cannot be underemphasized.

#### **6.5.7 External Stakeholders' Responsibilities for HCD:**

Though the HR team of the concerned RMG establishment is primarily responsible for HCD, considering the significance of RMG business in the national economy, external stakeholders, such as government, BGMEA, BKMEA, and educational institutions, need to come forward with certain initiatives for the development of human capital. A collective effort from internal and external stakeholders in this regard is presumed to be more effective and can bring better outcomes.

**Bangladesh Government:** Findings suggest that, being a major stakeholder of RMG business, the Bangladesh government can and should play a key role in facilitating the development of a competent workforce for the country's biggest contributing RMG sector (see TA8 in Table 5.1). The research participants recommend that government needs to formulate a visionary

HCD policy for promoting this sector's further growth in the international market. It is evident that this sector is still far away from reaching the target of \$50 billion RMG export, since the existing workforce involved in this sector is incapable of delivering value-driven orders for fashionable garments. The underlying reason is perhaps that RMG employees, particularly the operators, are mostly unskilled and semiskilled. Government can eradicate this shortcoming by establishing technical and vocational institutions and, thereby, enrich the employment market from which RMG employers can hire skilled people having technical know-how who can tackle the automated RMG operations in a compliant manner. Besides, the government's department for education can articulate RMG related education policy and suggest educational institutions such as schools and colleges design and incorporate RMG related courses into the existent curriculum. Findings imply that this endeavor will facilitate forming sector-specific human capital in Bangladesh. Government can also offer policy advice to RMG owners in respect of HCD interventions and allocate funds among rising RMG establishments to support foreign training and development. Empirical evidence suggests that such initiatives can help potential employees secure advanced knowledge and global exposure relating to RMG operations and management, which in turn benefits not only the concerned employees, but also the entire organization. However, government alone cannot implement all these policies and initiatives. Rather, it needs support from the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA) and other stakeholders to execute the HCD plans for RMG sector.

**BGMEA and BKMEA:** BGMEA and BKMEA are major stakeholders and umbrella bodies of all the RMG establishments in Bangladesh. Findings of this study imply that these giant stakeholders have the required resources and facilities to assist RMG establishments with respect to HCD measures. As discussed previously, BGMEA and BKMEA can assist government in formulating long term HR policies; sending core management employees

abroad for improved learning and exposure; and supporting the government founded training institutions (see TA8 in Table 5.1). It is also revealed that Bangladesh Government sometimes brings amendments in various clauses in the labor laws, export rules, VAT act that RMG employees, particularly the HR managers, need to be updated with. Data indicates that BGMEA organizes special training and seminars on the amended issues that are instrumental for employees to comply with the changes at the workplace. Apart from that, BGMEA and BKMEA sometimes arrange batch wise training on health and safety, employee rights and responsibilities for managerial employees. However, findings suggest that it would be more effective for the RMG sector if these institutions can provide RMG employees with long-term training and development by bringing expert foreign trainers. Besides, strengthening the training of trainers (ToT) scheme, launching management skills development program, and organizing workshops would be also beneficial in this regard.

**Educational Institutions:** Some interesting findings are transpired in this exploratory study regarding the roles and responsibilities of educational institutions in developing human capital specifically for the Bangladesh RMG sector (see TA8 in Table 5.1). Findings suggest that the prevailing education system is not at all suitable for the future employment of this sector, hence it should be revised in consultation with the academics, researchers, and RMG professionals. Findings of this study emphasize the significance of academic programs to engender a dynamic and knowledgeable workforce for this sector. Academic courses should be designed in line with the market needs so that RMG employers can have a suitable employment market. Particularly, devising and integrating RMG management related courses in the curriculum at higher education level will be beneficial in this respect. The reason why educational institutions need to come forward with this kind of endeavor is that there are enormous employment opportunities in this sector for graduates and an RMG establishment cannot completely educate a person in its business operations. Moreover, learning institutions can facilitate both potential

and existing RMG employees to gain competency-based education or functional literacy and in so doing play a pivotal role with regard to HCD (Ali et al. 2020).

### **6.6 Summary:**

The major findings of this exploratory study in relation to the literature review and research objectives are discussed in this chapter. Referring to the central research questions, answers are provided in a detailed manner with empirical evidence which is supported by the underpinning theories and the extant literature. The contributions of this study to the knowledge are exemplified throughout the discussion as well. An explicit connection between HCD and TQM is recognized in this study, and it becomes evident that HCD plays a pivotal role in TQM implementation at the workplace, primarily through fostering employee involvement and empowerment, enhancing innovation capabilities, and steering continuous improvement. Besides, learning and healthcare related interventions are found to be effective in forming generic and firm-specific human capital that serves as the key source of sustainable competitive advantage.



## **Chapter Seven: Conclusion**

### **7.1 Introduction:**

This chapter aims to draw conclusions based on the discussion of major research findings made in the previous chapter. It intends to synthesize all the critical aspects covered in this study. The answers to the specific research questions are provided sequentially in a brief manner in the form of a summarized discussion on the key findings. This final chapter presents an account of the theoretical and empirical contributions of the study to the knowledge, and also highlights the managerial implications. The methodological; contextual; and theoretical limitations of this exploratory research, along with the directions for future research are elucidated as well. The chapter finally ends with a personal reflective statement of the researcher.

### **7.2 Reflection on the Research Aim and Questions:**

The nexus between HCD and TQM philosophy is not explicitly recognized in the extant literature. This exploratory study, underpinned by the human capital theory, the resource-based view, and the behavioral theory, is thus intended to explore the role of HCD in implementing TQM philosophy and to develop a comprehensive HCD framework in this respect based on research participants' opinions and propositions. The labor-intensive Bangladesh Ready-made Garment sector is used as the research site to reveal the phenomenon investigated. In congruence with the aim, four specific questions are addressed in this research. The qualitative case study methodology driven by the interpretivism paradigm is espoused to accomplish the research aim and to answer four specific research questions. Thirty (30) semi structured interviews are conducted to collect participants' responses across five (5) case organizations. Reflexive thematic analysis is manually performed to analyze the interview data. Discussion

on the key findings of this multiple case study research indicate the answers to the research questions (RQ) addressed in chapter one. The following subsections sequentially present the answers to the four specific research questions.

