Chapter

The Emergence of Risk and Return on Human Capital Development

Cashandra C. Mara

Abstract

Performance improvement has been the focus of both public and private sector organisations for decades, but the extent to which human capital and human capital resources play a central role, has come into sharp focus only in recent years. Human capital, whether it is enhanced through local or foreign direct investment, can be turned into a dynamic capability, optimising and continually transforming collective human skills, competencies and expertise to improve performance and competitive capability. However, to understand the true contribution of human capital to dynamic capabilities, managers and team leaders require the ability to measure and manage the results of human capital improvement or training. Yet, they hardly do, for various reasons. In this chapter, the risk and return on human capital is highlighted, as well as the successes and improved relations organisations and countries may enjoy from understanding, managing and reporting on this important building block to human capital development.

Keywords: risk, return, evaluation, dynamic capabilities, human capital development, foreign direct investment

1. Introduction

An accurate tool to evaluate training and development has perplexed academics, managers and policy makers around the world in their search for means to evaluate the outcomes of training to improve individual and organisational productivity. What makes training evaluation more perplexing is that different stakeholders look for different outcomes, so for instance, a training manager may aim at closing the skills gap, while senior managers may aim at creating value through improved achievement of strategic objectives. For these reasons, there remains a gap in our knowledge on training evaluation and a reason for ongoing research.

As any investor would like to know or evaluate the return on their investment, by comparing it to the cost thereof, so would an investor in training. Training evaluation enables an investor to value the cost versus the benefit of the investment in training, with the aim of quantifying or justifying the investment. Investors in corporate training are usually employers, who seek to capture value in the form of a competitive advantage over rivals.

It has become a pressing concern though, as strategy makers, boards of organisations, and even governments are growing frustrated with the lack of training impact evaluation. If managers continue to fail at producing evidence of it, future decisions about spending on training may be negatively impacted and the likelihood of personal accountability, followed by disciplinary steps for failure to execute strategy is not excluded. Management tends to reduce spending on training during turbulent times with the aim of reducing operating expenses, particularly as immediate return is not observable, while immediate cost cutting is. An investment in training may even be considered risky if the outcomes do not further the organisation's efforts to achieve its strategic objectives.

In this chapter we will explore five areas related to training and its evaluation. The chapter starts off with the reasons managers invest in training and are interested in a return, then continues to explore the benefits of an excellent workforce. The discussion is followed by exploring various ways that training may be evaluated and the risks resulting from no evaluation or poor evaluation. The chapter is completed with a look into global investment practices and concluded with an overview.

2. Why develop human capital?

2.1 Knowing the value of investing in HCD

Human capital can be defined as the accumulation of marketable skills, on-the-job training, work experience and many years of exposure to a particular field. Collectively, the skills of individuals and groups contribute to the overall human capital of an organisation or a country, and can be developed through further education and training. From a strategic standpoint, organisations are interested in improving their productivity with the help of skilled employees, but employees also go to work to achieve their personal career objectives. Therefore, when the objectives of employers and employees are aligned, human capital development (HCD) helps both organisations and individuals achieve their respective objectives.

As far back as the 1950's authors such as Becker [1] and Mincer [2] started taken an interest in the relationship between human productivity, education and training. It makes sense that organisations would favour investing in organisation-specific training, such that for instance, a news channel would only pay for journalist related training, while a bakery may only pay for confectionery training. The advantage is that the organisation alone benefits from their investment training, and not the rest of the competitive environment. But then economist such as Schultz [3] argue that through labour mobility, entire nations benefit from enhanced productivity levels among individuals who tend to move between jobs. That is why global organisations such as the African Development Bank [4] and the World Economic Forum [5] place major emphasis on skills development, improved country productivity and the competitive capabilities of entire continents.

Investing in an individual's education is expected to enhance their talents and skills levels, their productivity or output at work, and ultimately the strategic performance of the organisation, but that that does not imply that the individual is enslaved or owned by the organisation. Individuals enjoy and prefer generic training, for example management training, since it makes them more marketable, flexible and mobile, particularly in these times of rapid change. Unlike earlier generations that used to have "jobs for life", modern day individuals are not afraid to exercise their newfound mobility and move between jobs, cities or even countries, and the investing organisation is left with the duel loss of the money and time spent on training, in addition to employee attrition.

