

Human Resource Management Practices and Operational Performance: An Empirical Study on Kushtia Sugar Mills Ltd

Md. Alamgir Jalil ^{1*}, Dr. Md. Abdul Hannan Shaikh ², Md. Jahangir Alam ³

¹ Lecturer, Dept. of Accounting, Kushtia Government College, Kushtia, Bangladesh.
Email: maj250980@gmail.com

² Professor, Department of Management, Islamic University, Kushtia, Bangladesh. Email: hannanbiu@gmail.com

³ Student of BBA (Hons), Dept. of Management, University of Rajshahi. Email: alamjahangir0088@gmail.com

* Corresponding Author

Abstract:

This research is conducted to study human resource management (HRM) practices in the public sector and explore the impact of HRM practices on the operational performance. For this purpose, primary data has been collected through questionnaire from 62 employees working in a state owned entity (SOE) namely Kushtia Sugar Mills Ltd (KSML), which is operating under Bangladesh Sugar and Food Industries Corporation (BSFIC). Simple random sampling was used to select respondents from KSML. Correlation analysis, regression analysis and T-test were carried out to examine the relationship between the selected HRM practices and operational performance of KSML. The analysis of the opinion and perception collected from the respondents revealed that, there is a positive and significant relationship between effective HRM practices (especially recruitment and selection, performance appraisal, involvement and communication and employee relationship) and the operational performance of KSML.

Key Words: Human resource management (HRM), State owned entity (SOE), Operational performance, Kushtia Sugar Mills Ltd (KSML), Bangladesh.

1. Statement of the Problem

Bangladesh is one of the populous countries in the world. So, there is available supply of manpower for both of the public and private enterprises operating in Bangladesh. But, despite having adequate supply of manpower, most of the SOEs especially sugar industries clearly failed to ensure expected performance compared to private entities. Many researchers found a positive relationship of HRM practices with the operational (Non-financial) as well as organizational performance of business enterprises. So, one of the major causes of the failure of KSML may be ineffective HRM practices. On the basis of this perception researcher tends to explore HRM practices and assess its' impact on the operational performance of KSML.

Armstrong (2006) observes that the assumption underpinning the practice of HRM is that people are the organization's key resource and organizational performance largely depends on them. Moreover, Wright and MacMahan's work points to the importance of human resources in the creation of firm-specific competitive advantage. Likewise, Research in HRM has established that the success of any organization is highly influenced by the caliber of its HR, which in turn, is affected by the firm's human resource management practices. If appropriate HRM policies and processes are developed and implemented effectively, HRM practices will make a substantial impact on firm performance (Rosemond Boohene & Ernesticia Lartey Asuinura, 2011).

Over the years, researchers have suggested many HRM practices that have the potentials to improve and sustain organizational performance. These practices include emphasis on employee selection based on best fit with the company's culture, emphasis on behavior, attitude, and necessary technical skills required by the job, compensation contingent on performance, and employee empowerment to foster team work, among others (Sohel Ahmad and Roger G. Schroeder, 2003). Therefore, preference has been given to study HRM practices and its' impact on the operational performance of KSML under the title of "Human Resource Management Practices and operational performance: An Empirical Study on Kushtia Sugar Mills Ltd".

2. Objectives

The main objective of this study is to investigate the human resource management (HRM) practices in the public sector and assess the impact of HRM practices on the operational performance of KSML. However, the specific objectives are as follows:

- ❖ To investigate human resource management practices in KSML,
- ❖ To examine the operational (Non-financial) performance of KSML,
- ❖ To assess the impact of HRM practices on operational performance of KSML ,

- ❖ To outline general and effective HRM activities that may have positive impact on the operational performance of the sugar industries of Bangladesh and
- ❖ To provide managerial implications and recommendations for better performance of KSML.

3. Research Method

3.1 HRM Practices

In this paper, a set of human resource management practices is specified first that may have impact on the operational performance. Then six major as well as traditional HRM practices are identified. Propositions are introduced that focus on the relationship between individual HRM practices and operational performance. Next, the research methodology is described including the sampling procedure and development of measurement issues. After that, Relationships between individual HRM practices and operational performance dimensions are explored through statistical analysis. Lastly, the findings of the study are discussed and their managerial implications are explored.

This study is undertaken to investigate six major HRM practices in KSML namely; recruitment and selection, performance appraisal, compensation and reward, training and development, involvement and communication, employee relationship etc. and examine the effect of the aforementioned practices on non-financial as well as operational measures of organizational performance such as innovation for products and process, effectiveness, productivity, efficiency, development, stakeholders satisfaction, product quality, comparative market share and overall performance compared to industry average.

