Relating Intellectual Capital and Performance via Organizational Ambidexterity: Evidence from Health Facilities in Uasin Gishu County, Kenya

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ABSTRACT

Health care sector is described as not only the foundation but also a key pillar for promoting country citizens' well-being and economic development. Hence, most devised policies and strategies nowadays largely relate to utilization of intangible as opposed to the traditional tangible resources. This aims at offering steadfast support to the health care sector in the current ever evolving operating environment. This study therefore sought to establish the moderating effect of organizational ambidexterity in the relationship between intellectual capital and performance of health facilities in Uasin Gishu, Kenya. Descriptive research anchored on both the public good and stewardship theory was carried out targeting 196 health facilities. Structured questionnaires were utilized in gathering data from 472 respondents given the 59 sampled health facilities. From the findings, it is evident that intellectual capital is an imperative constituent of performance. This is based on the positive connection between human capital (β = .247, p-v = .000<.05), structural capital (β = .172, p-v = .002<.05) and relational capital (β = .139, p-v = .001<.05) with performance. Furthermore, there exist a complimentary mediation effect of organizational ambidexterity in the relationship between intellectual capital and performance (β = .166, CI = .731, .526). The study's theory, practical and suggestions for future research are also described in details.

Keywords: Intellectual Capital; Organizational Ambidexterity; Performance; Health Care Sector

INTRODUCTION

Organizations in this 21st century are undeniably having diverse experiences given that there are many factors complicating their operations. The complexity and challenging environment are as a result of combination of many aspects relating to technological development and globalization among others. By extension, the environment nowadays has been therefore described as competitive (DeNisi, Hitt and Jackson, 2003), highly dynamic (Winnen and Wilms, 2014), uncertain and ambiguous (Mubarik, Naghavi and Mahmood, 2019). In order to circumnavigate the turbulence in the current world, firms are expected to formulate a new way of endurance as far as competitive advantage is concerned (DeNisi et al., 2003). Amid these up and downs, all forms of organizations solely aim at reaching greater performances (Ozgun, Tarim, Delen and Zaim, 2022). Unlike other firms, the healthcare sector is exceptional given the citizen's health shield mission and the management procedures (Vagnoni, 2017). Like other organizations, the health sector

of most countries has been hit hard lately. According to (Gastaldi, Appio, Corso and Pistorio, 2018), the sector's mission of healthcare provision has been handicapped due to inadequate resources following the sluggish economic progress. Moreover the sector's challenges range from inadequate financial resources (Garlatti, Massaro and Bruni, 2015) to emerging ones that touches on need of modern innovations for patients' care (Huang, Leone, Caporuscio and Kraus, 2021), increased citizens' expectations, rising population, both medical and technological advancements (Elg, Stenberg, Kammerlind, Tullberg and Olsson, 2011).

From the resource based view perspective, firms combine its tangible and intangible resources as to attain competitive advantage (Barney, 1991). Ideally, attention of most organizations nowadays is more on intangible than tangible resources (Mubarik et al., 2019). In the same breadth, DeNisi et al. (2003) echoes that knowledge based resources matter in today's world. The health care organizations comprises of personnel with both recognized and casual proficiency (Leal, Bessa, Loureiro, Nunes and Marques, 2019). Consequently, the health care organizations are described as 'knowledge-intensive' (Fiorani, Di Gerio, Rossi and Bosco, 2022; Pflugfelder, 2021) with the mandate of effectively managing resources allocated (Pirozzi and Ferulano, 2016). As one of the intangible assets, knowledge resource in these organizations creates value (Ikapel, 2016), promotes efficiency, progresses decision making (Alfiero, Brescia and Bert, 2021) and drives performance (Pflugfelder, 2021). From the knowledge resource aspect therefore, intellectual capital aspect comes into play. Intellectual capital is known to be a multifaceted process (Chen and Kuo, 2008) that integrates many factors in the organization besides other intangible assets and external aspects (Evans, Brown and Baker, 2015). Through intellectual capital which is basically a strategic asset (Khalique, Nassir Shaari, Isa and Ageel, 2011), unseen and immaterial resource (Ghaleb, Dominic, Alzoraiki, Mohamed, Naji and Ammar, 2022), an organization is better placed not only to create value (Subramaniam and Youndt, 2005), gain competitive edge (Ahmed, Khurshid and Yousaf, 2019; Hosein Chizari, Mehrjardi, Sadrabadi and Mehrjardi, 2016) but also intensification of its performance (Gigante, 2013). In the health care organizations equally, intellectual capital in the current world is one of the top ingredients that steer the value creation process (Ikapel, 2016; Kianto, Hurmelinna-Laukkanen and Ritala, 2010).

To date, there exist significant number of studies in different countries. To begin with, researchers have established relationship between intellectual capital and innovation capabilities (Subramaniam and Youndt, 2005), sustainable development (Cavicchi, 2017) and firm value (Berzkalne and Zelgalve, 2014; Iranmahd, Moeinaddin, Shahmoradi and Heyrani, 2014; Nejati and Pirayesh, 2015). Furthermore, intellectual capital has been linked to firm performance in information technology industry (Wang and Chang, 2005), companies (Ali and Murtaza, 2022; Bhattacharjee and Akter, 2022; Bhattu-Babajee and Seetanah, 2022; Smriti and Das, 2018), textile industry (Pal and Soriya, 2012; Rashid, Farooq, Liaqat, Qadeer and Younas, 2020; Shaneeb and Sumathy, 2021), financial industry (Joshi, Cahill, Sidhu and Kansal, 2013; Zhang, Duc, Burgos Mutuc and Tsai, 2021). In the same breadth, studies have been conducted in the small and medium enterprises (Demartini and Beretta, 2020; Naushad and Faisal, 2023), food and personal care sector (Rashid et al., 2020) and university (Shehzad, Fareed, Zulfiqar, Shahzad and Latif, 2014). Under the health sector, most studies reviewed have assessed intellectual capital and performance of pharmaceutical industries. For instance in Bangladesh (Chowdhury, Rana and Azim, 2019), Vietnam (Zhang et al., 2021), Indonesia (Sarwenda, 2020), China (Ge and Xu, 2021) and Iran (Kafili, Mirzaei Nezamabad and Hosseinloo, 2022). In Kenya, intellectual capital and performance has been examined in SMEs (Otor, 2015), small and medium manufacturing firms (Murimi, Ombaka and Muchiri, 2019), microfinance institutions (Ndambuki and Alala, 2014), commercial banks (Ikapel, 2016) and pharmaceutical firms (J. M. Ngari, 2019).

Certainly, given the outstanding roles of intellectual capital, a swing from capital to knowledge-intensive among the industries has been experienced in the global arena (Rashid et al., 2020). In this regard, an organization is expected to employ the knowledge related resources. As pointed out by Wang and Chang

(2005), they are expected to initiate transformation by carefully minimizing its resource consumption simply by look after its knowledge resources and intellectual capital. Innovative capabilities thus are linked to intellectual capital (Subramaniam and Youndt, 2005). In a special way, organization's intellectual capital is represented by its innovation capacity (Nick Bontis, 1998) thereby making the entire task a knowledge management process (Madhavan and Grover, 1998). Survival of a firm in the present dynamic world is guaranteed through innovation (Helena Santos-Rodrigues, 2013) as well as its competitiveness and having an upper hand in influencing the country's development matters (Helena Santos-Rodrigues, Dorrego and Fernandez-Jardon, 2011). Generally, innovation in hospitals being part of the health care organization is as a result of the quest to balance between provision of eminent services at affordable costs (Djellal and Gallouj, 2007). As part of innovativeness in the modern era, the rising demands in health care organizations has led to embracing of ambidexterity concept which is the ability to mix exploration and exploitation (Foglia, Ferrario, Lettieri, Porazzi and Gastaldi, 2019). In the process, ambidexterity has proved to be relevant (Foglia et al., 2019), an apogee given determinants of competitive advantage (Mubarik et al., 2019). Hence, the main goal is building hospitals that are ambidextrous in nature (Turner, Swart and Maylor, 2013) whereby immense performance arises from continuous innovation attained given an equilibrium between exploration and exploitation (Martini, Gastaldi, Corso, Magnusson and Laugen, 2012).

