



FACTORS INFLUENCING HUMAN CAPITAL IN READY MADE GARMENTS INDUSTRY IN BANGLADESH

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ABSTRACT

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The aim of this research is to determine the factors that influence the human capital of an organisation. An investigative study has been used to observe an exploratory factor analysis (CFA) of human capital. This study has been undertaken on the Ready-Made Garment (RMG) industry in Bangladesh and includes responses from 300 garment organisations using the cluster sampling technique. IBM, SPSS, and AMOS softwares were used to carry out the statistical analysis. The results suggest that skills, education and training, knowledge and competencies, and the attitudes of employees are very important elements of human capital. This study provides empirical evidence on the factors that affect human capital. It advises the policy maker to focus on key variables that affect the development of human capital in Bangladesh's RMG industry. Bangladesh has a rapidly growing economy, currently maintaining above six percent annual growth in Gross Domestic Production (GDP), largely driven by the RMG industry.

Contribution/Originality: This study undertakes the first logical analysis of this critically important sector and uncovered those variables that have significant influence on developing the human capital of an organisation RMG industry in Bangladesh.

1. INTRODUCTION

The human capital (HC) of companies is an important issue in contemporary management literature. Development of human capital improves the job performance of employees by equipping them with new and relevant skills and experience. HC is the key element in achieving a sustainable competitive advantage, and in improving employees' productivity (Schultz, 1993). HC consists of ability, intelligence, knowledge, skills, expertise, aptitudes, attitudes and other acquired traits contributing to production that gives an organisation its distinctive competencies. According to Marimuthu *et al.* (2009) human capital includes the processes related to employees' education and training. This in turn improves those skills, knowledge, values and abilities that directly impact their job satisfaction and performance, and ultimately improves organisational performance.

HC, in particular, denotes the individual's knowledge entrenched in the organisations' combined capability to achieve the best results from its employees (Bontis, 2001). It is explained as the total amount of the employees' skills, tacit knowledge, capabilities and experience (Edvinsson and Malone, 1997). According to Davenport and Prusak (1998) human capital comprises the intangible resources of effort, time and ability with which employees

enrich workplace capital. Human capital traits – including education, skills, knowledge and experience – are critical assets for the success of entrepreneurial organisations (Sexton and Bowman, 1985; Pfeffer, 1994; Florin *et al.*, 2003). Human capital has been illustrated in various studies that apply the idea to entrepreneurship (Chandler and Hanks, 1998; Davidsson and Honig, 2003; Rauch *et al.*, 2005). Investors place great significance on the HC practices of entrepreneurs in the course of their assessment of a firm's potential (Stuart and Abetti, 1990). Experience and management skills are the most widely used criteria for selecting the employees of venture capitalists. A majority of writers concur that ongoing investment in human capital is essential to the success of a business (Bruderl *et al.*, 1992; Dyke *et al.*, 1992; Cooper *et al.*, 1994; Bosma *et al.*, 2004; Van Der Sluis *et al.*, 2005; Cassar, 2006). Furthermore, HC may play an even greater part in increasing knowledge-based activities in most working environments (Pennings *et al.*, 1998; Honig, 2001; Sonnentag and Frese, 2002; Bosma *et al.*, 2004). This study undertakes a theoretical and empirical investigation into the relationship between human capital and organisational performance within a conceptual framework where organisational performance is measured by both financial and non-financial indicators.

2. PROBLEM STATEMENT

Bangladesh is one of the major global players in the ready-made garments industry. The roots of this industry extend back to the glorious ancient clothing businesses of Bengal in the Mughal period. “Dhakai Musline” was famous for its inimitability, and foreign merchants exported garments made in this style to many parts of the world. The late 1970's birthed the contemporary RMG sector. Despite rising tension between workers and owners in 2006, the garment industry basically stable. Bangladesh successfully tackled global recession in 2009 and ranked as the second largest exporting country in 2010. But, the “Rana Plaza” incident and a fatal fire at “Tazreen Fashions” in 2013 again brought into focus major issues affecting the safety question of workplaces in the industry. Bangladesh was subjected to tremendous pressure from the global community to improve workplace health and safety, and also lost its general system of preferences (GSP) status in the United States' market. In consequence, BGMEA, BKMEA and other international organisations decided to work jointly to ensure worker safety with a view to recovering the image of the Bangladeshi RMG sector. Despite these challenges, there has been significant growth in RMG. After starting with just nine garments in the 1970s, over 4,500 different types are now produced for export in Bangladesh, catering to a multi-billion-dollar global market. The success of the RMG industry has so far been based on the quality of the product and cheap labour, with women representing 90 per cent of the workforce.