3.2 Measurement Scale

Most of the statements used in this study were drawn from an in-depth study of literature on HRM practices and its impact on organizational performance. Most of the items used in the study were adapted from different studies (Ghebregiorgis & Karsten, 2007; Kundu & Malhan, 2007; Lee & Lee, 2007; Tzafir, 2005). This paper investigates six major HRM practices and its effect on operational performance. The recruitment and selection practice of KSML is measured on the basis of 9 items. Likewise, performance appraisal practice is measured on the basis of 8 items, compensation and reward is measured by 9 items, training and development is measured by 9 items, involvement and communication is measured on the basis of 8 items and labor-management relationship is measured on the basis of 8 items. But, the operational performance measure included 18 items related to perceived quality of products and services, production cost, performance relative to competitors, and organization's performance relative to industry average. In this survey, five points Likert rating scale (strongly disagree for 1, disagree for 2, neutral for 3, agree for 4 and strongly agree for 5) was used to measure the response.

3.3 Sample and Data Collection

The researcher purposively selected KSML for this study. A questionnaire survey was carried out in November-December 2012. There were 680 employees working at KSML during the survey. Eighty (80) questionnaires were randomly dispatched to the employees working at different tiers of various functional departments of KSML for collecting response. But, filled up questionnaires were received only from 62 respondents with a response rate of 77.5%. Ultimately, actual size of the sample is found 9.12% of the population (employees of KSML).

3.4 Descriptive Statistics

The mean and standard deviation of HRM practices and operational performance reflect the conformity of respondents' perception about the HRM practices and operational performance of KSML as shown in the table-1. That is, the values indicate general agreement of the respondents to the HRM practices (namely Recruitment and Selection, Performance Appraisal, Training and Development) and operational performance of KSML.

Table-1: Item Mean and Standard Deviation of variables

Variables	Item Mean	Item Std. Deviation
Recruitment and Selection (RS)	2.845878136	1.087185858
Performance Appraisal (PA)	2.800403226	1.147863189
Compensation and Reward (CR)	3.050179211	1.054956210
Training and Development (TD)	2.797491040	0.942076470
Involvement and Communication (IC)	3.231854800	1.016179900
Employee Relationship (ER)	3.612903226	0.968228769
Operational Performance (OP)	2.475806452	0.739370292

Because, the mean item scores of those HRM practices and operational performance ranges from highest 2.846 to lowest 2.476. But, mean and standard deviation of some of the HRM practices such as Compensation and Reward, Involvement and Communication, Employee Relationship show different perception of respondents about these HRM practices.

3.5 Reliability and Internal Consistency of data

Since HRM practices and operational performance have been measured by 5 point Likert Type scale, Coefficient of Cronbach's Alpha has been used to test the accuracy, reliability and internal consistency of data collected from the employees of KSML. Alpha was developed by Lee Cronbach in 1951 to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1. Internal consistency describes the extent to which all the items in a test measure the same concept and hence it is connected to the inter-relatedness of the items within the test. Internal consistency should be determined before a test can be employed for research or examination purposes to ensure validity.

Table-2: Cronbach's Alpha of variables

Variables	Coefficient of Cronbach's Alpha	Cronbach's Alpha If item deleted
Recruitment and Selection (RS)	0.807	0.771
Performance Appraisal (PA)	0.679	0.768
Compensation and Reward (CR)	0.612	0.784
Training and Development (TD)	0.716	0.796
Involvement and Communication (IC)	0.622	0.770
Employee Relationship (ER)	0.744	0.787
Operational Performance (OP)	0.896	0.827
Overall Value for this study	0.920	-----

However, the value of Cronbach's alpha (shown in the table-2) for all the items of questionnaire is 0.920. The Cronbach's alpha for individual items of recruitment and selection (0.807); training and development (0.716); employee relations (0.744) and operational performance (0.896) are found above acceptable level showing good internal consistency (Nunnally, 1978). But, Cronbach's alpha for the items of performance appraisal (0.679); compensation and reward (0.612) and Involvement and Communication (0.622) are found below acceptable level (0.7). The different perception of respondents about HRM practices such as Compensation and Reward and Involvement and Communication may cause the lower value of Cronbach's Alpha showing lower reliability.