According to Kassotaki (2022), increased consideration among researchers has been on ambidexterity aspect. Those studies that have dwelled on organizational ambidexterity and firm performance have been conducted in the electronic manufacturing firms (Peng, Lin, Peng and Chen, 2019) and energy sector (Dranev, Izosimova and Meissner, 2020). Other research findings have been reported regarding organizational ambidexterity and intellectual capital among firms in general (De la Lastra, García-Carbonell, Martín-Alcázar and Sánchez-Gardey, 2017b; Lopez-Zapata and Ramírez-Gómez, 2023; Winnen and Wilms, 2014), professional service firms (Fu, Ma, Bosak and Flood, 2016), hospitality sector (De la Lastra, Martín-Alcázar and Sánchez-Gardey, 2022) and multinational corporations (Lakshman, Dupouët and Bouzdine-Chameeva, 2017). As pointed out by (Fu et al., 2016), intellectual capital is linked to firm's ambidexterity thereby performance. From this backdrop, the study was conceived whereby its sought to link intellectual capital and performance via organizational ambidexterity from health care sector perspective, that is, health facilities in Uasin Gishu County. The paper is structured in such a way that the introductory section comprises of the background of the study, description of the Kenya's health sector and the problem statement. Following this is the literature review part that comprise of theoretical framework and empirical review. In the last sections, research design and methodology, findings, discussions, conclusions and recommendations are presented.

Overview of the Health Sector in Kenya

There exists a full-bodied health system in Kenya that has advanced from centralized system during independence to the current devolved system under the year 2010 constitution (Republic of Kenya, Health Sector Report, December 2023). Under the health sector report (2023), health care provision is provided by the faith-based, private, government-owned and non-governmental organizations. The sector is mandated to develop, implement and monitor specialized medical services policies, provision of strategic leadership and supporting of professional health professional bodies. Moreover, the report outlines that sector's priorities are linked with the country's constitution, Vision 2030, country's health policy, bottom-up transformative agenda, Universal Health Care (UHC), Post-Covid 19 Economic Recovery Strategy (PC-ERS), Sustainable Development Goals (SDGs) and Africa union's Agenda 2063. The sector's service delivery however has been complicated given the ever-changing environment characterized by globalization, emerging diseases, digitization and climate change. In the report therefore, the government thus has formed sectoral collaboration as well as partnerships with stakeholders as state and non-state, external like development partners and client (individuals, community and households) actors.

Problem Statement

In Kenya, the health sector shoulders vital responsibilities. Other than crafting polices, provision of visionary leadership and supporting of professional bodies, the sector promotes excellence in health care practices (Republic of Kenya, Health Sector Report, 2023). This is made possible given the specialized medical services that touches on many aspects as sanitation, public health, food and quality, health education management, hygiene and nutrition, quarantine administration, control and management of malaria and tuberculosis. Despite these vital services, the sectors is wrecked by various challenges relating to human resource crisis, weak health systems and inadequate health infrastructure, inadequate budgetary provisions, low levels of digitization of health records and health's supply chain (Health Sector Report, 2023). As a way out given these challenges, the sector has committed to pull up socks by conducting research, development and innovation as a means of ameliorating efficiency, effectiveness and productiveness. In addition, the sector looks forth in mobilizing resources, investing in health care innovations among other key turnaround strategies. The study proposed consideration of intellectual capital which is one of the intangible assets that can be used by the health sector in improving its performance. According to Olson and Van Bever (2008), survival of an organization is crucial as they are not only expected to exploit existing opportunities but also conduct an exploration to bring on board the innovative competences. Hence organizational ambidexterity is all about attainment of a balance given both the exploitation and exploration innovative strategies (He and Wong, 2004).

Empirically, there exists studies that have linked intellectual capital and performance of the pharmaceutical industry in different countries as Bangladesh (Chowdhury et al., 2019),Vietnam (Zhang et al., 2021), Indonesia (Sarwenda, 2020), China (Ge and Xu, 2021), Iran (Kafili et al., 2022) and Kenya (Ngari, Gichira and Waititu, 2013; Ngari and Kagiri, 2013). In addition, organization ambidexterity has been linked to performance (Dranev et al., 2020; Peng et al., 2019; Tushman and O'Reilly III, 1996) under the energy, electronic manufacturing and firms in general respectively. Other researchers have established nexus given intellectual capital and organizational ambidexterity in the professional services firms (Fu et al., 2016), multinational corporations (Lakshman et al., 2017), hospitality industry (De la Lastra et al., 2022) and companies (Lopez-Zapata and Ramírez-Gómez, 2023). In order to fill the research gap, the study investigated the mediating role of organizational ambidexterity in the relationship between intellectual capital and performance of health facilities in the Kenya's Uasin Gishu County. The findings of the were aimed helping the policy makers given the current competitive and dynamic aspects affecting all sectors including health. Besides, contribution of theoretical framework and extension of existing empirical literature on the study variables was also the foremost goal.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Theoretical Perspective

Health sector in most countries plays a crucial role that cannot be ignored. The sector is lauded for provision of services to the general public. According to Samuelson's public good theory, a public good is described to possess the features as non-excludability whereby all country's citizens have an access (Samuelson, 1958). Moreover, public goods are consumed jointly and that they are non-rivalrous in nature, that is, its increased usage does not lead to their disappearance. In Kenya, health services are mainly provided by the government and thus one of public goods where each and every citizen have a right to access. According to Holcombe (2000), the government role is fundamental as far as effective as provision of public good is concerned. Way back in 1980's, stewardship, an ethical form of good governance, was found to be a fundamental element in the images of the public administration (Kass, 1988). Notably, stewardship is termed as national health's effective trusteeship since the health systems have to be prioritized in order to

rally health as well as encourage sensible resource utilization (World Health Organization, 2000). In the Jensen and Meckling's agency theory, the concept of agency relationships emerges. In this case, the agent (manager) is appointed to make decisions and perform other responsibilities on behalf of the principal (shareholders).

As proposed by stewardship theory, managers are stewards whose motives are not driven by individual goals (Donaldson and Davis, 1991). On the contrary, all the motives of these stewards are aligned with those of the principals. As an extension of the stewardship theory, Davis, Schoorman and Donaldson (2018) gave both the psychological and sociological characteristics that are antecedents to principal-stewards relationship. First, managers' (stewards) needs have to be based on growth, achievement and self-actualizations. Secondly, managers (stewards) are expected to identify themselves with the organization and be motivated intrinsically for accomplishment of organizational rather than personal plans. Lastly, their management philosophy is anchored on trust and involvement while culture needs to be characterized by collectivism and low-power distance. From the context of the health sector, the citizens (principals) look upon the government (stewards) is the main provider of health services. Stewardship is key for the success of health policy making (Saltman and Ferroussier-Davis, 2000). As a result, the government require a vibrant and steady strategic path to enhance stewardship given the health policies. In line with the resource based view theory, a firm attains competitive advantage through utilization of both tangible and intangible resources that have to be valuable, rare, not easily imitated and non-substitutable (Barney, 1991). Moreover, creation and application of knowledge and learning are the critical resources under the knowledge based view of the firm (Spender, 1996). Therefore, through stewardship, effective provision of health services for the benefit of the all the citizens is attained. More importantly, utilization of the health sector's intangible and knowledge related resources as intellectual capital and organizational ambidexterity leads to satisfactory performance.

Intellectual Capital and Performance

All sectors of most organizations have resorted for knowledge under the intangible assets category as a strategy to promote sustainability (Al Issa, Abdullatif, Ntayi and Abdelsalam, 2023). The healthcare sector is a keystone of any society, serving as a vital component of public well-being and economic development. Within this sector, the concept of intellectual capital has gained prominence as a critical driver of performance (Tiwari, 2022). Intellectual capital is also known as intangible resource (Zigan, Macfarlane and Desombre, 2007), organization's knowledge or intelligence (Wilcox King and Zeithaml, 2003). It encompasses the intangible assets such as knowledge, expertise, and organizational processes that contribute significantly to an organization's competitiveness and ability to deliver high-quality services. Intellectual capital is an aggregation of knowledge (Subramaniam and Youndt, 2005) and knowledge management (Chen and Kuo, 2008) that has been seen as having roots in the organization's leadership and professionals' knowledge, skills and practices (Edvinsson and Malone, 1997). Among other determining factors of competitive advantage of the firm, intellectual capital according to Mubarik et al. (2019) is at the apex since the current century has led to alteration from tangible to intangible possessions. As such, industries globally have witnessed modifications from being capital to knowledge intensive (Rashid et al., 2020).

