Board role performance in service organizations: the importance of human capital in the context of a developing country.

Abstract

Purpose –We draw from multiple theories of upper echelons, stakeholder, agency, resource-based view and stewardship to establish the extent to which human capital (other than that of the board itself) in service organizations affect board role performance in those service sector firms.

Design/methodology/approach –This study is cross-sectional and correlational. Analyses are conducted using SPSS and Analysis of Moment Structures (AMOS) software on a sample of 128 service firms in Uganda.

Findings – Findings reveal that dimensions of employee safety, entrepreneurial skills, entrepreneurial development, employee welfare and employee relations fit the model of human capital and predict up to 69.1% of the variance in board role performance. The results of this study reveal that board role performance is affected by prior decisions, for example to invest in Corporate Social Responsibility (CSR) activities targeting employees that augment firm characteristics like existence of appropriate human capital. Essentially, an improvement in the quality of human capital explains positive variances in board role performance.

Originality/value – This study is one of the few that partly account for endogeneity in the study of boards, a methodological concern previously cited in literature (see, Bascle, 2008; Hamilton & Nickerson, 2003). Empirical associations between board role performance and organisational performance would not be useful unless we are able to grasp the causal mechanisms that lie behind those empirical associations (Hambrick, 2007). Thus this study contributes to literature that tries to account for variances in board role performance and supports a multi-theoretical approach as a relevant framework in the study of human capital and board role performance.

Result limitations/implications – Cross-sectional data do not allow for testing of the process aspect of the models; however, they provide evidence that the models can stand empirical tests. Additional research should examine the process aspects of human capital and board role performance.

Practical implications – Most companies in developing nations have relied on normative guidelines in prescribing what boards need to enhance performance, probably explaining why some boards have not been successful in their role performance. This research confirms that appropriate human capital, which can be leveraged through CSR ideals of employee safety, recognition, welfare, training in entrepreneurship; consistent with the stakeholder theory, can facilitate the board in the performance of its roles. In the developing-country context, organizations' boards could use these findings as a guideline, that is, what to focus on in the context of human capital development in organisations, because doing so improves their own role-performance

Type of paper: Research paper

Key Words: Human Capital, Board Role Performance, Service Firms, CSR, Developing Country, Uganda.

Introduction

Understanding the nature of effective board role performance is among the most important areas in management research (Ong and Wan, 2008). This is because among factors affecting performance of firms is the performance of the board (Dermirbas and Yukhanaev, 2011). Shareholders increasingly expect boards of directors to exercise greater oversight over the social and environmental impacts of corporate activities. According to Barney (1991) and Wernerfelt (1984) corporate social responsibility (CSR) may help firms to develop new competences, resources and capabilities. Essentially, the performance of a board is partly rooted in this perspective because the board formulates and support policies consistent with this dimension. A board that develops the human capital dimension of intellectual capital is predicted to improve its performance. A number of CSR activities that help improve this human capital dimension have been documented. These include: allowing employees to volunteer expertise and collecting donations from employees (Ahmad, 2006); training activities, safeguarding employee health, support of sports activities and employee services (Perrini et al., 2006); following ethical norms, improving labour relations and providing employment (Ip, 2008).

The benefits that accrue from CSR activities targeting the human capital dimension have also been widely documented. For example, more satisfied and productive workforce (The Aspen Institute, 2003); competitive advantage in terms of ability to attract quality employees (Weiss, 2003); internal benefits through improved employee motivation, morale, commitment and loyalty to the company; reduced turnover, recruitment, and training costs; employees' positive attitudes regarding workplace quality and competitive advantages due to employees' positive workplace attitudes (Branco and Rodrigues, 2006). Such benefits imply that CSR ideals targeting human capital contribute to the long-term prosperity of companies and ultimately their survival (World Business Council for Sustainable Development, 2000). According to Branco and Rodrigues (2006) socially responsible employment practices including fair wages, clean and safe working environment, training opportunities, health and education benefits for workers and their families, provisions of childcare facilities, flexible work hours and job sharing, can bring direct benefits to a firm by increased morale and productivity while reducing absenteeism and staff turnover. This observation is consistent with Upham's (2006) suggestion that being a socially responsible company can have a powerful positive effect on employees by increasing employee retention, boosting identification with the company, and raising helping behaviour. Top management team is responsible for managing the human capital consistent with upper echelons theory which Hambrick and Mason (1984) propounded. Moreover, a company's management team must know that a modern company changes so rapidly that everything is dependent on its human capital (Kamukama et al., 2010). This implies that even boards' performance of their roles is dependent on the human capital residing in people in organizations. To our knowledge empirical studies on the possible link between human capital creation, consistent with CSR ideals, and board role performance are non-existent. Instead, a number of studies highlight positive effects of the corporate investments in CSR activities on the creation or depletion of the intangible resources associated with employees (Denizde la Cruz and Perez de Saa, 2003; Branco and Rodrigues, 2006;Fuentes-Garcia et al. 2008; Surroca et al., 2010).

Consistent with CSR proclivity to human capital, in this paper we provide evidence that if human capital in service firms is good or excellent; an improvement in board role performance ensues. We premise this on the fact that Guadamillas-Go´mez and Donate-Manzanares (2011), demonstrate that CSR can be of great advantage to an innovative firm if it adopts a stakeholder approach to corporate strategy and includes a positive ethical stance to team working. Moreover, certain ethical requirements also exist in relation to dignity and human rights, work conditions or environmental respect (Werhane, 2008). Arguably, then, a board of directors that projects its commitment to stakeholder interests should develop a strategy that includes developing and exploiting their human capital for the very performance of its (board) roles. While Westphal (1999) indicates the existence of benefits of a collaborative relationship with management in terms of the provision by directors of advice and counselling, there could also be benefits to the board that accepts advice from human capital residing in employees and managers. Such a linkage can be detected empirically (Hambrick and Mason, 1984).Therefore, the overall objective of this paper is to establish the extent to which human capital in service organizations affect board role performance.

Motivation and contribution of the paper

Our study is motivated by four main reasons and makes contributions to existing board role performance, intellectual capital and CSR literature. First, empirical investigations into the possibility that properly harnessed human capital in accordance with CSR prescriptions explains positive variances in board performance of its roles are sparse. This is despite studies showing the importance of human capital if firms are to be responsive to the service needs of the market (Ting, et al., 2010) and managers endowed with a high level of human capital are likely to deliver consistent and high-quality services (Becker, 1964; Mincer, 1974). Extant studies mostly focus on measurement of human capital in firms (e.g., Robinson, 2009); advocate for break through board performance by harnessing boards' intellectual capital (e.g., Nicholson and Kiel, 2004) and propose intellectual capital reporting (e.g., Abeysekera, 2007).The reasons for previous studies' focus on human capital is because of its crucial influence as a source of innovation; its important role in shaping competitive advantage (Sveiby, 1997; Stewart, 1997); its importance in organisational value creation (Fitz-enz, 2000; Bontis and Fitz-end,2002; Kamukama, *et al*., 2010) and employees representing a stakeholder group commonly identified as highly important to organisations (Clarkson, 1995). These reasons support the conjecture that without appropriate human capital, it could almost be impossible for the board to perform its roles, hence the motivation of the paper in investigating this possibility.

Second, CSR is currently a topical issue in Uganda with some studies (e.g. Nkiko and Katamba, 2010) indicating that strategic CSR is relatively new. KPMG (2008) reported that CSR management in developing nations has become more challenging, especially given that there is no definitive consensus on what CSR means. In this paper we respond to the call by Katamba, et al. (2012) that more studies from a developing country perspective should be undertaken to assess the contribution and development impact of companies characterized by good CSR management. Moreover, Katamba, et al. (2012) found unbalanced engagement in CSR for business managers in Uganda. Ugandan managers are largely motivated towards CSR by external factors such as attracting and retaining customers to achieve competitive advantage, rather than internal factors such as CSR policies and employee (human) welfare. They also found that the responsibility to initiate, administer, and monitor CSR activities is largely vested in middle-level managers. Katamba, et al. (2012) concluded that such findings point to many challenges to CSR implementation amongst managers in Uganda. Earlier Nkiko and Katamba (2010) had indicated that, companies in Uganda can be internally supported to develop a broader and integrated CSR strategy and build internal capacity for CSR development and implementation. Thus, in addition, this study makes a case for policies by the board supporting investments in CSR dimensions that target human capital for board performance of its roles.

Third, poorly performing companies have often led to perceived attrition of credibility of board role performance. This, according to Ong and Wan (2008) is generally denoted as a board's ability to perform its roles (Forbes and Milliken, 1999; Cornforth, 2001), identified by literature as monitoring; service; strategy and resource provision (Zahraand Pearce, 1989; Maassen, 1999; Daily et al., 2003; Abor andBiekpe, 2007). Pfeffer and Salancik (1978) have also isolated the board role of facilitating the acquisition of critical company resources (Davis and Cobb, 2010). Therefore if an outgoing board does not leave behind an appropriate human capital, the successor board can be expected to underperform its roles. This conjecture puts the board and organizational human capital residing in people in organizations other than the board itself at the centre of board role performance debate and suggests that we should focus on human capital's proclivity to board role performance. The censure of board role performance system without analysing human capital as a precursor to board role performance is pedestrian.