3.6 Analysis of Data

The study adopted the quantitative technique using the SPSS package in the analysis of data collected from KSML. The analysis involved the use of percentage and different statistical tools are used in this study to examine the impact of HRM practices on the operational performance of KSML. Firstly, total individual scores of HRM practices and operational performance is considered for correlation and regression analysis to assess the preliminary relationship of HRM practices with operational performance of KSML. Then, t-test is carried out to test the hypotheses taken at the beginning of this study. Lastly, results are interpreted to explore insights and make inferences about the relationship between HRM practices and corporate performance of KSML.

3.7 Limitations and Barriers of this Study

This research is not free from the usual limitations of survey research. Firstly the research focused on a single organization under Bangladesh Sugar and Food Industry Corporation (BSFIC). Moreover, data has been collected from only 62 respondents working at KSML and most of them did not have clear idea on HRM practices and operational performance. On the other hand, there were some highly educated officers who were requested to fill up the questionnaire. But, some of them were confused and unwilling to comment on HRM practices and operational performance of KSML as their strategies depend on govt. policies as well as BSFIC. As a result, the research did not gather strong and reliable evidence to conclude on the effect of HRM practices on corporate performance.

4. Literature Review

A good number of HRM literatures have been reviewed at the very beginning of this study. Some important and relevant extractions are as follows-

Researchers found a positive relationship between effective recruitment and selection practices and top-class performance (Harel & Tzafrir, 1996; Delany & Huselid, 1996); training and development (Bartel, 1994; Fey et al., 2000); compensation and reward (Chie et al., 2002; Batt, 2002); performance appraisal (Boselie et al., 2001, Bjorkmand & Xiucheng, 2002); employee relations (Kuo, 2004). Much of the previous research on the relationship between HRM practices and organizational performance has concentrated on a single HR practice, such as compensation, selection, etc. (Gerhart and Milkovich, 1990). Recently, the focus of research on HRM has shifted from the relationship of individual HRM practices on business performance to entire HRM system and its influence on organizational performance (Muhammad Asif Khan, 2010).

Some other researchers suggest that Human resource practices should directly impact the employees of the firms where they are practiced and, if done effectively, will result in a number of positive employee outcomes. These outcomes might include commitment to the company, trust in management, higher levels of cooperation, higher levels of effort and involvement, and a lower inclination for employees to leave the company. These positive outcomes for the employees in the company should lead to higher levels of operational and financial performance (Cornell Research Team, 2005). Human resource has been vital for firm's sustained performance. So, firms have increasingly recognized the potential for their people to be a source of competitive advantage (Pfeffer, 1994).

However, a growing number of researchers have argued for instituting complementary bundles of HRM practices to enhance the organizational performance (Ichniowski et al., 1993; Osterman, 1994). Paul and Anantharaman (2003) found indirect effects of HRM related activities on operational and financial performance of firms. The study did not find the causal association of single HRM practice with business performance. In another study Sing (2003) found that strategic use of HRM practices positively affect performance of organizations in India. Researchers (Chiu et al., 2002; Tepstra & Rozell, 1993) have established that HRM practices of extensive recruitment and selection, training and development, and compensation systems have positive relationship with firms' performance. Lam and White (1998) also proved that effective recruitment, competitive compensation, and training and development have relationship with financial dimensions of performance (growth in sales, return on assets etc.). Moreover, Ahmed and Schroeder (2003) investigated effects of selective hiring, employment security, incentive and compensation and extensive training on the organizational performance and his study confirmed the positive and significant relationship of HRM practices with firms' operational performance.

Many researchers have evaluated the impact of HRM practices on organizational performance through empirical study (Becker & Huselid, 1998; Guest, 2003; Boselie, 2005). Review of literature also shown HRM practices as the recruitment and selection (Kulik, 2004); performance appraisal (Bernardin & Russel, 1993); training and development (Kundo, 2003); compensation and reward (Milkovich & Newmen, 1999); planning of workforce (Mathis & Jackson, 2004); job analysis (Cascio, 2006; Dessler, 2003); career management (Schein, 1996); human resource information system (Wolfe, 1998); quality of work life, personnel diversity, employees attitude surveys (Armstrong, 2005; Bracken, 2000; Hayes, 1999). Researchers have used financial and non-financial metrics to measure organizational performance. The financial measures include profit, sales, and market share whereas non-financial measures include quality, productivity, efficiency, and the attitudinal and behavioral measures such as commitment, intention to quit, and satisfaction (Dyer & Reeves, 1995).

