

# Human factor, justice and organizational effectiveness in Africa

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## Abstract

**Purpose** – The purpose of this paper is to examine the effect of the human factor (HF), organizational justice and the interaction between the two on individual employees' perceptions of the effectiveness with which their organizations undertake activities in two sub-Saharan African countries.

**Design/methodology/approach** – Survey data were collected from two samples containing public sector and private sector organizations from two sub-Saharan African economies – Ghana ( $n = 158$ ) and Uganda ( $n = 208$ ). Hierarchical regression analysis was utilized to analyze the survey data from the two countries separately.

**Findings** – The HF dimensions of moral capital and human capabilities, and organizational justice were related to individual employees' perceptions of the effectiveness of their organizations in both studies. In particular, higher perceptions of organizational justice at the workplace enhanced the impact of the HF dimensions of moral capital and human capabilities on individual employees' perceptions of the effectiveness with which their organizations perform activities.

**Practical implications** – Organizations in sub-Saharan Africa should emphasize the development of the HF qualities that focus on moral capital and the utilization and application of the knowledge, skills and abilities embedded in employees at the workplace. In particular, moral capital could play a critical role in ameliorating counter-productive attitudes and behaviors such as shirking, bribery and corruption in organizations. Moreover organizations in sub-Saharan Africa can improve their effectiveness by developing fair decision-making procedures and interactions between management/supervisors and subordinates.

**Originality/value** – The study provides the first empirical investigation of the link between the HF and perceived effectiveness of organizations, and how organizational justice moderates this relationship in a sub-Saharan African environment.

**Keywords** Competences, Employee behaviour, Organizational justice

**Paper type** Research paper

## Introduction

It is commonly believed that employees are the most important asset of an organization and the viability of any organization depends on the skills, competencies and initiative of its employees (Kanter, 1983). Adjibolosoo (1995) argued that the successful performance of organizations in developing countries is dependent on employees' human factor (HF) qualities. The HF describes the knowledge, skills, expertise, capabilities, and behavioral qualities and attitudes of employees (Adjibolosoo, 1995).



Several studies have used the HF construct to explain the lack of progress within organizations and institutions in developing countries. The majority of these studies, however, adopt a theoretical approach to study the impact of HF on organizational and national outcomes (Acquaah, 2004). Their findings provide anecdotal evidence and highlight the lack of empirical research on the impact of HF on organizational effectiveness and performance in developing countries (Adjibolosoo, 2005).

This paper examines the effect of the HF on employees' perception of organizational effectiveness (POE) using data from Ghana and Uganda – two of the fastest growing developing economies within SSA with real growth rates of GDP of 7.9 and 5.6 percent in Ghana and Uganda in 2013, respectively (Central Intelligence Agency, 2014a, b). Ghana and Uganda were selected for reasons including their location (Ghana is in west Africa while Uganda is in east Africa) and ease of access to available data. This paper argues that the impact of HF on POE is dependent on employees' perception of organizational justice (POJ) at the workplace. POJ describes an individual's perception of fairness within organizational settings. Employees' perceptions of fairness about organizational procedures, outcomes and interpersonal exchanges may influence their work-related attitudes and behaviors, and performance (Moon *et al.*, 2008). Thus POJ is expected to influence POE and also moderate the relationship between the HF and POE.

This study contributes to the literature by validating the relationship between HF and POE in SSA. Second, it attempts to extend the study of fairness issues at the workplace in developing economies to the SSA context by investigating how the findings could be corroborated with that from Asia, another high-power distance cultural environment. Third, it examines how the interaction between HF and POJ influence POE. The aim is to integrate the behavioral, skills and capabilities paradigm embodied in the HF, and the social exchange paradigm, which has not been previously investigated in developing countries.

## Conceptual background and hypotheses

### *The HF and perceived effectiveness of organizations*

People are the most important asset of nations, organizations and institutions (Pfeffer and Veiga, 1999). Adjibolosoo (1995, p. 33) defines the HF as the “spectrum of personality characteristics and other dimensions of human performance that enable social, economic and political institutions to function and remain functional over time.” It comprises employees' attitudes and behaviors, and their knowledge, skills and capabilities. The HF is not limited to the mere acquisition of human capital through education and training, but also includes the ability to apply the acquired knowledge in successfully accomplishing set goals and objectives.

The HF is categorized into six dimensions: spiritual capital, moral capital, human capital, aesthetic capital, human abilities and human potential. Failure to develop each component of the HF will result in poor human performance and living standards. Each dimension must be simultaneously developed and integrated or at least be present in employees for the benefit of an organization. This study focuses on the HF dimensions of moral capital, human capital and human abilities or capabilities. Moral capital refers to the attitudes and behaviors of employees that are based on universal principles regarding right or wrong. Human capital refers to the possession of know-how and acquired qualifications and skills; and human experiences, knowledge, and intelligence. Human abilities refer to the capability or capacity of an individual to undertake activities competently and perform tasks requiring mental and physical effort (see Adjibolosoo, 1995, pp. 33-38, for definitions of other dimensions).

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Lack of HF or HF decay and/or underdevelopment (Adjibolosoo, 1995) causes employee productivity to decline and lead to ineffectiveness in organizations. Organizations' whose employees possess the HF dimensions of moral capital, human capital and human capabilities are able to improve productivity, efficiency and effectiveness. Employees possessing moral capital qualities such as integrity, adherence to rules and regulations, reliability, loyalty, willingness to help and tolerance will help minimize if not eliminate corruption in organizations and improve overall organizational effectiveness.