Finally, the Ugandan services sector has since early 2000s gained a significant share of Uganda's GDP growth and in 2009/2010 contributed 49 percent to GDP and to its growth by 13 percent. It has remained the sector with the highest demonstrated potential than any other sector in Uganda (Nkundabanyanga et al., 2013). The importance of this sector creates much of the interest by the Ugandan government regarding board role performance of this sector and from a CSR perspective, is expected to leverage core factors of human capital development, innovation, knowledge, responsibility and ethics (Guadamillas-Go´mez, and Donate-Manzanares, 2011). Moreover, the services sector is often anecdotally taken to be human capital –laden. Government and other stakeholders need to gain reasonable assurance that the sector's firms continue to register impressive performance. This study indicates that this potential can be harnessed through well-defined observed variables of board role performance bolstered by appropriate human capital in respective firms.

The rest of the paper proceeds as follows: The next section is theoretical background, then literature review and hypotheses development. This is followed by the research methodology. The penultimate section is the results section and discussion. The final section is the conclusions and implications.

Theoretical background

Literature explaining the conditions underlying human capital and board role performance might be dominated by three perspectives. First is agency theory and stewardship theory. Agency theory recognises the blemish of governance structures in protecting shareholders' interests and is concerned with the consequences from the conflict of interests between managers and shareholders (Jensen and Meckling, 1976; Fama, 1980; Fama and Jensen, 1983). Agency theory supposes that the interests of managers are not necessarily aligned with the interests of shareholders. The board of directors is considered to be an efficient mechanism for monitoring a firm's managers on behalf of its investors. Accordingly, the roles of the board of directors are to maximize shareholders' wealth, reduce agency costs, select or dismiss the CEO, evaluate the CEO and company performance, and also participate in the strategic decision process and control (Kamardin and Haron, (2011). While agency theorists see managers as self-seeking, proponents of the competing stewardship theory argue that it is possible that managers' interests are similar to those of shareholders (Davis et al., 1997). Stewardship theorists thus suggest a collaborative approach between directors and managers (Ong and Wan, 2008). Such an approach stresses service, calling for boards to advise the managers (Sundaramurthy and Lewis, 2003) and vice versa.

Second, the strategic relevance of human capital to board role performance can also be studied within the context of resource-based view (RBV) of the firm. Resource-based view emphasises the strategic relevance of knowledge-based competences (Barney, 1991) and core competences should be developed internally (Prahalad and Hamel, 1990).Core competences are those that are valuable, rare, inimitable, and non-transferable (Wernerfelt, 1984). Moreover, the theoretical premise for integrating CSR and Intellectual Capital (IC) among whose dimensions is human capital, is the RBV (Surroca*et al.*, 2010; Passettiet al., 2009). The RBV identifies the determinants of firm performance in internal organizational resources (Barney, 1991; Seppanen, 2009). With regard to the relationship between RBV and human capital, it must be underlined that, according to the RBV, only valuable, rare, imperfectly imitable and substitutable resources are able to generate sustainable competitive advantages. These features are typical of intangible resources (Lev, 2001; Galbreath, 2005; Reed et al., 2006). Galbreath and Galvin (2008) compares the effects of firm-specific resources and industry-specific factors on the performance variations and provide evidence that only intangible assets and capabilities are able to explain the company's performance variations. RBV contributes in the understanding of the relationship between CSR and firm performance (Branco and Rodrigues, 2006). Russo and Fouts (1997) illustrate the potential of the RBV framework as an analytical tool for studying how CSR and corporate performance are interrelated through their mutual connection to a firm's resources. Some of the studies focus on CSR activities to predict the creation and development of intangible resources (Orlitzky et al. 2003; Branco and Rodrigues, 2006). Thus, RBV suggests that variances in firm performance are primarily the result of resource heterogeneity across firms (Wernerfelt, 1984). This implies that the different levels of human capital in different firms can explain differences in those firms' performance and, better still, cause variances in board role performance.

Third is stakeholder theory and upper echelons theories. Stakeholder theory is underpinned by the notion that stakeholders are important to organizational performance and require explicit consideration in corporate strategy formulation (Cuganesan, 2006).Contemporary understandings of stakeholder theory derive from the definition of a stakeholder as "any group or individual who can affect or is affected by the achievement of the firm's objectives" (Freeman, 1984, p. 25).Some of the studies focus on stakeholder management (Hillman and Keim, 2001) to predict the creation and development of intangible resources. Therefore the achievement of a service company's objectives (proxied by board role performance) might be dependent on human capital in such a company. And the firm might be considered as a coalition in which the different stakeholders participate to gain their own benefit (Freeman, 1984).According to upper echelons theory propounded by Hambrick and Mason (1984): "Organisational outcomes – both strategies and effectiveness – are viewed as reflections of the values and cognitive bases of powerful actors in the organisation. It is expected that, to some extent such linkages can be detected empirically," (Hambrick and Mason, 1984, p.193). Practically, the chief executive shares tasks and, to some extent, power with other team members (Hambrick and Mason, 1984). While Berle and Means (1932) indicate that owners have a greater stake in the firm than do non-owners, Hambrick and Mason (1984) indicate that such reasoning ignores the fact that non-owner executives derive their livelihood from the organisation and thus depend on its continuing health. This criticism of the agency model suggests that human capital (other than board human capital) residing in managers and employees is indeed relevant to board role performance. Accordingly, this study is underpinned primarily by stakeholder theory, resource-based view, resource dependency theory, agency theory and stewardship theory to provide a relevant framework for understanding board role performance and for its explanation. Assumptions of a more recent theory that there is a need for a multi-theory approach to the roles of boards (Neville, 2011) provide support for this multi-theoretic approach to this study.

Literature review and hypotheses development

Human capital

Human capital includes, leadership, problem solving ability, work environment (interaction), recruitment and selection, career paths, rewards and recognition, employee satisfaction, employee retention, employee relations, knowledge (including tacit), functional skills and experience (Roos et al., 2005). However, it has also been conceptualized by Abeysekera (2007) as training and development, entrepreneurial skills, equity issues, employee safety, employee relations and employee welfare. According to Abeysekera (2007), training and development sub-category comprises know-how, vocational qualifications, career development and training programs and the equity issues sub-category consists of equity issues relating to race, gender, religion and disability. The employee relation sub-category comprises union activity, employees being thanked, employees being featured and employee involvement in the community whilst the employee welfare sub-category comprises employee and executive compensation plans, employee benefits, and employee share and option ownership plans (Abeysekera, 2007). According to Blaug (1976), the concept of human capital is the purchase of health care and education and the spending of time searching for a job with the highest possible rate of pay (welfare). All these phenomena - health, education, job search, information retrieval, migration, and in-service training are conjectured to be investment in human capital, whether undertaken by individuals on their own behalf or undertaken by society on behalf of its members (Blaug, 1976). Thus Becker (1964) argues that the basis of human capital theory lies in the concept that individuals possess knowledge, skills, or experiences, which have economic value to a firm.

$\mathbf{H_1}$: *A relationship exists between human capital factor structure of observed variables and the underlying latent variables of employee safety, entrepreneurial skills, employee welfare, employee recognition and entrepreneurial development in service sector firms.*

Board role performance

Extant firm governance literature identifies roles which boards of directors may assume in decision-making as service, control and strategic roles (Fama and Jensen, 1983; Zahra and Pearce, 1989; Maassen, 1999; Daily, *et al*., 2003; Abor and Biekpe, 2007; Ong and Wan, 2008; Peterson and Philpot, 2009). Central to the service role is the co-option of the organisation, control of the firm, enhancing reputation of the firm, formulation and implementation of decisions if the stewardship theory is applied. We can also apply the agency theory approach to examine what is central to the control role as safeguarding interest of shareholders, selecting CEO, monitoring CEO/management performance and separation of decision control from decision management (Zahra and Pearce, 1989; Maassen, 1999 and Kakabadse and Kakabadse, 2001). The strategic role can be analysed through resource dependency or stakeholder theory. Central to this role is guiding firm mission, developing, implementing and monitoring of the firm's strategy, resource allocation and boundary spanning (Zahra and Pearce, 1989; Maassen, 1999; Kakabadse and Kakabadse, 2001). Board role performance, then, refers to the ability of directors to perform board roles (Ong and Wan, 2008). According to Nicholson and Kiel (2004), an effective board is “one that can successfully execute the role set required of it” (p. 453). The ability of the board to execute these roles will determine how effectively the board governs the company. Ong and Wan (2008) classified board roles into four dimensions: (1) monitoring roles; (2) strategic roles; (3) service roles; and (4) resource dependency roles. But resource dependency role is itself strategic (see Zahra and Pearce, 1989; Maassen, 1999; Kakabadse and Kakabadse, 2001). These roles can be theoretically derived and the following table exemplifies:

Table 1: Board roles

The roles of the board		
Control role	**Service role**	**Strategic role**
• Maximise owners’ wealth • The board monitors managers’ activities to ensure that they are acting in the interest of owners • Selection and election of CEO, promotion and dismissal • Monitoring and evaluation of company’s performance • Ratification of major decisions • Reduction of agencies’ Costs	• Giving advice and supporting the management • Guiding managers to accomplish company’s objectives • Participation in strategy formulation and implementation	• Board is an important strategic mechanism in governing the company • Strategic decision-making: the board and top management are strategic partners in the strategic decision-making process – active perspective
Agency theory	**Stewardship Theory**	**Stakeholder Theory**

Source: *Developed from literature*

Thus central issue of the performance of board roles as indicated in Figure 1 is how to ensure accountability of senior managers to their stakeholders while simultaneously providing executives with the autonomy and incentives needed for wealth producing strategies (Epps and Ismail, 2009). A number of studies on the structural variables of the board have predominated literature, but as we show below, the direct relationship with firm performance has been inconclusive, perhaps because of their potential to equate performance of the firm with performance of the board without any assessment of whether the board is performing its roles for which it was hired. Borrowing from the theories identified in this study, we show that attention should shift to board role performance from the insistence on structural variables of the board. Board structure studies like those of Lipton and Lorsch (1992) and Jensen (1993) observed that when firm boards expand beyond seven or eight people, they are less likely to function effectively as a curb on management overtime. While the separation of the roles of Chief Executive Officer (CEO) from chairperson is a key monitoring mechanism (Abidin et al. 2009), Dalton and Dalton (2011) stated that there is no evidence of substantive, systematic relationships between corporate financial performance and board leadership structure. As regards the composition of the board Bhagat and Black (1999) argue that there is no empirical support for proposals that firms should have "supermajority-independent boards" with only one or two inside directors. This means, within literature (e.g. Huse 2005; Roberts et al. 2005), individual director contribution is basically about creating roles that a board needs to perform (Petrovic, 2008).

While the management bears the responsibility for the development of new strategy, the boards' advisory role enables their indirect influence over the strategic decision-making process (Nicholson and Newton, 2010). Therefore to concentrate on board role performance as opposed to board structures, we will first state the following hypothesis:

> $\mathbf{H_2}$: *A relationship exists between board role performance factor structure of observed variables and the underlying latent variables of Control, Service, and Strategic roles in service sector firms.*

According to Lee, Phan and Yoshikawa (2009), an individual who possesses more human capital has more relevant knowledge and experiences necessary to be productive. Performing the role of a board member often involves performing non-repetitive tasks that are inherently ambiguous and complex. Thus the board may rarely have all the required expertise necessary for the undertakings but might be dependent upon the collective expertise of others. These others might have to be managers and key employees in an organisation. This is why probably Townsend (2007) recommends that management must candidly brief the board on organization and leadership capabilities required to implement strategies. In the context of this study, these organisation and leadership capabilities are the human capital. These capabilities must be supportive of the board, otherwise the board will not be able to have its strategies implemented thereby underperforming their role of service provision and others. In a study by Demirbas and Yukhanaev (2011), respondents were in favour of employee representatives on the board of directors and such a participation of stakeholders in the governance of a company was focused on consultation. The authors argued that such participation might not only improve employees' rights in Russia, but also bring a powerful means of monitoring to Russian corporate governance system. According to Wilson (1988), employee representation on the board might bring valuable first-hand operational knowledge to corporate board decision-making; provide a powerful means of monitoring; and thus reduce agency costs within the firm. These findings might also imply that the board needs a valuable human capital in organisations from whom to draw resources necessary for the performance of its tasks and also provide support for its role-performance. Indeed, for instance, the existence of internal audit (a management function) and its importance for the effective functioning of the companies (Demirbas and Yukhanaev, 2011), cannot be underestimated. The independence of the board and board role performance depend on the success of internal audit and so without a well-functioning internal audit it might be perfunctory that the audit committee of the board functions improperly. Moreover, the board might want entrepreneurial employees in organizations. Entrepreneurship in this case is the practice of developing a new venture within an existing organisation, to exploit a new opportunity and create economic value (Pinchot 1985). There is evidence that entrepreneurship helps managers to renew and revitalize their businesses, to innovate, and to enhance their overall business performance (Kuratko et. al. 1990; Antoncic and Hisrich 1990) and so the performance of the board by ensuring that a better return to shareholders is realized. And this is likely to be the case for developing countries whose company owners are not highly dispersed as those in developed nations (Abeysekera, 2007).

Consequently, relationships between employees and the firm in developing economies are far more important than in developed countries (Abeysekera, 2007). Abeysekera's (2007) study of the Sri Lankan case contributes to an understanding of the "entity" view of the firm, which argues that the relationships between employees and the firm are the most important factor in retaining employees. When applied to CSR under a resource-based view, Abeysekera's (2007) study illustrates the potential of the RBV framework as an analytical tool for studying how CSR and corporate performance are interrelated through their mutual connection to human capital resources consistent with the observation of Russo and Fouts (1997).We therefore apply this view together with, the "agency" view of the firm, which is an organisational theory that assumes that there exists a certain, narrowly defined kind of relationship between investors and managers. This understanding is based on the implicit assumption that the firm is a bundle of assets delegated by owners to managers who are charged with the task of managing these assets (Blair, 1999). Within this framework, the term "agency" according to Abeysekera, (2007) refers to the delegation of decision-making rights, which are normally associated with the investors of the firm, to managers. These delegated rights include the right to control labour as a means of economising the overall running of the firm (Armstrong, 1991). The entity view points out that modern management is increasingly interested in addressing the complex role of human input into the life of the firm, and is increasingly cognizant of the fact that human capital cannot be treated as something separate from corporate governance (Blair, 1999). Our understanding of this is that human capital cannot be overlooked when it comes to board role performance.

Thus consistent with the above discourse the importance of human capital residing in organizations and board role performance can be explained by stakeholder theory, agency theory, upper echelons theory and resource based view. The importance of human capital to board role performance for instance, can be discerned from a CSR model that advises companies to seek the maximum profits while obeying a moral minimum. Indeed Berle and Means's (1932, p. xii) original preface lamented:

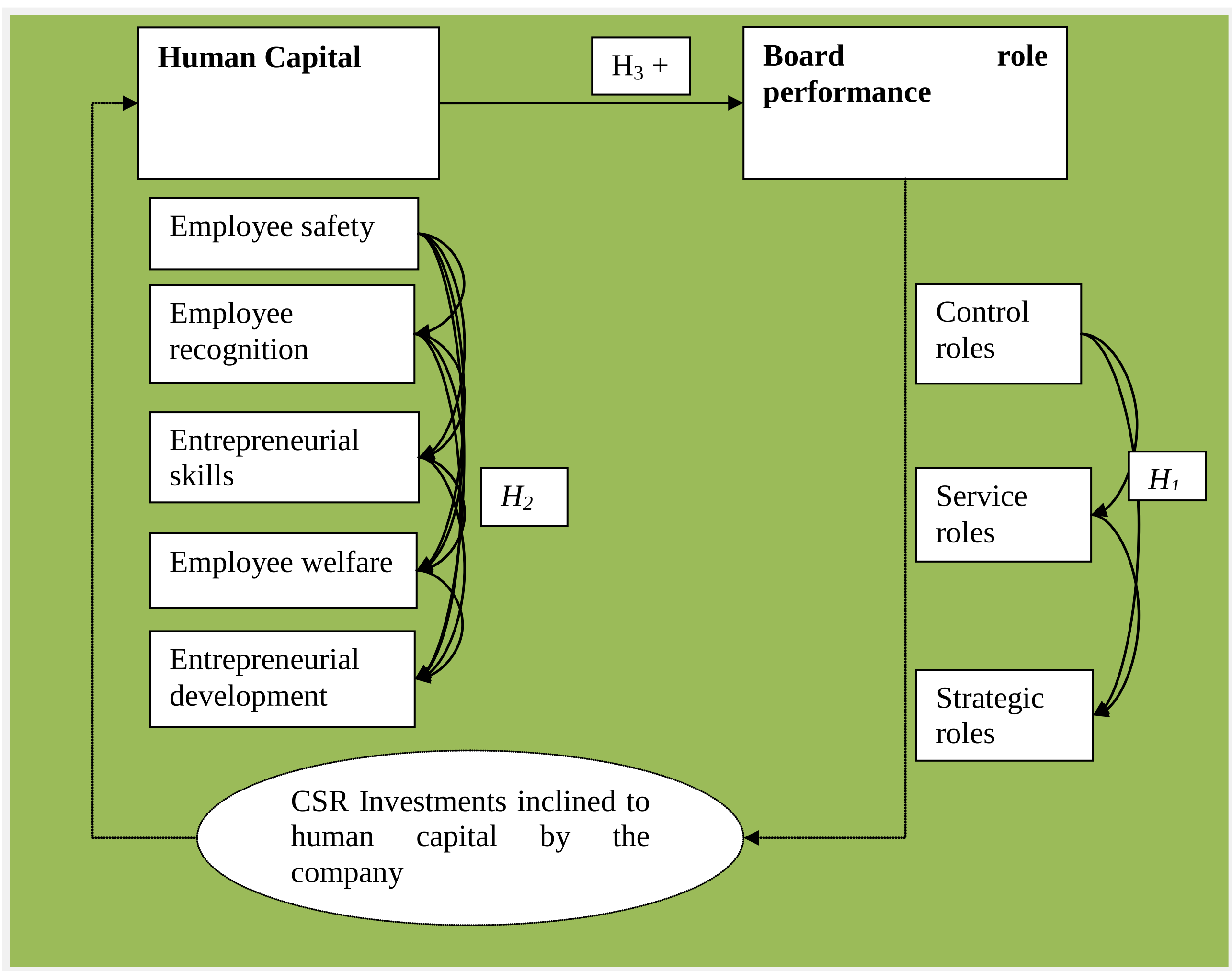
> "Accepting the institution of the large corporation (as we must), and studying it as a human institution, we have to consider the effect on property, the effect on workers, and the effect upon individuals who consume or use the goods or services which the corporation produces or renders".