According to Collins & Druten (2003), researchers have produced compelling evidence for the causal link between how people are managed and organizational performance. They also argued that the effectiveness of human resource practices, particularly employee selection procedures, performance appraisals, rewards and benefits management, and employee training and development (the matching model of HRM) often have a direct bearing on organizational productivity and performance. Mohammad Asif Khan (2010) stated that prior studies have validated the link between HRM practices and business performance in United States and Europe (Boselie et al., 2001; Hoque, 1999), Asia (Bjorkmand & Xiucheng, 2002; Ngo et al., 1998) and Africa (Chebregiorgis & Karsten, 2007). Empirical studies indicate a strong and positive association between HRM practices and performance of organizations (Cappeli, 1998; Katou & Budhwar, 2007; Kuo, 2004; Arthur, 1994; Huselid et al., 1997; Youndt et al., 1996).

But, there is no empirical research showing the effects of HRM practices on firms' performance in the sugar industry of Bangladesh. So, this study is an attempt of the researcher to address this gap. In addition, it will add information to the limited empirical knowledge about link of HRM practices and business performance in a developing economy, where the strategic role of HRM is gaining popularity as a vital tool for business performance (Muhammad Asif Khan, 2010).

5. Research Hypotheses

Based on the comprehensive study of literature, following alternative hypotheses can be outlined and taken to achieve the aforementioned objectives of this study:

H 1: Recruitment and selection have significant impact on the operational performance.

Recruitment and selection involve getting the best applicant for a job. Huselid (1995) notes that recruitment procedure that provides a large pool of qualified applicants, paired with a reliable and valid selection regime, will have a substantial influence over the quality and skills of new employees. The selection practices determine who can be hired. If properly designed, it will identify competent candidates and accurately match them to the job. The use of proper selection device will increase the probability that the right person will be chosen to fill a slot. When the best people are selected for the job, productivity increases (Rosemond Boohene & Ernesticia Lartey Asuinura, 2011). So, the first hypothesis can be 'recruitment and selection have significant impact on the operational performance'.

H 2: Performance appraisal has a positive relationship with the operational performance.

A formalized and systematic appraisal scheme will enable a regular assessment of the individual's performance, highlight potential and identify training and development needs. Most importantly, an effective appraisal scheme can improve the future performance of staff. The appraisal scheme can also form the basis for a review of financial rewards and planned career progression (Rosemond Boohene & Ernesticia Lartey Asuinura, 2011). According to Waal (2007), there is a clear and strong relation between organizational performance and the attention given to performance management and appraisal. Therefore, the second hypothesis of this study should be 'performance appraisal has a positive relationship with the operational performance'.

H 3: Compensation and rewards have profound effect on the operational performance.

Waal (2007) suggests that, an employee's ability to perceive the connection between the work and organization's strategic objective is a driver of positive organizational behavior. This clarity is achieved by formulating and using personal objectives derived from strategy. Waal also opines that the implementation of personal objectives, personal targets and clear assessment criteria linked with a flexible reward structure, can lead to a positive cultural change, commitment of employees to achieve the objectives of the organization increases. These ultimately lead to greater productivity and improved performance (Rosemond Boohene & Ernesticia Lartey Asuinura, 2011). Consequently, the third hypothesis is "compensation and rewards have profound effect on the operational performance".

H 4: Training and development have significant impact on the operational performance.

According to Huselid (1995), providing formal and informal training experiences, such as basic skills training, on-the-job experience, coaching, mentoring and management development can further affect employees' development and their performance. Training, when well done, productivity will increase, then there will be reduction in accidents on the job and in the end profits of the organization would be maximized; the ultimate goal of every employer. Dessler (2003) also sums up how training and development influences corporate performance by arguing that developing human capital through training may increase the productive output from each employee either through improvement in skill level or through improvement in morale and job satisfaction. So, the fourth hypothesis is taken as "training and development have significant impact on the operational performance".

H 5: Involvement and communication have significant impact on operational performance.

Anastasia A. Katou (Measuring the impact of HRM on organizational performance, 2008) includes employee participation, involvement and communication as influential human resource policies to the organizational performance. So, the researcher thinks that involvement and communication may also have a positive relationship with the operational performance of KSML and it should be measured to explore the HRM practices having a significant impact on the operational performance of KSML. In response, the fifth hypothesis is "involvement and communication have significant impact on operational performance".

H 6: Employee relationship has significant relationship with operational performance.

