Does human capital mediate the nexus of human resource management (HRM) practices and organizational performance?

**Frank Nana Kweku Otoo (a)**, **Manpreet Kaur (b)**, **Evelyn Akosua Otoo (c)**

(a) Department of Secretaryship and Management Studies, Faculty of Business and Management Studies, Koforidua Technical University, Koforidua, Ghana

(b) GNA Business School, GN University, Phagwara, India

(c) Department of Administration, Metro Mass Transit Limited, Accra, Ghana

**ARTICLE INFO**

Article history:
Received 08 February 2022
Received in rev. form 13 May 2022
Accepted 22 June 2022

Keywords:
Human Capital, HRM Practices, Banking Industry, Organizational Performance

JEL Classification:
O15

**ABSTRACT**

Human capital is a significant element in the attainment of sustained competitive advantage and economic survival of organizations. The study explored whether human capital mediate the nexus of human resource management practices and organization performance. A field study was conducted among 11 internationally and 4 indigenously owned banks. The hypothesized relationships were supported by the data. The results show that the association between selective staffing with the levels of human capital was significant. The results also show that the levels of human capital influenced organizational performance significantly. The results further show that human capital mediated the nexus of HRM practices and organizational performance. The generalizability of the results obtained may be constrained, since the present study focused on the banking industry. The study suggests the creation and maintenance of valuable human capital to promote competitiveness and sustained competitive advantage. The study contributes to the extant literature by empirically evidencing that human capital mediated the nexus of HRM practice and organizational performance.

**Introduction**

In a constantly fluctuating and hyper-competitive arena, superior competitive advantage grounded on human capital resources among competing firms becomes increasingly significant (Zahid et al., 2015). Literature acknowledges widely the notion of organizational members being its foremost source of economic competitive advantage, therefore, forming the bases for the theoretical underpinnings of human resource role in organizational effectiveness and efficiency (Lado and Wilson, 1994; Otoo, 2020; Wright et al., 1994). Earlier research has identified human capital as a critical resource for assuring the development of a set of capabilities on which different aspects of companies are built (Youndt and Snell, 2004; Clardy, 2008). The resource-based view (RBV) arose from the assumption that strategic activities necessitate the possession of certain resources, and that those resources must be scarce, valued, and difficult to imitate or substitute (Grant, 1996; Spender, 1996). The heterogeneity among firms affects their competitiveness and performance by influencing their chances of strategy formulating and implementing (Heliat and Peteraf, 2003; Ahuja and Katila, 2004). HRM practices are an essential element in stimulating necessary behaviour and building human capital resources for organizations (Ostroff and Bowen, 2000). The impact of HRM practices on organizational performance, according to researchers, strengthens employees' skills, behavior, and firm capacity (Frank and Mishra, 2018; Gerhart, 2007). The role of mediation by various variables have been investigated in studies along these lines (e.g., Jackson and Schuler, 1995; Otoo, 2019). Several mediating variables in the nexus of HR practices and performance relationships have been discovered in these research (Otoo and Mishra, 2018; Takeuchi et al., 2009). Similarly, in advancing the erudition of mechanisms of mediation in strategic HRM an extensive range of disparate theoretical perspectives have been employed. Intimately associated, researchers accentuate that organizational performance can be influence by

* Corresponding author. ORCID ID: 0000-0003-4378-3353
© 2022 by the authors. Hosting by SSBFNET. Peer review under responsibility of Center for Strategic Studies in Business and Finance.
HR practices through mediators that reside at different echelons of analysis (e.g., Gong et al., 2009; Wright et al., 2005). These studies provide useful insight into the characteristics of mediation mechanisms in the HR practices–performance link. Human capital, according to several authors, is a critical component in achieving long-term competitive advantage and organizational economic survival (Mahoney and Pandian, 1992; Subramaniam and Youndt, 2005). Accordingly, this present study explored whether human capital mediate the nexus of HRM practices and organization performance. The study is structured as follows. Section two describes the theoretical framework used and provides the justification for the research hypotheses. The next section describes the methodology, research context, information gathering, sample and measures used. The results are presented in section four, with the discussion of the key findings, implications and limitations, as well as further lines of research.

**Literature Review**

**Theoretical Review and Hypothesis Development**

**Human Resource Management Practices**

The strategic perspective associated with HRM has grown out of researchers’ desire to demonstrate the importance of HRM practices for organizational performance (Becker and Huselid, 1998; Schuler and Jackson, 1987). Adopting a strategic approach necessitates assessing the match between various HRM practices and the firm’s competitive strategy (Bowen and Ostroff, 2004; Wright and McMahan, 1992). This implies an appropriate management of human resources in order to align their skills, competencies and knowledge to organizational goals (Boselie, 2010; Youndt and Snell, 2004). HRM is profoundly defined as a unique technique to the management of employment where committed and competent employees are developed strategically by means of integrated array of personnel, structural and cultural practices to attain competitive advantage (Storey, 2001). HRM practices are a system of attracting, developing, motivating and retaining employees which ensure the survival and effective implementation of organizational policies (Schuler and Jackson, 1987). To explore the relationship at the unit level or firm analysis in the strategic HRM, several prevailing viewpoints have been employed. The resource-based view of the firm (RBV) has been espoused as a peculiar viewpoint (Mahoney and Pandian, 1992; Barney, 1991). In addition, the abilities–motivation–opportunities (AMO) theory and human capital theory are espoused as viewpoints theoretically in strategic HRM (e.g., Kehoe and Wright, 2013; Minbaeva, 2005). AMO theory emphasis that, employee performance is enhanced when the opportunities to participate are provided by their work environment as well as having the needed abilities and motivation (Boxall and Steenveld, 1999; Boselie, 2010). The human capital theory stipulates that the abilities, skills and knowledge of employees is cardinal in driving organizational performance when human capital investments outweigh its cost (Lepak and Snell, 1999; Wright et al., 2004). Behavioural theory (e.g., Wright and McMahan, 1992) and social exchange theory (e.g., Schuler and Jackson, 1987) have also been employed in exploring the collective individual factors of mediation in the HR practice–performance nexus at the firm level.