3. LITERATURE REVIEW

Quantifying the "human element" in business capital is not a new concept. It has long been recognised as vital to productivity (Becker, 1962), and has been progressively acknowledged as an element developing the competitiveness of organisations (Bartel, 1989; Senker and Brady, 1989; Howell and Wolff, 1991; Prais, 1995). Adam Smith, List and Say recognised the acquired abilities and skills of human beings as human capital, whereas Fisher, Von Thunen, Marshall, Walras and Senior recognised human beings themselves as capital. According to Adam Smith, the skills of a man may be considered as a machine that has a real cost and generates profit. Vein and J.B. Say emphasised that since abilities and skills are earned at an expense and intended to improve employees' productivity, they should be considered as capital (Say, 1821). In spite of this List (1909), having concentrated on the doctrine of nationality, emphasised intangible capital, that is, the accumulation of all inventions, discoveries, improvements, exertions and perfections from past generations.

Walsh (1935) posited that the greater their advance in education, the greater the potential profitability of the worker, and hence the necessity to consider them as a capital investment. Thus, abilities achieved through professional learning and education thoroughly enrich conventional capital. The idea of HC was formalised in the

1960s with the introduction of the human capital theory developed by Schutz (1961a;1961b) and Becker (1962). Schultz analysed educational expenses as a mode of investment, whereas Becker initiated a theory of human capital formation that explained the rate of return on investment in training and education. In a seminar, Becker (1962) defined his concepts as “specific human capital” (on-the-job training) and “general human capital” (off-the-job training and formal education). According to him and the majority of scholars who accept the notion of human capital, skills, education and human capital are identical concepts.

According to Coleman (1988) human capital relates to individuals’ abilities and knowledge that allow improvement in accomplishment and economic growth. Sandberg (1986) suggests that an organisation’s particular human capital - specifically skills and knowledge - may give it a competitive advantage over its competitors. Chen *et al.* (2004) defined his ideas of human capital as a mixture of individuals’ competence, attitude and creativity. Employees’ knowledge and talent within organisations including know-how, competence, capacities, attitude, creativity and intellectual agility are denoted as human capital (Sandberg, 1986; Samad, 2010). Santos-Rodrigues *et al.* (2010) viewed human capital as a competencies: know-how, skills, commitment and loyalty.

“Generic” and “organisation-specific” are the two dimensions of human capital. Generic human capital takes place outside of the organisation through formal education and years of work experience (Swart, 2006). Hitt *et al.* (2001) argued that people earn knowledge and skills from education and experience before joining the organisation. Organisation-specific human capital is achieved during the term of employment. People gain knowledge and continue to learn by doing (Hitt *et al.*, 2001). Organisation-specific human capital is highly valuable because the skills and knowledge earned on the job by employees are distinctive to the firm and cannot easily be shifted to its competitors (Swart, 2006).

According to Garavan *et al.* (2001) human capital contains four important attributes: a) adaptability and flexibility; b) development of individual competencies; c) individual employability, and d) the growth of organisational competencies. Boyatzis (1982) established a model that stressed competency as central to the value of human capital. His enhanced model emphasised those fundamental characteristics of employees that contribute to effective and superior performance. These include motives, traits, skills, knowledge, self-image and social role, both effective and cognitive. Boyatzis *et al.* (2002) recommended that in order to face competition, highly competent managers actively contribute to the design of effective programs and learning methods. The study of Odhon’g and Omolo (2015) found a statistically significant relationship between human capital investment and organisational performances. The variables of skills developments, education, knowledge management and training have significant relation with organisational performance. Investment in the HC is an instrument for adding value, and constitutes part of a sound human capital risk management strategy. Saini *et al.* (2016) found that skills, knowledge, creativity and innovation capability within human capital as a whole have a significant and positive impact on the organisation’s quality of performance.