Employees' cooperation is usually indicated in skills as employees "use their skills in collaboration with other workers" (Batt, 2002). Although competencies are considered as the foundation to all performance improvement, they are not sufficient unless employees are cooperated (Lopez, Peon, & Ordas, 2005). So, the sixth hypothesis is taken as "employee relation has significant relationship with organizational performance".

6. Analysis of Data

6.1 Preliminary Analysis

Analyses of the demographic characteristics of respondents indicate that, 32.3% of the respondents have little academic background (below SSC) and 16% of them have only SSC. It is obviously alarming that 48.3% of the respondents have studied up to SSC. Among all the respondents 29% were found Master degree holder and they start with comparatively higher salary based on their academic qualification not their experience. However, 30.6% of the respondents have been working for 5 years or less, whereas 21% of them have experience for 6 to 20 years and the remaining 48.4% have been working for 21 to 40 years. Surprisingly, there is significant negative correlation between academic qualification and experience of the respondents. This means most of the employees with higher degree prematurely leave the Job at KSML for better employment opportunities. Moreover, 43.5% of the respondents fall within the age of 24 years to 35 years, while 32.3% are within the ages of 36 years to 50 years and the remaining 24.2% are running beyond 50 years. This finding represents that the KSML's workforce are not dominated by any particular age group. Furthermore, 1.6% of the respondents are found female. It indicates the total workforce of KSML is majored by male.

6.2 Correlation Analysis

The Karl Pearson's coefficient of correlation has been calculated with the total scores of individual HRM practices considered under this study (recruitment and selection, performance appraisal, compensation and reward, training and development, involvement and communication and employee relationship) and Operational Performance of KSML. The values found in correlation matrix (shown in the table-3) indicates the significant relationship of involvement and communication and employee relationship) with operational performance of KSML.

Table-3: Correlation Matrix

		RS.Total	PA.Total	CR.Total	TD.Total	IC.Total	ER.Total	OP.Total
RS.Total	Pearson Correlation	1	.613**	.565**	.414**	.523**	.382**	.263*
	Sig. (2-tailed)		.000	.000	.001	.000	.002	.039
PA.Total	Pearson Correlation	.613**	1	.584**	.568**	.463**	.281*	.302*
	Sig. (2-tailed)	.000		.000	.000	.000	.027	.017
CR.Total	Pearson Correlation	.565**	.584**	1	.572**	.546**	.127	.147
	Sig. (2-tailed)	.000	.000		.000	.000	.327	.254
TD.Total	Pearson Correlation	.414**	.568**	.572**	1	.448**	.159	.097
	Sig. (2-tailed)	.001	.000	.000		.000	.216	.453
IC.Total	Pearson Correlation	.523**	.463**	.546**	.448**	1	.436**	.450**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
ER.Total	Pearson Correlation	.382**	.281*	.127	.159	.436**	1	.738**
	Sig. (2-tailed)	.002	.027	.327	.216	.000		.000
OP.Total	Pearson Correlation	.263*	.302*	.147	.097	.450**	.738**	1
	Sig. (2-tailed)	.039	.017	.254	.453	.000	.000	
	N	62	62	62	62	62	62	62

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed).

Coefficient of correlation also shows a positive relationship of recruitment and selection and performance appraisal with the KSML's operational performance. Likewise, HRM practices in KSML are found positively correlated to each other. According to the correlation matrix only employee relationship practice has no significant relationship with compensation and rewards and training and development practices.

6.3 Regression Analysis

Coefficient of regression has also been calculated to measure the degree of contribution of HRM practices to the operational performance of KSML. However, HRM practices namely recruitment and selection, performance appraisal, involvement and communication and employee relationship has only been considered for regression analysis as these practices have positive correlation with the operational performance of KSML.

Table-4: Coefficient of Regression

Sl. No.	Dependent Variables	Independent Variables	Value of R	R Square	Value of F	Sig. Level	Beta
1.	OP Total	RS Total	0.263	0.069	4.451	.039	0.263
2.	OP Total	PA Total	0.302	0.091	6.009	.017	0.302
3.	OP Total	IC Total	0.450	0.203	15.274	.000	0.450
4.	OP Total	ER Total	0.738	0.545	71.948	.000	0.738

The coefficient of regression (shown in the table-4) indicates that recruitment and selection practice contributes 6.9% and performance appraisal practice contributes 9.1% to the operational performance of KSML, whereas the contribution of involvement and communication practice is 45% and employee relationship practice is 73.8%. The regression analysis revealed that the operational performance is significantly affected by involvement and communication and employee relationship.