The importance of exploiting human capital and capabilities for the benefit of organizations is highlighted in both human capital and resource-based view of the firm literature (e.g. Barney, 1991). Employees possessing human capital attributes in the form of educational qualifications, skills and experience enable organizations to improve their effectiveness and other outcomes (Hitt *et al.*, 2001). However, in SSA, the possession of human capital by employees does not necessarily lead to the creation of value in organizations. Most of the initially acquired skills and experiences have become outmoded or emaciated over time for lack of effective use. Employees' human capital is not therefore sufficient to create value in organizations unless employees have the capabilities or the ability and willingness to leverage the human capital in solving firm-specific problems. Thus:

*H1.* The HF dimensions of moral capital, human capital, and human capabilities will be positively related to POE.

#### *Organizational justice and perceived effectiveness of organizations*

POJ refers to employees' perception of fairness in the workplace (Greenberg and Colquitt, 2006; Moorman, 1991). It is the degree to which fair procedures/processes exist and are adhered to, and whether leaders are perceived as fair, sincere and applying rational in their actions. Organizational justice falls into three types: distributive justice refers to the perceived fairness of the distribution of outcomes; procedural justice (PJ) refers to the perceived fairness of an allocation decision regarding the distribution of outcomes; while interactional justice refers to the quality of interpersonal treatment employees receive from an authority figure and the enactment of procedures (Coyle-Shapiro *et al.*, 2004; Moorman, 1991). While distributive justice is more strongly related to personal outcomes, PJ is more strongly related to organizational outcomes (Choi, 2008). Employees are more likely to alter their behavior in response to the fairness of allocation of resources and rewards rather than fairness of a decision outcome. Choi (2008) also argues that justice perceptions are strongly related to employees' organization-directed reactions than event justice perceptions.

Organizational justice issues are very important in African economies because they are often non-existent at various levels. Greenberg (2001) argues that culture affects both the formation of justice perceptions and the effects of these perceptions on employee attitudes and behaviors. Most African cultures are relatively high on masculinity and power distance, and low on individualism (Hofstede, 1980). Employees are often expected to obey management decisions without formal legitimate procedures. Thus, African employees perceive that the mechanisms or procedures used to determine issues such as pay raises, promotions, work assignments, selection for further training and development, are not fair. These justice issues at the workplace often generate negative employee attitudes and behaviors which affect organizational effectiveness.

Social exchange theory and the norm of reciprocity asserts that employees perform both their in-role and extra role activities to reciprocate fair treatment received from organizational leaders (Eisenberger *et al.*, 1990). Therefore, we posit that employees POJ will leads to positive behaviors and attitudes that foster the effectiveness with which organizations undertake their strategic activities:

H2. POJ will be positively related to POE.

#### *The moderating role of perceived organizational justice*

Since employees' fairness perceptions of an organization's leaders and management may affect their behavior toward the performance of their activities, it is likely that POJ will moderate the relationship between the HF and POE. When employees perceive an organization's management to be fair, they may react positively to the organization and be more willing to exercise their HF to improve the organization's effectiveness and performance. In contrast, when they regard the management to be unfair, they are more likely to react negatively and exhibit behaviors and attitudes that are characteristics of HF decay such as shirking, absenteeism, bribery and corruption.

In Africa, the high-power distance between top management and subordinate employees creates inequality in organizations. Many African employees perceive that they are unfairly treated in areas such as pay raises, promotion and work assignments. These employees are more likely to portray behaviors and attitudes that minimize the utilization of the HF for the benefit of their organizations. This is because unfair workplaces create high levels of uncertainty (Lind and van den Bos, 2002), and employees are more likely to repay the organization by withholding the use of the knowledge, skills, abilities, behaviors and attitudes embodied in the HF for the benefit of the organization. So, POJ will moderate the relationship between HF (moral capital, human capital and capabilities) and POE:

H3. POJ will positively moderate the relationship between the HF dimensions of moral capital, human capital, and human capabilities, and POE.

## **Method and results**

### *Study 1 – public sector organizations in Ghana*

*Research design and procedure.* Totally, 200 surveys were personally distributed to individuals working in various public sector organizations in Ghana who volunteered to participate in the study. A maximum of ten questionnaires were distributed to each organization – five to managers and/or supervisors and five to subordinate employees. Totally, 158 questionnaires were returned for a response rate of 79 percent. The employees' average age was 39.21 years (SD = 8.06 years), 63 percent were males, 47 percent were managers/supervisors, with 8.71 years of organizational tenure (SD = 4.69 years).

*Dependent variable.* POE was measured with seven items commonly found in the literature (Ellis and Shockley-Zalabak, 2001; Parhizgari and Gilbert, 2004). For each item, respondents indicated the extent of the importance of objective, and achievement of that objective, by their organization on seven-point Likert scales from 1 = not important to 7 = extremely important for the importance of objectives scale; and 1 = completely not achieved to 7 = completely achieved for the achievement of objectives scale. The perceptions of the effectiveness of the organizations for each individual employee was then operationalized as the average of the scores of importance of objectives scale, multiplied by the achievement of objectives scale. The reliability of POE was 0.89.