Wright [6] distinguishes between the value captured by the individual versus that captured by the organisation. The organisation would like to capture value from organisation specific skills in the form of improved competitive capability and the individual. However, individuals prefer to acquire generic skills, which have similar value across organisations and industries. Management scientists tend to lose focus of the psychology aspect, focusing only on the economic aspect of creating value and outcompeting rivals. Human psychology tells us that the very success in the form of profits and competitive advantages is afforded the organisation by the humans that work in it. Therefore human aspects, notably free will, identity, meaning and purpose, as well as community involvement are important considerations in an organisation's efforts to develop human capital strategically [6]. Free will implies that individuals choose the level of commitment they have to creating value for themselves or their organisation whether investing in generic or organisation specific skills. Individuals who identify strongly with their workplace are more likely to act positively toward the organisation and are not likely to leave the organisation. Humans seeking meaning and life purpose through work help the organisation achieve success and community refers to our tendency to build relationships at work.

Apart from management commitment, there are countless factors at work that may impact HCD success and the extent to which overall productivity is enhanced through an investment in HCD. Other factors may include quality of secondary and tertiary education, individual motivation, organisational culture and incentives governments use to encourage training. Training increases the individual's productivity, and subsequently, that of the nation, as the productivity cycle below illustrates [7].

In **Figure 1**, seven steps to productivity are illustrated, and form the productivity cycle. Through training, individual and national productivity is expected to increase, which ultimately leads to improved sustainability as countries become more competitive.

While managers and leaders are expected to strive for productivity gains through HCD, it is frequently incentives such as tax breaks or spending allocated funds, also called ticking boxes, rather than the actual improved human capital and productivity gains that become the driving force behind spending on training. It remains important that as managers, we need to make informed decisions about the money spent on training, versus the return we receive through training evaluation. Over the years, many efforts at training evaluation have been researched, as we will explore later.

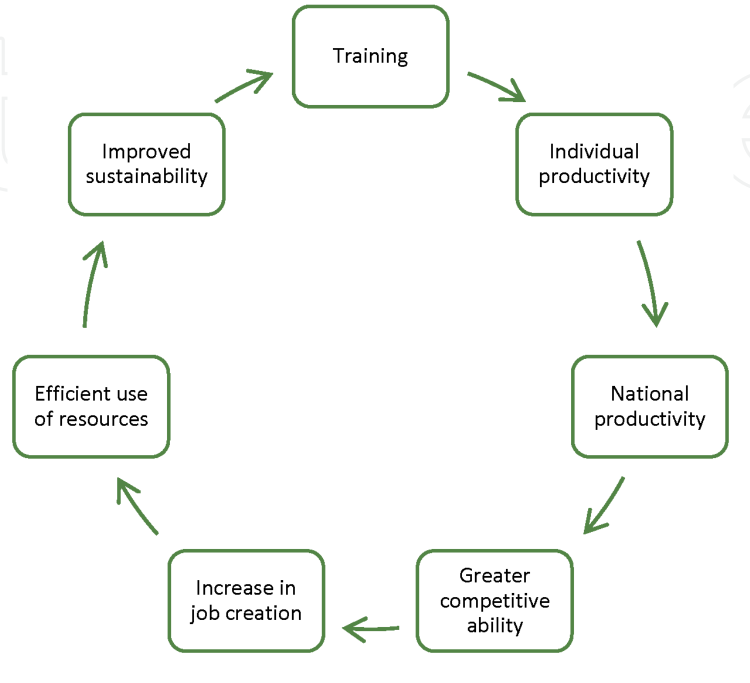

Figure 1.
The productive cycle [7].

Functional managers work together as a team, and successful team efforts can lead to synergy in the organisation. In that sense, sometimes line managers need to perform a typical HR function, such as identifying a training need or even coach a team member or subordinate. Hence, the flatter and less hierarchical organisational structures we tend to see in modern organisations result in the roles of functional managers converging and it was found to improve the organisation's performance. Indeed, managers are the implementers of the organisation's strategy, but manager perceptions and personal interests may interfere with strategic goals. Although all managers are appointed to act as agents or representatives of the organisation they work for, not all of them buy equally into the vision and goals of the organisation. The extent to which managers are committed to and identify with the vision and goals, and work hard to implement the annual strategy, determines the effort they will exert in strategy implementation or organisational change.

2.2 Human capital as dynamic capabilities

Dynamic capabilities (DC) result when an organisation succeeds in an ever-changing external environment, at transforming itself, by sensing, seizing and reconfiguring its resources. By optimising and continuously transforming its successful, routine ways of doing things, while learning new knowledge, an organisation develops dynamic capabilities, which improves its ability to outperform rivals and build a sustainable competitive advantage [8].