**Human Capital**

Human capital has been given considerable attention as valuable resource in organizations (Nyberg et al., 2014). Human capital encompasses the competencies, skills, attributes and knowledge embodied in individuals which facilitate the creation of economic, social and personal well-being (Garvan et al., 2001). Several authors emphasize that human capital is a significant element in the attainment of sustained competitive advantage and economic survival of organizations (Barney, 1991; Mahoney and Pandian, 1992; Subramaniam and Youndt, 2005). Wright et al. (1994) postulates that human capital promotes competitiveness and sustained competitive advantage. Garavan et al. (2001) identified individual employability, flexibility and adaptability, organizational competencies and individual competencies as human capital attributes. They further argued that these attributes add value to individual and organizational outcomes. Individual employability, flexibility and adaptability, organizational competencies individual competencies and were examined as human capital measures.

**Organizational Performance**

Organizational effectiveness and performance concept embraces a dominant standpoint in the management of publicly or privately owned organizations and in the area of business research (Bourne et al., 2003). Apprehensions for total quality, excellence in productivity and efficiency, is prevalent in organizations over the last decades (Lewin and Minton, 1986). The threats to the durability and sustainability of organization often times motivates these apprehensions (Short and Palmer, 2003). The quest for resources and market share by international competition seems to justify these apprehensions (Maltz et al., 2003). Bourne et al. (2003) outlined five integrative models of organizational performance: the organizational effectiveness model, performance measurement matrix, performance pyramid, stakeholder approach, balance scorecard, and degree of complexity. The relevance of the integration of non-financial and financial measures like resource allocation, competitiveness, organizational flexibility, customer satisfaction and service quality has been championed by various researchers in performance management (Neely, 1990; Randeree and Al Youha, 2009; Haktanir and Harris, 2005). Similarly, the significance of linking the performance measures of an organization to its service delivery process, revenue management, strategic intent, competitive environment, and market orientation have been espoused by various researchers (Harris and Mongiello, 2001; Tomal and Jones, 2015; Zhang et al., 2008). Human resource outcome, organizational outcome, financial outcome and capital market outcome were examined as organizational performance measures.
Human Resource Management Practices and Human Capital

Becker (1964) accents that the knowledge, skills and abilities of employees acquired in the education system and through work experience constitute the human capital available in an organization. Wright et al. (1999) contend that human resource practices ensure the transformation of the abilities, knowledge and skill of core employees. Similarly, several authors argue that organizations use human resource practices in the creation and maintenance of valuable human capital culminating in enhanced operational and financial performance (Boon et al., 2018; Lepak and Snell, 2002). HRM practices like selective staffing, employee participation and self-managed teams enhance the knowledge, skill, abilities, value and social assets of employees and inordinately enhances the human capital levels within organizations (Dyck and Neubert, 2009; Glew et al.,1995; Kirkman et al.,2004). Selective staffing promotes the accretion of human capital resources (Boxall and Purcell, 2008; Youndt and Snell,2004). Self-managed teams empower and gives autonomy and flexibility which enables team members to assume responsibility and advance new approaches and skills in responding to challenges (Wageman, 1997). Employee participation enables employees to access pertinent information and partake in work-related decision-making to acquire competencies which in turn enhances productivity (Glew et al.,1995). In this present study, the researchers concentrated on HRM practices of selective staffing, self-managed teams and employee participation as forerunners of the levels of human capital.

Selective Staffing and Human Capital

Dyck and Neubert (2009) posited that selective staffing is the process of identification, attraction, hiring and retention of people possession the requisite skills, knowledge and abilities in fulfilling their accepted obligations. Henry and Temtime (2009) averred that the effectiveness of an organizational staffing process is premised on human resources qualities. Along the same lines, Ployhart and Moliterno (2011) contend that selective staffing practices promotes the accretion of human capital resources. Consequently, the following is hypothesized:

$H_3$: Selective staffing is positively associated with the levels of human capital.

Self-Managed Teams and Human Capital

Self-managing teams are autonomous groups of employees whose members are accountable for work activities without any direct control (Kirkman et al.,2004). Wageman (1997) argued that the empowerment, autonomy and flexibility enables team members to assume responsibility and advance new approaches and skills in responding to challenges. Similarly, several authors contend that self-managed teams contribute to performance effectiveness, such as team effectiveness, employee satisfaction, quality of work-life indicators, cost savings and productivity improvements (Beekun, 1989; Cohen and Ledford, 1994; Yang and Guy, 2011). Accordingly, the following is hypothesized:

$H_2$: Self-managed teams are positively associated with the levels of human capital.

Employee Participation and Human Capital

Armstrong (2006) opined that employee participation is an arrangement that seeks to ensure the contribution of employees towards the advancement and improvement of organizational performance by exerting their influence on management decisions. Ardichvili et al. (2003) accentuate that employee participation plays a significant role in strategy formulation and implementation and the extent of employee motivation, commitment and job satisfaction determinates. Along the same lines, several authors postulate that employee participation improves and enhances productivity, job satisfaction and employee performance (Armstrong, 2006; Denison and Mishra, 1995; Randolph, 2000). Hence, the following is hypothesized:

$H_1$: Employee participation is positively associated with the levels of human capital.

Human Capital and Organizational Performance

Lado and Wilson (1994) defined human capital as the set of knowledge, skills, and abilities residing and utilized by individuals. Coleman (1988) opined that a significant constituent of knowledge is its relatedness with individual action. Subramaniam and Youndt (2005) concurred with the above view when they argued that the creation of knowledge is associated inherently with human capital levels in firms. They further emphasized that novel philosophies are made available to organizations due to the advancement in the abilities, skills and knowledge of employees. This parallels the contention of several authors who averred that enhanced organizational commitment and retention, improved performance and sustainable competitive advantage are inherently associated with a firm’s human capital (Coleman, 1988; Sandberg, 1986; Siegel et al., 1993). Accordingly, the following is hypothesized:

$H_c$: The levels of human capital have a positive influence on organizational performance.