4. OBJECTIVE

The objective of the study is to discover the factors that influence the human capital of an organisation in Bangladesh’s RMG sector.

5. RESEARCH METHODS

5.1. Research Design

An investigative study has been used to observe the exploratory factor analysis (EFA) of human capital.

5.2. Sampling and Sample Size

According to BGMEA, there are almost 4,500 garments factories in Bangladesh. The study was conducted on 300 respondents from 300 garments using the cluster sampling method. The researcher has divided the whole

country into five clusters namely Dhaka, Chittagong, Gazipur, Narayanan and other areas of the county. Respondents were selected from each of the clusters according to availability. The respondents were the Head of Human Resources (HR) or other senior officials such as Directors, Managing Directors, General Managers and Deputy General Managers.

5.3. Survey Instrument

The researcher has undertaken a comprehensive literature review to identify variables and items. A self-administered survey instrument was developed consisting of 28 items within four categories, namely: skills, education and training, knowledge and competencies, and attitudes of employees (included in Appendix C). The questions were developed with five-point Likert scale wherein part one (1) of the questionnaire refers to 'strongly disagree' and five (5) refers to 'strongly agree'. The survey instrument was developed while keeping two criteria in mind:

- i) that the instrument meets reasonable reliability and validity standards; and
- ii) that the instrument is short and practical to administer in terms of the amount time required to complete.

5.4. Data Collection Procedure

Both primary and secondary data have been used in this study. Primary data was collected through face-to-face interview, sending and receiving questionnaires by email. The researcher attempted to conduct interviews with 300 respondents. After scheduled confirmation, the researcher firstly briefed the respondents about the purpose of the study, then asked them the questions and filled-in the form accordingly. Respondents took ten to 15 minutes on average to complete the survey. 215 respondents were interviewed. Of the 215 instruments 7 were rejected due to incompleteness. The success rate was 69% ($208 \times 100 / 300$). Secondary data were collected from research studies, books, journals and academic working papers.

5.5. Data Analysis

All raw data collected was reviewed, edited and entered into an Excel file for summarisation, and then imported into the Statistical Package for the Social Sciences (SPSS) 20 software to discover the factors that affect human capital in Bangladesh's RMG sector.

IBM SPSS AMOS software was used to develop a structural equation model (SEM) and to interpret standard multivariate analysis including factor analysis, correlation, regression and analysis of variance. Skills, education and training, knowledge, competencies and attitudes have been considered as exogenous variables. Organisational performance has been considered as an endogenous variable. All the items or observed variables under each latent variable have been used to a form-measured model.

6. RESULTS AND DISCUSSION

The findings are discussed under the following sub-headings.

6.1. Respondents' Profile

In Table 1 85 per cent of respondents were male, and 11.5 per cent female. The operational age of 34.6 per cent of organisations is up to 10 years, and 65.4 per cent between eleven to 20 or above. 58.2 per cent of organisations have employees of 1,000 to 5,000 while 27.9 per cent have fewer than 1000. A large majority of respondents (91.3 per cent) were between 41 to 60. 47.1 per cent had experience of between eleven to 20 years.

Table-1. Respondents' Information

Demographic information			Percentage
Gender			
Male			88.5%
Female			11.5%
Operational age of Organization		Number of employees in selected org	
5 years or less	08.2%	0-999	27.9%
6-10 years	26.4%	1000-5000	58.2%
11-15 years	22.6%	5001-10000	08.7%
16-20 years	17.8%	10001-20000	02.9%
20-Above	25.0%	20001-Above	02.4%
Age of respondents		Year of Experience	
40 years or less	05.3%	1-10 years	27.4%
41-50	34.6%	11-20	47.1%
51-55	32.7%	21-30	19.7%
56-60	24.0%	31-40	5.3%
61 or above	03.4%	40-above	0.5%

Note: Data have been compiled by the researchers.