Generally, there are diverse elements making up intellectual capital in an organization. In 1999, the Organization for Economic Co-operation Development (OECD) described intellectual capital from economic value perspective given that it comprises of human and structural or organizational capital comprised. The value added intellectual coefficient (VAIC) model by Pulic (2000), value added is the summation of firm's operating profit, employee costs, depreciation and amortization. Intellectual capital efficiency thus under this model is the aggregate of human and structural capital efficiencies. The VAIC model is then complete when intellectual capital efficiency is added to the capital employed efficiency. However, the modified value-added intellectual coefficient (MVAIC), relational capital efficiency has been

added with both human and structural efficiencies to make up the intellectual capital efficiency (Vishnu and Gupta, 2015). From the organizational innovation view, human, structural and relational capital are essential (Helena Santos-Rodrigues, 2013). Under human capital, innovative attitude, creativity and incentive to innovativeness is required while structural dimensions are culture, trust, knowledge creation and development as well as organizational structure. Further, clients or customers, networks and alliances are important relational capital dimensions. Under sustainability aspect that is part of the modern world, green intellectual capital consist of green human, structural and relational capital (Al Issa et al., 2023).

The processes in a health care organization are unique with different criteria (Vagnoni, 2017). Intellectual capital in the health care organization comprises of three main types of capital namely the human, structural and relational (Evans et al., 2015). To begin with, human capital in this case is defined as the knowledge, skills and experiences owned and used by individuals (Nick Bontis and Fitz-enz, 2002; Evans et al., 2015; Yang and Lin, 2009). Secondly, structural or organizational capital is the institutionalized knowledge and codified experience stored in databases, procedures, and the organizational culture (Evans et al., 2015). Furthermore, structural capital is defined as organization's intangible assets or infrastructure that gives backing to the human capital (Edvinsson and Malone, 1997). These infrastructure known also as properties according to Martínez-Torres (2006) includes the systems, culture, strategies, technologies, structure, inventions data and publications. Lastly, relational capital is the knowledge available through networks of relationships internal and external to the organization (Evans et al., 2015; Mazzotta, 2018; Helena Santos-Rodrigues et al., 2011). While relational capital remains on the shadow as one of the elements of intellectual capital, human capital emerges to be the most discussed in the health sector literature followed by the structural capital (Paoloni, Mattei, Dello Strologo and Celli, 2020). In a typical health care therefore, there are various examples under the human, structural and relational capital as adopted from Evans et al. (2015) and shown in Figure 1.

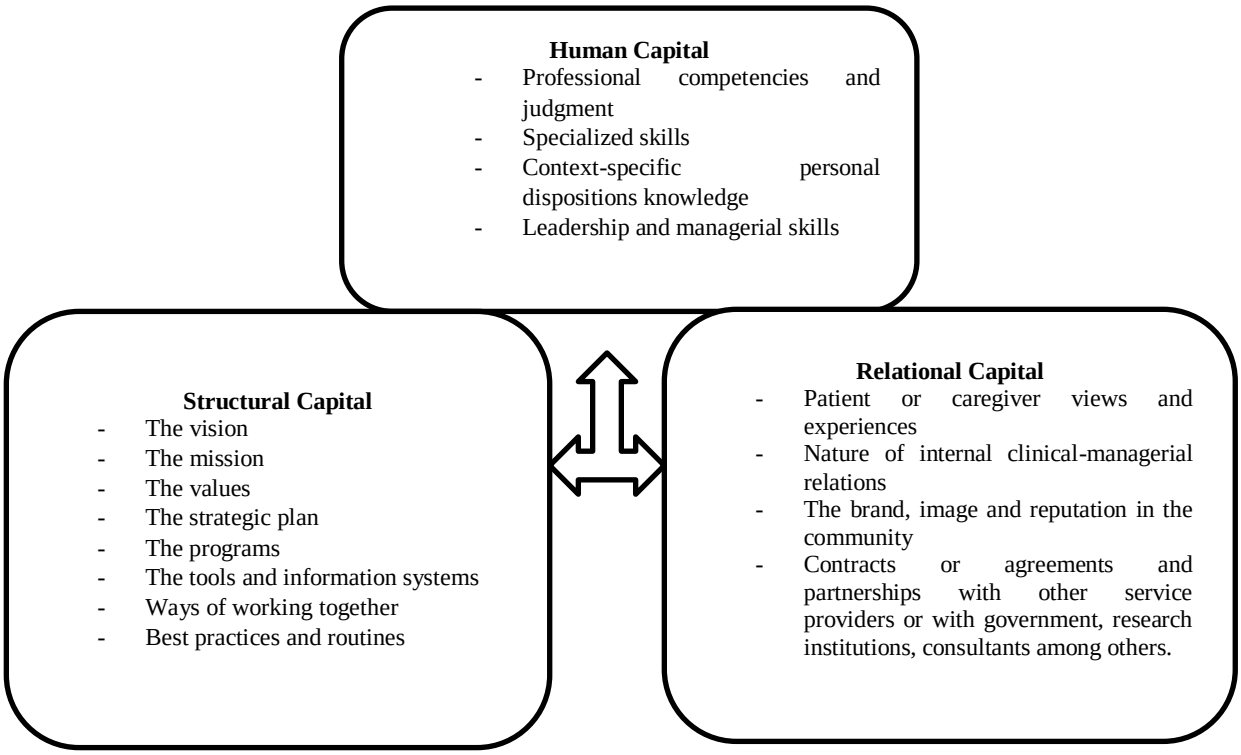

Figure 1: Kinds of Intellectual Capital Elements in the Health Care Organization

Source: (Evans et al., 2015)

Over years, researchers have sought to explore the intricate relationship between intellectual capital and the

performance within the health sector context. Peng, Pike and Roos (2007) conducted an exploratory study in Taiwan's health sector to assess the link between intellectual capital and performance indicators. From analysis of data collected from 30 questionnaires distributed to health care managers, intellectual capital elements as human, organizational and relational capital were critical for performance. In India, intellectual capital measured using human, structural and physical capital was analyzed by Bharathi Kamath (2008) given performance indicators as profitability, market valuation and productivity of the top 25 firms listed under drug and pharmaceutical industry (1996 to 2006). In the study, human capital was found to have major impact on firm's performance proxies as profitability and productivity. Using similar measures for intellectual capital and performance as in Bharathi Kamath (2008) study, Mehralian, Rajabzadeh, Sadeh and Rasekh (2012) focused on pharmaceutical companies listed in Iran between 2004 to 2009. A positive relation between intellectual capital and profitability was reported. In the same year, Pal and Soriya (2012) documented a positive relationship between intellectual capital and profitability of 105 pharmaceutical and 102 textile companies sampled for study in India.

In Kenya, Ngari and Kagiri (2013) analyzed the structural capital (systems and programs, research and development, intellectual property rights) and were found to have positive and significant with performance of 19 sampled pharmaceutical firms in Kenya. Within the same country, Ngari et al. (2013) the human capital elements as learning and education, experience and expertise, innovation and creation were examined in relation to performance of the 19 pharmaceutical firms. A significant positive relationship was reported where the learning and education had the major impact on performance. Anghel, Siminică, Cristea, Sichigea and Noja (2018) study sampled 24 biotech companies within the pharmaceutical industry in Australia, North America, West and Northern Europe. The data base as obtained from Thomson Reuters between 2002 and 2014. In this study, intellectual capital comprised of efficiency or research and development expenditures (ECD) and the market-to-book (MTB) ratio. On the other hand, performance indicators used were return on assets (ROA), return on equity (ROE) and the debt-equity ratio. After analysis of data, there was a positive relationship given debt to equity ratio and MTB but negative given ROA and ROE. The opposite was true for ECB and the performance indicators. In Bangladesh, Chowdhury et al. (2019) investigated the effect of intellectual capital efficiency on performance of the pharmaceutical sector. VAIC model was used to measure intellectual capital, that is, capital employed, human and structural capitals. The findings indicated that VAIC components failed to predict ROA but significantly explained performance as indicated by asset turnover and ROA. In Nigeria, Lawal, Lawal and Abdullahi (2019) sought the nexus between intellectual capital and performance of 6 listed health care firms between 2008 and 2017. In their findings, both human and relational capital efficiencies had no significant impact on profitability while structural capital efficiency positively related with ROA.