The Mediating Role of Human Capital

Though a number of exploratory studies have revealed a direct relationship amongst certain HRM practices and organizational performance (Boxall and Purcell, 2008; Kehoe and Wright, 2013), one supposition underlying studies on strategic HRM is that instead of exerting a direct effect, these practices could affect organizational performance through their impact on specific organizational variables. Jiang et al. (2012) avers that HR practices improves firm-specific human capital which inordinately enhance
organizational performance. This study draws from resource-based value of the firm and on the strategic HRM literature (Barney,1991; Clardy,2008). The resource-based view (RBV) stipulates those strategic activities necessitate the possession of certain resources, and that those resources must be scarce, valued, and difficult to imitate or substitute (Grant, 1996; Spender, 1996). In particular, HRM practices enhances organizational performance through their influence on human capital (Huselid,1995; Garavan et al.,2001). Human capital enhances the prospects for productivity and adds value to organization due to the relevant knowledge and skills of employees (Snell and Dean,1992). Accordingly, the following is hypothesized:

\[ H_5: \text{Human capital mediates the nexus of HRM practices and organizational performance.} \]

**Research and Methodology**

**Research Setting and Data Structure**

A total of 15 commercial banks consisting of 4 indigenously owned and 11 internationally owned participated in the study. The Bank of Ghana (2022) Licensed Banks Directory was sourced in obtaining information on the banks. The study sample was 850 respondents. Employees (supervisors and junior staff) were nominated as important informants for the study mainly because of the reduced number of studies in the banking literature (Delery & Doty,1996; Hinson et al., 2006). The study design was cross-sectional and banks were selected using stratified sampling (Ary et al.,2002). Questionnaires were received from supervisors and junior staff of the different operational departments. A complete response from 650 respondents were received (a 76.5 % response rate). 26.3 employees by the banks “the ability to retain employees skills that are difficult for our competitors to imitate or duplicate”, “our employees exert their best efforts to achieve organizational goals and objectives”, “employees have skills that are difficult for our competitors to imitate or duplicate”. The reliability of the scale was 0.81.

Human Capital: For the measurement of human capital, individual employability (Ellig,1998) flexibility and adaptability (Holm,1995), organizational competencies (Cappelli and Crocker-Hefter,1996) and individual competencies (Boam and Sparrow,1992) were employed.

**Measures**

All the items were scored on 5-point Likert response scales, ranging from 1 (strongly disagree) to 5 (strongly agree).

HRM practices. For the measurement of HRM practices, selective staffing (Dyck and Neubert (2009) self-managed teams (Yang and Guy, 2011) and employee participation (Pfeffer,1994) were employed. Sample items include “selection process focuses on selecting the best all-round candidate”, “selection process places priority on employee’s potential to learn”, team goals are aligned with corporate goal”, “team members share expertise, knowledge and always stimulate a learning environment”, employees participating in the decision-making”. The reliability of the scale was 0.81.

**Table 1: Profile of Respondents**

| Variables        | Frequency(s) | Percentage of total (%) | Variables        | Frequency(s) | Percentage of total (%) |
|------------------|--------------|-------------------------|------------------|--------------|-------------------------|
| Gender           |              |                         | Education        |              |                         |
| Male             | 395          | 60.8                    | Senior High      | 154          | 23.7                    |
| Female           | 255          | 39.2                    | Diploma          | 126          | 19.4                    |
| Department       |              |                         | HND              | 137          | 21.1                    |
| Operations       | 205          | 31.5                    | Bachelor’s degree | 203         | 31.2                    |
| Credit           | 138          | 21.2                    | Master’s degree  | 30           | 4.6                     |
| Marketing        | 70           | 10.8                    | Age              |              |                         |
| Risk & Compliance| 55           | 8.5                     | 18-25            | 130          | 20.0                    |
| Human Resource   | 92           | 14.2                    | 26-35            | 330          | 50.8                    |
| Audit            | 90           | 13.8                    | 36-45            | 99           | 15.2                    |
| Banks            |              |                         |                  |              |                         |
| Indigenously owned| 4           | 26.7                    | 46-55            | 61           | 9.4                     |
| Internationally owned| 11     | 73.3                    | 56-65            | 30           | 4.6                     |

**Table 1:** Profile of Respondents

All the items were scored on 5-point Likert response scales, ranging from 1 (strongly disagree) to 5 (strongly agree).

HRM practices. For the measurement of HRM practices, selective staffing (Dyck and Neubert (2009) self-managed teams (Yang and Guy, 2011) and employee participation (Pfeffer,1994) were employed. Sample items include “selection process focuses on selecting the best all-round candidate”, “selection process places priority on employee’s potential to learn”, team goals are aligned with corporate goal”, “team members share expertise, knowledge and always stimulate a learning environment”, employees participating in the decision-making”. The reliability of the scale was 0.81.

Human Capital: For the measurement of human capital, individual employability (Ellig,1998) flexibility and adaptability (Holm,1995), organizational competencies (Cappelli and Crocker-Hefter,1996) and individual competencies (Boam and Sparrow,1992) were employed.

Sample items include “team goals are aligned with corporate goal”, “employee’s skills are not available to our competitors” “our firm to provide exceptional customer value by virtue of the skills of employees”, “our employees exert their best efforts to achieve organizational goals and objectives”, “employees have skills that are difficult for our competitors to imitate or duplicate”. The reliability of the scale was 0.80.

Organizational Performance: For the measurement of organizational performance, human resource outcome (Huselid,1995; Dryer and Reeves,1995), organizational outcome (Youndt and Snell, 2004), financial outcome (Rowe and Morrow’s,1999; Becker and Huselid,1998) and capital market outcome (Richard et al.,2009) were employed. Sample items include “the ability to retain employees by the banks” “the quality of products or services offered by the bank.”, “the development new products or services by
the bank”, “increase in the bank’s profit”, “return on the bank’s assets”, “an increase in the stock price of bank”, “an increase in the market share of bank” and “an increase in the market value of bank”. The reliability of the scale was 0.83.