This concept of the corporation is viewed to have ''placed the community in a position to demand that the modern corporation serve not alone the owners or the control but all society'' (Berle and Means, 1932, p. 312). Therefore, the decisions made by the board of directors must be made partly in consideration of their effect on workers (human capital). This idea is effectively today's stakeholder theory and thus in responding to stakeholder expectations of CSR, (*the board and*) the chief executive sets the tone and priorities for the firm's actions (Sirsly, 2009) – emphasis is ours. Heald (1970) summarized the importance of CSR 43 years ago: There is a justifiable corporate reason for its maintaining a lively interest in social welfare because it cannot hope to thrive if it is surrounded by degeneracy and squalor; its corporate existence will avail it nothing if its employees should decay. This may imply that investments in CSR may help firms develop new competencies, resources, and capabilities, which are partly manifested in a firm's human resources (Barney, 1991; Russo and Fouts, 1997; Wernerfelt, 1984). When CSR is pre-emptive (Hart, 1995) and a firm's environment is dynamic or complex, this may help directors pursue CSR policies that build managerial competencies because preventive efforts necessitate significant employee involvement, organization-wide coordination, and a forward-thinking managerial style (Shrivastava, 1995). Thus, CSR can help management develop better scanning skills, processes, and information systems, which increase the organization's preparedness for external changes, turbulence, and crises (Russo and Fouts, 1997). These competencies (human capital), which are acquired internally through the CSR process, would then lead to more efficient utilization of resources (Majumdar and Marcus, 2001). We argue that these are among the necessary conditions for the board to perform its roles of control, service and strategic roles mentioned earlier. Given the foregoing discourse, the following main hypothesis will be stated:

H_3: *There is a positive and significant association between human capital in service sector firms and board role performance.*

Figure 1 below shows the tentative conceptual and theoretical model that guided the study. In the model we make an assertion that there is a relationship between the factor structure of observed variables of employee safety, employee recognition, entrepreneurial skills, employee welfare and entrepreneurial development with the latent variable, human capital (H_2). Similarly, we make an assertion that there is a relationship between the factor structure of observed variables of control roles, service roles and strategic roles with the latent variable, board role performance (H_1). Appropriate human capital is determined by prior CSR investment decisions targeting it and this human capital is predicted to influence positive variances in board role performance (H_3). So the model advances the argument that board role performance is affected by prior decisions: to invest in CSR activities targeting employees that augment firm characteristics such as the existence of appropriate human capital for the very performance of its roles.

Figure 1:Conceptual and theoretical model



Methodology

Sample and characteristics

The study population consists of 6,534 formal service firms in Kampala region (Uganda Bureau of Statistics – Uganda Business Register 2006/07).We generated a sample of 377 service firms for this study using Yamane's (1973) sample selection approach. One hundred twenty eight (128) questionnaires were received from respondent firms indicating a response rate of 34%. For the unit of analysis, trade and other business services were 64 (or about 50%), hotels and restaurants were 17 (or about 13%), transport storage, posts and telecommunications were 21 (or about 16%) and financial services were 26 (or about 20%). For the unit of enquiry, the male respondents were 97 (about 76%) and the female respondents were 31 (or about 24%). About 60% of the respondents had post graduate education; meaning they were able to comprehend the questions asked in the questionnaire. It also implies that the managers and directors of service sector organizations in Uganda are fairly educated. More than half of the respondents were above 36 years of age which corroborates the qualification that would normally have been acquired in Uganda by such an age bracket. Out of 128 respondents, ninety three (93) were managers (or about 73%) and thirty five (35) were directors (or about 27%). This indicates a known difficulty in obtaining directors to fill questionnaires.

Measures

Board (role) performance We identify board's performance of its tasks consistent with the works of Heuvel, Gils and Voordeckers (2006); Murphy and Mclntyre, (2007); Petrovic, 2008 and Huse, (2005) on likert scale of 1-5 designed to measure the opinion or attitude of a respondent (Burns & Grove, 2007). As an example Murphy and Mclntyre, (2007) have this say:

> "Boards can also be judged by their ability to scan the internal and external operating environments for opportunities and threats. The ability to act as an external source of knowledge may be bolstered by the network of contacts that the board can access. Directors usually have a number of contacts with experience and expertise on particular issues that may be relevant to the challenges being faced by the firm. Directors may be able to provide more impartial advice on the person-job fit of proposed executives. At the very least, BOD may be able to act as a ''sounding board'' for why a particular individual is being considered for an executive position." (pp. 218-219)

Similarly, Heuvel, *et al*. (2006), informs our board role performance measurements because most of the service firms in Uganda are small and medium and sometimes family businesses. Therefore, in addition to agency, resource dependency, stakeholder and stewardship theories, from which we identified roles of boards: the service role, the control role and the strategic role, the questions were designed to capture the performance of these roles and were anchored on 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). For the reliability and data reduction, see next paragraph.

Human capital: This study utilised the measurements of human capital (a subset of intellectual capital) as developed by Abeysekera (2007). We did this because these measurements are consistent with CSR values regarding human capital. An intellectual capital item is defined as an intellectual capital attribute, thus the existence of one or more attributes gives rise to an intellectual capital sub-category. The intellectual capital items in the human capital category were interpreted and clustered into five sub-categories arising from the principle component analysis and confirmatory factor analysis and the reliability statistics for these categories are presented in appendix. In the measurement models, certain factors are dropped because of measurement variance

Statistical Modelling

To estimate the model, we employed structural equation modelling (SEM). SEM addresses the issue of measurement error, and simultaneously estimates a system of structural equations. SEM is a comprehensive statistical approach to testing hypotheses about relations among observed and latent variables (Hoyle, 1995). According to Rigdon, (1998) it is also a methodology for representing, estimating, and testing a theoretical network of (mostly) linear relations between variables. MacCallum and Austin (2000) also suggest that SEM tests hypothesized patterns of directional and non-directional relationships among a set of observed (measured) and unobserved (latent) variables. SEM therefore helps in understanding the patterns of correlational/covariance among a set of variables and according to Kline (2011) explains as much variance as possible with the model specified. Therefore, in order to account for variation and covariation of human capital and board role performance, the present study uses SEM with AMOS. We used the estimation procedure in AMOS 18 (Arbucle, 2009) to construct a structural equations model. The measurement and structural models are estimated sequentially to reduce interpretational confounding and to limit complexity (Anderson and Gerbing, 1988). Missing values were not an issue as only complete questionnaires for 128 respondents were used. The overall fit of our models were tested using the following criteria of the goodness-of-fit indices: The Chi-square test which is an absolute test of model fit requires that the model is rejected if the p-value is $< .05$; Root Mean Square Error of Approximation (RMSEA) should be $< .06$ and Tucker-Lewis Index (TLI) values of .95 or higher (Hu and Bentler, 1999). Others like Kim (2007) and Yang, (2006) recommend Goodness of Fit (GFI) $>.90$, Adjusted Goodness of Fit Index (AGFI) $> .85$, TLI $> .95$, CFI $> .90$, RMSEA $< .08$ as acceptable goodness-of-fit indices. We followed those guidelines in fitting our models.

We used self-reported data and a questionnaire. Using a post-hoc procedure we attempted to detect whether common methods variance was present. The influence of Common Methods Variance (CMV) which has been a pervasively cited concern in organizational research (Podsakoff, MacKenzie, Lee, and Podsakoff, 2003) affects questionnaire-based studies in social sciences (Gorrell. *et al.,* 2011).We performed factor analysis otherwise known as exploratory factor analysis or principle component analysis (factors with coefficients below .5 were suppressed) to detect whether a single factor would emerge or one 'general' factor would account for the majority of the covariance in the independent variable and criterion variables (Podsakoff and Organ, 1986). This has come to be known as Harman' one factor test (Sejjaaka, 2010). Results (not reported) indicated that this study does not materially have the problem of CMV. We also tested for discriminant validity which is the degree to which factors that are supposed to measure a specific construct do not predict conceptually unrelated criteria (John and Benet-Martinez, 2000).To establish discriminant validity of our measures we, first of all, used a method proposed by Anderson and Gerbing (1988) who proposed that "discriminant validity can be assessed for two estimated constructs by constraining the estimated correlation parameter [...] between them to 1.0 and then performing a chi-square difference test(p.416)."Using this procedure we, in pairs, compared all constructs, in all of those cases the fit of the models (dramatically) worsened. Thus, we concluded that our measures are sufficiently different from each other and could be used separately. Secondly, we used Fornell and Larcker's approach to assess discriminant validity (Fornell and Larcker, 1981). In this approach the Average Variance Extracted (AVE) for each construct should be higher than the squared correlation between the construct and any of the other constructs (Fornell and Larcker,1981).AVE, which measures the proportion of variance captured by the construct in relation to measurement error for that construct, should exceed 0.5. According to Chen, et al., (2011), AVE = [sum (λ^2)]/[sum (λ^2) + sum ($1-\lambda^2$)] where λ is the standardized loadings. Further, convergent validity was performed using Bentler-Bonett normed fit index (NFI); a measurement model which shows strong convergent validity with a NFI value above .90 (Mark and Sockel, 2001). The results of this and other tests are presented in the following section. In all cases, we registered strong convergent validity. Moreover to ensure construct validity, a critical review of agency theory, resource-based view, stewardship theory, stakeholder theory, upper echelons and literature was performed. Basing on that review human capital and board role performance concepts, and item scales were developed (Saunders, et al. 2006).