6.2. Reliability Measures

Reliability displays the inside consistency of a set of items in the assessment of study variables. To analyse the reliability of the variable, Cronbach's Alpha coefficient value has been used in Table 2. Cronbach's alpha value is the most widely used method to measure the reliability of the scale (Hair *et al.*, 1998; Page and Meyer, 2000; Cooper and Schinder, 2001; Malhotra, 2002). It may be said that Cronbach's alpha value ranges from "0" to "1" but the satisfactory value is required to be more than 0.60 for the scale to be reliable (Cronbach, 1951; Malhotra, 2002). However, the Cronbach's alpha of this study is 0.912 which indicates that the survey instrument used for data collection is highly reliable (Hair *et al.*, 1998). The reliabilities of the components of Human Capital are as follows:

Table-2. Reliability Statistics of Variables.

Latent Variables	Cronbach's Alpha	Number of Items
Skills (F1)	.796	6
Education and Training(F2)	.674	4
Knowledge and Competencies(F3)	.832	11
Attitudes (F4)	.779	7
All variable together	.912	28

6.3. Path Diagram

Path analysis is used to explain causal models and explore the interaction affects and pathways between observed and/or latent variables. Skills, education and training, knowledge and competencies, and attitudes have been considered as latent variables Figure 1.

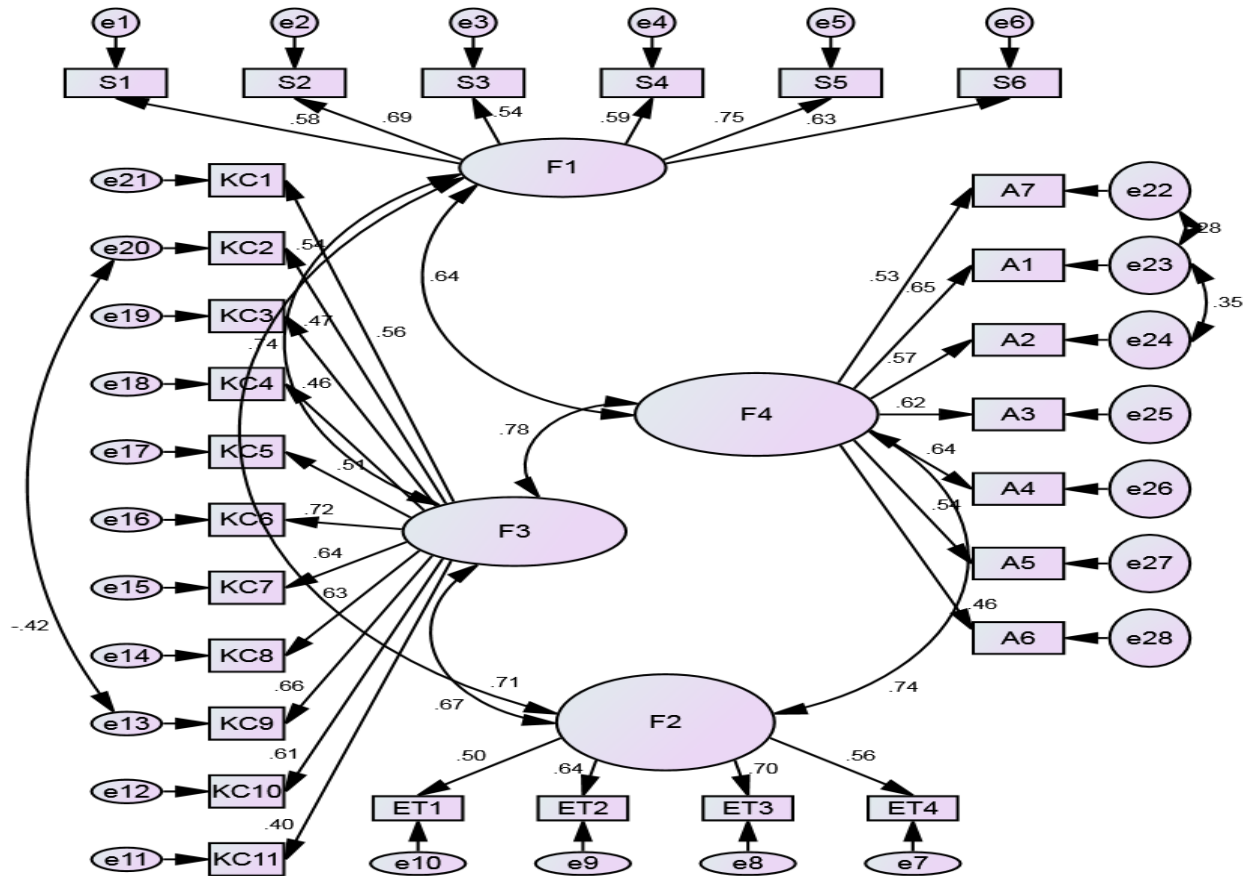


Figure-1. Path Diagrams of Human Capital of RMG Industry.