In the last four years, the analysis intellectual capital and performance within the health sector is still on. For instance, Sarwenda (2020) assessed the influence of intellectual capital on business performance as well as competitive advantage of the 44 firms within the pharmaceutical industry in the Indonesia's East Java. From the findings, no effect was found between performance indicators, human and structural capital. However, relational capital was found to influence performance of the firms sampled. Ge and Xu (2021) ascertained as to whether intellectual capital enhances performance of the 204 pharmaceutical listed companies between 2013 and 2018 in China. Basing on MVAIC model, there was a positive impact of intellectual capital on earnings, profitability, corporate return and productivity. Moreover, a negative and no impact of intellectual capital was reported given market valuation and sales growth respectively. From Vietnam, Zhang et al. (2021) undertook a comparative study by sampling 108 financial and 41 pharmaceutical firms. After adopting VAIC model, a positive relationship between intellectual capital and financial performance of financial firms was found. On the contrary, there was no effect given the firms from the pharmaceutical industry. Using a sample size of 26 listed pharmaceutical companies in Iran between 2011 through to 2020, Kafili et al. (2022) found that human, structural and relational capital efficiencies positively impacted on financial performance (ROA). In India, Tiwari (2022) obtained data for

84 healthcare firms between 2009 to 2018 in order to examine the link between intellectual capital and profitability. Using the MVAIC model, intellectual capital was found to positively relate with profitability. From the empirical review therefore, the study tested the following hypotheses under H_{01};

H_{01}; There is no significant relationship between intellectual capital and performance of health facilities in Uasin Gishu County, Kenya.

H_{01a}; There is no significant relationship between human capital and performance of health facilities in Uasin Gishu County, Kenya.

H_{01b}; There is no significant relationship between structural capital and performance of health facilities in Uasin Gishu County, Kenya.

H_{01c}; There is no significant relationship between relational capital and performance of health facilities in Uasin Gishu County, Kenya.

Mediating Role of Organizational Ambidexterity

In the continually-evolving business and management arena, organizations in all sectors have to endure a lot of pressure in enhancing their innovations to meet the customers' demands and expectations (Turner et al., 2013). As a result, the concept of organizational ambidexterity has gained considerable attention. As laid down by Carmeli and Halevi (2009), the source of ambidexterity is traced to the human attribute since it is described as individual's ability to operate mutually with both hands. In an organization context therefore, ambidexterity involves the ability to simultaneously exploit existing capabilities and explore new opportunities (Geerts, Blindenbach-Driessen and Gemmel, 2010; Gupta, Smith and Shalley, 2006; O'Reilly III and Tushman, 2013; Tushman and O'Reilly III, 1996). Moreover, organizational ambidexterity is described by Cegarra-Navarro and Dewhurst (2007) as the synchronized attainment of alignment and adaptability. On the other hand, Simsek, Heavey, Veiga and Souder (2009) talks of organizational ambidexterity as a concurrent effort of pursuing divergent and opposing strategic acts. From the two main outright elements associated with these definitions of organization ambidexterity, varied opinions have emerged. From organizational learning standpoint to begin with, exploration and exploitation are seen as learning activities that are vital in enhancement of organizational ambidexterity (March, 1991). On the contrary, simultaneous exploitation and exploration have been described by Boumgarden, Nickerson and Zenger (2012) as a go-ahead tactic known as organization vacillation. Nonetheless, ambidexterity is supreme given its importance to the firm's going concern (Tushman and O'Reilly III, 1996), competitive advantage (Turner et al., 2013), dynamism (Olson and Van Bever, 2008) and also the applicability to wide variety of themes within the recent years (Birkinshaw and Gupta, 2013; O'Reilly III and Tushman, 2013).

Under organizational ambidexterity, several terms have been used in place of exploitation and exploitation (March, 1991). For exploitation, the related synonyms are execution, refinement, production, efficiency, choice, selection and implementation. On the contrary, exploration is also known to be search, experimentation, risk taking, play, flexibility, discovery and innovation. In order to enhance organizational ambidexterity, there is need for to enhance punctuated equilibrium given both the exploitation and exploration activities (Geerts et al., 2010), formation of autonomous exploitation and exploration subunits (Tushman and O'Reilly III, 1996) and designing of organizational structures (Gibson and Birkinshaw, 2004). Successful exploration and exploitation indeed happen through utilization of special organizational processes, structures, strategies, cultures and capabilities (He and Wong, 2004) As per O'reilly III and Tushman (2008), successful ambidexterity within an organization requires shared vision and values, mutually agreed upon unit's strategy by the top managers, aligned organizational architectures given the competencies, models, incentives, memes and culture. In addition, there is need for strategic commitment that prioritizes exploration and exploitation as well as senior management tolerance given contradictions

relating to multiple alignments. In support of these, Palm and Lilja (2017) brings to light the key enabling factors of organizational ambidexterity though from the public sector perspective. These factors thus consist of dialogue, ambassadors, leadership with exploration insights, better understanding of users' needs plus situations, budgeting for exploration and exploitation, system view, innovation implementation focus, culture allowing mistakes, incentives for both exploitation and exploration.

As the operating environment continue to become competitive, organizational ambidexterity has become an important ingredient for performance especially of non-manufacturing industry (Junni, Sarala, Taras and Tarba, 2013). Organizations are in dire need of ambidexterity to promote competition in mature technologies and markets that exceedingly ranks efficiency, control and incremental improvement (O'Reilly III and Tushman, 2013). Further, such technologies and markets demand flexibility, autonomy and experimentation. In the health care sector, ambidexterity is applicable as expectations continue to grow and the need to provide valuable health care at reasonable costs (Foglia et al., 2019). Thus, organizational ambidexterity is not only associated linked to higher performance (Fu et al., 2016) but also used as a tactic to solve existing predicaments given exploitation and exploration (De la Lastra et al., 2022). In the attempt to understand ambidextrous organizations that are able to manage revolutionary and evolutionary changes, Tushman and O'Reilly III (1996) found that a lasting existence is possible through ambidexterity. In Belgium, Geerts et al. (2010) conducted a longitudinal study to analyze the balance between exploration and exploitation among 532 firms in the manufacturing and service sectors. From their findings, exploitation and exploration can be achieved through punctuated equilibrium. Thus, organizational ambidexterity through punctuated equilibrium positively effects the firms' performance. Junni et al. (2013) concluded a positive and significant relationship between organizational ambidexterity and performance given meta-analysis from the major academic databases as google scholar, EBSCO and Web of Science. Peng et al. (2019) and Dranev et al. (2020) too documented the same finding among the electronics manufacturing firms and energy sector respectively.

Ambidexterity in an organization is crafted as a result of intellectual capital efficiency hence the link between the two concepts. According to Kang and Snell (2009) as well as De la Lastra, García-Carbonell, Martín-Alcázar and Sánchez-Gardey (2017a), ambidexterity exists in organizations that dynamically consider the intellectual capital components. Certainly, an organization is better placed given its intellectual capital architectures to magnificently undertake concurrently organizational ambidexterity tasks, namely, exploration and exploitation (Winnen and Wilms, 2014). Using a sample size of 112 Chinese and 93 Irish accounting firms, Fu et al. (2016) found a significant positive link given intellectual capital and organizational ambidexterity from professional service context. Basing on the multilevel arguments and existing literature, De la Lastra et al. (2017b) established the synergetic work given intellectual capital facets as human, social and organizational capital in bringing out ambidexterity. In this study therefore, it was concluded that the ambidexterity is developed given the link between the intellectual capital paths. These paths consist of inputs, mechanisms and infrastructure that represents human, social and structural capital respectively.

From multinational corporations perspective in France, human resource practices and intellectual capital architectures were examined by Lakshman et al. (2017). It was found that high levels of intellectual capital architectures as human, social and organizational capital configures and are essential for fostering ambidexterity. From the findings given data of 152 fine dining restaurants, De la Lastra et al. (2022) found that the three paths of intellectual capital (human, social and organizational capital) are simultaneously used to build organizational ambidextrous capabilities. A similar positive link between intellectual capital and organizational ambidexterity was documented by Lopez-Zapata and Ramírez-Gómez (2023) following findings from 124 directors of firms in Colombia. Organizational ambidexterity has been analyzed as a mediator given different concepts. To begin with, organizational ambidexterity was found by Severgnini, Vieira and Cardoza Galdamez (2018) to mediate the link between performance management systems and

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organizational performance. In another study by Chams-Anturi, Moreno-Luzon and Escorcia-Caballero (2020), organizational ambidexterity is used as a mediating variable in the relationship between organizational trust and performance of firms in organic agro-food industry. In another context, Mubarik et al. (2019) sampled 233 textile firms in Pakistan and found out that organizational ambidexterity significantly mediates the nexus between intellectual capital and competitive advantage. In the effort to fill the existing literature gap, the study tested the following hypothesis;

H_{02}; *Organizational ambidexterity does not significantly mediate the relationship between intellectual capital and performance of health facilities in Uasin Gishu County, Kenya.*

The Conceptual Framework

Figure 2 illustrates the conceptualization of the study variables anchoring on the theoretical and empirical review. In this figure, intellectual capital as independent variable dimensions include the human, structural and relational capital. Moreover, organizational ambidexterity (mediating variable) is made up of exploitation and exploration. Lastly, performance as the dependent variable is measured qualitatively.