7. Hypotheses Testing, Findings and Discussion

7.1 T-test and Hypotheses Testing

The paired sample t-test was used to test the hypotheses between the human resource management practices and corporate performance. Since HRM practices and operational performance don't have equal number of items, average score of the items has been used in the t-test (shown in the table-5) for more accuracy of findings.

Table-5: Paired-samples t-test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval				
					Lower	Upper			
Pair 1	RS.Avg - OP.Avg	.36968	.71004	.09018	.18936	.55000	4.100	61	.000
Pair 2	PA.Avg - OP.Avg	.32661	.65845	.08362	.15940	.49383	3.906	61	.000
Pair 3	CR.Avg - OP.Avg	.57435	.63356	.08046	.41346	.73525	7.138	61	.000
Pair 4	TD.Avg - OP.Avg	.32161	.65220	.08283	.15598	.48724	3.883	61	.000
Pair 5	IC.Avg - OP.Avg	.75806	.51836	.06583	.62643	.88970	11.515	61	.000
Pair 6	ER.Avg - OP.Avg	1.13903	.39217	.04981	1.03944	1.23862	22.870	61	.000

The first hypothesis was taken to test the impact of recruitment and selection practice on the KSML's operational performance. The t-test gives a positive figure of **4.100**. In addition, the probability value (p-value) of the relationship between recruitment and operational performance is 0.000. This value is substantially smaller than the specified significance level of 0.05. Thus, the test of the hypothesis confirms that effective recruitment and selection practices have a positive impact on the operational performance of KSML. This positive relationship means that KSML should always recruit the best candidate to control employee effectiveness and its associated costs.

The t-test for the second hypothesis yields a positive value of **3.906** and the probability value (p-value) of the relationship between performance appraisal and operational performance is 0.000. Because the value of t-test is positive and the p-value is lower than the level of significance, it shows that effective performance appraisal practice have a positive effect on the operational performance of KSML. The result indicates that employees of KSML may be able to contribute more to the operational performance if the performance appraisal system is satisfactory.

In testing the third hypothesis t-test yields a result of **7.138** and the p-value of 0.000 which is lower than the level of significance. The t-test suggests that effective compensation and reward practice has a positive relationship on operational performance, although this is not supported by the coefficient of correlation. These findings underpin the opinion given by Stup et al (2005) that the relationships between firm level performance and HRM are complex and not always positive and also in public organizations' remunerations are usually not commensurate with output.

The fourth hypothesis was taken to examine the effect of training and development on the operational performance of KSML. The t-test yields a result of **3.883** and a p-value of 0.000. This suggests that effective training and development practice has also a positive impact on operational performance. But, coefficient of correlation did not back this finding. In effect, strong evidence has not been found in this study to support the hypothesis that effective training and development practices have a positive effect on the operational performance of KSML.

The fifth hypothesis was taken to test the impact of involvement and communication practice on the KSML's operational performance. The t-test gives a positive figure of **11.515**. In addition, the probability value (p-value) of the relationship between involvement and communication and operational performance is 0.000. This value is lower than the specified significance level of 0.05. Thus, the test of the hypothesis confirms that effective involvement and communication practice has a significant impact on the operational performance of KSML. It

indicates that KSML should always involve and communicate all the employees effectively to set and achieve the organizational goal.

The t-test for sixth hypothesis gives a positive figure of **22.870** and the probability value (p-value) of the relationship between employee relationship and operational performance of KSML is 0.000 which is substantially smaller than the specified significance level of 0.05. Thus, the test of the hypothesis confirms that effective employee relationship has a significant relationship with the operational performance of KSML. This relationship means that the KSML should effectively nurture and improve this relationship to maximize the operational as well as overall performance. In turn, this finding indicates that operational performance of an organization is the result of coordinated team work which requires effective cooperation to each other for the achievement of predetermined goal.

7.2 Findings and Discussion

On the basis of correlation, regression and t-test analyses this study clearly discovered the positive relationship of recruitment and selection and performance appraisal practice. The impact of recruitment and selection practice on the operational performance can be considered relevant as this finding agrees with the finding of the research conducted by Harel & Tzafir (1996) and Delany & Huselid (1996). Moreover, performance appraisal has an acceptable impact which was found by Boselie et al. (2001) and Bjorkmand & Xiucheng (2002).