N.B: Here, F1= Skills, F2= Education and Training, F3= Knowledge and Competencies and F4= Attitudes of employee.

Table-3. Model Summary of Goodness-of-fit index.

Index	Level of acceptance	Result	Note
Absolute Fit Index			
Root Mean Square Error of Approximation (RMSEA)	<0.08	0.056	A value less than 0.05 is considered for a perfect fit, between 0.05 to 0.08 is considered for an acceptable fit
Incremental Fit Index			
Goodness Fit Index (GFI)	0.90>	0.832	A value 0 indicates a poor fit value 1 indicates a perfect fit.
Normal Fit Index (NFI)		0.746	
Relative Fit Index (RFI)		0.719	
Incremental Fit Index (IFI)		0.881	
Tucker-Lewis Index (TLI)		0.866	
Comparative Fit Index (CFI)		0.879	
Parsimonious Fit Index (NFI)			
Normed Chi-square	1.00-5.00	1.658	Less than 3 are preferred up to 5 is acceptable.

In order to assess the structural equation model, it is necessary to test the soundness of fit indices. It prescribes whether the structural model fits the data or not. The outcome of the model demonstrates that the hypothesised model fits the data absolutely. The fit index values are Chi-square=1.658, GFI=0.832, NFI=0.746, RFI=0.719, IFI=.881, TLI=.866, CFI=0.879, and RMSEA=0.056 Table 3. These results demonstrate that the proposed model is the best fit for the data.

Table-4. Regression Weights: (Group number 1 - Default model).

Observed Variables	Relations	Latent Variables	Estimate	S.E.	C.R.	P	Label
Technical skills	<---	F1	.622	.080	7.763	***	par_1
Analytical skills	<---	F1	.763	.083	9.207	***	par_2
Leadership skills	<---	F1	.624	.086	7.227	***	par_3
Communication skills	<---	F1	.768	.098	7.840	***	par_4
Decision-making skills	<---	F1	1.000				
Problem-solving skills	<---	F1	.825	.097	8.469	***	par_5
Access to training	<---	F2	.805	.120	6.686	***	par_6
Well trained	<---	F2	1.000				
Attract and retain talent	<---	F2	.959	.128	7.466	***	par_7
Educational profile	<---	F2	.883	.144	6.119	***	par_8
Adaptable to change	<---	F3	.553	.102	5.416	***	par_9
Entrepreneurial zeal	<---	F3	.849	.102	8.311	***	par_10
Creative	<---	F3	.900	.100	8.977	***	par_11
Aware of global trend	<---	F3	.874	.101	8.651	***	par_12
Competency	<---	F3	.687	.079	8.739	***	par_13
New idea	<---	F3	1.000				
Share knowledge	<---	F3	.629	.091	6.934	***	par_14
Long tenure	<---	F3	.649	.103	6.311	***	par_15
Experience	<---	F3	.609	.094	6.468	***	par_16
Information sharing	<---	F3	.599	.082	7.333	***	par_17
Work as a team	<---	F3	.630	.082	7.689	***	par_18
Loyal	<---	F4	.955	.147	6.485	***	par_19
Committed	<---	F4	.692	.116	5.985	***	par_20
Satisfaction	<---	F4	.883	.139	6.362	***	par_21
Self-motivated	<---	F4	.960	.148	6.482	***	par_22
Tendency to leave	<---	F4	1.000				
Willingness	<---	F4	.742	.143	5.204	***	par_29
Trustworthiness	<---	F4	.858	.150	5.717	***	par_30

Regression weights indicate unstandardized loadings of the model where SE stands for standard errors, CR stands for the critical ratio P which stands for P-value Table 4. We know that a p-value of less than 0.05 or a critical value more than 1.96 is statistically significant. Here, three asterisks (***) indicate that p-value is smaller than 0.001, and all critical value of the above table is higher than 1.96. In this case, all of the estimates are significant. Employee variables such as decision-making skills, training, ability to generate a new idea, and a tendency to leave the organisation appear to be the best indicators of skills, education and training, knowledge, competencies and attitudes. Other variables range from 0.553 to 0.960.