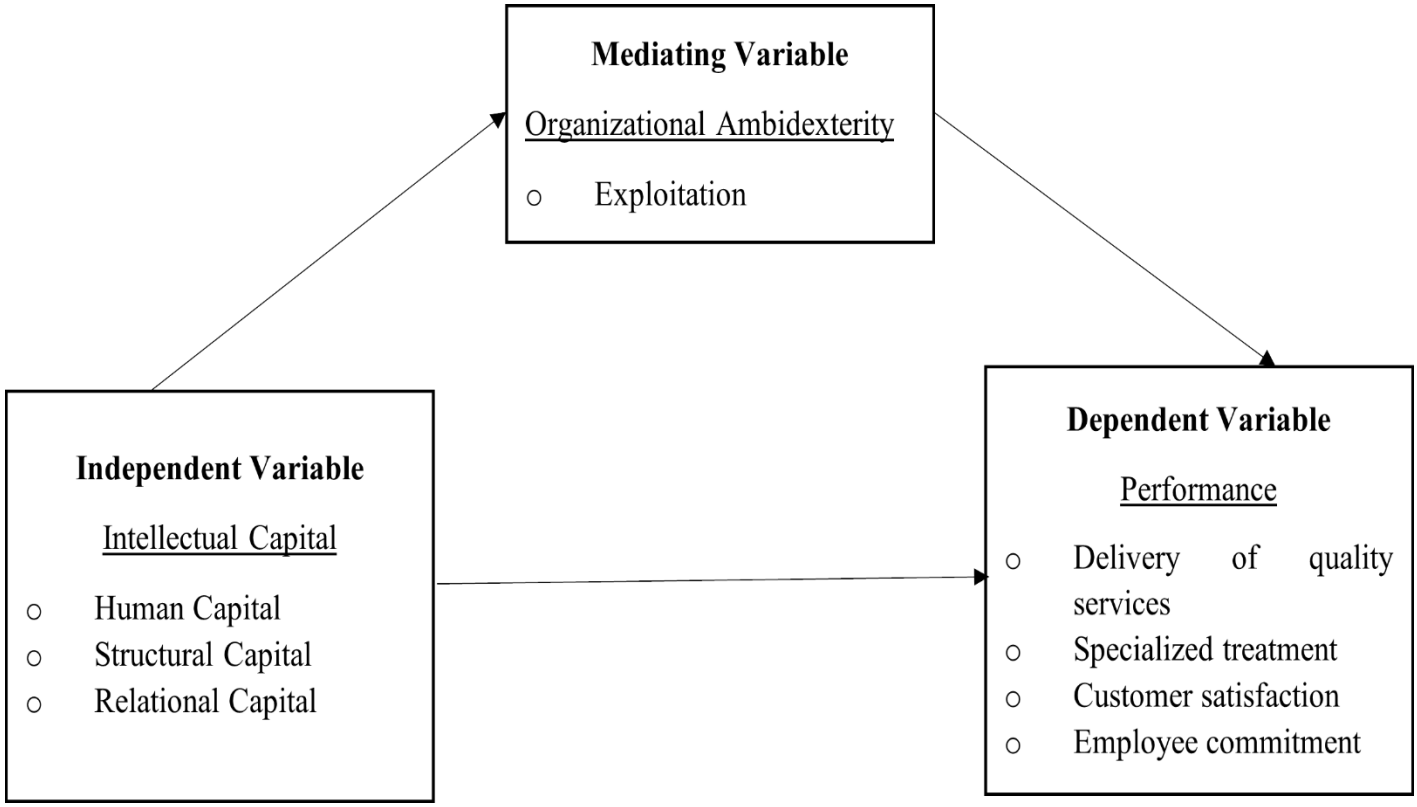

Figure 2: Conceptual Framework of the Study

Source: Researchers (2023)

RESEARCH METHODOLOGY

The researchers conducted the study to ascertain the link of variables given the health care organizational context. As a result, post-positivist research philosophy guided the study as it beliefs in absence of an entire objective view of the world rather subjectivity sharpens that reality (Maksimovic and Evtimov, 2023). The research philosophy was found hand as it works best given scientific exploration of a phenomena (Panhwar,

Ansari and Shah, 2017). In addition, the paradigm is of the belief that reality exists beyond the observer's mind (Malkani, 2019) and thus try to present reality as best possible rather than finding the truth (Maksimovic and Evtimov, 2023). More importantly, the paradigm was relevant given that it encourages a specific phenomenon can be investigated and reinvestigated from diverse viewpoints, in dissimilar contexts using various tools and methods (Maksimovic and Evtimov, 2023). Ideally, descriptive research designs are suitable in nursing and health care research as they are simple, flexible and able to be utilized in various health contexts (Doyle, McCabe, Keogh, Brady and McCann, 2020). Furthermore, descriptive research design can help determine and describe variable attributes (Al-Ababneh, 2020) as well as describing study aspects at individual, organizational or industry levels (Saunders, Lewis and Thornhill, 2003). For these reasons therefore, descriptive research design was adopted as to pave way for describing the study variables at an organizational level.

The study targeted 196 health facilities in Uasin Gishu County (Uasin Gishu County Health Department, December 2023). In each of these facilities, population of interest were the head of 8 sections namely human resource or personnel, accounts/finance, pharmacy, information and communication technology (ICT), nurse station, doctors/clinical officers' station, customer care and marketing sections. As to draw the sample size, 30% of the targeted population was sampled since it is within the threshold of between 10 to 50% by Mugenda and Mugenda (2003). Thus, 59 health facilities in Uasin Gishu County were sampled resulting to 472 total number of respondents. Purposive sampling under the non-probability sampling techniques was used. This is because the sampling technique taken into consideration according to Palinkas, Horwitz, Green, Wisdom, Duan and Hoagwood (2015) is widely used in descriptive research. Consequently, the study thus considers only the knowledgeable and experienced participants given situation under scrutiny.

Research Tool and Study Variables' Measures

Structured questionnaires were administered given the study respondents sampled. In the first section, demographic information was provided relating to gender, age and working experience. In the second and third section, opinions were sought regarding intellectual capital and organizational ambidexterity respectively. Under the intellectual capital, 11 five point Likert scale items were adopted from Evans et al. (2015). In the same scope, two of the human capital dimensions related to employee competence and development. The five structural capital dimensions comprised of culture, access to information, information technology, external environment and internal process. On the other hand, relational capital's four dimensions were patient-centered, patient loyalty, partnerships and internal relations. In the third section of the questionnaire, organizational ambidexterity (exploration and exploitation) were measured using the 16 five point Likert scale items adopted from Foglia et al. (2019). In the fourth section, performance indicators (7 five point Likert scale items) were adopted from Gachagua (2021). Thus, summated score of five-point Likert scale items in each research instrument constituted the measure of each study variable.

Data Analysis Procedures and Models

The study tested the internal consistency given the research instruments items regarding intellectual capital, organizational ambidexterity and performance. In this test, items were adopted after meeting the Cronbach Alpha coefficient threshold of 0.70. Pearson correlation analysis was conducted to test the relationship between the study variables. Data collected was analyzed descriptively using the mean and standard deviation. Furthermore, organizational ambidexterity was the intervening variable as it was conceptualized to transmit the effect of intellectual capital to performance of health facilities. Figure 3 thus presents the path diagrams for a simple cause effect relationship and general mediation model adopted from Nitzl, Roldan and Cepeda (2016).