However, involvement and communication and employee relationship have been found significant for the operational performance of KSML. The analyses reveal that involvement and communication has profound impact on the operational performance and it is reliable as this finding is underpinned by the research finding of Anastasia A. Katou (2008). In addition, employee relationship has also significant impact on the operational performance and it is supported by the finding of Kuo (2004). Surprisingly, there is no strong evidence that compensation and rewards and training and development have positive impact on the operational performance of KSML, although these practices were found significant for the organizational performance by some other researchers (Milkovich & Newmen, 1999, Kundo, 2003). This finding is underpinned by the statement of Rosemond Boohene & Ernesticia Lartey Asuinura (2011) that employees of public organization are not motivated to apply what they learn through training and development programs as promotion may also be based on length of service not on individual output.

8. Recommendation and Conclusion

8.1 Recommendation

According to the finding of this study, effective HRM practices especially recruitment and selection practice, performance appraisal, involvement and communication and employee relationship can be considered a set of determinants of KSML's operational performance. The literature review showed research has established that although the value of a company's human resource assets are not reported on its financial statements; it nevertheless, has significant impact on an organization's performance. However, training and development and compensation and rewards are not found significant for the operational performance of KSML. The evidence suggests that these HRM practices are expected to have mere contribution positively towards KSML's operational performance, as perceived by the respondents. Based on the findings of this study, it is recommended that KSML management should ensure that the HRM standards and policies is effectively formulated and implemented to achieve outstanding performance every year. In addition, the organizational HRM policy should be clearly communicated to all the employees of KSML to ensure widespread dissemination and application of the policies. However, KSML management also should set specific and effective standard and policy for each HRM practices affecting operational performance.

Firstly, the management of KSML should establish the fair recruitment and selection process to recruit competent employees as effective recruitment and selection practices will ensure positive operational as well as financial return for the organization, either through ensuring effectiveness on the part of employees, or minimizing costs associated with training and retraining of employees. Secondly, the management of KSML should apply performance appraisal practices and measures seriously to motivate the employees for utilizing best of their efforts. Employees will surely be able to contribute to the operational performance if the attention is given to performance management and appraisal. Thirdly, KSML management should ensure effective involvement and communication practice with the employees regarding the operational standards, policies and activities as this study finds strong relationship between operational performance with involvement and communication practice. Lastly, management must manage cooperative organizational relationship among the employees and managers working at different levels of the organization. This will cause a clear and positive

reflection on the operational performance of KSML as a significant relationship between employee relationship and operational performance has been found in this research.

On the other hand, other HRM practices such as compensation and rewards and training and development may also have positive impact if a) plans relevant and strategic training and development programs to improve current and future employee performance on the job, b) the management of KSML can ensure well-structured remuneration and reward system based on the individual performance and innovation of the employees. Furthermore, management must ensure a fair balance between financial and non-financial rewards to maximize employee satisfaction.

In fact, KSML is a state owned entity and a small unit among a number of state owned sugar mills controlled by BSFIC. So, KSML's management is guided by BSFIC as well as the government policy. Notwithstanding, KSML's management is responsible for the operational performance. Although they have limitations in setting HRM policies, the management of KSML should follow the best standards and policies within their authoritarian capacity. If any policy goes beyond the regulations of BSFIC, they may propose the policy with detailed performance plan to the BSFIC for approval. However, Government should also necessarily make effective decisions and formulate pro-performance policies to ensure satisfactory operational performance of state owned sugar mills of Bangladesh.

8.2 Conclusion

Last of all, the finding of this study is expected to offer valuable insight to the management of the state owned organizations especially KSML about the strategic importance of HRM practices for superior and sustainable operational performance. However, finding of this study could be effectively generalized to all the state owned sugar mills of Bangladesh if head office of BSFIC and a good number of mills operated under BSFIC would have been taken under study along with KSML. Moreover, future research could also be replicated to other sectors, including a comparison between the private the research framework and hypothesis developed for this study could be expanded to include the influence of other factors on the operational performance.