### **7.2.1 Revisiting RQ 1: *What role does HCD play in the implementation of TQM philosophy?***

The first research question addressed in chapter one relates to the role of HCD in the implementation of TQM philosophy. The results of this multiple case study research indicate that HCD is a pivotal factor for TQM implementation. Synthesizing the findings of five TQM practicing RMG establishments, it can be realized that robust HCD practices have substantial impacts on the materialization of a zero defects policy in every business operation. Empirical evidence suggests that HCD interventions can play a significantly important role in assuring greater customer satisfaction and loyalty, which is the underlying focus of TQM philosophy. The study reveals three specific effects of HCD practices, such as reduced cost of doing business, superior quality finished products, and on-time product shipment, all of which together imply the successful implementation of TQM philosophy. It is evident from this study that these positive outcomes of HCD endeavors can facilitate gaining sustainable competitive advantages in the market.

### **7.2.2 Revisiting RQ 2: *How can HCD contribute to the implementation of TQM philosophy?***

The second research question of this exploratory study is about how HCD can contribute to the implementation of TQM philosophy. To address this question, a conceptual framework was developed in chapter 2, based on the literature review. This framework tries to explain three potential ways, involvement, innovation, and improvement, by which HCD might affect TQM

execution. However, the findings of this study discussed in chapter 6 reveal that systematic HCD practices can create a productive workforce having firm specific as well as generic human capital. Empirical evidence suggests that such a workforce is typically characterized by a higher degree of job involvement, empowerment, innovation capabilities, and adaptability to continuous improvement, which are fundamentals to TQM philosophy. Findings are therefore consistent with the conceptual framework of this study that HCD can contribute to TQM implementation by enabling employees to responsibly participate in problem solving and decision-making situations; creatively think and perform the job; and effectively detect and accomplish appropriate changes in the work processes and procedures. Apart from that, findings indicate that HCD significantly affects effective utilization of time, enhanced job specialization, and resilient workplace behavior, which are also important preconditions for successful execution of TQM philosophy. Synthesizing the case findings, it can be enunciated that HCD can positively influence TQM implementation, or in other words customer satisfaction, through enabling employees to effectively manage time; accurately conduct assigned jobs; and demonstrate anticipated behavior at the workplace.

### **7.2.3 Revisiting RQ 3: *What is the relationship between HCD and TQM philosophy?***

The third research question of this study is intended to explicate the linkage between HCD and TQM philosophy precisely. Though answers to the first and second research question already provide an indication regarding the inquired association, this question might reinforce the understanding of the aspect. To address this research question, the extant literature on the nexus between HCD and TQM was reviewed in chapter 2 where an implicit connection was noticed. However, the findings of this study suggest that systematic HCD practices are explicitly related to the implementation of TQM philosophy. It is revealed from this investigation that the

effectiveness of organizational functioning and total business integrations are contingent on potent HCD conduct. Findings indicate that HCD interventions undertaken by HR act as enablers for employees to overcome gaps in terms of knowledge, skills, and abilities (KSA) and subsequently lead to decreased wastages, diminished rate of rejections, reduced alterations, less overtime schedule, and lower lead time, all of which are critical signals of successful realization of TQM philosophy. It is particularly evident that when employees acquire the necessary human capital, they could work with greater precision and mental alertness and so accomplishing quality or zero defects in every business operation might become feasible. Thus, a cause-effect relationship between HCD and TQM can be hypothesized in which HCD, and TQM refers to independent and dependent variable respectively.

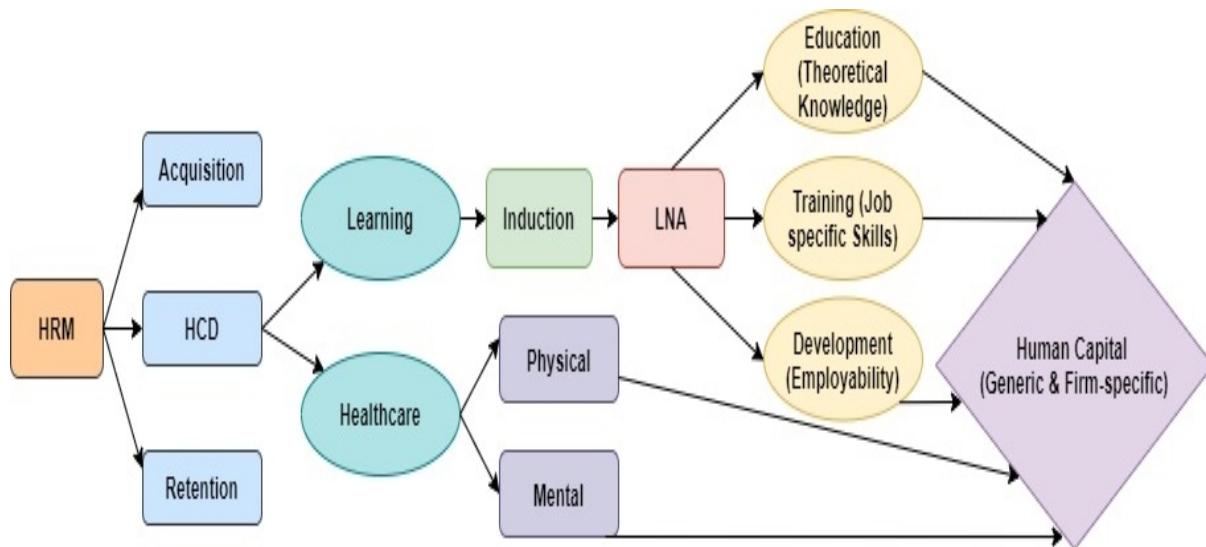
#### ***7.2.4 Revisiting RQ 4: How to develop an HCD framework for the implementation of TQM philosophy?***

The final research question of this study is related to the development of an inclusive HCD framework for triggering TQM implementation. A thorough review on the extant literature was conducted in chapter 2 to address this research question. In light of the literature review, open-ended enquiries were made as well during the fieldwork to seek the research participants' viewpoints and propositions in this regard. Integrating the research findings with the existing literature, two categories of interventions, employee learning and healthcare, can be explicitly identified as critical to form requisite human capital for the organization. Although the exploration was performed in five purposively selected RMG establishments of Bangladesh, it can be argued that to develop a robust HCD framework, certain rudimentary learning initiatives, including induction, learning needs assessment, education, training, and

management development, are to be strategically incorporated by the HR team of any establishment.