Dynamic capabilities theory is based on four principles, being i) the resource-based view (RBV), ii) the knowledge-based view (KBV), iii) the evolutionary perspective and iv) the market-based view [9]. In this chapter, we will only explore the resource-based view (RBV) and the knowledge-based view (KBV) for its relevance to HCD. According to the RBV of dynamic capability theory, all organisations have similar access to technological and financial resources, and therefore it is the success with which each organisation can sense, seize and reconfigure its unique combination of valuable, rare, inimitable and non-substitutable (VRIN) resources that will create competitive advantage. The RBV of dynamic capability theory supports the views of Schultz and Becker, that organisation specific HCD is most valuable to the investing organisation, than for any other. Thankfully, modern organisations invest not only in organisation specific human capital, but also in generic human capital. Since such generic skills are valuable to any organisation, the human capital of the entire nation is enhanced through labour mobility, giving the nation better global competitive abilities.

The knowledge-based view (KBV) is an extension of the RBV and theorises that knowledge can be used to create dynamic capabilities, competitive advantage and subsequently, value for an organisation's stakeholders. Knowledge is a strategic asset, especially if management can collect, manage and retain valuable, rare, inimitable and non-substitutable (VRIN) knowledge sources [10]. Value creation is optimised when internal knowledge sources are complemented with other relevant, available knowledge to create new knowledge. However, the acquisition of knowledge through means such as formal education or on-the-job training is contingent on management's bounded rationality, or the finite knowledge, time and other resources they have at their disposal at the time knowledge acquisition decisions are made. Care should be taken that the cognitive limitations of managers or their personal agendas do not interfere with knowledge acquisition.

The three micro-foundations referred to by Teece [11], sensing, seizing and reconfiguring, warrant more in-depth exploration. Sensing is management's savoir-faire to attract human capital, and seizing refers to transforming existing human capital to develop capabilities with the aim of seizing new market opportunities.

Reconfiguration refers to the reordering and reformation of human capital resources to give the organisation the best possible chance against competitors. Sensing is a vital first step in securing the best possible team but what can managers do if they lack certain capabilities and time to develop them? They need to recruit or acquire human capital. This could be done through the normal recruitment channels, or through acqui-hiring. Acqui-hiring takes place when an organisation acquires an entire outside team or separate organisation to gain access to the expertise they need [12]. We see such practices often, with Google and Facebook probably the leading organisations to acquire skills in that manner. Facebook acquired WhatsApp for its talent and to drive innovation more than the organisation's assets or products.

Seizing talent gives management the option of retraining existing employees, using consultants temporarily or by acquiring individuals or teams externally. The large scale use of information and communication technology (ICT), the world-wide-web and the onset of social media has enabled the formation of virtual communities of practice (COP's), a virtual group who share the same concerns or their passions about a particular or variety of topics. Such a COP can source of shared knowledge, innovation and expertise, which the organisation can seize to build on its existing knowledge base.

Reconfiguring as the final leg of Teece's micro-foundation is the management action of combining existing and newly-acquired skills to improve organisational performance and enhance value. A frequently reconfigured VRIN resource base, makes an organisation agile, flexible and much more competent to align their resources to a turbulent external environment. The combination and fine-tuning of the three micro-foundations all come back to building the organisation's VRIN resources.

Since the seminal work of Teece, Pisano and Shuen [8] more than 2 000 articles were published on the dynamic capabilities theory. Major criticism against the theory is its continuing foundation level and conceptual nature, with no material empirical research to back up the theory. A number of empirical studies in the last two decades on dynamic capabilities have tried to remove the vagueness around the concept. In these studies dynamic capabilities were analysed based on more specific strategic efforts, such as customer centricity, competitor orientation and strategic investment in technology [13–15].

The knowledge based view suggests that organisations can use knowledge to create value, meaning that knowledge can be an asset to be invested in. In a knowledge economy, knowledge workers make an organisation very valuable for the shareholders [12]. Think about Facebook acquiring WhatsApp and a variety of other lucrative business, not for their intellectual properties, but for their human capital and more specifically, for their abilities to innovate. Knowledge is a difficult investment to manage, but what a manager would most appreciate is to see newly acquired knowledge have a practical impact on behaviour [16]. Behaviour is expected to change in the individual when they acquire new knowledge through learning, assimilate and apply that knowledge to improve their work and the organisation's business processes. Humans build newly acquired knowledge upon existing knowledge and the intensity of effort increases our absorptive capacity [17]. Collectively, the absorptive capacity of individuals build the absorptive capacity of the organisation and in organisations with a functioning knowledge management strategy, higher absorptive capacity is a dynamic capability.