References

- Ahmad, S., Schroeder, R.G., (2002). "The impact of human resource management practices on operational performance: recognizing country and industry differences", *Journal of Operations Management*, 21 (2003), 19–43.
- Armstrong, M.A. (2005). "Handbook of Human Resource Management", Practice, New Delhi: Kogan Page India.
- Arthur, J.B., (1994). "Effects of human resource systems on manufacturing performance and turnover", *Academy of Management Journal*, 37, 670–687.
- Asif Khan, M., (2010). "Effects of Human Resource Management Practices on Organizational Performance – An Empirical Study of Oil and Gas Industry in Pakistan", *European Journal of Economics, Finance and Administrative Sciences*, 24, 157-175.
- Becker, B., Gerhart, B., (1996). "The impact of human resource management on organizational performance: progress and prospect", *Academy of Management Journal*, 39 (4), 779–801.
- Bernardin, H.J., Russell, J.E.A. (1993). "Human Resource Management: An Experiential Approach", Singapore: McGraw-Hill Inc.
- Boohene, R., Asuinura E. L., (2011). "The Effect of Human Resource Management Practices on Corporate Performance: A Study of Graphic Communications Group Ltd", *International Business Research*, 4 (1), 266-272.
- Boselie, J., Dietz, G., and Boon, C. (2005). "Commonalities and contradictions in HRM and Performance research", *Human Resource Management Journal*, 15(3), 67–94.
- Cascio, W.F. (2006). "Managing Human Resource: Productivity, Quality of Work Life, Profits", New Delhi: Tata McGraw-Hill.
- Cronbach, L.J., (1951). "Coefficient alpha and the internal structure of tests", *Psychometrika*, 16 (3), 297–334.
- Dessler, G. (2003). "Human Resource Management", Delhi: Pearson Education Asia.
- Gliem, J. A., Gliem, R. R., 2003. "Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales", Presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus, OH.

- Guest, D. E., Michie, J., Conway, N., & Sheenan, M. (2003). "Human resource management and corporate performance in the UK", *British journal of industrial relations*, 41(2), 291 – 314.
- Hoque, K. (1999). "Human Resource Management and Performance in the UK Hotel Industry", *British Journal of Industrial Relations*, 37, 419–443.
- Harel, G.H., & Tzafrir, S.S. (1999). "The effect of human resource management practices on the perceptions of organizational and market performance of the firm", *Human Resource Management*, 38, 185-200.
- Huselid, M.A. (1995). "The impact of human resource management practices on turnover, productivity and corporate financial performance", *Academy of Management Journal*, 38, 635-670.
- Huselid, M.A., Jackson, S.E., & Schuler, R.S. (1997). "Technical and strategic human resource management effectiveness as determinants of firm performance", *Academy of Management Journal*, 40, 171-188.
- Ichniowski, C., Shaw, K., Prennushi, G., (1997). "The effect of human resource management on productivity", *The American Economic Review*, 87 (3), 291–313.
- Katou, A. A., Budhwar, P.S., (2007). "The effect of human resource management policies on organizational performance in Greek manufacturing firms", *Thunderbird International Business Review*, 49, 1-35.
- Katou, A. A., (2008). "Measuring the impact of HRM on organizational performance", *Journal of Industrial Engineering and Management*, 01(02), 119-142.
- Kulik, C.T. (2004). "Human Resource for the non-HR Manager", New Jersey: Lawrence Erlbaum Associates Publishers.
- Kundu, S.C., & Malhan, D. 2007. "Human Resource Management Practices in Insurance Companies Operating in India: A Study", *Proceedings of the 13th Asia Pacific Management Conference*, Australia, 2007, 472-488.
- Kuo, H. P. (2004). "The relationship between Human Resource Management practices, employee commitment, and operational performance in the healthcare institutions", National Cheng Kung University, Tainan, Taiwan.
- Mathis, R.L. and Jackson, J.H. (2004). "Human Resource Management, Singapore", Thomson Asia Pte. Ltd.
- Milkovich, G.T. and Newman, J.M. (1999). "Compensation", New York: Irwin/McGraw-Hill.
- Paul, A.K., Anantharaman, R.N. (2003). "Impact of people management practices on organizational performance", *International Journal of Human Resource Management*, 14, 1246-1266.
- Rizov, M., & Croucher, R. (2008). "Human resource management and performance in European firms", *Cambridge Journal of Economics*, 33(2009), 253–272.
- Singh, K. 2003. "Strategic HR Orientation and Firm Performance in India", *International Journal of Human Resource Management*, 14(4), pp. 530–543.
- Terpstra, D.E. and Rozell, E.J. (1993). "The Relationship of Staffing Practices to Organizational Level Measures of Performance", *Personnel Psychology*, 46, 27–48.
- Wolfe, S. (1998). "HRIS usability: why you can't afford to ignore it", *IHIRIM Link*, January 1998.
- Youndt, M., Snell, S., Dean, J., & Lepak, D. (1996). "Human resource management: manufacturing strategy and firm performance", *Academy of Management Journal*, 39, 836-866.