*Independent variables.* The HF dimensions of moral capital, human capital and human capabilities were measured using the 24 items suggested by Acquah (2004). The employees were asked to indicate the extent to which they agree or disagree on statements about their colleagues or fellow employees on a seven-point Likert scale with 1 = strongly disagree and 7 = strongly agree. An exploratory factor analysis (EFA) was conducted using the principal component analysis (PCA) method with varimax rotation. The EFA yielded four factors explaining 70 percent of explained variance, which we labeled: general moral capital (GMOCAP), helping moral capital (HMOCAP), human capital (HUMCAP) and human capabilities (HCAPAB). GMOCAP was measured with ten items (e.g. they have high levels of integrity; they are highly loyal to the company). HMOCAP was measured with four items (e.g. they are willing to help others with work-related problems). HUMCAP was measured with five items (e.g. most of them have a technical, vocational or university-level education and qualification), while HCACAP were measured with five items (e.g. most of them possess problem-solving capabilities).

POJ was measured by procedural and interactional justice. Beugre (2002) has argued that PJ and interpersonal justice (IJ) may be more important to employees in SSA than distributive justice. We operationalized PJ with five items – two items taken from Moorman (1991) assessing the degree to which an employee can appeal decisions and make their views heard, and three items taken from Coyle-Shapiro *et al.* (2004) assessing the fairness of procedures used by the organization to determine promotion, wage/salary increases and performance. IJ was measured using three items taken from Moorman (1991), which assess employees' perception of the extent to which their immediate supervisor is honest in dealing with employees, provides employees with the opportunity to express their views, and treats all employees in a fair and consistent manner. All items were measured on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree).

A confirmatory factor analysis (CFA) of the eight POJ items to examine the discriminant validity of the justice constructs in the African context was conducted. First, the fit of a two-factor model which specifies PJ and IJ as two distinct factors was examined. The two factor model did not indicate a good fit with the observed covariance matrix:  $\chi^2(df = 19) = 107.82$ ,  $p < 0.001$ ; root mean square error of approximation (RMSEA) = 0.12; comparative fit index (CFI) = 0.94; incremental fit index (IFI) = 0.94. Second, we compared the fit of the two-factor model with that of a one-factor model. The one-factor model produced a good fit ( $\chi^2(df = 20) = 95.13$ ,  $p < 0.001$ ; RMSEA = 0.07; CFI = 0.95; IFI = 0.95). A change in  $\chi^2$  test indicated that the one-factor model was a significantly better fit than the two-factor model:  $\chi^2_{\text{difference}}(df = 1) = 12.69$ ,  $p < 0.01$ . Moreover, the correlation between PJ and IJ was 0.77, which falls well above the guideline of 0.70 suggested by Colquitt and Shaw (2005) for the combination of justice constructs. Therefore the PJ and IJ constructs were combined to form an overall justice. The reliability of POJ was 0.93.

*Control variables.* Consistent with recent organizational justice studies (Moon *et al.*, 2008), we controlled for gender (0 = female; 1 = male), organizational tenure, age of respondent and organizational position of the respondent (0 = subordinate staff; 1 = managerial/supervisory).

### *Results of Study 1*

Table I presents the descriptive statistics, intercorrelations and the reliabilities of the variables. We used hierarchical regression analyses to test our hypotheses. Our interest

Variables	1	2	3	4	5	6	7	8	9	10
1. Employees' Perception of Organizational Effectiveness (POE)	0.89									
2. General Moral Capital (GMOCAP)	0.16*	0.91								
3. Helping Moral Capital (HMOCAP)	0.37**	0.53**	0.83							
4. Human Capital (HUMCAP)	0.07	0.35**	0.49**	0.71						
5. Human Capabilities (HCAPAB)	0.16*	0.52**	0.27**	0.38**	0.79					
6. Organizational Justice (POJ)	0.17*	0.39**	0.25**	0.27**	0.21**	0.93				
7. Position <sup>a</sup>	-0.15	0.14	0.02	0.07	0.11	0.51**				
8. Age (years)	-0.05	-0.09	0.10	0.19*	-0.02	0.18*	0.34**			
9. Tenure (months)	0.26**	-0.34**	0.11	0.11	-0.13	-0.09	0.11	0.68**		
10. Gender <sup>b</sup>	0.31**	0.24**	0.06	-0.10	0.17*	0.03	0.23**	0.15	0.19*	
Mean	26.99	4.65	4.86	5.58	4.51	4.25	0.47	39.21	104.6	0.63
SD	8.23	1.26	1.24	0.75	0.96	1.29	0.50	8.06	56.22	0.48
Minimum	9.29	2.20	1.75	3.40	2.00	1.88	0.00	21.00	6.00	0.00
Maximum	45.14	6.60	6.75	7.00	6.60	6.50	1.00	55.00	246.00	1.00

**Notes:** *n* = 158. The values in diagonals are reliability coefficients (Cronbach  $\alpha$ 's). <sup>a</sup>Managerial/supervisory = 1, subordinate = 0; <sup>b</sup>male = 1, female = 0. Significance levels: for  $r > 0.15$ , \* $p < 0.05$ ;  $r > 0.20$ , \*\* $p < 0.01$

**Table I.**  
Study 1 (Ghana) –  
descriptive statistics  
and correlations

was in examining the individual influences of the three HF dimensions (moral capital, human capital and human capabilities) and POJ on POE, and how POJ moderates the relationship between the HF dimensions and POE.