Empirical evidence suggests that a formal orientation followed by feedback can be regarded as a highly effective mechanism that facilitates newly hired job incumbents to cope up with the work setting eloquently. Learning virtually begins at workplace when employees go through such as induction. Findings also indicate that once employees get settled down at their work, the subsequent crucial job for HR is to assess their actual learning needs that might guide to select the most appropriate HCD intervention to help overcome performance deficiencies. It is evident from this research that employees' job performance can be improved by creating and leveraging firm specific, as well as generic, human capital through specifically three learning dimensions, namely education, training, and development.

Moreover, results imply that employee health is an integral component of human capital, and that healthcare should be contemplated as a pivotal HCD intervention. Nurturing the physical and mental wellbeing of employees might have significant impacts on job-related behavior, hence healthcare needs to be integrated into the HCD framework like the aforementioned learning interventions. Despite the objective of this study being to develop an HCD framework for HR practitioners to adhere to, the critical roles of RMG owners, as well as external stakeholders, in crafting human capital for smooth business operations are also seemingly uncovered through this inductive exploration. However, based on the discussion of relevant research findings, an HCD framework was illustrated in chapter 6 that could be largely followed by HR practitioners regardless of the type of organization. This proposed HCD framework which is a contribution of this study to the knowledge is further demonstrated here.



**Figure 7.1: Proposed HCD Framework (Author's Construct)**

### **7.3 Contributions of this Research:**

This qualitative case study research adds value to the existing knowledge in several ways through inductive exploration which can be categorized into theoretical and empirical contributions.

#### **7.3.1 Theoretical Contributions:**

Addressing multiple gaps in the extant literature, this exploratory study makes important theoretical contributions. First, it contributes to the HRD literature by explicitly recognizing two distinct types of HCD interventions, learning and healthcare, that are essentially required for developing an effective workforce in the organization (Garavan et al. 2000). Second, this study underpinned by the human capital theory provides a new insight that healthcare is a necessary means of developing human capital, hence should be incorporated in the broader field of HRD (Fisher 1906; Schultz 1961; Becker 1964; Savu 2013; Goldin 2016). Third, based on the exploration of various HCD measures, this study develops an all-encompassing HCD framework, which is a major contribution to the HRD discipline since there is no such

established theoretical framework found in the extant literature (Chetty 1996). This framework might serve as the foundation for theory development in the field of HRD. Fourth, this study, through examining five exemplary case organizations, envisages a causal relationship between HCD and TQM and in that way tries to establish a link between the literature on HRD and TQM which is a theoretical contribution. Specifically, the development of a hypothesis on the relation between HCD and TQM is an obvious theoretical contribution. Fifth, this study determines the behavioral implications of HCD with respect to TQM philosophy and in so doing integrates human capital theory with behavioral theory (Robbins and Judge 2013). Sixth, this study by corroborating the resource-based theory (Baron and Armstrong 2007; Buta 2015) provides an insight that effective HCD practices can ensure forming valuable, rare, inimitable, and non-substitutable human capital resource, thereby facilitates achieving competitive advantages (Barney 1991; Powell 1995; Reed et al. 2000; Bornay-Barrachina et al. 2012; Delery and Roumpi 2017). Seventh, an important theoretical contribution of this study is that, based on the literature review, it develops a conceptual framework representing a possible nexus between HCD and TQM philosophy (see Figure 2.2). Eighth, synthesizing the underlying themes of different perspectives of TQM, a definition of TQM highlighting the philosophical aspects is proposed in chapter 2 (see subsection 2.3.3), which can be considered as a theoretical contribution. Last but not least, the exploratory findings of this research can serve as a foundation for future studies on the phenomenon being explored.

### **7.3.2 Empirical Contributions:**

This study is a pioneering empirical work conducted in the context of the Bangladesh RMG sector that investigates the linkage between HCD and TQM and specifically explores the roles of HCD in the implementation of TQM philosophy. To the best of the researcher's knowledge

there is no such study conducted earlier in this perspective and this study is the first exploration on this pressing issue. Based on the empirical evidence, this exploratory research contributes to the knowledge by establishing an overt connection between HCD and TQM. Another important empirical contribution is that the result of this study identifies the potential benefits of HCD practices with regard to TQM philosophy, such as decreased cost of doing business, improved product quality, and on-time shipment. It is evident from the study that human capital or the knowledge, skills, and abilities (KSA) of employees is the key factor in TQM implementation on which the utility of hard TQM elements largely depends. The research findings contribute to the understanding regarding the ways in which HCD can affect the implementation of TQM philosophy at the workplace. This study provides sufficient empirical evidence in postulating a fact that the execution of TQM principles is contingent on the creation of an engaged, innovative, and adaptable workforce. This exploration also gives rise to the notion that, though human capital is never owned by the employer, but rather by the employee, the employer needs to make a prudent investment in developing human capital considering its potential impacts on organizational goal attainment.

#### **7.4 Managerial Implications:**

From an HCD perspective, the results of this exploratory research have critical implications for managerial actions. This research establishes the fact that successful implementation of TQM philosophy at the workplace requires robust HCD efforts to form valuable, rare, inimitable, and non-substitutable human capital resource. In this study, the HR managers as well as other line managers of RMG establishments are suggested to comprehend the innate linkage of HCD interventions with employees' enhanced involvement and empowerment, innovation



capability, and adaptability. This exploration proposes that HCD can be applied as a comprehensive framework to gain competitive advantages through TQM implementation.

It is suggested in this research that before technology adoption, top-level management needs to critically consider the people aspect (Hafeez et al. 2006), that whether the workforce has gained the required capabilities to capitalize on automation since the diffusion of hard TQM elements such as structural control, statistical process control, exploration is evidently impacted by employees at the workplace (Rahman and Bullock 2005). However, considering the rapid technological shifts and unprecedented customer expectations, it is of great importance for the management to engage both the managerial and nonmanagerial employees in life-long learning, interdisciplinary thinking and action, and IT skills development.

Moreover, the proposed HCD framework of this study might guide the HR practitioners with respect to formulating and executing appropriate functional strategies to develop a dedicated and dynamic workforce that can act as the driving force in accomplishing zero defects in operations, thereby assuring greater customer satisfaction. However, an indirect implication of this research is that HR managers need to be cautious regarding the allocation of overtime duty among the factory workers, given that working for long hours might cause serious health complications and subsequently diminish productive capabilities. Additionally, this study explores the potential roles and responsibilities that RMG owners as well as relevant external stakeholders, such as the Bangladesh Government, BGMEA, BKMEA, educational institutions could assume concerning the development of human capital for the country's most promising RMG sector.