We performed a normality test on our data. As Tabachnick and Fidell, (2007) maintain that normality of variables enhances the solution and because the numbers of factors were determined using statistical inference, multivariate normality was assumed. We assessed normality among single variables by skewness and kurtosis as suggested by Tabachnick and Fidell, (2007) because lack of symmetry and kurtosis are the two main ways a distribution deviates from normal (Norusis, 1994; Field, 2009). According to Field, (2009), the values of kurtosis and skewness should be zero in a normal distribution. Following this guideline some values in the predictor variable indicated significant kurtosis and skewness (after conversion to z-scores) at $p < .001$. More so as almost all scores indicated a negative skew, we used reverse score transformations to reverse the scores by subtracting each score from the highest score + 1 for all the variables and thereafter log transformation ($\log(X_i)$) was used to approximate to normality as recommended by Field (2009). A reassessment of normality after the transformation shown in table II indicates an acceptable normality.

Table II: Assessment of normality

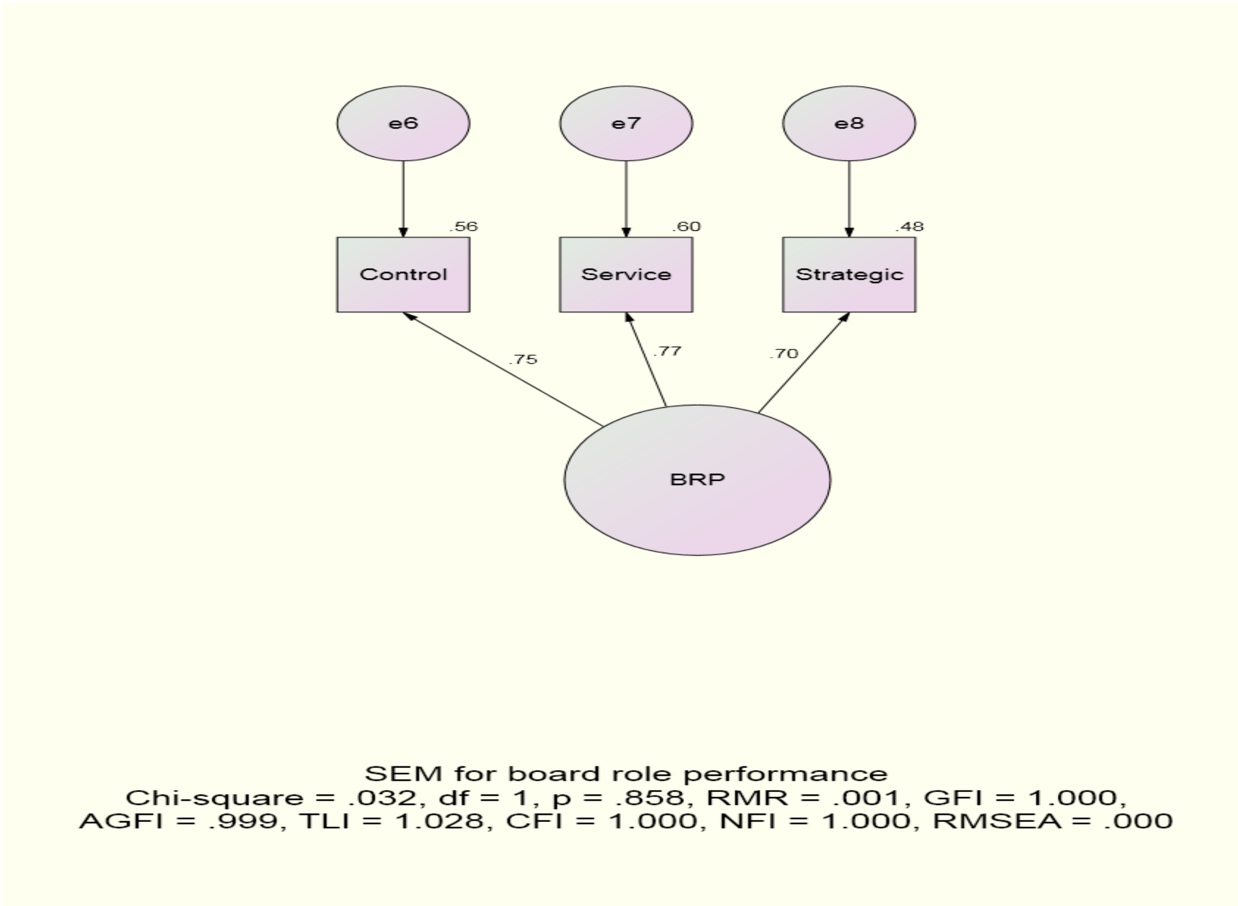
Variable	min	max	skew	c.r.	kurtosis	c.r.
Entrepreneurial Development	.000	1.442	-.047	-.216	-.110	-.253
Employee Relations	.000	1.535	.281	1.299	.184	.425
Employee Welfare	.000	1.609	-.261	-1.207	-.071	-.164
Entrepreneurial Skills	.000	1.431	-.391	-1.807	.346	.799
Employee Safety	.000	1.609	.027	.123	-.300	-.692
Strategic roles	.000	1.546	.063	.291	.359	.828
Service roles	.000	1.546	-.202	-.934	.398	.919
Control roles	.000	1.609	.168	.775	.082	.189
Multivariate					11.456	5.123

Results and discussion

(H_1). The results of our analysis testing the $\mathbf{H_1}$ which states that: a relationship exists between board role performance factor structure of observed variables and the underlying latent variables of control, service, and strategic roles in service sector firms can be discerned from figure 2. The board role performance model suggested in this study showed an NFI of 1.000, which indicates strong convergent validity and Figure 2 indicates the model in which we obtained 6 distinct sample moments, 5 distinct parameters estimated and 1 degree of freedom (6-5). The chi-square value of .032is non-significant at the .05 level: its p-value is .858 suggesting that the model fits the data acceptably in our population. More evidence is provided by the RMSEA = .000 which is further supported by the TLI result of 1.028. Additionally, GFI = 1.000 and AGFI = .999 are larger than .9 which reflects a good fit. Accordingly board role performance structure is confirmed for the case of service firms. The Hoelter (1983) index indicates that 26,243 is the largest sample size for which one could accept at the .01 level the hypothesis that the default model is correct. And so if our sample size were any bigger than 26,243we would reject our model at the .01 level.

The unstandardized loadings in table III appear along with a critical ratio, and p-values. The critical ratio and p-values were used to ascertain statistical significance. A critical ratio - the parameter estimate divided by an estimate of its standard error - greater than 1.96 or a p-value smaller than .05 signifies significance. Three asterisks (***) indicate that the p-value is smaller than .001. In this case all of the unconstrained estimates are significant. The unstandardized weights are highly sensitive to model constraints, whereas the standardized regression weights provide more intuitive information about the strength of loadings. All the other indicators have strong standardized loadings. The squared multiple correlations provide information about how much variance the factors account for in the observed variables. The R^2 statistics range from moderate to strong regressions. The convergent validity which refers to agreement among the multiple items attempting to measure the same construct (Kim, 2009; Koufteros, 1999) can be assessed by examining factor loadings. The observed factor loadings compared with their standard errors reveal evidence of an association between board role performance and its respective constructs of control roles, services roles and strategic roles. As shown in table III, the observed factor loadings of all the items are statistically significant at the .01 alpha levels. As for item reliability, the multiple regression which is the same as R^2, can be used (Koufteros, 1999). The squared multiple correlations of the items are listed in table III. In general, an R^2 value above 0.5 is considered an acceptable reliability for each item (Bollen, 1989). Except for control, the other items turned out to be well over the criterion of .05 and thus each item was reliable as a measurement item. In addition, estimates of construct reliability were calculated using SPSS. Construct reliability refers to the degree to which the measurement of the set of latent items of a construct is consistent (Lu *et al*., 2007). For the measurement model, the proposed cut-off value of construct reliability should be 0.7 or higher to indicate adequate construct reliability (Kim, 2007). The reliability of board role performance was .818, .885 and .898 for control, service and strategic respectively. These results confirm construct reliability for the criterion variable in this study. Thus all the three items significantly explained board role performance, verifying the posited relationships for board role performance factor structure of observed variables and the underlying latent variables of control, service, and strategic roles. Based on this information H_1 is substantiated. Our results provide further support for Ong and Wan (2008), Nicholson and Kiel (2004). According to these authors, board role performance is the ability of the board to perform board roles. For instance for control purposes, the board of directors should ensure that no employee of group of employees should be in a position both to perpetrate and to conceal errors or fraud in the normal course of their duties. This can ably be handled by the audit committee of the board with the help of a well-functioning internal audit (Demirbas and Yukhanaev, 2011)