Table II presents the regression results. Step 1 examined the effects of the control variables on POE. Except position in organization, the rest of the control variables were significantly related to POE. Step 2 includes the HF variables to Step 1 to examine their influence on POE. It was posited in *H1* that the HF dimensions of moral capital, human capital and human capabilities will be positively related to POE. The results provide a partial support for this hypothesis. While GMOCAP ( $\beta = 0.36$ ,  $t(4, 149) = 2.96$ ,  $p < 0.01$ ), HMOCAP ( $\beta = 0.59$ ,  $t(4, 149) = 6.24$ ,  $p < 0.01$ ) and HCAPAB ( $\beta = 0.31$ ,  $t(4, 149) = 3.02$ ,  $p < 0.01$ ) were significant and positively related to POE, HUMCAP ( $\beta = -0.28$ ,  $t(4, 149) = -2.80$ ,  $p < 0.01$ ) was significant and negatively related to POE.

Variables	Step 1 $\beta$ (t-value)	Step 2 $\beta$ (t-value)	Step 3 $\beta$ (t-value)	Step 4 $\beta$ (t-value)	VIF
<i>Controls</i>					
Age	-0.35** (-3.39)	-0.27** (-2.94)	-0.29** (-3.27)	-0.34** (-3.71)	2.47
Tenure	0.45** (4.60)	0.28** (2.66)	0.27** (2.68)	0.38** (3.28)	3.93
Gender	0.30** (4.15)	0.29** (3.95)	0.36** (4.86)	0.36** (4.95)	1.55
Position	-0.15 (-1.87)	-0.12 (-1.77)	-0.28** (-3.46)	-0.24** (-2.81)	2.19
<i>Human factor variables</i>					
GMOCAP		0.36** (2.96)	0.36** (3.26)	0.33* (2.60)	6.32
HMOCAP		0.59** (6.24)	0.54** (5.80)	0.40** (3.42)	3.99
HCAPAB		0.31** (3.02)	0.37** (3.64)	0.42** (3.75)	3.67
HUMCAP		-0.28** (-2.80)	-0.31** (-3.16)	-0.22 (-1.79)	4.15
<i>Perceived organizational justice</i>					
POJ			0.34** (3.43)	0.39** (3.94)	2.94
<i>Interactions</i>					
GMOCAP $\times$ POJ				0.23* (2.08)	3.68
HMOCAP $\times$ POJ				0.19 (1.31)	6.07
HCAPAB $\times$ POJ				0.24* (2.00)	3.96
HUMCAP $\times$ POJ				-0.32** (-2.71)	4.15
Adjusted $R^2$	0.23	0.40	0.44	0.52	
$\Delta$ Adjusted $R^2$	0.00	0.17**	0.04*	0.08*	
Model $F$	12.62**	14.12**	14.77**	11.75**	
df	4,153	8,149	9,148	13,144	

**Table II.** Study 1 (Ghana) – hierarchical regression analysis

**Notes:**  $n = 158$ . DV: POE. The coefficients are standardized coefficients. \* $p < 0.05$ ; \*\* $p < 0.01$

The  $\Delta R^2$  for this step was 0.17 ( $p < 0.01$ ). In Step 3, we added POJ to Step 2. We posited in  $H2$  that POJ will be positively related to POE. The results supported this hypothesis, ( $\beta = 0.34$ ,  $t(1, 148) = 3.43$ ,  $p < 0.01$ ,  $\Delta R^2 = 0.04$ ,  $p < 0.01$  for step). It should be noted that we conducted a supplementary analysis where we changed the order of inclusion for the variables in Steps 2 and 3. However, this did not affect the results in any way.

Step 4 displays the results of the effects of the interaction between HF variables and POJ on POE. It should be noted that the interactions were created with mean-centered variables. The results indicated that  $\text{GMOCAP} \times \text{POJ}$  ( $\beta = 0.23$ ,  $t(4, 144) = 2.08$ ,  $p < 0.05$ ) and  $\text{HCAPAB} \times \text{POJ}$  ( $\beta = 0.24$ ,  $t(4, 144) = 2.00$ ,  $p < 0.05$ ) were significant and positively related to POE. The results also showed that  $\text{HUMCAP} \times \text{POJ}$  ( $\beta = -0.32$ ,  $t(4, 144) = -2.71$ ,  $p < 0.01$ ) was significant and negative, while  $\text{HMOCAP} \times \text{POJ}$  did not influence POE ( $\beta = 0.19$ ,  $t(4, 144) = 1.31$ , ns). The  $\Delta R^2$  for Step 4 was 0.08,  $p < 0.01$ .

### *Study 2 – public sector and private organizations in Uganda*

The findings from Study 1 provided some initial evidence in support of our hypotheses. Employees' HF dimensions of GMOCAP, HMOCAP, HCAPAB and HUMCAP influence POE. POJ is also related to POE, and moderates the relationship between HF dimensions and POE. Empirical evidence shows that there are differences between public sector employees and private sector employees (Utgoff, 1983). Thus, it is not known whether the results from Study 1 are generalizable to the private sector in SSA. Study 2 is intended to replicate the findings of Study 1 to enable contextualization of the differences.

*Research design and procedures.* Personally distributed surveys were given to 300 employees (150 managers/supervisors and 150 subordinate staff) in 15 public-sector organizations and 15 private firms in Uganda. Ten surveys were hand-delivered to each organization with five surveys given to managers/supervisors and five surveys given to subordinate staff. Totally, 208 surveys were returned for a response rate of 69.3 percent. The average age of employees was 34.86 years ( $SD = 8.94$  years), 56.7 percent were males, 51 percent held managerial/supervisory positions, and had 6.6 years of organizational tenure ( $SD = 6.20$ ). Furthermore, 49.5 percent of the responses came from public-sector organizations, while 50.5 percent were from private firms.