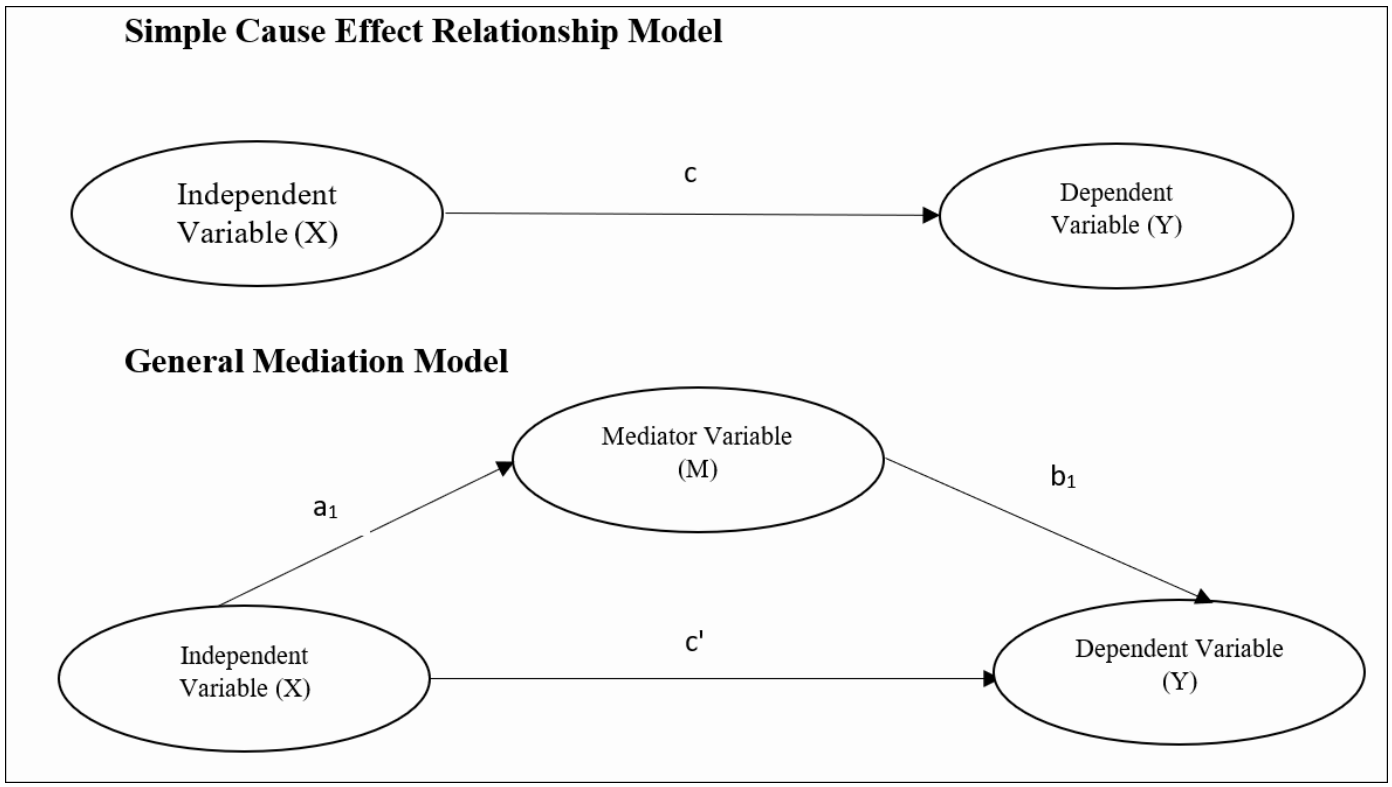

Figure 3: Simple Cause Effect and General Mediation Analysis Path Diagrams

Source; Nitzl et al. (2016)

KEY: Independent Variable (Intellectual Capital); Mediating Variable (Organizational Ambidexterity); Dependent Variable (Performance); a, b, c and c' are Regression Coefficients

For simple cause effect relationship between independent variable (Intellectual capital dimensions) and dependent variable (performance) as itemized in hypothesis H_{01}, the following regression model was tested;

$PERF = \beta_0 + \beta_1 HC + \beta_2 SC + \beta_3 RC + e$

KEY: PERF (Performance); HC, SC and RC (Human, structural and relation capitals respectively) β_0 (the intercept); β_1, β_2 and β_3 (Beta Coefficients); e (Random Error Term)

In order to test mediation (hypothesis H_{02}) Process Macro by Hayes (2017). More importantly, the mediation procedure put forth MacKinnon, Coxe and Baraldi (2012). Under this method, four conditions given the four steps need to be met;

Step One; The must be a significant relationship between independent variable (X) and mediating variable (M). As such, this relationship is indicated by regression coefficient 'a_1'.

Step Two; There must be significant relationship between the mediating (M) and the dependent variable (Y) as represented by regression coefficient 'b_1'.

Step Three; Testing of the relationship between independent (X) and dependent (Y) variables in presence of the mediating variable (M) as represented by the regression coefficient c'.

Step Four; This last condition ascertains the significance of the relationship between independent (X) and dependent (Y) variables via the mediating variable (M). Hence, for mediation to exist, the mediation effect

(a*b) needs to be significant, that is, the confidence intervals should not contain zero. There are a number of mediation according to Zhao, Lynch Jr and Chen (2010). To begin with, indirect only mediation is document if there is no direct effect (indicated by regression coefficient c') while mediation exist (a * b). Secondly, complimentary mediation occurs when both the mediation and direct effect exist with their results signs pointing the same direction, either positive or negative. Lastly, competitive mediation is reported if both the mediation and direct effects exits only that their results sign point opposite directions. This implies that result for mediation effect may be positive while those for direct effect are negative or vice versa.

RESEARCH FINDINGS AND DISCUSSIONS

Reliability Test

In Table 1, the questionnaires' items were tested using Cronbach Alpha to ascertain internal consistencies. From the results, the items were adopted since their Alpha coefficient were above the recommended threshold of 0.70.

Table 1: Reliability Test Results

Study Variable	Questionnaire Number of Items	Cronbach Alpha Coefficient
Performance	7	0.914 > 0.70
Intellectual Capital	11	0.823 > 0.70
Organizational Ambidexterity	16	0.809 > 0.70

Source: Field Data (2023)

Response Rate

Based on the sample size as illustrated in Figure 4, a total of 472 questionnaires were issued to 59 health facilities in Uasin Gishu County. However, 378 (representing 80.08%) out of 94 (19.92%) were returned and used for analysis.

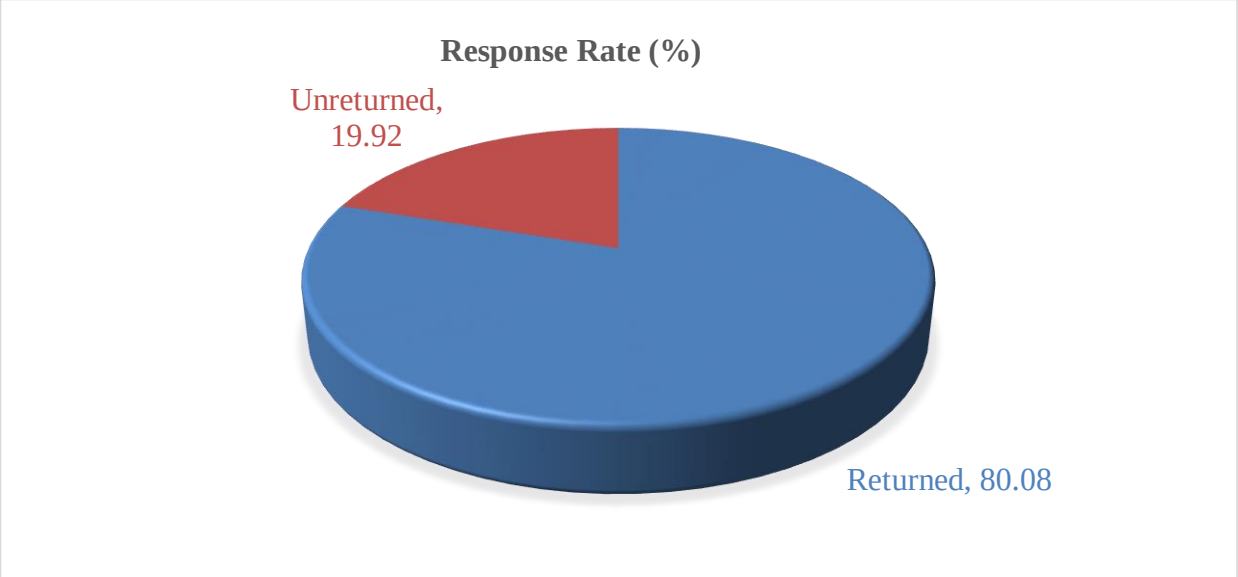

Figure 4: Questionnaire Response Rate

Source: Field Data (2023)

Correlation Analysis Results

First and foremost, performance has a strong and significant positive correlation with intellectual capital as indicated by (r = .614, .000<.01) in Table 2. Secondly, there is a moderate positive and significant correlation (r = .436, .007<.05) given organizational ambidexterity and performance. Lastly, there exist a strong positive but not significant correlation (r = .549, .012 >.01) between organizational ambidexterity and intellectual capital.