2.3 Evaluation practices in HCD

The calculation of the costs and benefits of an investment in training is not a new academic or business challenge. Schultz [3] noted that it is far easier to calculate the quantitative aspects of training that the qualitative ones. Quantitative aspects are the costs related to the training venue, the cost of the trainer, possible travel to the venue, even the time away from the offices is calculable. However, the benefits of training are far more elusive to determine, because managers cannot estimate increased productivity from training, considering the many factors involved, such as the employee's prior knowledge, retention of acquired knowledge, and their intensity of effort after the training. We already know that the effects of training seems to wear off as time passes, and the timing of evaluation will therefore produce varied results. Understandably, it is not viable to try and determine the value of knowledge acquired and retained during training. Although researchers in the 1960s questioned whether it was worthwhile to put a value on training and education, the scene was set for subsequent research on how individuals and organisations may benefit from training. That would only be possible if a formal evaluation technique is employed.

Such a technique was first formalised by Donald Kirkpatrick [18] who developed the Kirkpatrick-Philips Model of Training Evaluation as a doctoral thesis. Soon it became the industry standard for the evaluation of human capital development, and although often criticised by subsequent researchers and authors, it remains the industry's most acceptable evaluation tool. The model is summarised below as **Table 1**.

In short, the Kirkpatrick Training Evaluation Model contains four steps to evaluate training interventions, being participant satisfaction, learning that took place, the application in the workplace or training transfer, and impact on organisational results. As we progress through the actions, from Level 1 to Level 4, placing an accurate value on training outcomes become increasingly difficult and therefore, avoided. Whether it was the individual, the workplace or government that invested in the training, return on investment needs to be measured. As the knowledge based view suggests, it is the determination with which we change our behaviour after training, and apply our newly acquired skills and knowledge, that can become a dynamic capability. It is human nature to change our behaviour immediately after training, and with the passage of time, to resort to old and ingrained habits. Nevertheless, the measurement of training transfer may be hypothetical at best, but managers can manage it through incentives and disincentives, by encouraging their employees to apply newly acquired skills continuously.

Another author who criticised the Kirkpatrick Training Evaluation Model was Jack Phillips [20] who contributed a fifth level, that of return on investment (ROI). This level intends to measure the financial benefit of the training intervention in relation to its costs and was dubbed Five-Level ROI Framework. See **Table 2**. Typically the financial benefit is observed in improved customer service, product quality and organisational performance.

Measuring, recording and reporting on the benefits from any organisational intervention are not equally simple to conduct. Any good management tool such as

Step	Action	Description
1	Reaction	The extent to which the training participant enjoyed or accepted the training attended.
2	Learning	The skills or knowledge acquired during the training.
3	Behaviour	On-the-job application of the newly acquired skills and knowledge.
4	Results	Business improvement in the form of reduced costs, increased morale or customer satisfaction.

Table 1.
The Kirkpatrick four-step training evaluation model [19].

	Level	Description
1	Reaction and planned action	Measures participant's reaction to the programme and outlines specific plans for implementation.
2	Learning	Measures skills, knowledge or attitude changes.
3	Job application	Measures change in behaviour on-the-job and specific application of the training material.
4	Business results	Measures business impact of the programme.
5	Return on investment (ROI)	Measures the monetary value of the results and costs of the programme usually expressed as a percentage.

Table 2.
Five-level ROI framework. Source: Adapted from Phillips [20].

the Five-Level ROI Framework should serve its purpose of informing management of the advantages and disadvantages of a management decision. Perhaps Phillips should have named his contribution to the Kirkpatrick model a "cost–benefit-analysis. Either way, another solution may be to verbalise expected benefits, and compare actual benefits against it. Training evaluation should not be the emphasis, but rather the realignment of training to key business outcomes such as creating stakeholder value, career progress and employee retention.

Training evaluation and effectiveness remains evasive, and although the questions of the learning environment, trainer efficacy and training design have been researched, it was found to be less influential in HCD effectiveness. Individual motivation to learn is not automatic and varies among employees. However, in addition to our own determination and effort, workplace factors such as managerial and even peer support, may negatively impact how much training is absorbed and transferred to the job and the rest of the team (**Figure 2**).