*Dependent variable.* As in Study 1, we used the same seven-item POE scale. The reliability ( $\alpha$ ) for POE was 0.86.

*Independent variables.* As in Study 1, the HF dimensions were operationalized using Acquah's (2004) items. A CFA of the 24 items indicates that the four-factor model is a good fit with the observed covariance matrix:  $\chi^2(df = 224) = 609.84$ ,  $p < 0.001$ ;  $RMSEA = 0.05$ ;  $CFI = 0.97$ ;  $IFI = 0.97$ . The HF was measured with the four variables of GMOCAP, HMOCAP, HUMCAP and HCAPAB. Thus, GMOCAP, HMOCAP, HUMCAP and HCAPAB were measured with the 10, 4, 5 and 5 items, respectively. The reliabilities for GMOCAP, HMOCAP, HUMCAP and HCAPAB were 0.89, 0.83, 0.84 and 0.86, respectively.

POJ was also measured with items from Moorman (1991) and Coyle-Shapiro *et al.* (2004). As in Study 1, we conducted a CFA of the justice construct. The one-factor model ( $\chi^2(df = 20) = 63.14$ ,  $p < 0.001$ ;  $RMSEA = 0.06$ ;  $CFI = 0.96$ ;  $IFI = 0.96$ ) revealed a better fit than the two-factor model ( $\chi^2(df = 19) = 101.77$ ,  $p < 0.001$ ;  $RMSEA = 0.12$ ;  $CFI = 0.93$ ;  $IFI = 0.93$ ). A change in the  $\chi^2$ -test ( $\chi^2_{\text{difference}}(df = 1) = 38.63$ ,  $p < 0.001$ ) indicated that POJ should also be treated as one construct in Study 2. Moreover, the two factors were also highly correlated ( $r = 0.73$ ) so we combined the two factors to create one measure of POJ. The reliability for POJ was 0.88.

*Control variables.* To be consistent with Study 1, we also controlled for gender, organizational tenure, age of respondent, organizational position of the respondent, in addition to the organizational type of the respondents (0 = public; 1 = private).

### *Results of Study 2*

Table III presents the descriptive statistics, intercorrelations and the reliabilities of the variables in Study 2. Hierarchical regression analyses were used to test the hypotheses. Table IV presents the regression results of the overall sample in Study 2. Step 1 examined the effects of the control variables on POE. Only the respondents' organizational type was significantly related to POE. Step 2 included the HF variables to Step 1 to examine their influence on POE.

It was posited in *H1* that HF dimensions will be positively related to POE. Again, the results provide a partial support for this hypothesis. While GMOCAP ( $\beta = 0.48$ ,  $t(4, 197) = 4.12$ ,  $p < 0.01$ ) and HCAPAB ( $\beta = 0.22$ ,  $t(4, 197) = 2.14$ ,  $p < 0.05$ ) were significant and positively related to POE, HMOCAP ( $\beta = -0.31$ ,  $t(4, 149) = -2.64$ ,  $p < 0.01$ ) was significant and negatively related to POE. HUMCAP ( $\beta = -0.02$ ,  $t(4, 197) = -0.16$ , ns) was not significant. The  $\Delta R^2$  for this step was 0.17 ( $p < 0.01$ ). In Step 3, we added POJ to Step 2. We posited in *H2* that POJ will be positively related to POE. As in Study 1, the results supported this hypothesis ( $\beta = 0.38$ ,  $t(1, 196) = 4.75$ ,  $p < 0.01$ ,  $\Delta R^2 = 0.08$ ,  $p < 0.01$  for step).

Step 4 in Table IV displays the results of the interaction between the HF dimensions and POJ on POE. All the interactions were created with mean-centered variables. The results indicated that GMOCAP  $\times$  POJ ( $\beta = 0.24$ ,  $t(4, 193) = 2.18$ ,  $p < 0.05$ ), HMOCAP  $\times$  POJ ( $\beta = 0.32$ ,  $t(4, 193) = 2.11$ ,  $p < 0.05$ ) and HCAPAB  $\times$  POJ ( $\beta = 0.26$ ,  $t(4, 193) = 2.17$ ,  $p < 0.05$ ) were significant and positively related to POE. The HUMCAP  $\times$  POJ did not influence POE ( $\beta = -0.03$ ,  $t(4, 193) = -0.29$ , ns). Thus *H3* was partially supported. The  $\Delta R^2$  for Step 4 was 0.05,  $p < 0.05$ .

Because the sample in Study 2 was made up of employees from both public-sector and private organizations, we disaggregated the sample into public-sector organizations and private organizations and examined the relationship between HF dimensions, POJ and POE in the two sectors separately. The results are displayed in Table V for the public-sector organizations (Model 1) and private organizations (Model 2). In Step 1 of each model, none of the control variables was significant. Step 2 of each model provides a comparative test of the effect of HF dimensions on POE. The results for both models provide a partial support for *H1*. In both the public and private sector organizations models, GMOCAP ( $\beta = 0.63$ ,  $t(4, 94) = 3.28$ ,  $p < 0.001$  for public-sector; ( $\beta = 0.44$ ,  $t(4, 96) = 2.76$ ,  $p < 0.01$ ) for private-sector) and HCAPAB ( $\beta = 0.33$ ,  $t(4, 94) = 2.07$ ,  $p < 0.05$  for public-sector; ( $\beta = 0.26$ ,  $t(4, 96) = 2.03$ ,  $p < 0.05$ ) for private-sector) were positive and significantly related to POE. But, HMOCAP was negative and significantly related to POE for public-sector organizations ( $\beta = -0.51$ ,  $t(4, 94) = -2.63$ ,  $p < 0.01$ ), while it was also negative but not significant for private-sector organizations ( $\beta = -0.15$ ,  $t(4, 96) = -1.53$ , ns).