Table 2: Correlation Analysis

	Variables		**PERF**	**IC**	**OA**
Pearson Correlation					
	PERF	Pearson Correlation	1	.614**	.436*
		Sig (2 tailed)		.000	.007
		N		**378**	**378**
	IC	Pearson Correlation	.614**	1	.549
		Sig (2 tailed)	.000		.012
		N	**378**		**378**
	OA	Pearson Correlation	.436*	.549	1
		Sig (2 tailed)	.007	.012	
		N	**378**	**378**	

*Correlation is significant at the 0.05 level **Correlation is significant at the 0.01 level

KEY: PERF (Performance); IC (Intellectual Capital); OA (Organizational Ambidexterity); N (Valid Response)

Source: Field Data (2023)

Descriptive Statistics Results

In the study conducted, the heads of the eight sections were part of the respondents. These heads were drawn from the sections as human resource or personnel, accounts/finance, pharmacy, ICT, nurse station, doctors/clinical officers' station, customer care and marketing. From the analyzed data in Table 3, 56.08% respondents were male as compared to 43.92% who were female. Secondly, most (31.22%) of the respondents were aged between 24 and 29 years. In the same breadth, only 4.76% were aged above 42 years.

Table 3: Demographic Characteristics of the Respondents

	Responses	**Percentage (%)**
Gender:		
Female	166	43.92
Male	212	56.08
Total	*378*	*100.00*
Age:		
Between 18 and 23 Years	69	18.25
Between 24 and 29 Years	118	31.22

Between 30 and 35 Years	97	25.66
Between 36 and 41 Years	76	20.11
Above 42 Years	18	4.76
Total	*378*	*100.00*
Working Experience:		
3 Years and Below	52	13.76
Between 4 and 7 Years	121	32.01
Between 8 and 11 Years	104	27.51
Between 12 and 15 Years	90	23.81
15 Years and Above	11	2.91
Total	*378*	*100.00*

Source: Field Data (2023)

In the health facilities sampled in Uasin Gishu County, 32.01% of the respondents had attained a working experience of between 4 and 7 years. This is the highest given the five categories provided. In these facilities, it is evident that 2.91% of the respondents had worked for 15 years and above.

Table 4: Descriptive Results for Intellectual Capital

Intellectual Capital Statements	**N**	**M**	**SD**
Human Capital:			
Employee Competence; My hospital is excellent in terms of medical and administrative personnel's know-how	378	4.02	1.121
Employee Development; The center devotes resources and effort to update and develop employee knowledge and skills	378	3.98	0.809
Structural Capital:			
Culture; My hospital has a supportive culture that allows medical and administrative personnel to try things	378	3.36	0.723
Access to Information; Our hospital has a full range of handbooks & a complete knowledge management system for employees' easy reference	378	4.12	0.926
Information Technology (IT); My hospital has superior IT infrastructure to support hospital strategies	378	4.06	0.714
External Environment; My hospital possesses precise knowledge of competitor orientation	378	3.88	0.806
Internal Processes; Our hospital has an effective management process	378	4.26	1.015
Relational Capital:			
Patient-Centered; The center prides itself on being patient-oriented	378	4.18	0.994
Patient Loyalty; Patients are highly loyal to the center	378	4.05	0.846
Partnerships; Employees have close interactions with partners	378	3.92	0.726
Internal Relations; Employees trust each other with open communication	378	4.33	1.107

Source: Field Data (2023)

In Table 4, the findings relating to intellectual capital dimension are presented. In this table, majority of the respondents (Mean (M)= 4.33, Standard Deviation, (SD) = 1.107) were of the opinion that employees in

their respective hospitals trust each other with open communication as far as internal relation within the relational capital is concerned. This was followed closely (M = 4.26, SD = 1.107) by the opinion given under the internal processes in the structural capital dimension that the hospitals have an effective management process. On the tail end, a mean of 3.36 with the SD of 0.723 respondents gave their opinion regarding the culture aspect under the structural capital dimension. In this case, these least number of respondents were of the opinion that their respective hospital have a supportive culture that allows medical and administrative personnel to try things.

Table 5: Descriptive Results for Organizational Ambidexterity

Organizational Ambidexterity Statements	**N**	**M**	**SD**
Exploration:			
My hospital generates new clinical services in order to increase patients' access	378	4.14	0.948
My hospital keeps the pubic well informed of new clinical services	378	4.22	0.827
My hospital seeks to increase market share via new ventures	378	3.68	0.763
My hospital has strategic initiatives involving new technological fields (social media, electronic medical records, robotics and many more)	378	4.17	0.005
My hospital encourages searching for novel ideas and 'thinking outside the box'	378	4.29	0.934
My hospital looks for creative ways to satisfy its patients' needs	378	4.15	0.818
My hospital is flexible enough to allow us to respond quickly to changes in our strategic initiatives and goals	378	4.24	0.870
My hospital evolves rapidly in response to shifts in our strategic initiatives and goals	378	3.96	0.925
Exploitation:			
My hospital frequently adjusts existing clinical services to improve patients' safety	378	4.09	0.944
My hospital reduces the cost of providing clinical services	378	4.02	1.043
My hospital continuously improves the reliability of clinical services and work flow processes	378	3.95	0.790
My hospital improves labor productivity in providing clinical services	378	3.78	0.866
My hospital expands clinical services for existing patients	378	4.24	1.083
My hospital's departments work cohesively to support overall hospital objectives	378	4.16	0.972
My hospital frequently adopts procedures, rules and polices to improve patients' safety	378	4.01	0.883
My hospital's publicly reported quality indicators have continuously improved	378	3.93	0.814

Source: Field Data (2023)

The study examined both exploration and exploitation aspects of the organizational ambidexterity. Within the exploration aspect in Table 5, significant number of respondents (M = 4.29, SD = 0.934) agreed to the fact that their hospital encourages searching for novel ideas and 'thinking outside the box'. This was followed closely by the opinion as outlined by M = 4.24, SD = 0.870 that the hospitals are flexible enough to allow us to respond quickly to changes in our strategic initiatives and goals. Within this exploration aspect, least responses (M = 3.68, SD = 0.763) were given pertaining to the statement that the hospital seeks to increase market share via new ventures. Further in Table 5, the highest number of responses (M = 4.24, SD = 1.083) concurred with the statement that their hospitals expand clinical services for existing patients. On the contrary, there were few responses (M = 3.78, SD = 0.866) as to whether the hospital improves labor productivity in providing clinical services.

Table 6: Descriptive Results for Performance

Performance Statements	N	M	SD
The services offered at the hospital are of top quality	378	4.22	1.045
There is top quality professionalism at the hospital	378	4.01	1.001
The hospital offers specialized treatment to patients requiring special attention	378	4.26	0.916
Customers are satisfied with the services delivered at the hospital	378	4.13	0.923
Employees are committed to their tasks allowing focus on quality service delivery	378	4.30	0.804
The services at the hospital are easily accessible by the citizens	378	4.25	0.842
There is an active and functional feedback mechanism to encourage communication with the patients	378	3.98	0.715

Source: Field Data (2023)

In Table 6, it is evident that a significant number of respondents as indicated by M = 4.30 and SD = 0.804 supported the statement that the hospital's employees are committed to their tasks allowing focus on quality service delivery. This was closely followed by the opinion that the hospital offers specialized treatment to patients requiring special attention (M = 4.26, SD =0.916) as well as that relating to the fact that the services at the hospital are easily accessible by the citizens (M = 4.25, SD = 0.842). In this table, a mean of 3.98 responses with the SD of 0.715 were of the opinion that hospitals had an active and functional feedback mechanism to encourage communication with the patients.

Hypotheses Testing Results

First and foremost, the study tested the simple causal effect relationship given H_{01}; There is no significant relationship between intellectual capital and performance of health facilities in Uasin Gishu County, Kenya. In Table 7, the model summary outlines that R^2 = .721 with the standard error (SE) of .601. Thus, 72.1% of the variations in performance of the health facilities sampled in Uasin Gishu County are explained by intellectual capital.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	SE of the Estimate
1	.775[a]	.721	.763	.601

Source: Field Data (2023)

Table 8 presents that F (3,374) is 275.344 with the probability value (p-v) of .000 <0.05). In this regard, the overall regression model given the intellectual capital dimensions (human, structural and relational capitals) besides performance was of good fit.