**Analytic approach**

To examine whether the indicators sufficiently represented their hypothesized constructs a confirmatory factor analysis (CFA) was conducted. A two-level hierarchical linear model was developed and tested. The Statistical Package for the Social Sciences, Version 20 was used in testing the model and hypothesis. The correlations among sub-dimensions and the relationship between the observable indicators and their latent constructs were examined. The classical product method developed by Baron and Kenny (1986) was used in testing the model of mediation. The model of mediation is depicted in figure I.

**Empirical Analysis and Findings**

A three-factor CFA model representing HRM practices, organizational performance, and human capital (χ²/df = 2.93, RMSEA= 0.044, SRMR= 0.040, TLI=0.978, CFI=0.988) achieved good model fit (Bentler,1999; Sharma et al.,2005). Coefficient α estimates ranged between 0.79 to 0.87 (Hair et al.,2010; Kline,2010). Estimates AVE ranged between 0.56 to 0.74, while estimates CR a ranged between from 0.72 to 0.86 (Kline,2011; Wu et al., 2008). Discriminant validity was established (Fornell and Larcker, 1981, Kline, 2010). Descriptive statistics and intercorrelations among variables are reported in Table 2. Table 3 for model test result. Table 4 reports results of the CFA while discriminant validity test in Table 5. Hypothesis test results in Table 6 and Table 7 for HRM practices effects. For the first hypothesis, a statistically significant association between selective staffing with the levels of human capital (0.684, p < 0.05) was observed. Accordingly, Hypothesis 1 was supported. Contrary to hypothesis 1 a statistically insignificant association between self-managed teams and the levels of human capital (0.492, p > 0.05) was observed. Accordingly, Hypothesis 2 was not supported. The association between employee participation and the levels of human capital was not statistically significant (-0.078, p > 0.05) therefore not supporting hypothesis 3. The levels of human capital had a statistically significant influence on organizational performance was (0.502, p < 0.05). Therefore, hypothesis 4 was supported. Human capital mediated the nexus of HRM practices and organizational performance (0.536, p < 0.05). Accordingly, Hypothesis 5 was supported.

**Table 2: Descriptive statistics, Correlations, and Scale reliabilities**

| Items               | Mean | SD   | 1   | 2   | 3   | 4   | 5   |
|---------------------|------|------|-----|-----|-----|-----|-----|
| 1. Selective Staffing | 8.08 | 3.08 | 1   |     |     |     |     |
| 2. Self-managed Teams | 8.14 | 3.45 |     | 0.394** | 1   |     |     |
| 3. Employee Participation | 8.26 | 3.65 |     | 0.322* | 0.350** | 1   |     |
| 4. Human Capital    | 17.51 | 10.65 |     | 0.376** | 0.315** | 0.262** | 1   |
| 5. Organizational Performance | 22.08 | 12.79 |     | 0.584** | 0.455** | 0.383** | 0.468** | 1   |

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).**
Note. RMSEA=Root mean square of approximation; SRMR=Standardized Root Mean Residual; TLI=Tucker-Lewis index; CFI=Comparative fit index; *p<0.05.

Table 4: Confirmatory Factor Analysis (Factor Names, Factor Loadings and Cronbach’s alpha)

| Factor                                      | Items                                                        | (λ) | AVE | CR |
|---------------------------------------------|--------------------------------------------------------------|-----|-----|----|
| Selective Staffing (α=0.87)                 | Selection process focuses on selecting the best all-round candidate. | 0.735 |     |    |
|                                             | Selection process places priority on employee’s potential to learn. | 0.875 | 0.61 | 0.78 |
|                                             | Selection process assesses the ability to collaborate and work in a team. | 0.718 |     |    |
| Self-managed Teams (α=0.84)                | Team goals are aligned with corporate goal.                   | 0.783 |     |    |
|                                             | Team members share expertise, knowledge and always stimulate a learning environment. | 0.773 | 0.59 | 0.77 |
|                                             | Decisions are taken by collective consensus.                  | 0.753 |     |    |
| Employee Participat. (α=0.79)              | My views have a real influence in company decisions.          | 0.785 |     |    |
|                                             | Employees participate in the decision-making process.         | 0.817 | 0.64 | 0.72 |
| Flexibility and Adaptability (α=0.82)      | Employees identify themselves with company values and vision. | 0.815 |     |    |
| Individual Competencies (α=0.80)           | Employees have skills that are developed through on-the-job experience. | 0.836 | 0.68 | 0.74 |
|                                             | Employees have skills that are not available to our competitors. | 0.879 |     |    |
|                                             | Employees have skills that contribute to developing new markets/products/services/ opportunities. | 0.866 | 0.72 | 0.87 |
|                                             | Employees have skills that enable our firm to provide exceptional customer value. | 0.797 |     |    |
| Organizational Competencies (α=0.81)       | Our employees exert their best efforts to achieve organizational goals and objectives. | 0.753 |     |    |
|                                             | Employees have skills that are difficult for our competitors to imitate or duplicate. | 0.789 |     |    |
|                                             | Employees have skills that are difficult for our competitors to buy from us. | 0.795 | 0.61 | 0.78 |
| Individual Employability (α=0.83)          | Employees have skills that are needed to maintain high-quality products/services. | 0.846 |     |    |
|                                             | Employees have skills that are instrumental for creating innovations. | 0.859 | 0.73 | 0.81 |
| Human Resource Outcome (α=0.88)            | The bank has the ability to attract employees.                | 0.836 |     |    |
|                                             | The bank has the ability to retain employees.                 | 0.881 | 0.74 | 0.87 |
|                                             | There is a cordial relationship between management and employees of the bank. | 0.864 |     |    |
| Organizational Outcome (α=0.81)            | The bank offers quality products or services.                 | 0.771 |     |    |
|                                             | The bank develops new products or services.                   | 0.869 | 0.73 | 0.83 |
|                                             | The bank satisfies its customers or clients.                  | 0.861 |     |    |
|                                             | There is an increase in the bank’s productivity.              | 0.913 |     |    |
| Financial Outcome (α=0.83)                 | There is an increase in the bank’s profit for the past three years as compared to other banks. | 0.917 |     |    |
|                                             | There is a return on the bank’s assets for the past three years as compared to other banks. | 0.687 | 0.58 | 0.86 |
|                                             | There is a return on the bank’s investment for the past three years as compared to other banks. | 0.675 |     |    |
|                                             | There is an increase in the bank’s revenue for the past three years as compared to other banks. | 0.743 |     |    |
| Market Capital Outcome (α=0.84)            | There is an increase in the stock price of bank for the past three years as compared to other banks. | 0.820 |     |    |
|                                             | There is a growth in sales of bank for the past three years as compared to other banks. | 0.832 | 0.66 | 0.86 |
|                                             | There is an increase in the market share of bank for the past three years as compared to other banks. | 0.658 |     |    |
|                                             | There is an increase in the market value of bank for the past three years as compared to other banks. | 0.914 |     |    |