Figure 2: The relationship between board role performance and its latent variables



Note: *BRP = board role performance*

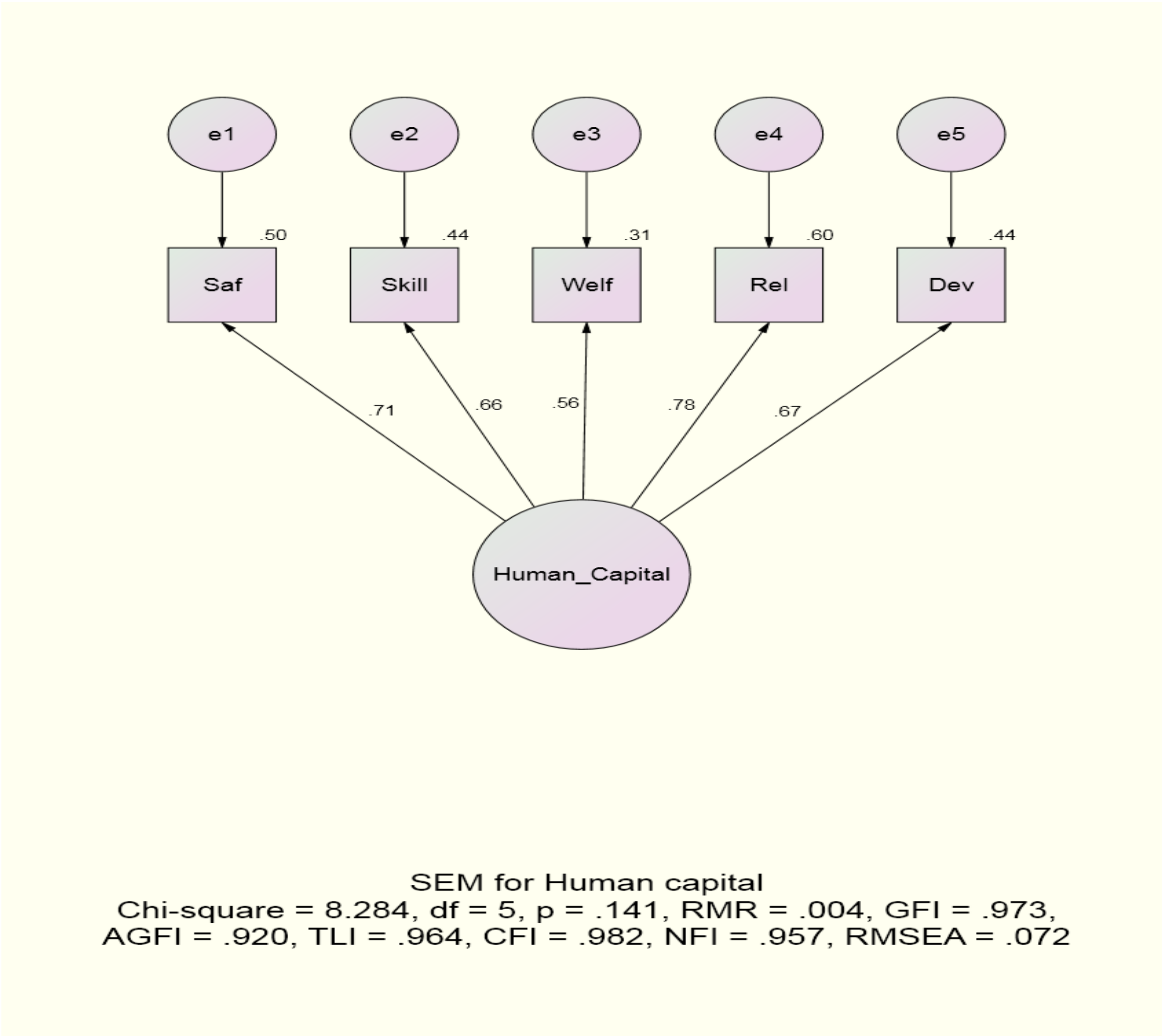
Table III: Path coefficients for board role performance

Path			**Unstandardised Path coeff.**	**C.R.**	**Standardised Path coeff.**	R^2	***AVE***	***p***
Control	<---	BRP	1.000		.749	.485	.55	***
Service	<---	BRP	1.000		.773	.598		***
Strategic	<---	BRP	.884	7.365	.696	.561		***

($\mathbf{H_2}$). The results of our analysis testing the $\mathbf{H_2}$ which states that: a relationship exists between human capital factor structure of observed variables and the underlying latent variables of employee safety, entrepreneurial skills, employee welfare, employee recognition and entrepreneurial development in service sector firms; can be discerned from figure 3. The human capital model suggested in this study showed an NFI of .957, again indicating strong convergent validity and Figure 3indicates the model in which we obtained 15 distinct sample moments, 10 distinct parameters estimated and 5 degrees of freedom (15-10). The chi-square value of 8.284 is non-significant at the .05 level: its p-value is .141 suggesting that the model fits the data acceptably in our population. More evidence is provided by the RMSEA = .072 which is further supported by the TLI result of .964. Additionally, GFI = .973 and AGFI = .920 are larger than .9 which reflects a good fit. Accordingly human capital structure is confirmed for the case of service firms. The Hoelter (1983) index indicates that 382 is the largest sample size for which one could accept at the .01 level the hypothesis that the default model is correct. In other words, if our sample size were any bigger than 382 we would reject our model at the .01 level.

The unstandardized loadings in table IV appear along with a critical ratio, and p-values. All the critical ratios are greater than 1.96 and all p-values are smaller than .05 signifying significance. Table IV indicates that all of the unconstrained estimates are significant and all the indicators have higher standardized loadings. As for convergent validity, the observed factor loadings of all the items are statistically significant at the .01 alpha levels, corroborating the NFI. We again use R^2 to gauge reliability. The squared multiple correlations of the items are listed in table 4. Except for entrepreneurial and skills and also for development, the other items turned out to be below the criterion of .05 although not very far from the mark. Thus each item was conservatively considered reliable as a measurement item for human capital. In addition, estimates of construct reliability were calculated using SPSS. The construct reliability of human capital was .907, .826, .847, .819 and .795 for employee safety, employee recognition, entrepreaneurial skills, employee welfare and entrepreneurial development respectively. These results confirm construct reliability for the predictor variable in this study. Thus all the five items significantly explained human capital, verifying the posited relationships for human capital factor structure of observed variables and the underlying latent variables of employee safety, employee recognition, entrepreneurial skills, employee welfare and entrepreneurial development. Based on this information H_2 is accepted. The results of this study do not differ materially from Abeysekera's (2007) identification of the constituents of human capital. Thus we confirm that the appropriate human capital in organizations is addressing issues of welfare, entrepreneurship, employee safety and recognition. The results are also not at variance with Blaug's (1976) understanding of human capital of welfare and skills' acquisition and this confirms that human capital theory is indeed rooted in the concept that individuals possess knowledge, skills, or experiences (Becker, 1964).This together with the employers' need to improve work conditions (employee safety) or work environment (Werhane, 2008) appears to suggest that indeed CSR correlates with organizational competences, learning and efficiency (Nkundabanyanga and Okwee, 2011) and provides further evidence for the beliefs of Barney (1991) and Wernerfelt (1984) that CSR may help firms to develop new competences, resources and capability. In light of this, this study underlies the importance of investments in employee entrepreneurial skills that should unlock their potentialities.

Figure 3: The relationship between human capital and its latent variables.



Notes:*Saf = Employee Safety; Skill = Entrapreneurial Skills; Welf = Employee Welfare; Rel = Employee Recognition; Dev = Entrapreneurial Development*

Table IV: Path coefficients for human capital

Path			Unstandardised Path coeff.	C.R.	Standardised Path coeff.	R^2	*p*
Employee Safety	<---	Capital	1.000		.709	.445	***
Entrepreneurial Skills	<---	Capital	.773	6.400	.660	.602	***
Employee Welfare	<---	Capital	.803	5.507	.558	.312	***
Employee Relations	<---	Capital	.912	7.202	.776	.436	***
Entrepreneurial Development	<---	Capital	.796	6.457	.667	.503	***

(H_3). The results of our analysis testing the $\mathbf{H_3}$ which states that: There is a positive and significant association between human capital in service sector firms and board role performance; can be discerned from Figure 4. The model suggested in this study showed an NFI of .971 which also reveals strong convergent validity and Figure 3 indicates the model in which we obtained 36 distinct sample moments, 19 distinct parameters estimated and 17 degrees of freedom (36-17). The chi-square value of 11.108 is non-significant at the .05 level: its p-value is .851 suggesting that the model fits the data acceptably in our population. More evidence is provided by the RMSEA = .000 which is further supported by the TLI result of 1.027. Additionally, GFI = .980 and AGFI = .958 are larger than .9 which reflects a good fit. As expected, the effect of human capital on board role performance ($\beta = .860$, $p < .001$) is significant. In other words, the total (direct and indirect) effect of human capital on board role performance is .860. That is, due to both direct (unmediated) and indirect (mediated) effects of human capital on board role performance, when human capital goes up by 1, board role performance goes up by 0.86. Similarly, when human capital goes up by 1 standard deviation, board role performance goes up by 0.831 standard deviations. The model in Figure 4 which is corroborated by table V indicates that human capital is a significant predictor of board role performance and explains 69.1 percent of its variance. In other words, the error variance of board role performance is approximately 30.9 percent of the variance of board role performance itself.