The Table 5 displays standardised regression weights (factor loadings) for a common factor and each of the indicators. Here the adaptability to change has the lowest factor loading of 0.398, suggesting that it is a less reliable indicator of knowledge and competency. Other variables have moderate to strong standardised loading, ranging from 0.462 to 0.749.

The Table 6 indicates the mean weight of all the variables, ranging from 3.135 to 4.053. Here, the mean value is statistically significant if p-value is 0.000. In the table, technical skills and the strength of employees' commitment achieved the highest means of 4.053 and 4.00 respectively.

Table-5. Standardized Regression Weights: (Group number 1 - Default model).

Observed Variables	Relations	Latent Variables	Estimate
Technical skills	<---	F1	.582
Analytical skills	<---	F1	.691
Leadership skills	<---	F1	.542
Communication skills	<---	F1	.588
Decision-making skills	<---	F1	.747
Problem-solving skills	<---	F1	.635
Access to training	<---	F2	.558
Well trained	<---	F2	.699
Attract and retain talent	<---	F2	.638
Educational profile	<---	F2	.504
Adaptable to change	<---	F3	.398
Entrepreneurial zeal	<---	F3	.609
Creative	<---	F3	.665
Aware of global trend	<---	F3	.634
Competency	<---	F3	.641
New idea	<---	F3	.722
Share knowledge	<---	F3	.509
Long tenure	<---	F3	.463
Experience	<---	F3	.475
Information sharing	<---	F3	.545
Work as a team	<---	F3	.564
Loyal	<---	F4	.646
Committed	<---	F4	.568
Satisfaction	<---	F4	.623
Self-motivated	<---	F4	.643
Tendency to leave	<---	F4	.538
Willingness	<---	F4	.462
Trustworthiness	<---	F4	.530

In Table 7 the covariance among the common factors of skills, education and training, knowledge and competencies and attitudes are in between 0.211 to 0.303. The covariance among the item is statistically significant as p-value is 0.000.

The Table 8 shows a strong correlation between the common factors of human capital. The highest correlation exists between knowledge, competencies and attitudes of the employee (0.785), whereas there is least correlation exists between skills and attitudes of the employee (0.640).

7. DISCUSSION

The RMG sector is the backbone of the Bangladeshi economy. Bangladesh has a strong position in the global apparel market. The vision of government of Bangladesh is to increase its global market share from five percent to eight percent by 2021, which will necessitate growth in exports from the present level of \$28.15 billion to about \$50b. This can only be achieved if organisations can sufficiently increase the value and amount of human capital in the sector. The study recommends that the skills, education and training, knowledge, competency and attitudes of the employee are recognised as vitally important elements of human capital in order to achieve this. Accordingly, the proper initiatives should be undertaken to improve the technical skills, analytical skills, problem-solving skills, decision-making skills, and communication and leadership skills of employees. Moreover, training must be arranged to develop knowledge and competency levels. A proper work environment and timely incentives should also be provided to employees in order to build favorable attitudes such as loyalty toward the organisation.

Table-6. Intercepts: (Group number 1 - Default model).