Notes: AVE represents average variance extracted; CR represents composite reliability. All Factor loadings are significant at p<0.05.
The current study explored the nexus of human resource management practices and organizational performance and whether human capital mediated nexus of HRM practices and organizational performance. The results of the study did show a significant association between selective staffing with the levels of human capital. Self-managed teams and employee participation association with the levels of human capital were not significant. The study also indicates a positive influence of organizational performance by the levels of human capital were not significant. The study also indicates a positive influence of organizational performance by the levels of human capital.

**Inferences drawn on Hypotheses**

| Hypothesis | Beta coefficient | p value | Result |
|------------|------------------|---------|--------|
| H1: Selective staffing is positively associated with the levels of human capital. | 0.684 | 0.000 | Accepted |
| H2: Self-managed teams are positively associated with the levels of human capital. | 0.492 | 0.063 | Rejected |
| H3: Employee participation is positively associated with the levels of human capital. | -0.078 | 0.273 | Rejected |
| H4: The levels of human capital have a positive influence on organizational performance | 0.502 | 0.044 | Accepted |
| H5: Human capital mediates the nexus of HRM practices and organizational performance. | 0.536 | 0.003 | Accepted |

**Standardized Direct, Indirect and Total Effects of HRM Practices**

| HRM Practices | Direct | Indirect | Total effect | p value |
|---------------|--------|----------|--------------|---------|
| Human Capital | 0.238  |          | 0.238        | 0.000   |
| Organizational Performance | 0.196  | 0.046    | 0.243        | 0.000   |

**Conclusions**

The noted positive association between selective staffing with the levels of human capital suggests that the effectiveness of an organizations staffing process is premised on human resources qualities (Henry and Temtime, 2009). These findings, therefore, imply that an organization’s selection process should endow workers with high performance expectations, people relevance and importance to their organizations and a sense of elitism (Pfeffer, 1998; Ployhart and Moliterno, 2011). This result implies that a well-defined and wide-ranging selective staffing practice is essential in influencing the level of a firm’s human capital (Rauch et al., 2005). The findings align with previous research, which indicated that selective staffing practices promotes the accretion of human capital resources (Youndt and Snell, 2004). They also parallel previous research which averred that human capital resources promotes employee efficiency and flexibility, knowledge sharing and inordinately organizational performance (Coleman, 1998; Schuler and MacMillan, 1984). The findings validate the suppositions of researchers (Henry and Temtime, 2009; Dyck and Neubert, 2009). Furthermore, the study indicated that the levels of a firm’s human capital influences organizational performance positively. This result implies that human capital as a valuable resource within organization and that the creation of knowledge is associated inherently with human capital levels in firms (Nyberg et al., 2014; Snell et al., 1999). The findings align with previous research, which showed that human capital is a significant element in the attainment of sustained competitive advantage and economic survival of organizations (Barney and Wright, 1998; Otoo, 2018). The findings align with the supposition of researchers (Crook et al., 2011; Otoo, 2018).
2019). The nexus of HRM practices and organizational performance was mediated by human capital. This result implies that human capital enhances the prospects for productivity and adds value to organization due to the relevant knowledge and skills of employees (Snell and Dean, 1992). The findings align well with previous research, which showed that organizations attain operational goals such as innovation, great service, quality and high productivity with high-quality human capital pools (Schuler and MacMillan, 1984). They also parallel previous research which emphasized that organizations are able to formulate and implement strategies in an efficient manner with high quality human capital (Guthrie et al., 2002; Jovanovic, 2004). The findings align with the supposition of researchers (Mahoney and Pandian, 1992; Frank and Mishra, 2018).

Implications for Practice

HRM practices shape and impacts the knowledge, competencies and skills of employees in achieving organizational objectives (Baird and Meshoulam, 1998; Delaney and Huselid, 1996). The findings show that selective staffing was significantly associated with the levels of human capital. Therefore, a prime interest for the banks would be to (re)consider a selection process that selects exceptional candidates and where employee’s potential to learn is prioritized (Felin et al., 2009). The banks would have to (re)consider a selection process that endows endow workers with high performance expectations, people relevance and importance to their organizations and a sense of elitism (Pfeffer, 1998; Ployhart and Moliterno, 2011). Another finding of this study shows that human capital mediated the nexus of HRM practices and organizational performance. Human capital enhances the prospects for productivity and adds value to organization due to the relevant knowledge and skills of employees (Snell and Dean, 1992). This is especially important because human capital is a significant element of sustained competitive advantage and economic survival of organizations (Mahoney and Pandian, 1992; Subramaniam and Youn, 2005). Thus, it could be helpful for banks in the development and implementation of effective strategies while sensing critical environmental changes (Guthrie et al., 2002; Chen and Huang, 2009). Banks would have to (re)consider the creation and maintenance of valuable human capital since human capital ensures the attainment of a series of competencies and capabilities on which distinctive elements of organizations are premised (Barney and Wright, 1998; Wright et al., 2001).