The findings are consistent with the notion that improvement in a service firm's human capital will improve board's performance of its roles. However based on regression coefficients, employee recognition appeared to be critical in the human capital equation followed by employee safety. This is followed by entrepreneurial development and entrepreneurial skills which fair almost equally. The welfare of employees appears to perform satisfactorily in the model. This suggests, for board role performance to be evidenced in service organizations in Uganda, all the five hypothesized measures of human capital must be appropriate. The results which are consistent with the CSR ideals assure service firms' owners and other stakeholders that a well leveraged human capital in terms of the constructs hypothesized in this study should lead to better board role performance.

Drawing on upper echelons research, we have argued that effectiveness of board of directors reflect the values and cognitive bases of powerful actors like employees and managers in whom human capital resides. The link between human capital and board role performance has been detected in this study. Essentially, an improvement in the quality of human capital explains positive variances in board role performance. While agency theory focuses on separation of decision control from decision management, this study implies that decision management is an important indicator of board role performance usually mirrored in achievement of objectives (firm performance). Similarly, while the strategic role of the board is to guide firm mission, develop, implement and monitor firm strategy, and resource allocation, execution of such a role depends on an appropriate base of human capital residing in managers and other key employees in an organisation. This study therefore partly accounts for endogeneity in the study of boards, a methodological concern previously cited in literature (see, Bascle, 2008; Hamilton & Nickerson, 2003). Empirical associations between board role performance and organisational performance would not be useful unless we are able to grasp the causal mechanisms the lie behind empirical associations (Hambrick, 2007). The results of this study reveal that board role performance is affected by prior decisions, for example to invest in CSR activities targeting employees that augment firm characteristics such as the existence of appropriate human capital. Our results are consistent with some of the prior studies. For example, Adams, Hermalin and Weisbach (2010) found that the issue in board research is that board composition is not exogenously determined but rather is affected by prior decisions and firm characteristics that in turn affect board decisions. Similarly, Kor and Misangyi (2008) find that entrepreneurial firms going public in technology-intensive industries seek out directors with industry-specific experience when current executives lack such experience and An and Jin (2004) and Chhaochharia and Grinstein (2007) note that boards try to appoint directors with complementary or necessary skills as need arises. So, board role performance is indeed complimented by skills already available in the firm.

The results in the present study have implications for developing human capital in organisations and methodological implications. Most companies in developing nations have relied on normative guidelines in prescribing what boards need to enhance performance, probably explaining why some boards have not been successful in their role performance. Thus this study may serve as an exemplar in further developing specific empirical measures that reflect developing country contexts or environments. In evaluation studies, measurement development can be part of fundamental research that provides a foundation from which to facilitate evaluation practices (Joo and Lee, 2011). In the context of this study, we applied and modified authoritative models such as those of Heuvel, *et al.* (2006), Abeysekera, (2007), Murphy and Mclntyre, (2007) together with the application of informing theories of agency (Berleamd Means, 1932), resource dependency (Pfeffer and Salancik, 1978), resource-based (Wernerfelt, 1984), stakeholder (Freeman, 1984), upper echelons and Stewardship (Davis et al., 1997), in order to build the basis of measurement instruments. To validate the instrument, we followed the instrument development methodology from psychometrics, which emphasises the examination of an instrument's reliability and validity constructs. In psychometrics, a series of statistical analyses, particularly SEM, are imperative in the determination of whether the identified instrument is properly designed to measure what it intends to measure and hence produce reliable results. So, based on psychometric studies, this study examined not only construct validity, but also internal reliability, item reliability and construct validity.

Figure 4: The relationship between human capital and board role performance

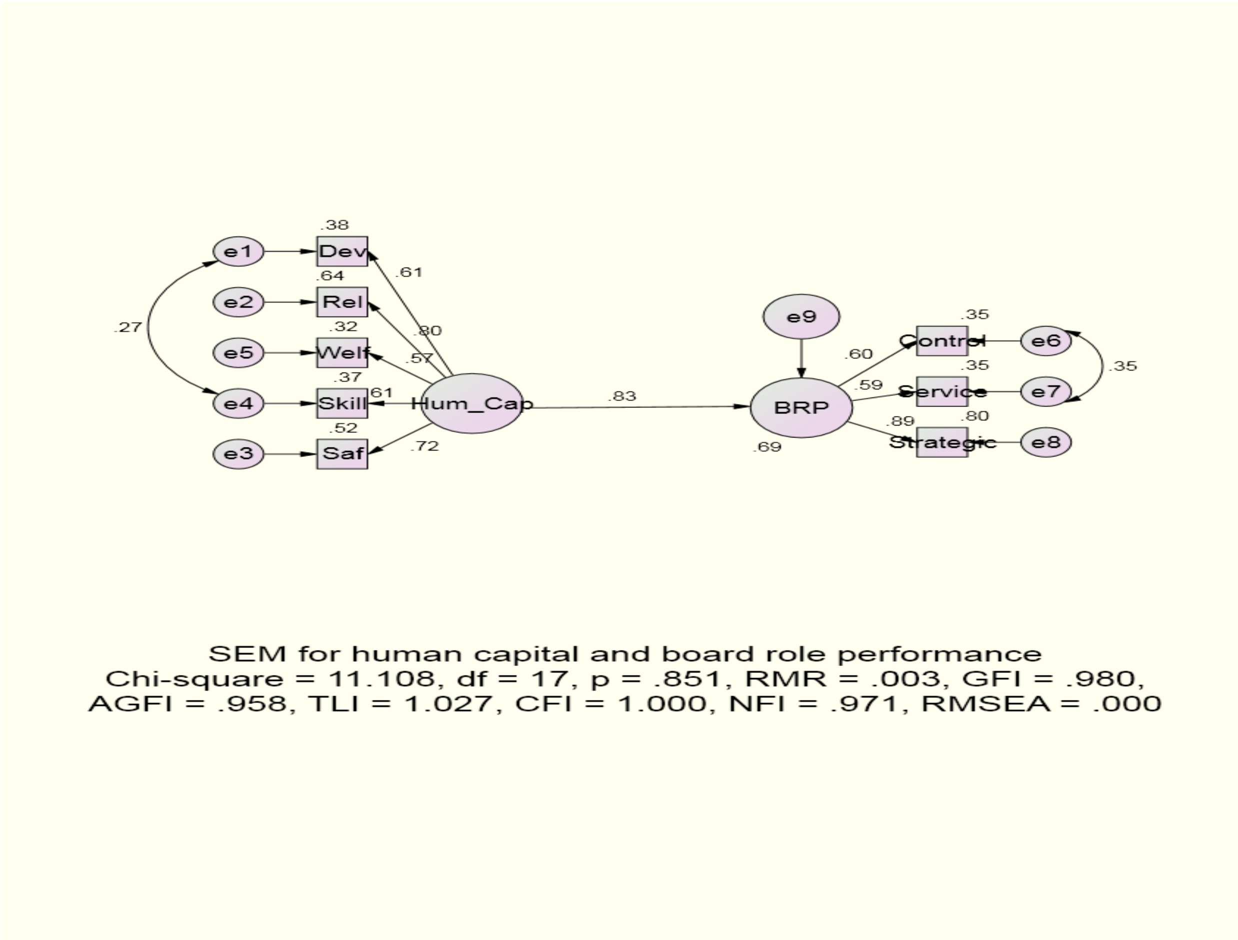


Table V: Regression weights and squared multiple correlations

Un standardized Regression Weights								**Standardized Regression Weights**	**Squared Multiple Correlations**	
			Estimate	S.E.	C.R.	P	Label	Estimate		Estimate
BRP	<---	Hum_Cap	.860	.182	4.735	***	par_9	.831	BRP	.691
Saf	<---	Hum_Cap	1.434	.232	6.191	***	par_1	.723	Dev	.376
Skill	<---	Hum_Cap	1.000					.607	Rel	.642
Welf	<---	Hum_Cap	1.150	.221	5.210	***	par_2	.568	Strategic	.798
Control	<---	BRP	1.000					.596	Service	.350
Service	<---	BRP	.954	.143	6.680	***	par_3	.591	Control	.355
Strategic	<---	BRP	1.420	.231	6.153	***	par_4	.893	Welf	.323
Rel	<---	Hum_Cap	1.325	.202	6.562	***	par_5	.801	Skill	.369
Dev	<---	Hum_Cap	1.030	.158	6.526	***	par_6	.613	Saf	.523

Conclusions and implications

Based on the review of the literature and related theories pertaining to human capital and board role performance, it was identified that there was gap in the literature as most studies on factors influencing board role performance largely fail to consider the role that the human capital residing in people in the service firms plays in board's performance of its tasks. Moreover some studies are focused on the human capital of the board without particular regard to the human capital in the organisation other than that of the board and these have typically employed the resource dependency perspective as opposed to RBV, stakeholder and upper echelons theories. So, the objective of this study was to establish the extent to which human capital affect board role performance in service sector firms drawing on a multi-theoretic approach. We find that human capital is an important predictor of board role performance. The results of this study also reveal that board role performance is affected by prior decisions, for example to invest in CSR activities targeting employees that augment firm characteristics like existence of appropriate human capital. Our results are important because they provide evidence for the first time, as far as we are aware, of the relationship between human capital developed through CSR ideals and board role performance. This is the first time that such a relationship has been tested using responses from company directors as well as managers.