## **7.5 Limitations of the Study and Directions for Future Research:**

Like any other research work, this study is also not beyond limitations that need to be addressed while judging the research findings. These limitations relating to the methodology, context, and theory, along with some suggestions for future research are summarized in the following subsections.

### **7.5.1 Methodological Limitations and Suggestions:**

This study follows a purely qualitative research design and, as such, relies on the subjective interpretations of the researcher, which itself is an inherent methodological limitation. To select exemplary cases and within case participants, the nonprobability purposive sampling technique was used; hence the study suffers from lack of generalizability. Since this investigation entails interviewing only thirty participants of five cases, the findings cannot be precisely interpreted in a generalized manner. Besides, the participants of this study encompassed only the managerial employees and not the nonmanagerial factory workers, which is, however, due to the fact that the phenomena under inquiry are not easily comprehensible for operating staff. Moreover, this research largely depends on interview data because of the nature of research topic and questions, though both primary and secondary data were utilized for multiple case studies. Consequently, triangulation, which is typically expected in case study research, does not come about in a true sense while analyzing the data and exemplifying the findings. Furthermore, text-based reflexive thematic analysis is performed manually for analyzing interview data that cannot always capture the exact meaning and thus can be regarded as a limitation of this research.

In fact, the methodology of this study is aligned with the interpretivism research paradigm that is embedded in ontological idealism and epistemological subjectivism. It is suggested that future research from either a positivist or pragmatist philosophical stance

applying quantitative or mixed method can examine the conceptual framework of HCD and TQM that has emerged in this study. Besides, this research was a preliminary endeavor to develop a comprehensive HCD framework with respect to TQM implementation through inductive exploration. There is essentially a need for further research to examine the effectiveness of this proposed HCD framework empirically.

Moreover, conducting explanatory research on the phenomena explored in this study might lead to interesting empirical findings having the potential to deepen the understanding of the innate linkage between HCD and TQM. Such research findings can be better generalized to a broader population. However, even if such a qualitative case study research is to be replicated in future, it is recommended to increase the sample size and consider factory workers as research participants along with managerial employees. In addition to the interview method, future study could apply the focus group discussion (FGD) method to gather primary data from nonmanagerial employees on this research topic in depth to be facilitated by the researcher. Subsequently, the shortcoming of this research with respect to triangulation will be resolved. Moreover, any future study can use qualitative data analysis (QDA) software like NVivo to facilitate improved transcription and thematic analysis of the interview data.

### **7.5.2 Contextual Limitations and Suggestions:**

The limitation of this study with respect to the context is that this exploratory research is conducted in the perspective of the Bangladesh RMG sector, which itself is a poorly explored research site, hence the study suffers from lack of sufficient secondary information pertinent to the research topic. The findings of this study cannot be generalized since the primary data obtained through interview are only context specific, though they are rich and thick in nature. Moreover, as the research site this study uses RMG sector of a single country characterized by

a developing economy, but it is not adequate in terms of coverage to explore a phenomenon comprehensively.

In future, the same research topic can be studied in other contexts of Bangladesh, like the FMCG or pharmaceuticals sector. The sectoral differences regarding HCD – TQM linkage can be interesting to be focused and explored in future research. Moreover, in future studies the phenomena of the role of HCD in TQM implementation can be explored in the context of the RMG sector of other leading RMG manufacturing countries, like China or Germany, having the world's largest developing economy and highly developed market economy respectively. Country context has an impact in studying the nexus between HCD and TQM, hence future studies conducted from a different national perspective might reveal interesting outcomes as well as facilitate a cross-country contrast and comparison. It would be also interesting to investigate the role of HCD in TQM implementation in a capital-intensive sector.

### **7.5.3 Theoretical Limitations and Suggestions:**

In this exploratory study, the researcher limits himself to three underpinning theories, human capital theory, resource-based theory, and behavioral theory, to examine the role of HCD in TQM implementation which can be considered as a theoretical limitation of the research. Though human capital theory lays the foundation of this research and determines the main agenda, the theory itself is inadequate to explicate the intrinsic value of human capital in respect of quality management. The resource-based view of human capital is thus adopted in this study as a supporting theory, which has, however, no significant managerial implications. To overcome the shortcoming of resource-based theory, this study embraces behavioral theory to comprehend the behavioral implications of HCD relating to TQM. However, in the perspective of organization this theory is also not good enough to understand the phenomena under inquiry

since it does not address the interrelations among the various parts of the organizational system, which is an important aspect of the TQM philosophy. Future research can thus take place adopting the system theory along with these underpinning theories to focus on the broader spectrum of HCD and TQM philosophy in the organizational context, which might bring about more interesting research findings. Moreover, this study found a positive correlation between HCD and TQM and identified them as independent and dependent variable respectively. However, the hypothesis developed in this study regarding their association needs to be tested in future studies. It would also be interesting to further explore the impacts of HCD interventions on employee motivation and subsequent retention particularly in the perspective of the Bangladesh RMG sector, which this study addressed to some extent.

#### **7.6 Researcher's Reflective Statement:**

I began my PhD study in 2019 after serving as an HR faculty member in the academia for ten years. Apart from full time teaching, I also conducted some conceptual and empirical research in HRD. I have always been interested in the Bangladesh RMG sector, which is regarded as the lifeblood of its national economy. I became enthusiastic to know what makes RMG the largest exporting and one of the major employment sectors in the country. Undoubtedly, it would not have been feasible for this sector to hold the second position in the global market without evidencing excellence in quality management. As an HR academic and research enthusiast I determined to investigate the role of human capital development in this respect. After reviewing some literature, I found a major research gap concerning the linkage between HCD and TQM, particularly in the context of this sector. My dream of pursuing PhD research on this context specific topic came into reality when I got the Commonwealth Scholarship in the UK and admission offer from the University of Bradford.

After commencing the PhD journey, I came to realize I know very little and that an extensive exploration on the chosen topic is needed. I started searching and reviewing the relevant literature to develop a conceptual framework for my study that will represent a possible nexus between HCD and TQM. While reviewing the extant literature I identified several research gaps based on which I developed four research questions. During the first year of my PhD program, I had to complete the compulsory modules on qualitative and quantitative research methods. The practical lessons I learned from these modules facilitated me greatly to shape the research design aligned with the research questions.