In spite of the prospectively significant practical and theoretical contribution of this study, the results obtained ought to be evaluated on the light of its prospective limitations. First, the inference of causal relationship or reverse causality cannot be ruled out from the results obtained since the study was cross sectional. Future longitudinal studies are necessary for those purposes (Johnson et al., 2007). Also, the study evaluates merely subjective opinions of employees. Nevertheless, future studies recommend the espousal of objective measures (Real et al., 2014; Benson and Hagtvet, 1996). Additionally, using objective measures reduces the potential of common method bias (Benson and Hagtvet, 1996; Podsakoff et al., 2012). Similarly, the present study explored a mechanism of mediation that elucidates the HRM practices effects on organizational performance using different HRM measures. Nevertheless, to achieve a well-defined and wide-ranging exploration of the HRM – organizational performance nexus, future theoretical and experiential endeavors are required. Finally, the generalizability of the results obtained may be constrained, since the present study focused on the banking industry.

Acknowledgement

All authors have read and agreed to the published version of the manuscript.

Author Contributions: Conceptualization, F.N.K.O., M.K., and E.A.O.; Methodology, F.N.K.O and M.K. Validation, F.N.K.O.E.A.O.; Formal analysis, F.N.K.O., M.K and E.A.O.; Investigation, F.N.K.O., M.K and E.A.O.; Resources, F.N.K.O and E.A.O.; Writing—original draft preparation, F.NKO. E.A.O; Writing—review and editing, F.N.K.O., M.K. and E.A.O.

Funding: There was no funding for the research

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to restrictions.

Conflicts of Interest: The authors declare no conflict of interest.

References

Africa’s dynamic people process. Organization Development Journal, 28, 57-66. Retrieved from http://proxy.lib.odu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=58080576&site=ehost-live&scope=site

Ahuja, G. & Katila, R. (2004). Where do resources come from? The role of idiosyncratic situations. Strategic Management Journal, 25, 887-907. https://doi.org/10.1002/smj.401

Ardichvili, A., Page, V., & Wentling, T. (2003). Motivation and barriers to participation in virtual knowledge sharing teams. Journal of Knowledge Management, 7, 64-77. https://doi.org/10.1108/13673270310463626

Armstrong, M. (2006). A handbook of human resource management practice. London: Kogan Page.

Athey, T.R. & Orth, M.S. (1999). Emerging competency methods for the future. Human Resource Management, 38, 215-28.

Baird, L. & Meshoulam, I. (1998). Managing two fits of strategic human resource management. Academy of Management Review, 13(1), 116-128. https://doi.org/10.2307/258359
Bank of Ghana (2022). The 2022 directory of licensed banks. available at: www.bog.gov.gh (accessed 6 February 2022).

Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120. https://doi.org/10.1177/014920639101700108

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51,1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Becker, B.E., & Huselid, M.A. (1998). High performance work systems and firm performance: a synthesis of research and managerial implications. *Research in Personnel and Human Resources Management*, 53,53-101. http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.319.7549

Benson, J. & Hagtvet, K. (1996). The interplay among design, data analysis, and theory in the measurement of coping. in Zeidner, M. and Endler, N.S. (Eds), Handbook of Coping: Theory, Research, Applications, John Wiley, New York, NY, 83-106.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238-246. https://doi.org/10.1037/0033-2909.107.2.238

Boselie, P. (2010). High performance work practices in the health care sector: a Dutch case study. *International Journal of Manpower*, 31(1) 42-58. https://doi.org/10.1108/01437721011031685

Bourne, M., Franco, M. & Wilkes, J. (2003). Corporate performance management. *Measuring Business Excellence*, 7(3), 15-21. https://doi.org/10.1108/13683040310496462

Boxall, P. & Steenveld, M. (1999). Human resource strategy and competitive advantage: a longitudinal study of engineering consultancies. *Journal of Management Studies*, 36(4),443-463. https://doi.org/10.1111/1467-6486.00144

Capelli, P. & Crocker-Hefter, A.C. (1996). Distinctive human resources are a firm's core competencies. *Organisational Dynamics*, 28, 7-21. https://doi.org/10.1016/S0090-2616(96)90002-9

Chenhall, R.H. & Langfield-Smith, K. (2007). Multiple perspectives of performance measures. *European Management Journal*, 25,266-282. https://doi.org/10.1016/j.emj.2007.06.001

Claridy, A. (2008). The strategic role of human resource development in managing core competencies. *Human Resource Development International*11(2),183-197. https://doi.org/10.1080/13678860801932998

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94,95-120. http://www.jstor.org/stable/2780243

Conway, J.M. & Lance, C.E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*,25 No. (3), 325-334. https://doi.org/10.1007/s10869-010-9181-6

Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39, 949–969. https://doi.org/10.2307/256718

Delery, J. E., & Shaw, J. D. (2001). The strategic management of people in work organizations: Review, synthesis, and extension. *Research in personnel and human resource management*, 20,165-197. https://doi.org/10.1016/S0742-7301(01)20003-6

Delery, J.E., & Doty, D.H. (1996). Modes of theorizing in strategic human resource management: tests of universalist contingency and configurational performance predictions. *Academy of Management Journal*, 39,802-835. https://doi.org/10.5465/256713

Dryer, L. & Reeves, T. (1995). Human resource strategies and firm performance: An approach and an agenda”, *Industrial Relations*, 23,156-169. https://doi.org/10.1080/0019886000000041

Ellig, B.R. (1998). Employment and employability: foundation of the new social contract. *Human Resource Management*, 37,173-175.

Evans, W.R., & Davis, W.D. (2005). High-performance work systems and organizational performance: the mediating role of internal social structure. *Journal of Management*, 31,758-775. https://doi.org/10.1177/01492063050529370

Felin, T., Zenger, T.R., & Tomsk, J. (2009). The knowledge economy: emerging organizational forms, missing micro foundations, and key considerations for managing human capital. *Human Resource Management*, 48,555-570. https://doi.org/10.1002/hrm.20299

Garavan, T. N., Morley, M., Gunnigle, P., & Collins, E. (2001). Human capital accumulation: the role of human resource development. *Journal of European Industrial Training*, 25, 48-68. https://doi.org/10.1108/EUM00000000005437

Glew, D., O’Leary-Kelly, A., Griffin, R., & Van Fleet, D. (1995). Participation in organizations: A preview of the issues and proposed framework for future analysis. *Journal of Management*, 21, 395-421. https://doi.org/10.1177/014920639502100302

Gong, Y., Law, K.S., Chang, S. & Xin, K.R. (2009). Human resources management and firm performance: the differential role of managerial affective and continuance commitment. *Journal of Applied Psychology*, 94(1),263-275. https://doi.org/10.1037/a0013116

Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate data analysis: a global perspective*. Delhi: Pearson Education.