Items	Estimate	S.E.	C.R.	P	Label
Technical skills	4.053	.045	89.436	***	par_34
Analytical skills	3.755	.047	80.149	***	par_35
Leadership skills	3.923	.049	80.299	***	par_36
Communication skills	3.808	.055	68.689	***	par_37
Decision-making skills	3.683	.057	64.801	***	par_38
Problem-solving skills	3.899	.055	70.719	***	par_39
Access to training	3.803	.056	67.437	***	par_40
Well trained	3.947	.056	70.643	***	par_41
Attract and retain talent	3.851	.059	65.599	***	par_42
Educational profile	3.548	.068	51.862	***	par_43
Adaptable to change	3.490	.065	53.985	***	par_44
Entrepreneurial zeal	3.168	.065	48.850	***	par_45
Creative	3.293	.063	52.240	***	par_46
Aware of a global trend	3.346	.064	52.177	***	par_47
Competency	3.438	.050	68.895	***	par_48
New idea	3.212	.064	49.851	***	par_49
Share knowledge	3.582	.058	62.235	***	par_50
Long tenure	3.707	.065	56.840	***	par_51
Experience	3.856	.060	64.540	***	par_52
Information sharing	3.976	.051	77.652	***	par_53
Work as a team	3.957	.052	76.030	***	par_54
Trustworthiness	3.851	.061	63.495	***	par_55
Loyal	3.995	.055	72.134	***	par_56
Committed	4.000	.046	87.489	***	par_57
Satisfaction	3.856	.053	72.532	***	par_58
Self-motivated	3.620	.056	64.653	***	par_59
Tendency to leave	3.423	.070	49.159	***	par_60
Willingness	3.135	.060	52.038	***	par_61

Table-7. Covariances: (Group number 1 - Default model).

Latent Variables	Relations	Latent Variables	Estimate	S.E.	C.R.	P	Label
F4	<-->	F3	.283	.052	5.421	***	par_23
F1	<-->	F3	.303	.048	6.307	***	par_24
F2	<-->	F3	.251	.044	5.646	***	par_25
F4	<-->	F1	.211	.042	4.966	***	par_26
F4	<-->	F2	.223	.044	5.062	***	par_27
F1	<-->	F2	.242	.042	5.792	***	par_28

Here, F1= Skills, F2= Education and Training, F3= Knowledge and Competencies and F4= Attitudes of the employee.

Table-8. Correlations among dependent variable: (Group number 1 - Default model).

Latent Variables	Relations	Latent Variables	Estimate
F4	<-->	F3	.785
F1	<-->	F3	.741
F2	<-->	F3	.666
F4	<-->	F1	.640
F4	<-->	F2	.735
F1	<-->	F2	.705

8. POLICY IMPLICATIONS

The study has distinct implications. *Firstly*, it provides empirical evidence as to the factors that affect human capital in Bangladesh's RMG industry. *Secondly*, the study advises the policy maker, BGMEA, BKMEA, entrepreneur and investors to focus on those key variables that affect the development of human capital in RMG. *Finally*, the investigation and findings of it help future researchers in the field of human capital development.

9. LIMITATIONS

This study has certain limitations. *Firstly*, it was based on data collected from 208 respondents within the RMG sector only. *Secondly*, the survey instrument was mainly constructed using the Likert scale. In consequence, there may be the chance of central tendency bias, acquiescence bias and social desirability bias.

10. DIRECTIONS FOR FUTURE RESEARCH

Researchers may widen the scope of similar studies in the future by accumulating data from other sectors of the Bangladeshi economy such as the pharmaceutical, educational, and information technology. Regard may also be had to data from more developed economies.

11. CONCLUDING REMARKS

Human capital is considered to be critical to any knowledge-based economy and is a basic component of intellectual capital. Successful organizations must recognize the importance of HC as a foundation of sustainable, competitive advantage. This study has demonstrated that skills, education and training, knowledge, competencies and the attitudes of employee are the essential elements of human capital.

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Appendix-A Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	93	565.404	341	.000	1.658
Saturated model	434	.000	0		
Independence model	56	2228.310	378	.000	5.895

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.045	.832	.800	.699
Saturated model	.000	1.000		
Independence model	.191	.306	.255	.285

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.746	.719	.881	.866	.879
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.902	.673	.793
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	224.404	162.945	293.759
Saturated model	.000	.000	.000
Independence model	1850.310	1705.426	2002.640

FMIN

Model	FMIN	Fo	LO 90	HI 90
Default model	2.731	1.084	.787	1.419
Saturated model	.000	.000	.000	.000
Independence model	10.765	8.939	8.239	9.675

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.056	.048	.065	.101
Independence model	.154	.148	.160	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	751.404	781.708		
Saturated model	868.000	1009.416		
Independence model	2340.310	2358.557		

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	3.630	3.333	3.965	3.776
Saturated model	4.193	4.193	4.193	4.876
Independence model	11.306	10.606	12.042	11.394