Besides, I attended several training and workshops on systematic review, critical appraisal, EndNote, thesis and copyright, research ethics, writing skills, etc. These had been useful, especially to carry my study forward. However, my PhD journey was never linear; rather it was challenging, with several ups and downs. Apart from intense academic challenges I confronted impediments due to the covid pandemic while carrying on fieldwork in Bangladesh. Considering the covid related potential hazards, I initially approached research participants for Skype or Microsoft Teams interviews from England, but most of them were reluctant about this. I then realized the need for in-person interview that subsequently compelled me to go for fieldwork physically in Bangladesh, which involved some risks. Though it was not always easy to get the participants' appointments at a convenient time, they all supported me wholeheartedly during the interview and the subsequent validation phase.

From every single interview I learned valuable knowledge regarding my research topic and many useful things beyond that. Besides, taking the opportunity to visit the factory, I noticed relevant aspects and took important notes for analysis. I felt it was justified to take the risk of visiting Bangladesh for primary data collection. During the whole fieldwork trip, I had taken all the precautionary measures to prevent myself from covid infection but, unfortunately,

on the way back to England from Bangladesh my wife and I became covid infected. It was quite a difficult time in my research journey, but we recovered gradually by the grace of the Almighty.

Another challenge I faced is that a huge amount of textual data was generated from interviews. I had to translate 23 out of 30 interviews from Bengali to English and transcribe every single interview manually, staying up all night. Though the transcription was a time-consuming process, it helped me to get immersed in the data and deeply acquainted with every aspect of data. It was initially intended to use NVivo software to facilitate thematic analysis, but I later realized that it would be complicated to manage such a massive amount of textual data using this software. More importantly, as an interpretivist I realized that it is essential to analyze the themes in a reflexive manner with my own hands instead of relying on rigid software. Reflexive thematic analysis approach provided me with the required flexibility to analyze textual data thoroughly and write the discussion chapter in a more intuitive manner.

Moreover, being inspired by my principal supervisor, I had always tried to write whatever pertinent comes to my mind almost every day in the last three years. It helped me to craft this thesis in the present form. However, every time I wrote something for my thesis, I confronted the hardest question from my associate supervisor ‘so what?’ and that little but toughest comment changed my thought process and forced me to look at everything more critically. It was always difficult to justify every single word I wrote but, eventually, I learned how to substantiate something with improved reasoning.

In every single phase of this research journey, I learned how to deal with unforeseen contingencies and circumstantial challenges that would help me to handle adverse situations in the future. Moreover, using the research and communication skills acquired from this expedition I would be able to pursue future research projects more meticulously. On successful

accomplishment of a PhD degree, I intend to return to my previous job at the University of Dhaka and enrich students with my advanced knowledge. I hope the unique experiences I have gained will enable me to serve as an expert academic researcher in the domain of human capital development. Last, but not least, the completion of this thesis I believe is not the end of my research journey but rather the beginning of a research career and more insightful life.



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## Appendices

### Appendix A: HCD Interventions and Impacts

Author	Means/Interventions of HCD	Elements of Human Capital	Outcomes/Impacts of HCD
Schultz (1961)	Health, Education, On-the-job training, Study programs, and Migration	Knowledge, Skills, and Capabilities	Increased productivity
Becker (1993)	Schooling, On-the-job training, and Medical care	Skills, Knowledge, and Health	Individual welfare, and Social benefits
Blundell et al. (1999)	Education, and Training	Ability, Knowledge, and skills	Productive employee, Higher individual earnings, Promotion, Retention, Firm profitability, and Economic growth
Oribabor (2000)	Training, and Development	Technical, human, conceptual, and	Individual growth, and

		managerial competencies	Organizational growth
Lloyd (2002)	Training, and Development	Skill, and Ability	Greater employability, External flexibility, and Secure and stable income
Berger et al. (2003)	Occupational health services and programs	Workforce health	Greater productivity
Stiles and Kulvisaechana (2003)	Pro-learning environment, Constant learning, and Motivation	Skills, Abilities, and Knowledge	The increased market value of the organization
Hatch and Dyer (2004)	Education, and Firm-specific training	Knowledge, and Skills	Higher productivity, and Higher earnings
Clarke (2006)	Management Training and Development	Knowledge	Competitive advantage



Hsu et al. (2007)	High-performance work system (training and development)	Skills, Information, Motivation, and Latitude	Enhanced firm performance, and Competitive advantage
Olaniyan and Ojo (2008)	Staff Training, and Development	Knowledge, Relevant Skills, and Attitudes	Adequate performance, Increased productivity, and Organizational growth
Lacy et al. (2009)	Sustainability related learning, The long-running central training course, and Business case study	Knowledge, Skills, and Attitudes	Innovative ideas, Sustainable development, and Continuous improvement
Marimuthu et al. (2009)	Training, Education, and Professional initiatives	Knowledge, Skills, Abilities, Values, and Social assets	Better financial performance, Better non- financial performance, and Access to the global market

Rondeau et al. (2009)	Education, Job-related training (workplace safety training and clinical skills training), and Professional development	Enhanced self- value, and Increased job satisfaction	Lower employee turnover, and Higher organizational commitment
Zubovic et al. (2009)	Formal education, Non-formal education, Training	Knowledge, and Efficiency,	Improved agricultural productivity
Camps and Luna- Arocas (2012)	High-performance work systems (training and development)	Skill, and learning capability	Organizational performance
Berna and Radu (2013)	Stable infrastructure development, Workforce education, and Training	Latent qualities, and Traits	Creative outcome
Eftimie (2013)	Continuing education	Knowledge	Economic prosperity
Savu (2013)	Education, Capacity development, and Healthcare	Learning, Knowledge, Employability, and Human health	Positive economic phenomenon

Armstrong (2014); Smither and London (2009)	Self-directed learning	Empowerment, and Self-development	Improved employee and firm performance, Greater job satisfaction, A higher level of commitment, and Coping up with the volatility of the market
Fallon and Rice (2015)	Employee development	Opportunities for personal career development	Job satisfaction, Less voluntary turnover intentions
Fallon and Rice (2015) and Koster et al. (2011)	Training (General)	General skills	Enhanced individual- level outcomes, and No retention problem
Klinge (2015); Argyris (2004); and Armstrong (2014)	Mentoring	On-the-job learning, Double-loop learning, and Experience	Improved employee performance, and A compliment to formal training
Mason and Bishop (2015); Armstrong	Focused training, and Continued employee development	Specific skill, Future employability	Future productivity and competitiveness, and