This study has resulted in important academic and managerial contributions. This study contributes to academic research by producing empirical evidence to support theories relevant to human capital and board role performance. This research confirms that appropriate human capital, which can be leveraged through CSR ideals of employee safety, recognition, welfare, training in entrepreneurship; consistent with the stakeholder theory, can facilitate the board in the performance of its roles. In the developing-country context, organizations' boards could use these findings as a guideline, that is, what to focus on in the context of human capital development in organisations, because doing so improves their own role-performance. Indeed the findings of this research have important policy implications for board committees such as welfare and audit. The current study presents boards of directors with the ability to classify strategies, evaluation guidelines and measures requirements aimed at improving human capital for the benefit of the board. This research can be useful to developing nations and service firms with similar cultural, economic and political environments to that of Uganda.

There are number of limitations with our paper. Although we self-administered the questionnaire, we did not undertake follow-up interviews which would have informed us of the reasons why the respondents held certain views. The study was also limited to service firms in Uganda and it is possible that our results are only applicable to Ugandan service sector firms. Finally, our study was carried out in one particular year rather than a number of years. It is possible that the views held by respondents may change over the years. Despite these limitations, we believe that our study makes important contributions in informing board decisions regarding their roles and how to bolster the validity of human capital to board role performance. Future research may wish to extend the research by examining the possibility of board role performance mediating the relationship between human capital and organisational performance. It might also be important for future studies to carry out such studies over a number of years too and our study carries with it replicative capability. We are also aware that cross-sectional data do not allow for testing of the process aspect of the models. However, they provide evidence that the models can stand empirical tests. Additional research should examine the process aspects of human capital and board role performance.

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Appendix

Reliability for board role performance

Cronbach's Alpha	N	N of Items
.818	128	5

Reliability Statistics for control	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Our board of directors encourages the idea that no employee or group of employees should be in a position both to perpetrate and to conceal errors or fraud in the normal course of their duties.	2.7191	1.684	.584	.792
Our board of directors adapts performance measures to monitor the implementation of strategy, policies and plans, and the legal/fiduciary obligations affecting business and the board	2.6406	1.800	.642	.773
Our board of Directors monitor the CEO	2.7143	1.712	.601	.785
Our board of directors establishes mutually agreed management performance criteria and business plans	2.6978	1.816	.625	.778
Our board of directors uses mutually agreed management performance criteria and business plans as the basis for monitoring and evaluating management's performance	2.6874	1.805	.608	.782

Cronbach's Alpha	N	No. of Items
.885	128	10

Reliability Statistics for Service	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Our board of directors acts as a source of knowledge bolstered by the number of contacts this board accesses	6.3581	6.900	.676	.870
Our board of directors provide advice on new ways of identifying and developing talent in this organization	6.3660	7.036	.612	.875
The contacts of our board of directors always have the requisite experience and expertise on particular issues relevant to the challenges our organization faces	6.3629	7.047	.706	.869
Our organization is reputed because of our board of directors	6.2847	6.726	.671	.870
Our board of directors act as a ‘’sounding board” for why a particular individual is being considered for an executive position	6.2828	7.048	.600	.875
Our board of directors extend the organizations network contacts	6.4943	7.068	.628	.874
Our board of directors acts as a source of knowledge	6.4511	6.897	.596	.876
Our board of directors bring to this organization beneficial ideas obtained elsewhere	6.5534	7.043	.627	.874
Our board of directors help our organization acquire scarce resources like finances	6.4561	7.176	.493	.884
Our board of directors engage in activities that link our organization to others	6.5133	7.036	.598	.876

Cronbach's Alpha	N	N of Items
.898	128	12

Reliability Statistics for Strategic	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Our Board of directors harness cross-sector partnerships	7.6551	9.625	.637	.889
Our directors leverage cross-cultural perspectives	7.6015	9.832	.592	.891
Our directors facilitate cross generational collaboration	7.6009	9.656	.653	.888
Our Directors encourage development of everyone in this organization to think globally	7.6399	9.623	.584	.892
Our directors break down glass ceilings (e.g., encourage and promote women into senior management positions)	7.5716	9.635	.560	.893

Our board of directors evaluates present and future opportunities, threats and risks in the external environment, and current and future strengths, weaknesses and risks of the company	7.6747	9.436	.726	.885
Our board of directors determines business unit strategies and plans designed to implement the corporate strategy	7.6334	9.674	.558	.893
Our board of directors ensures that the company's organization structure and capability are appropriate for implementing its chosen strategies	7.7174	9.456	.666	.888
Our board of directors reviews present and future opportunities, threats and risks in the external environment, and current and future strengths, weaknesses and risks of the company	7.7183	9.191	.772	.882
Our board of directors determines, supports, and enforces company policies	7.7044	9.656	.625	.890
Our board of directors determines financial and other strategic options	7.7435	9.881	.506	.896
Our board of directors reviews financial and other strategic options and selects those to be pursued, and decides the resources, contingency plans and means to support them	7.7196	9.923	.518	.895

Reliability for Human Capital

Cronbach's Alpha	N	N of Items
.907	128	9

Employee Safety	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Responsibility for safety and health follows the normal line of supervision through all levels in this organization.	5.8727	6.812	.740	.893
Managers in this organization ensure compliance using employee safety Plans	5.8898	6.590	.800	.888
In this organization, there is a detailed list of methods of procedures that are applied to Employee Safety Plans, encompassing things like personal protective equipment, manual handling, and other, more basic safety elements.	5.8476	6.865	.690	.896
All supervisors in this company are responsible for protecting their employees from occupational hazards	5.8988	7.038	.616	.901
Managers in this organization ensure correct health and safety plan implementation	5.9124	6.784	.651	.899
Potential risks to employees are identified and dealt with during the employee safety plans.	5.8983	6.690	.755	.891
This organization instigates comprehensive employee safety	5.8298	6.884	.653	.899
Every individual in this organization has a responsibility to accomplish her part of the safety program.	5.8723	7.086	.605	.902
Our firm invests in work health programs	5.7470	6.798	.647	.899

Cronbach's Alpha	N	N of Items
.826	128	6

Employee recognition	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
In this organization, employees get thanked for better performance	3.0946	2.388	.687	.779
Staff of this company interacts freely with anybody in the organization regardless of race	3.2674	2.583	.498	.818
In this organization employees are encouraged to succeed in life	3.1485	2.364	.695	.777
Human resources is our major corporate strategic asset	3.0099	2.605	.511	.815
In this organization employees are featured when they make spectacular contributions to the organization	3.0517	2.372	.645	.787
My organization attaches great importance to the stability of employees (duration level of employees and their overall satisfaction)	3.0368	2.522	.537	.810

Cronbach's Alpha	N	N of Items
.847	128	6

Entrepreneurial Skills	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
People in this organization communicate across technical boundaries as innovations often start at borders rather than within a set area of expertise	3.7698	2.164	.699	.807
People in this organization co-operate with other experts such as marketing, R&D, external suppliers, service providers, customers	3.8424	2.268	.688	.809
People in this organization have personal initiative	3.8063	2.598	.545	.837
People in this organization see opportunities that others have not seen	3.7116	2.340	.649	.817
People in this organization have high need for achievement	3.8610	2.337	.625	.822
People in this organization have a clear understanding of corporate politics and culture	3.7165	2.369	.570	.833

Cronbach's Alpha	N	N of Items
.819	128	4

Employee welfare	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
In this organization, there is always an upward review of salaries and welfare packages at intervals	2.5830	1.390	.662	.764
This organization has staff canteens or lunch subsidy; staff buses; children scholarships; car loans, housing allowances and wardrobe allowances	2.4092	1.374	.601	.792
This organization instigates comprehensive employee welfare	2.5575	1.319	.734	.730
This organization encourages socialization events, ceremonies, and corporate events such as the family day and foundation day	2.5605	1.373	.579	.803

Cronbach's Alpha	N	N of Items
.795	128	4

Entrepreneurial development	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
This organisation enables the skills development of intrapreneurs	2.5332	.883	.741	.676
This organization establishes frameworks to encourage intrapreneurial processes	2.5137	.955	.588	.752
The staff in company persist in new ideas and creative thought	2.5091	.913	.689	.702
We have employees currently employed to always come up with new innovations	2.5332	1.037	.430	.831