In Step 3 of each model, POJ was positive and significantly related to POE ( $\beta = 0.38$ ,  $t(1, 94) = 3.42$ ,  $p < 0.001$  for public-sector; ( $\beta = 0.45$ ,  $t(1, 96) = 3.72$ ,  $p < 0.001$ ) for private-sector). The results provide support for *H2*. Step 4 of each model displays the results for the interaction effects. In both models, GMOCAP  $\times$  POJ ( $\beta = 0.23$ ,  $t(4, 94) = 2.09$ ,  $p < 0.05$ ) for public-sector; ( $\beta = 0.37$ ,  $t(4, 96) = 3.08$ ,  $p < 0.01$ ) for private-sector) and HMOCAP  $\times$  POJ ( $\beta = 0.24$ ,  $t(4, 193) = 2.18$ ,  $p < 0.05$ ) for public-sector; ( $\beta = 0.32$ ,  $t(4, 193) = 2.56$ ,  $p < 0.01$ ) for private-sector) were positive and

Variables	1	2	3	4	5	6	7	8	9	10	11
1. POE	0.86										
2. GMOCAP	0.41**	0.89									
3. HMOCAP	0.28**	0.52**	0.83								
4. HUMCAP	0.28**	0.48**	0.38**	0.84							
5. HCAPAB	0.37**	0.44**	0.46**	0.40**	0.86						
6. POJ	0.45**	0.41**	0.44**	0.34**	0.36**	0.88					
7. Organization Type <sup>a</sup>	0.17*	0.05	0.02	-0.14*	-0.02	0.02	-0.06				
8. Age (years)	-0.11	-0.10	-0.08	-0.12	-0.10	-0.03	-0.14*	0.62**			
9. Tenure (months)	-0.17*	-0.01	-0.05	-0.12	-0.09	-0.05	-0.19**	0.20**	0.10		
10. Gender <sup>b</sup>	-0.12	-0.01	0.04	-0.01	0.02	0.05	-0.19**	0.26**	0.25**	0.08	
11. Position	-0.10	-0.09	-0.05	-0.04	-0.15*	0.02	-0.04	0.26**	0.25**	0.08	0.51
Mean	3.05	5.15	4.91	5.45	4.85	4.83	5.50	34.86	79.36	0.57	0.50
SD	9.16	1.01	1.25	1.08	1.20	1.26	0.50	8.94	74.34	0.50	0.50
Minimum	1.71	2.00	1.00	1.20	1.60	1.00	0.00	21.00	12.00	0.00	0.00
Maximum	49.86	7.00	7.00	7.00	7.00	7.00	1.00	67.00	386.0	1.00	1.00

**Notes:**  $n = 208$ . The values in diagonals are Cronbach  $\alpha$ 's. <sup>a</sup>0 = public-sector organizations = 0, 1 = private organizations; <sup>b</sup>0 = female, 1 = male. \* $p < 0.05$ ; \*\* $p < 0.01$

**Table III.**  
Study 2 (Uganda) –  
descriptive statistics  
and correlations

Variables	Step 1 $\beta$ (t-value)	Step 2 $\beta$ (t-value)	Step 3 $\beta$ (t-value)	Step 4 $\beta$ (t-value)	VIF
<i>Controls</i>					
Age	0.01 (0.16)	0.07 (0.85)	0.04 (0.55)	0.06 (0.66)	1.81
Tenure	-0.15 (1.88)	-0.18* (-2.17)	-0.15* (1.97)	-0.16* (-2.02)	1.81
Gender	-0.10 (-1.39)	-0.10 (-1.50)	-0.11 (-1.75)	-0.11 (-1.82)	1.18
Position	-0.05 (-0.73)	0.001 (0.01)	-0.02 (-0.36)	-0.02 (-0.39)	1.15
Organization Type	0.14* (1.98)	0.12 (1.89)	0.11 (1.74)	0.11 (1.69)	1.17
<i>Human factor</i>					
GMOCAP		0.48** (4.12)	0.39** (3.55)	0.38** (3.39)	3.60
HMOCAP		-0.31** (-2.64)	-0.44** (-3.80)	-0.38** (-3.18)	4.17
HCAPAB		0.22* (2.14)	0.23* (2.12)	0.21* (1.99)	3.53
HUMCAP		-0.02 (-0.16)	-0.08 (-0.87)	-0.07 (-0.77)	2.52
<i>Perceived organizational justice</i>					
POJ			0.38** (4.75)	0.42** (5.24)	1.94
<i>Interactions</i>					
GMOCAP $\times$ POJ				0.24* (2.18)	5.13
HMOCAP $\times$ POJ				0.32* (2.11)	7.07
HCAPAB $\times$ POJ				0.26* (2.17)	5.01
HUMCAP $\times$ POJ				-0.03 (-0.29)	2.58
Adjusted $R^2$	0.04	0.21	0.29	0.38	
$\Delta$ Adjusted $R^2$	0.00	0.17**	0.08*	0.09*	
Model $F$	2.75*	7.10**	9.35**	7.43**	
df	5,202	9,198	10,197	14,193	