Helfat, C.E. & Peteraf, M.A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*24, 997–1010. https://doi.org/10.1002/smj.332

Henry, O., & Temtime, Z. (2009). Recruitment and selection practices in SMEs: empirical evidence from a developing country perspective. *Advances in Management*, 3.52-58. Retrieved from:https://www.semanticscholar.org/paper/Recruitment-and-Selection-Practices-in-SMEs%3A-from-a-Henry-Temtime/cf478da0dcaafaf46e4723becfefe3eb46a7b9254


Hinson, R., Mohammed, A. & Mensah, R. (2006). Determinants of Ghanaian bank service quality in a universal banking dispensation. Banks and Bank Systems, 1, 69-81. https://businessperspectives.org/journals/banks-and-banksystems?category_id=30

Huselid, M.A. (1995). The impact of human resources management practices on turnover, productivity and corporate finance performance. *Academy of Management*, 38(3), 635-672. https://doi.org/10.5465/256741

Jackson, S.E. & Schuler, R.S. (1995). Understanding human resource management in the context of organizations and their environment. *Annual Review of Psychology*, 46(1), 237-264. 10.1146/annurev.ps.46.020195.001321

Jiang, K., Lepak, D.P., Hu, J., & Baer, J.C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, Vol. 55, 1264-1294. https://doi.org/10.5465/amj.2011.0088

Johnson, R.B., Onwuegbuzie, A.J. & Turner, L.A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112-133. https://doi.org/10.1177/1558689806298224

Kehoe, R.R. & Wright, P.M. (2013). The impact of high-performance human resource practices on employees' attitudes and behaviors. *Journal of Management*, 39, 366-391. https://doi.org/10.1177/014920631365901

Kline, R.B. (2010). *Principles and practice of structural equation modeling*. (3rd ed.) New York: Guilford Press

Kline, R.B. (2011). Principles and Practice of Structural Equation Modeling, 3rd ed., Guilford Press, New York, NY.

Lado, A.A., & Wilson, C.M. (1994). Human resource systems and sustained competitive advantage: a competency-based perspective. *Academy of Management Review*, 19, 699-727. https://doi.org/10.5465/amr.1994.9412190216

Lepak, D.P., Liao, H., Chung, Y. & Harden, E.E. (2006). A conceptual review of human resource management systems in strategic human resource management research. In Martocchio, J. J. (Ed.), *Research in Personnel and Human Resource Management*. Greenwich, CT: JAI Press, 217–71. https://doi.org/10.1016/S0024-6500(00)165-6

Lepak, D.P. & Snell, S.A. (1999). The human resources architecture: Toward a theory of human capital allocation and development. *Academy of Management Review*, 24, 31-48. https://doi.org/10.5465/amr.1999.1580439

Lepak, D.P. & Snell, S.A. (2002). Examining the human resources architecture: The relations among human capital, employment, and human resources configurations. *Journal of Management*, 28, 517–543. https://doi.org/10.1177/014920630202800403

Lewin, A., & Milton, J. (1986). Determining organisational effectiveness: Another look, and an agenda for research. *Management Science*, 32, 514-538. https://doi.org/10.1287/mnsc.32.5.514

Mahoney, J. T., & Pandian J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal*, 13, 363-80.

Maltz, A., Shenhar, A., & Reilly, R. (2003). Beyond the balanced scorecard: Refining the search for organisational success measures. *Long Range Planning*, 36, 187-204. https://doi.org/10.1016/S0024-6301/02/00165-6

Minbaeva, D.B. (2005). HRM practices and MNC knowledge transfer. *Personal Review*, 34 (1)125-144. https://doi.org/10.1108/00483480510571914

Nyberg, A. J., Moliterno, T. P., Hale, D., & Lepak, D. P. (2014). Resource-based perspectives on unit-level human capital: a review and integration. *Journal of Management*, 40, 316-346. https://doi.org/10.1177/0149206312458703

Ostroff, C. & Bowen, A.E. (2000). Moving HR to a higher level: HR practice and organizational effectiveness. In Klein, K.J. and Koslowski, S.W.J. (Eds), *Multilevel Theory, Research, and Methods in Organizations, Foundations, Extensions, and New Directions*, Jossey-Bass, San Francisco, 211-266.

Otoo, F.N.K. (2019). Human resource development (HRD) practices and banking industry effectiveness: The mediating role of employee competencies. *European Journal of Training and Development*, 43, 250-271. https://doi.org/10.1108/EJTD-07-2018-0068

Otoo, F.N.K. (2019). Human resource management (HRM) practices and organizational performance: The mediating role of employee competencies. *Employee Relations*, 41, 949-970. https://doi.org/10.1108/ER-02-2018-0053

Otoo, F.N.K. (2020). Measuring the impact of human resource management (HRM) practices on pharmaceutical industry’s effectiveness: the mediating role of employee competencies. *Employee Relations*, 42, 1353-1380. https://doi.org/10.1108/ER-03-2019-0142

Otoo, F.N.K. & Mishra, M. (2018). Influence of human resource development (HRD) practices on hotel industry’s performance: The role of employee competencies. *European Journal of Training and Development*, 42, 435-454. https://doi.org/10.1108/EJTD-07-2017-0113

Otoo, F.N.K. & Mishra, M. (2018). Measuring the impact of human resource development (HRD) practices on employee performance in small and medium scale enterprises. *European Journal of Training and Development*, 42, 517-534. https://doi.org/10.1108/EJTD-07-2017-0061