(2014); Kim and Ployhart (2014). and Nadler (1979)			Development of competitive strategy,
Akpinar and Gun (2016)	Imposed training (Apprenticeship)	Skills (questionable)	Decreased labor cost
Goldin (2016)	Education, Training, and Health system	Knowledge, Skills, and Better employee health	Raised income level, and Economic growth
Pasban and Nojehdeh (2016)	Training, and Empowerment	Knowledge, Information, Innovation, and Creativity	Customer's satisfaction, and Sustainable competitive advantage
Stephan et al. (2016) and Armstrong (2014)	e-learning or web-based learning	Supplement to face to face learning	Not very effective for growing soft skills like team building
Delery and Roumpi (2017)	Training	Ability, and Firm-specific skills	Higher productivity Sustainable competitive advantage

Riley et al. (2017)	Training	Knowledge, Skills, and Capability	Positive stock price
Tetteh et al. (2017)	Training, and Development	Knowledge, and skills	Better individual and organizational performance, Job satisfaction, Retention, and High morale

Source: Author's Compilation

## Appendix B: Themes of TQM Philosophy

Author	Perspectives	Themes
British Standards Institution (1991)	TQM can be viewed as a management philosophy that incorporates every activity through which customer's, as well as community's need and expectation, and the organizational objectives as well, are met effectively and efficiently by exploiting the latent of all the employees in an unending drive for improvement	Continuous improvement through employee efforts
Dale and Cooper (1992: 19)	One of the common principles of TQM is that "everyone in the organization is involved in continually improving the processes under his or her control and takes responsibility for his or her own quality assurance"	Involvement, and Improvement

Lakhe and Mohanty (1994)	TQM is a constant pursuit for excellence by creating the right skills, and attitudes in people to prevent probable flaws and always satisfying customers in all respects	Constant development
Sitkin et al. (1994)	TQM philosophy is the combination of three major guiding principles such as focusing on customer satisfaction, emphasizing on continuous improvement, and considering the organization as a total system	Customer satisfaction, Continuous improvement, and Whole system
Kanji and Asher (1996)	TQM is a managerial approach of performing business based around continuous improvement and cultural change	Continuous improvement, and Innovation
Madu et al. (1996)	Making the right choice of new and suitable technology for process transformation is a must to achieve TQM	Innovation, and Continuous process improvement (CPI)

	which also calls for a never-ending philosophy of change for the organizational betterment	
Mullins (1996)	TQM is a way of life for any organization which is devoted to attaining total customer satisfaction through a continuous process of improvement and the involvement and contribution of the people	Customer satisfaction, Continuous process improvement, and Employee involvement
Plenert (1996)	TQM is not just a mere tool, rather a complete philosophy concerning how to run a business successfully through change as change is the only thing certain in life	Innovation
Silos (1999)	TQM philosophy grasps vertically as well as parallely across different business levels and functions to embrace all employees within the organization	Employee involvement



Walsh et al. (2002)	TQM is a customer-focused philosophy which revolves around the concept of ensuring customer satisfaction through establishing an in-built culture of continuous improvement, employee empowerment, and involvement	Continuous improvement, Employee empowerment, and Employee involvement
Emison (2004)	In essence, the philosophy of pragmatism implies that realistic experience, such as which gained from the continuous improvement of and experimentation with TQM, provides the basis for thriving organizational performance	Continuous improvement
Issac et al. (2004)	TQM is a philosophy based on customer satisfaction and aimed at quality through mainly the process of continuous improvement,	Continuous improvement, Employee empowerment, and Teamwork

	employee empowerment, and teamwork	
Pheng and Teo (2004)	TQM is recognized as a successful management philosophy that can be embraced in the construction industry to help increase quality and productivity through measures like top management commitment, employee involvement, and empowerment, process improvement, etc.	Top management commitment, Employee involvement, Employee empowerment, and Process improvement
Hafeez et al. (2006)	Satisfying customers through continuously improving the quality of all the functions performed by an enterprise is the essential belief of TQM philosophy	Consistent quality improvement
Kumar et al. (2011)	TQM is a modern management philosophy, a never-ending journey focuses on achieving and keeping impeccable quality in both manufacturing and	Continuous improvement of everything an organization does

	service industries, by improving performance in all respects to meet customers' expectations	
Rahman and Masud (2011)	TQM is a philosophy about quality suggesting for everyone's involvement in the organization in pursuit of quality	Involvement of all employees
Zakuan et al. (2012)	For the implementation of TQM in higher education institutions certain internal factors act as critical success factors such as top management support, continuous improvement, employee involvement for employee empowerment, greater skill level, effective communication, and teamwork	Management commitment, Continuous improvement, Employee involvement, Work efficiency, Communication, and Teamwork
Besterfield et al. (2012); Krajewski et al. (2013)	TQM is both a philosophy as well as a set of guiding principles representing the	Continuous improvement

	basis of a continuously improving organization	
Augusto et al. (2014)	TQM philosophy integrated process and product-related innovation initiatives rather than organizational-wide innovation are instrumental towards achieving and maintaining a superior organizational performance particularly in a smaller-sized organization which are characterized by an organic, flexible structure, and informal culture	Process innovation, and Product innovation
Kutlu and Kadaifci (2014)	TQM is an integrative management philosophy of continuously improving the product and process quality, in which top management commitment and leadership, and strategic planning are found to be the most influential drivers of TQM implementation	Continuous quality improvement, Leadership, and planning

Luburic (2014)	TQM is a comprehensive and the most complex management philosophy and a mode of running a business to achieve success through constant improvements and involvement of all employees	Continuous improvement, and Employee involvement
Manalo (2014)	TQM is a philosophy as well as a strategy of total manifestation to improve and change the way anything to be given out and done for creating a base of the high-performance management system and to be competitively successful	Improvement, and Innovation
Oakland (2014)	TQM can be conceptualized as a way of removing people's lives of useless endeavor by bringing them all into the improvement processes to achieve expected outcomes shortly	Involvement, and Improvement