Table 8: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	147.511	3	49.170	275.344	.000[b]
	Residual	49.170	374	.131		
	Total	196.681	377			
a. Dependent Variable: Performance						

b. Predictors: (Constant), Human Capital, Structural Capital, Relational Capital

df; Degrees of freedom; Sig.; Significance

Source: Field Data (2023)

As part of the first test of the simple relationship casual effect, H_{01a}; There is no significant relationship between human capital and performance of health facilities in Uasin Gishu County, Kenya was tested. From the findings in Table 9 illustrates a positive (β = .247) and significant (p-v = .000 < .05, confidence intervals (CI) = .283, .411) relationship between human capital and performance. This implies that one unit change in human capital leads to increase in performance by 0.247 units. As a result, H_{01a} was rejected and concluded that human capital significantly relates with performance of health facilities in Uasin Gishu County, Kenya. This therefore supports the findings by Tiwari (2022) and Kafili et al. (2022).

Table 9: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	3.682	.665		5.537	.000	1.571	3.316
	Human Capital	.247	.126	.264	1.960	.000	.283	.411
	Structural Capital	.172	.088	.186	1.956	.002	-.033	-.246
	Relational Capital	.139	.107	.145	1.299	.011	.192	.327

Source: Field Data (2023)

Secondly, the test involved H_{01b}; There is no significant relationship between structural capital and performance of health facilities in Uasin Gishu County, Kenya. The results showed a positive and significant relationship (β = .172; p-v = .002 < .05, CI = -.033, -.246) between structural capital and performance. Hence, one unit change in structural capital results to 0.172 unit increase in performance. Based on this finding, H_{01b} was rejected and clinched that structural capital significantly relates with performance of health facilities in Uasin Gishu County, Kenya. As such, the results threw some weight on the findings by Kafili et al. (2022) though contradicting with Sarwenda (2020) and Zhang et al. (2021). Lastly, H_{01c}; There is no significant relationship between relational capital and performance of health facilities in Uasin Gishu County, Kenya. Table 9 thus highlights that relational capital positively (β = .139) as well as significantly (p-v = .011 < .05, CI = .192, .327) relates with performance. Consequently, performance increases by 0.139 units as a result of one unit change in relational capital. In the end, the findings contradicted with those by Lawal et al. (2019) while being at par with those by Sarwenda (2020). This is because H_{01c} was rejected thereby concluding that there exists a nexus between relational capital and performance of health facilities in Uasin Gishu County, Kenya

Testing of the Mediation Effect

To begin with, Model 1 in Table 10 indicates that the first condition for mediation analysis procedure (path a_1) by MacKinnon et al. (2012). This is because intellectual capital positively (β = .327) and significantly

(p- v = .024 < .05) relates with organizational ambidexterity. This finding supports those by De la Lastra et al. (2017a), De la Lastra et al. (2022) and Lopez-Zapata and Ramírez-Gómez (2023). Notably in this model, intellectual capital explains 21.8% variations in organizational ambidexterity as indicated by R^2 = .218. In the Model 2 (path b_1), there exists a positive and significant relationship organizational ambidexterity and performance as shown by β = .508 and p-v = .011 < .05 respectively. This result is at par with Fu et al. (2016), Peng et al. (2019) and Dranev et al. (2020). Thus, basing on R^2 = .432, organizational ambidexterity explains 43.2% variations in performance. Still within Model 2, the path c' tests the linkage between intellectual capital and performance in presence of organizational ambidexterity. In this regard, there is a positive (β = .416) and significant relationship (p-v = .000 < .01) between intellectual capital and performance while having organizational ambidexterity in the picture. Thus, the second and third recommendations regarding mediation analysis is met.

Table 10: Mediation Analysis

	Model 1 (OA)		**Model 2 (PERF)**		**Model 3 (Total Effect)**	
Predictor	β	p-v	β	p-v	β	p-v
IC	a_1 = .327*	.024	c' = .416**	.000	.582***	.004
OA			b_1 = .508*	.011		
R^2	.218		.432		.346	
F	62.235***		96.301***		77.115***	
Mediation	.327 * .508 = .166 SE = .263 CI = .371 (Lower Bound), .526 (Upper Bound)					

Significance Level: *p< 0.05, **p< 0.01, ***p< 0.001

Key: PERF (Performance); IC (Intellectual Capital); OA (Organizational Ambidexterity); CI (Confidence Interval)

Source: Field Data (2023)

Furthermore, Model 3 gives the total effects which is derived by obtaining the summation of direct effect (path c') and mediation effect (a_1 * b_1). In this case, direct effect under this model is positive and significant (β = .582, p-v = .004 < .001). This signifies an improvement when compared to the Model 2's direct effect of β = .416. However, Model 3's R^2 is .346 which is slightly lower as compared to .432 in Model 2. Nonetheless, intellectual capital jointly with organizational ambidexterity account for 34.6% variations in performance. Lastly, H_{02} was rejected and concluded that organizational ambidexterity positively and significantly mediates the relationship between intellectual capital and performance. This is due to the fact that the mediation effect (a_1 * b_1 = .166) is positive as well as absence of zero in the lower (.371) and upper (.526) bound of the confidence intervals. In line with description of mediation categories by Zhao et al. (2010), there exists complimentary mediation as both the direct effect (path c' = .416) and mediation effect (.166) are positive or points in the same direction.

CONCLUSION

In most countries across the world, health care is a crucial sector that promotes the public well being as well as the economic growth and development. In this sector therefore, intellectual capital which comprises of intangible assets like knowledge, expertise and other processes contributes immensely to organizational performance. On the other hand, organizational ambidexterity involves finding a balance between exploiting of existing knowledge and capabilities for short term gains besides exploration of new

opportunities for long term sustainability. This paper thus explored the intricate relationship between intellectual capital, organizational ambidexterity and performance from the health sector perspective. To begin with, the study concludes that the three intellectual capital dimensions, namely, human, structural and relational capital are positively linked to performance of health facilities in the Kenya's Uasin Gishu County. Further, there exists a significant association between intellectual capital and organizational ambidexterity. In addition, organizational ambidexterity was found to intensify performance of the heath facilities. Lastly, the study sums up that organizational ambidexterity has a complimentary mediation effect in the nexus between intellectual capital and performance.

STUDY IMPLICATIONS

Theory Implications

First and foremost, the findings of the study contribute to the existing literature as it provides the mediation analysis given the key aspects as intellectual capital, organizational ambidexterity and performance. As a result, these theorized linkage of the three variables could form a basis of undertaking more research in future. From stewardship theory perspective, the government plays the role of a steward in ensuring that each and every citizen access quality heath care services. In order to promote this stewardship role, there is need for strategic means as a far as health polices as concerned. This study thus contributes to the stewardship theory by outlining the utilization of the health care organization's intangible and knowledge-based resources as intellectual capital and organizational ambidexterity with the sole aim of refining performance.

Practical Implications

The study findings are of immense benefit to the policy makers in the general health care sector. In this case, the findings outline the vital role of intellectual capital as a significant driver of not only organizational ambidexterity but also performance. Thus, the necessary policies, procedures and strategies relating to intangible assets and knowledge-based resources can be designed and implemented. This will enhance the efficient utilization of intellectual capital so as to enhance performance. For instance, promotion of human capital through prioritization of workforce training and professional development, improving structural capital efficiency through optimization of information systems and process. Moreover, developed polices could help in enhancing relational capital by nurturing relationships and collaborations with patients, stakeholders and other health care providers. Through different intellectual capital dimensions, the support of health care organization's ambidexterity will be intensified. That is, the ability to exploit the existing capabilities and explore new opportunities for both innovation and growth purposes. In the long run, the health care management would be able to develop the regular evaluations that will aid in identification of areas of improvement as well as guiding the strategic process. In particular, continuous assessment and monitoring of impact of performance given the intellectual capital and organizational ambidexterity.

Suggestions for Future Research

Future research could be conducted based on a certain number of limitations of this study. At the outset, target population generalized all the health facilities. Thus, future research could be comparative given the public and private health facilities from a wider geographical scope. As regards to the sampling design, purposive sampling used in this study might lead to biased responses. As a remedy therefore, other probability sampling designs could be implemented in future. Moreover, data collection was based on the five-point Likert scale items adopted from other studies relating to intellectual capital, organizational ambidexterity and performance. Hence, other quantitative measures relating to these variables could be utilized in future. In particular, performance measures as key performance indicators from the balance

scorecard, strength, weakness, opportunities and threats (SWOT) analysis integration besides the financial related ones could be incorporated. Instead of exploration and exploitation, organizational ambidexterity may be assessed in future from other dimensions as temporal, structural, contextual, simultaneous or sequential. Given the current competitive environment, incremental and radical innovation types could be assessed along side this study's variables since its also categorized as a knowledge-based resource of the organization.

CONFLICT OF INTEREST

There was no conflict of interest reported by the authors.

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