Otoo, F.N.K., Otoo, E.A., Ablade, G.K. & Bhardwaj, A. (2019). Impact of human resource development (HRD) practices on pharmaceutical industry’s performance: The mediating role of employee performance. *European Journal of Training and Development*, 43, 188-210. https://doi.org/10.1108/EJTD-09-2018-0096

Pfeffer, J. (1998), *The human equation: building profits by putting people first*. Boston: Harvard Business School Press,
Ployhart, R.E., & Moliterno, T. (2011). Emergence of the human capital resources: a multilevel model. *Academy of Management Review*, 36, 127-150. https://doi.org/10.5465/AMR.2009.0318

Podsakoff, P. M., MacKenzie, S. B., Lee, J.Y., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539-569. 10.1146/annurev-psych-120710-100452
Randeree, K. & Al Youha, H. (2009). Strategic management of performance: an examination of public sector organizations in the United Arab Emirates. *International Journal of Knowledge, Culture and Change Management*, 9(4), 123-134. https://doi.org/10.18848/1447-9524/CGP/v09i04/49722

Real, J.C., Roldan, J.L. & Leal, A. (2014). From entrepreneurial orientation and learning orientation to business performance: analyzing the mediating role of organizational learning and the moderating effects of organizational size. *British Journal of Management*, 25(2), 186-208. https://doi.org/10.1111/j.1467-8551.2012.00848.x

Richard, J.P., Devinney, T.M., Yip, G.S. & Johnson, G. (2009). Measuring organizational performance: towards methodological best practice. *Journal of Management*, 35(3), 718-804. https://doi.org/10.1177/0149206308330560

Rowe, W.G. & Morrow, J.L., Jr. (1999). A note on the dimensionality of the firm financial performance construct using accounting, market, and subjective measures. *Canadian Journal of Management*, 35, 467-504. https://doi.org/10.1057/256484

Spender, J. C. (1996). Making knowledge the basis of dynamic knowledge of the firm. *Strategic Management Journal*, 17, 45-62. https://doi.org/10.1002/smj.4250171106

Subramaniam, M., & Youndt, M.A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, 48, 450-463. https://doi.org/10.5465/AMJ.2005.17407911

Takeuchi, R., Chen, G. & Lepak, D. P. (2009). Through the looking glass of a social system: cross-level effects of high-performance work systems on employees’ attitudes. *Personnel Psychology*, 62, 1–29. https://doi.org/10.1111/j.1744-6570.2008.01127.x

Tomal, D.R. & Jones, K.J. (2015). A comparison of core competencies of women and men managers. *The Coastal Business Journal*, 14(1), 13-25. Retrieved from: https://www.semanticscholar.org/paper/A-COMPARISON-OF-CORE-COMPETENCIES-OF-WOMEN-AND-MEN-Tomal-Jones/87d4da0d53146786cee60254837d7d2d6bd1f84

Wageman, R. (1997). Critical success factors for creating superb self-managing teams. *Organizational Dynamics*, 26, 49–61. https://doi.org/10.1016/S0090-2616(97)90027-9

Waterman, R., Waterman, J. & Collard, B.A. (1994). Towards a career resilient workforce. *Harvard Business Review*, July-August, pp. 87-95. Retrieved from: https://hbr.org/1994/07/toward-a-career-resilient-workforce

Wright, P. M. & McManan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, 18, 295–320. https://doi.org/10.1177/01492063920180205

Wright, P.M., McManan, G.C. & McWilliams, A. (1994). Human resources and sustained competitive advantage: a resource-based perspective”. *International Journal of Human Resource Management*, 5,301-326. https://doi.org/10.1080/09585199400000020

Wu, J.H.C., Lin, Y.C. & Hsu, F.S. (2008). An empirical analysis of synthesizing the effects of service quality, perceived value, corporate image and customer satisfaction on behavioral intentions in the transport industry: a case of Taiwan high-speed rail. *Innovative Marketing*, 7,83-100. https://doi.org/10.1002/jtr.2011

Yamao, S., Cieri, H.D. & Hutchings, K. (2009). Transferring subsidiary knowledge to global headquarters: subsidiary senior executives’ perceptions of the role of HR configurations in the development of knowledge stocks. *Human Resource Management*, 48, 531-554. https://doi.org/10.1002/hrm.20297

Yang, C., & Lin, C. Y. (2009). Does intellectual capital mediate the relationship between HRM and organizational performance? Perspective of a healthcare industry in Taiwan. *International Journal of Human Resource Management*, 20: 1965–1984. https://doi.org/10.1080/09585199003142415

Yang, S.B., & Guy, M.E. (2004). Self-managed work teams: who uses them? what makes them successful? *Public Performance & Management Review*, 27, 69-79. 10.1080/15309576.2004.11051799

Yang, S.B., & Guy, M.E. (2011). The effectiveness of self–managed work teams in government organizations. *Journal of Public Administration and Psychology*, 26, 531–541. https://doi.org/10.1007/s10869-010-9205-2

Yates, T., & Finikiotics, S. N. (2010). Self-directed leadership teams: a case study on e-services

Youndt, M.A., & Snell, S.A. (2004). Human resource configurations, intellectual capital and organizational performance. *Journal of Managerial Issues*, 16(1), 337–357. https://www.jstor.org/stable/40604485

Zahid A, C Sareeta, T. & Manisha, B. (2015). Impact of human capital variables on the effectiveness of the organizations, *Pakistan Journal of Commerce and Social Sciences*, 9,228-240. Retrieved from: https://www.semanticscholar.org/paper/Impact-of-human-capital-variables-on-the-of-the-Channar-Talreja/dae9e3d3b683eb61d3eb7b949a55c45c85f2e8e9

Zhang, Z., Wan, D. & Jia, M. (2008). Do high-performance human resource practices help corporate entrepreneurship: the mediating of organizational citizenship behavior. *Journal of High Technology Management Research*, 19(2),128-138. https://doi.org/10.1016/j.jhitech.2008.10.005

*Publisher’s Note*: SSBFNET stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.