Singh and Singh (2015)	TQM has an interdependent relationship with the process-oriented concept of Kaizen where Kaizen which means continuous process improvement (CPI) is a subset of TQM philosophy	Continuous process improvement (CPI)
Al-Juboori and Al-Azemi (2016)	Unlike ISO 9000 initiatives, TQM philosophy applies to all the activities of an enterprise and 65% of surveyed respondents from electricity and public water sector perceive that TQM administration is the most appropriate to be applied in this sector to improve maintenance and shrink the cost	Every activity improvement
Setu et al. (2016)	The philosophy of TQM refers to the integration of all the activities and processes of an organization to achieve continuous improvement of product	Customer satisfaction, and Continuous quality improvement

	quality for ensuring customer satisfaction	
Hasanuzzaman (2017)	Identified certain factors that may help implement Quality Management System (QMS) in the Bangladeshi garments industry, which is an investment in developing factory layout, proper education, employee's awareness of QMS, and infrastructure development	Change or Innovation, Knowledgeable employees, and Improved infrastructure
Marin-Garcia et al. (2018)	Kaizen used as a weapon to uphold and advance competitiveness by using knowledge and involving employees, which can be seen as the corporate capability to form an ingredient of TQM	Continuous improvement (CI)
Worlu et al. (2019)	The execution of TQM philosophy which is a set of guiding principles can be conceptualized as a lengthy and complicated process of	Innovation

	transformational change within an organization	
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Source: Author's compilation



## Appendix C: Participant Information Sheet



### Participant Information Sheet

#### **Title of the Research:**

Implementing Total Quality Management Philosophy through Human Capital Development:  
An Exploratory Study of Selected Ready-Made Garment Establishments in Bangladesh

#### **Aim and Objective:**

This study aims to explore and understand the critical role of HCD in implementing TQM philosophy specifically in the context of the Bangladesh RMG sector as well as to develop an inclusive HCD framework in this respect based on the opinions and suggestions of the research participants.

#### **What Would Participation Encompass:**

The researcher will raise eight open-ended thematic questions for the participant to discuss about the role of HCD in TQM implementation subjectively. The participant will be asked 'What' and 'How' type of question so that s/he can share personal opinions and suggestions in a flexible manner. The total length of the interview session will be around an hour. If the participant agrees, the conversation will be audio recorded.

**Confidentiality and Anonymity:**

The notes taken during the interview will be kept in a secured lockable cabinet and the recorded data will be kept in a digital archive in a password protected file to ensure confidentiality. Participant's responses will be preserved as anonymous, and data will be treated with the highest confidentiality. There will be no sign of identification of the research participant in the PhD thesis or anywhere else to confirm anonymity. Unique identification code will be used for each participant to serve the research purpose.

**Participant's Rights:**

A participant has the full right to withdraw himself/herself from the study at any time without prior notice and/or explanation. S/he has the authority to ask for removing or extinguishing data provided earlier. S/he can omit or refuse to respond to any query being asked during the interview. Moreover, s/he has the right to ask questions relating to the procedure of the interview. After reading this information sheet if questions arise in mind, s/he can inquire the researcher before joining the interview.

**Storage, Use, and Destruction of Data:**

The data provided by the participant will be preserved in a safe and secure place as stated earlier for analysis and interpretation which will be anonymously presented later in the thesis. Once the study is fully complete, the preserved recorded data will be permanently deleted from the storage device and the data in the form of notes will be destroyed as well.

**Potential Benefits and Risks of taking part:**

The anticipated outcome of this study might have practical implications for the RMG sector of Bangladesh since the study intends to offer a comprehensive framework of human capital development. Consequently, the participants would be benefited in a wider sense if the respective RMG establishment adopts the proposed framework. However, there is no known risk involved in this study for the participant. The final study outcome can be shared with the participant.

**For Further Supporting Information:**

The researcher will be happy to respond to any inquiry the participant might have about this research. Besides, the research supervisory team can be an important contact point in this regard.

Researcher’s Official E-mail: Q.M.Mahmud@bradford.ac.uk

Principal Supervisor’s Official E-mail: J.K.Danquah1@bradford.ac.uk

Associate Supervisor’s Official E-mail: D.P.Spicer@bradford.ac.uk

**Voluntary Participation:**

Please confirm that you are willing to involve in this study as a participant by putting your signature.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name of Participant

Date

Signature

## Appendix D: Consent Form



### Consent Form

**Title of the Research:** Implementing Total Quality Management Philosophy through Human Capital Development: An Exploratory Study of Selected Ready-Made Garment Establishments in Bangladesh

**Name of the Researcher:** Qazi Moinuddin Mahmud

*(To be completed by the participant himself/herself)*

Please initial box

1. I confirm that I have read the participant information sheet for the above research thoroughly.
2. I confirm that I have had the opportunity of considering information, asking questions, and discussing the research with the researcher.
3. I confirm that I have received satisfactory answers to all my queries.
4. I confirm that I have received sufficient information concerning the research and the intended use of, and access arrangements to, the data I provide.
5. I confirm that I am happy to proceed based on the information received.
6. I confirm that I have been given adequate time to decide on my participation in this research.

7. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, and without any adverse result of any type.
8. I hereby give consent that the interview conversation can be recorded in an audio recorder for future retrieval and analysis to support this research.
9. I do agree to take part in the above research.

_____	_____	_____
Name of Participant	Date	Signature

## Appendix E: Semi-structured Interview Guide



### Semi-structured Interview Guide

**Prelude:** This study aims to explore and understand the role of human capital development (HCD) in the implementation of total quality management (TQM) philosophy and to develop an inclusive HCD framework in this respect based on the opinions and suggestions of the research participants. Your views and opinions as a research participant are of great importance and will be critically considered for the analysis and interpretation of this academic research. This interview intends to draw rich conclusions based on your subjective thoughts, perceptions, and judgments and hence there will be no right or wrong answer to any question being raised. Each of your responses will be treated with the utmost confidentiality and anonymity. Notes will be taken during the interview. However, it would be of great convenience if you kindly allow me to use an audio recorder to record the interview conversation. Taking notes extensively might disrupt and delay the interview session. Recording the voice would be instrumental in this regard and help subsequent analysis. Please be informed that your response will be used only for this Ph.D. research and any succeeding academic work, such as conference paper presentation, journal paper, and academic book.