**Table IV.**  
Study 2 (Uganda) –  
hierarchical  
regression analysis

**Notes:**  $n = 208$ . DV: POE. The coefficients are standardized coefficients. \*  $p < 0.05$ ; \*\*  $p < 0.01$

significantly related to POE. While  $HCAPAB \times POJ$  is positive and significantly related to POE for private-sector organizations ( $\beta = 0.28$ ,  $t(4, 96) = 2.15$ ,  $p < 0.05$ ), it was negative and insignificant for public-sector organizations ( $\beta = -0.17$ ,  $t(4, 94) = 1.21$ , ns). In both models  $HUMCAP \times POJ$  was not significant.

### Discussion

The purpose of this study was to examine the relationship between some dimensions of the HF, POJ and POE. This research has generated some initial evidence that HF dimensions of moral capital, human capital and human capabilities; and POJ are related to POE. Moreover, the relationship between the HF dimensions and POE is moderated by POJ.

Variables	Model 1 (public sector, $n = 103$ )				Model 2 (private, $n = 105$ )			
	Step 1	Step 2	Step 3	Step 4	Step 1	Step 2	Step 3	Step 4
<i>Controls</i>								
Age	0.04	0.03	0.01	0.03	-0.03	0.11	0.02	0.02
Tenure	-0.13	-0.16	-0.17	-0.18	-0.16	-0.18	-0.14	-0.15
Gender	-0.19	-0.22*	-0.23**	-0.26**	0.08	0.08	0.07	0.08
Position	-0.05	0.01	-0.02	-0.03	-0.12	-0.09	-0.12	-0.13
<i>Human factor</i>								
GMOCAP		0.63***	0.61***	0.57***		0.44***	0.26*	0.25*
HMOCAP		-0.51***	-0.66***	-0.54***		-0.15	-0.15	-0.12
HCAPAB		0.33*	0.29*	0.27*		0.26*	0.26*	0.27*
HUMCAP		-0.07	-0.12	-0.14		0.10	0.02	0.03
<i>Perceived organizational justice</i>								
POJ			0.38***	0.39***			0.45***	0.43***
<i>Interactions</i>								
GMOCAP × POJ				0.23*				0.26*
HMOCAP × POJ				0.37**				0.32**
HCAPAB × POJ				-0.17				0.28*
HUMCAP × POJ				-0.04				-0.05
Adjusted $R^2$	0.05	0.27	0.35	0.41	0.05	0.26	0.36	0.43
$\Delta$ Adjusted $R^2$	0.00	0.22**	0.08**	0.06*	0.00	0.21**	0.10***	0.08*
Model $F$	1.23	4.35***	5.61***	3.98***	1.43	4.30***	5.87***	3.98***
df for step	4,98	8,94	9,93	13,89	4,100	8,96	9,95	13,89

Notes: DV: POE. \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Table V.**  
Study 2 (Uganda) –  
hierarchical  
regression analysis  
for public and  
private-sector  
employees

First our findings indicated that the HF is related to POE in the two studies (Ghana – Study 1 and Uganda – Study 2). However, the association between the various dimensions of HF and POE was different across the two studies. The findings from Study 1 indicated that while high levels of GMOCAP, HMOCAP and HCAPAB were more likely to help improve POE, high levels of HUMCAP was less likely to improve POE. In Study 2, the findings from the overall data showed that high levels of GMOCAP and HCAPAB were more likely to enhance POE but high levels of HMOCAP was less likely to improve POE. These findings were confirmed in the public-sector organizations sub-sample, but not the private-sector organizations sub-sample. The private-sector organizations sample indicates that high levels of GMOCAP and HCAPAB were more likely to improve POE. Across the two studies, there was consistency on the effect of GMOCAP and HCAPAB on POE.

The HCAPAB and HUMCAP findings were interesting and suggested that the possession of educational qualifications and technical skills, expertise and experiences (human capital) alone was not sufficient to improve POE unless they are utilized and applied for the benefit of an organization (Acquaah, 2004; Adjibolosoo, 1995, 2005). This explains the positive relationship between HCAPAB and POE, and the negative (and sometimes insignificant) relationship between HUMCAP and POE. Thus our findings corroborated the claims of Adjibolosoo (1995) that the effectiveness of organizations in Africa is dependent on the possession of the HF qualities and capabilities by employees. The findings also suggested that the attitudes, behaviors and knowledge bases of employees are important in engendering effectiveness in African organizations, both public and private.

Furthermore, the findings from the two studies showed that POJ can contribute to improving POE even after controlling for the various dimensions of the HF in addition to respondents age, tenure, organization type and gender. The employees in the two countries, whether they worked for private or public-sector organizations, who perceived that they were treated fairly were more likely to contribute to the effectiveness of their organizations. The result is consistent with fairness theory (Folger and Cropanzano, 2001), which suggests that when organizational procedures are deemed to be unfair, employees are more likely to see the authority or entity as responsible for their unfavorable outcomes and thus leads them to react more negatively to events in the organization. This finding is interesting since it is contrary to the notion that employees working in organizations in a high-power distance cultural environment typically do not expect fairness from their organizational leadership (Moon *et al.*, 2008). Our findings suggested that for organizations in high-power distance cultural environments such as in Ghana and Uganda to improve POE, the leadership would need to develop and practice fairness at the workplace.