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	141	149
Independence model	40	42

Appendix-B Covariances: (Group number 1 - Default model)

Errors	Relations	Errors	Estimate	S.E.	C.R.	P	Label
e13	<-->	e20	-.177	.033	-5.309	***	par_31
e23	<-->	e24	.115	.027	4.240	***	par_32
e22	<-->	e23	.127	.035	3.665	***	par_33

Correlations: (Group number 1 - Default model)

Errors	Relations	Errors	Estimate
e13	<-->	e20	-.423
e23	<-->	e24	.348
e22	<-->	e23	.281

Variances: (Group number 1 - Default model)

Latent Variables and errors	Estimate	S.E.	C.R.	P	Label
F1	.373	.064	5.848	***	par_62
F2	.316	.063	5.044	***	par_63
F3	.448	.078	5.769	***	par_64
F4	.291	.076	3.815	***	par_65
e1	.281	.030	9.227	***	par_66
e2	.237	.028	8.470	***	par_67
e3	.349	.037	9.406	***	par_68
e4	.416	.045	9.197	***	par_69
e5	.296	.038	7.817	***	par_70
e6	.376	.042	8.921	***	par_71
e7	.454	.051	8.898	***	par_72
e8	.330	.045	7.395	***	par_73
e9	.423	.052	8.207	***	par_74
e10	.723	.078	9.217	***	par_75
e11	.728	.073	9.943	***	par_76
e12	.547	.058	9.445	***	par_77
e13	.459	.051	9.017	***	par_78
e14	.509	.054	9.343	***	par_79
e15	.304	.033	9.314	***	par_80
e16	.411	.047	8.818	***	par_81
e17	.508	.052	9.744	***	par_82
e18	.691	.070	9.838	***	par_83
e19	.572	.058	9.816	***	par_84
e20	.382	.040	9.524	***	par_85
e21	.382	.040	9.599	***	par_86
e22	.548	.059	9.275	***	par_87
e23	.370	.043	8.683	***	par_88
e24	.293	.032	9.076	***	par_89
e25	.358	.041	8.779	***	par_90
e26	.381	.044	8.618	***	par_91
e27	.713	.077	9.282	***	par_92
e28	.591	.062	9.584	***	par_93

Appendix-C - Survey Instrument

Respondents Profile	
1. Name of Organization:	2. Address
3. Number of employees:	4. Operational age of Organization:
5. Name of respondent:	6. Designation:
7. Age:	8. Year of Experience:
9. Marital Status:	

Part A: The degree of Human Capital available in the organization

i. Skills

Please tick mark(√) from the scale of 5, the most appropriate matching scale	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Employees have adequate technical skills to do their specific assigned job.					
Employees can analyze and face a critical situation.					
Employees have enough communication skills.					
Leadership skills					
Employees have good decision-making skills.					
Employees have the skills to solve the problem.					

ii. Education and Training

Please tick mark(√) from the scale of 5, the most appropriate matching scale	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Employees' educational profile matches with their job requirement.					
The organization is able to attract and retain talented human resources.					
Employees are well trained on their job.					
Procedures in place that enable employees to access training when they need it.					

iii. Knowledge and Competencies

Please tick mark(√) from the scale of 5, the most appropriate matching scale	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Employees have the ability to work as a team.					
Employees have the information they need to do their jobs.					
Employees are well experienced on their job.					
Most of the employees have a long tenure in the organization					
Employees share knowledge with each other.					
Employees generate new innovative ideas.					
The competence of Employees as a whole is equal to the most ideal level (matching with their work requirements and responsibilities).					
Our Employees are aware of global trends in their respective areas.					
Employees are creative.					
Employees have an entrepreneurial zeal in them while doing the job in the organization.					
Employees are proactive in approach and highly adaptable to change.					

Iv. Attitudes

Please tick mark(√) from the scale of 5, the most appropriate matching scale	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Employees are loyal toward the organization.					
Employees' trustworthiness and credibility cannot be doubted.					
Employees are committed to the organizational strategy.					
Employees are satisfied with the organization.					
Employees are self-motivated toward their job.					
Employees don't have the tendency to leave the organization.					
Employees are willing to make tough decisions.					

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