***Research Participant's Information:***

Participant's ID:	
Name:	
Age:	
Gender:	
Academic Qualification:	
Current Position:	
Division / Department:	
Name of Employer:	
Length of Service in the current RMG company:	
Total Length of Service in the RMG sector:	
Contact Phone Number:	
Mail Address:	
Email Address:	
Venue of Interview:	
Date of Interview:	
Interview Start Time:	
Interview End Time:	

<b>Theme &amp; RQ</b>	<b>Interview Question</b>
<p><i>Concept of HCD &amp; its significance</i></p> <p><i>(RQ 1)</i></p>	<p>1. How would you explain the concept of employee development? In your opinion, how important is it to invest in the development of employees working in your organization?</p>
<p><i>Current &amp; potential HCD interventions</i></p> <p><i>(RQ 4)</i></p>	<p>2. What sort of initiatives are typically undertaken in your organization for employee development? What else do you think can be instrumental in this regard?</p>
<p><i>Employee health</i></p> <p><i>(RQ 4)</i></p>	<p>3. Can improved healthcare (physical and mental) be regarded as a tool for ensuring employee development? What do you think about it?</p>
<p><i>Essence of TQM</i></p> <p><i>(RQ 1)</i></p>	<p>4. How would you assess the total quality management practices in your organization? Which one do you consider is more pivotal for implementing total quality management? Employee development or system/technology</p>



	development? Can you please explain your stance with an instance?
<i>Core competence</i> <i>(RQ 1) + (RQ 2)</i>	5. How does total quality management help your organization in gaining a competitive advantage in the international market?
<i>Role of HCD in TQM implementation</i> <i>(RQ 1) + (RQ 2)</i>	6. What role do the employee development initiatives play in ensuring total quality management at your organization? Can you please describe from your experience how do they do so?
<i>Strategic link between HCD and TQM</i> <i>(RQ 3)</i>	7. In your opinion, what type of relationship does prevail between the employee development initiatives taken in your organization and total quality management?
<i>Suggestions regarding HCD</i> <i>(RQ 4)</i>	8. What suggestions would you make on employee development that could enhance quality everywhere in your organization, leading in turn to the progress of the whole RMG sector?

**Notes:**

## Appendix F: Interview Details

### Interview Details

Serial No.	Anonymous Name	Age	Gender	Academic Qualification	Current Position	Department	Total Job Experience in RMG Sector	Date of Interview	Venue of Interview	Length of Interview	Nature of Data (Voice / Notes)
1	A – 1	37	Male	M.Com (Accounting)	AGM	Merchandising and Marketing	16 Years	27-12-2020	Factory	52 minutes	Both
2	A – 2	35	Male	BA	Manager	Quality Control	18 Years	05-01-2021	Factory	30 minutes	Both
3	A – 3	35	Male	M.S.S.	Senior Executive	HR and Compliance	10 Years	05-01-2021	Factory	30 minutes	Both
4	A – 4	42	Male	M.Com.	Senior Executive	Planning	15 Years	10-01-2021	Factory	35 minutes	Both

5	A – 5	30	Male	MSS (Economics), MBA (Apparel Merchandizing)	Officer	Production	5 Years	13-01- 2021	Factory	31 minutes	Both
6	A – 6	31	Male	BSC (Textile), MSC (Textile)	Merchandizer	Merchandising and Marketing	5 Years	26-01- 2021	Factory	53 minutes	Both
7	B – 1	55	Male	HSC	General Manager	Production	25 Years	23-11- 2020	Factory	45 minutes	Both
8	B – 2	39	Male	HSC	Manager (Finishing)	Production	23 Years	23-11- 2020	Factory	30 minutes	Both
9	B – 3	43	Male	B.Com.	Manager (Admin)	Admin and Accounts	22 Years	25-11- 2020	Head Office	40 minutes	Both
10	B – 4	34	Female	BBA	Senior Officer (Compliance)	HR	7 Years	26-11- 2020	Head Office	52 minutes	Both

11	B – 5	35	Male	MBA	Merchandizer	Merchandising and Marketing	14 Years	30-11- 2020	Head Office	40 minutes	Both
12	B – 6	40	Male	MA	Assistant Manager	HR	18 Years	30-11- 2020	Head Office	33 minutes	Both
13	C – 1	35	Male	MBA (Management)	Manager	HR and Compliance	10 Years	07-12- 2020	Factory	71 minutes	Both
14	C – 2	53	Male	HSC	Manager	Quality Control	26 Years	08-12- 2020	Factory	30 minutes	Both
15	C – 3	35	Male	M.Com. (Management)	Executive	HR and Compliance	5 Years	08-12- 2020	Factory	52 minutes	Both
16	C – 4	48	Male	HSC	Manager	Finishing	29 Years	14-12- 2020	Factory	30 minutes	Both
17	C – 5	27	Female	MBA (HRM)	Welfare Officer	HR and Compliance	5 Years	14-12- 2020	Factory	35 minutes	Both

18	C – 6	36	Male	Diploma in Welding	Manager (Knitting - Fabrication)	Knitting	20 Years	23-12- 2020	Factory	40 minutes	Both
19	D – 1	48	Male	BSC (Textile), MBA (Manufacturing), Certified Lead Auditor ISO 9000, 14000, 18000, SA 8000, GSP GRADE A LEAN SIX SIGMA, NLP Practitioner	Senior Vice President	Sourcing and Merchandizing	30 Years	02-02- 2021	Head Office	52 minutes	Both
20	D – 2	59	Male	BSC (EEE)	Manager	Engineering	35 Years	04-02- 2021	Head Office	67 minutes	Both

21	D – 3	43	Male	MBA (HRM)	Manager	Sourcing and Merchandizing	15 Years	09-02-2021	Head Office	73 minutes	Both
22	D – 4	45	Male	M.Com, Diploma in IT	Head of HR and Compliance	HR and Compliance	21 Years	17-02-2021	Head Office	46 minutes	Both
23	D – 5	45	Male	MA	General Manager	Quality Assurance	22 Years	17-02-2021	Head Office	40 minutes	Both
24	D – 6	58	Male	B. Com, FCMA	Senior Vice President	Finance and Accounts	36 Years	24-02-2021	Head Office	66 minutes	Both
25	E – 1	46	Male	MCOM (Accounting), FCA	CFO	Finance, Accounts and Commercial	21 Years	03-03-2021	Head Office	120 minutes	Both
26	E – 2	42	Male	MBA (Finance and Marketing)	Manager	Sales and Marketing	15 Years	07-03-2021	Head Office	115 minutes	Both

27	E – 3	48	Male	MSC (applied Physics and Electronics)	AGM and Head of Compliance	Compliance	21 Years	09-03-2021	Head Office	51 minutes	Both
28	E – 4	43	Male	BCOM (Management), MSC (IT) UK	AGM and Head of HR and Admin	HR and Admin (Corporate and Factory)	24 Years	16-03-2021	Head Office	143 minutes	Both
29	E – 5	53	Male	BSC (Mechanical Engineering)	Senior Manager	Quality Assurance	25 Years	22-03-2021	Head Office	67 minutes	Both
30	E – 6	53	Male	BSC (Textile Engineering)	Vice President	Corporate and Factory	24 Years	24-03-2021	Head Office	60 minutes	Both