The findings from the two studies also demonstrated that POJ has the potential to enhance POE, in addition to moderating the relationship between the HF dimensions of GMOCAP, HMOCAP, HUMCAP and HCAPAB, and POE. In Study 1, while high POJ by employees enhance the effects of GMOCAP and HCAPAB on POE, it intensifies the detrimental effect of HUMCAP on POE. However, in Study 2, the findings from the overall sample showed that POJ augment the effects of GMOCAP and HCAPAB on POE, and assuage the effect of HMOCAP on POE. The findings imply that when employees perceive that they receive fair treatment from their organizations they are more likely to leverage their capabilities and engage in moral and helping behaviors that enhance POE. This finding is consistent with the sub-sample from private-sector organizations, but not the public-sector where POJ boosts the impact of GMOCAP and HMOCAP on POE. Overall, the evidence from the moderating hypotheses from the two studies indicated that high POJ by employees has the potential to boost the impact of the HF on POE.

#### *Practical implications*

In this globally competitive environment, the long-term viability and effectiveness of any organization critically depends on its employees' ability to create competitive advantage. The findings of this research suggest that this can be done through the leveraging of the capabilities and proactive attitudes and behaviors embedded in employees, and improving fairness issues at the workplace. First, our analyses indicated that organizations with employees who possess GMOCAP and HCAPAB are more likely to help an organization improve upon the effectiveness with which it undertakes its strategic activities. This indicates that developing moral capital in employees could play a significant role in limiting counter-productive attitudes and behaviors such as shirking on the job, bribery and corruption practices, and embezzlement of financial resources which have had negative impact on firm productivity in SSA. Perhaps the most surprising outcome was the perception that human capital cannot contribute positively to POE in both studies. These findings suggest that organizations in SSA should emphasize the development of the HF dimensions that focus on moral capital and the utilization and application of the knowledge, skills and abilities embedded in employees.

Second, our findings suggest that organizations that are perceived to be fair (procedural and interactional) are more likely to benefit from employees contributing to the enhancement of POE. Thus organizations in SSA can improve their effectiveness by developing fair decision-making procedures and interactions between management/supervisors and subordinates.

Third, perceptions of fair procedures and interaction in an organization by employees have the potential of augmenting the positive influence and/or assuaging the negative effect of HF on POE. Thus, POJ can play both promotive and preventive role in organizations (Moon *et al.*, 2008). For instance, POJ enhances the influence of GMOCAP and HCAPAB on POE, while it mollifies the negative effect of HMOCAP on POE. The interactive findings indicate that organizations that create fairness climate, actively promote fairness and embed fairness issues in the development of the HF (especially GMOCAP) have the potential to increase the effectiveness with which they undertake the strategic organization of their activities. Thus, a major strength of this research is that it provides the first empirical support of the link between the HF dimensions of moral capital, human capital, and human capabilities, and POE and how POJ moderates this relationship in a SSA environment.

#### *Strengths and limitations*

The present research has several strengths. First, we collected data from several respondents who were both supervisors/management and subordinates in each organization. Second, we used a data from both private-sector and public-sector organizations in different contextual environments in SSA. Third, the research offers a strong test of the hypotheses by including both personal and organizational variables as controls to eliminate plausible alternative explanations for the findings. Fourth, the research provides an initial empirical analysis of the relationship between some dimensions of the HF and POE. Fifth, we replicated the findings from Study 1 with a second sample from a different contextual environment.

As with all empirical studies, there are limitations that must be acknowledged. In both studies we used a cross-sectional design in the data collection method, thus eliminating the possibility of exploring causality between the independent and dependent variables. Moreover, the data from the two studies were collected at different time periods, but the data from each of the studies were collected at a single point in time. This raises concerns about common method bias. However, we interspersed the justice items with the HF items to minimize common method bias. Nevertheless it would be desirable to use longitudinal data to investigate the relationships examined here in future to alleviate the causality problem.

While the justice measures focused on the respondent's perceptions about fairness in their organizations, the HF measures focused on respondent's evaluation of the extent to which their colleagues possess the HF qualities and capabilities. It is possible that the subordinate employees may not be able to effectively assess the attitudes, behaviors, skills and capabilities of their colleagues. However, this limitation may be tempered by the fact that subordinate employees are more likely to underestimate the HF qualities of their colleagues rather than overestimate them. Furthermore, the subordinate employees may not have adequate information to evaluate their organizations' effectiveness when compared with supervisors/management. Thus some of the responses to the POE items may be biased. Future research should strive to use objective measures of organizational outcomes to minimize this problem.

## Conclusion

This research has demonstrated the need to carefully consider the relationship between the HF and organizational justice issues at the workplace and how they influence employees' perceptions of organizational outcomes. We explored the relationships among the HF dimensions of moral capital, human capital and human capabilities; POJ and POE using two studies which were comprised of data from public-sector employees (Study 1) and public and private-sector employees (Study 2). Our findings have important implications for organizational leaders and top management in both private and public-sector organizations in SSA who must rely and harness the creative potential of their employees to effectively compete in the global marketplace. The implications focus squarely on developing and encouraging moral capital qualities and organizational justice at the workplace. We hope the findings from this research will encourage future research that examine these relationships in other African and developing economies so as to deepen our understanding of the impact of the HF and organizational issues on organizational outcomes.

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