The Baldwin-Ford Learning Transfer Model [21] was one of the first conceptual models to explain training transfer, and it was developed to overcome some of the shortcomings of the Kirkpatrick Phillips model. The three main elements are

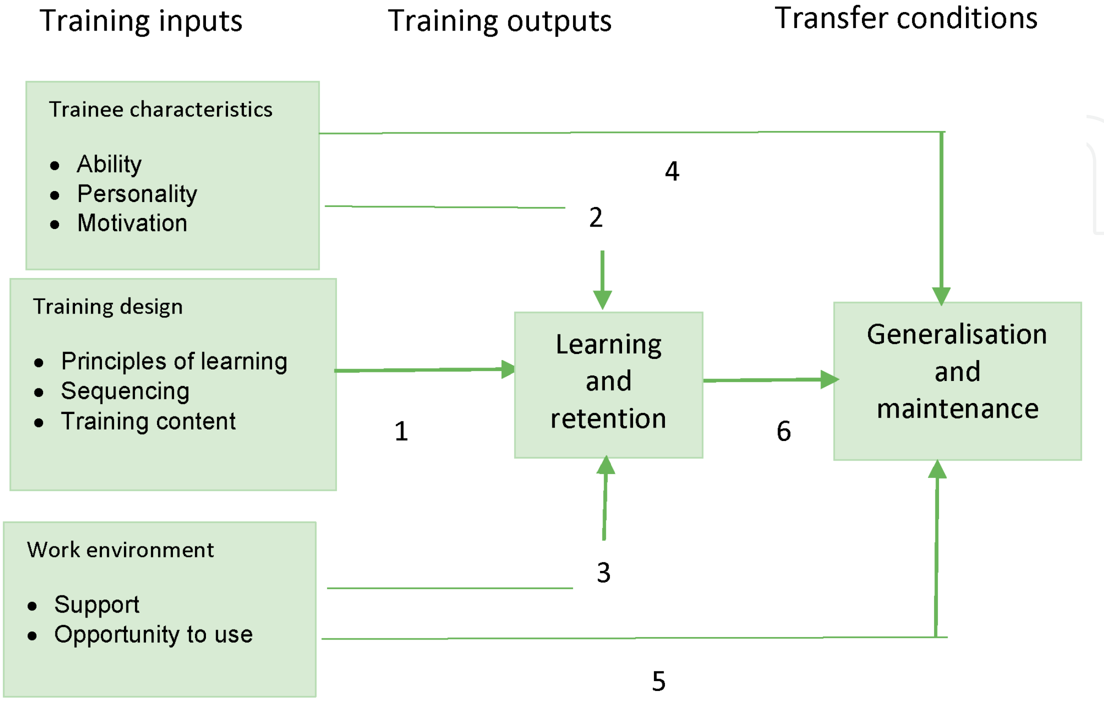

Figure 2.
The Baldwin-ford transfer of training model [21].

training inputs, outputs and conditions of transfer. Training inputs include the characteristics of the trainee, the design of the programme and the workplace conditions following training. Training outputs relate to the extent of which learning and retention occurs and the conditions of transfer relate to the maintenance of the learning over time. Subsequent models [22] suggest that other factors such as timing and key stakeholder influences also impact training transfer. Clearly, these factors point to the complexity and multifaceted nature of training transfer.

Nevertheless, it remains regrettable that most organisations fail to evaluate training beyond Kirkpatrick-Phillips's Level 1, which measures participant satisfaction. This takes place immediately following a training intervention, and participants are asked to complete a "smile sheet". Most managers do not evaluate the impact training has on business results and therefore are unable to improve results.

2.4 Risk in HCD

The continued failure to calculate benefits from investments in training could eventually lead to enterprise risks, embodied in various forms that range from strategic and operational risk, to the risk of legal non-compliance. According to risk literature there are three vital components present in enterprise risk management, being uncertainty, risk and opportunity. Uncertainty implies that we are unsure about the outcome of an event, and in turbulent times such as the present, volatility increases uncertainty. Risk implies an undesirable outcome, and possible negative consequences that follow, whereas opportunity implies potential positive outcomes and consequences. Considering that risk may present a potential positive outcome, managers should actively pursue opportunities, but manage risks discretely and carefully, rather than avoid it.

Enterprise risk management has been a vital element in corporate governance for a few decades, despite which the world has seen a fair quantity of corporate scandals, involving agents who act in their own interest, leading to reputational and financial loss and even bankruptcy. Risk is also perceived differently by different people and risk perception includes subjective judgement, expectations and bounded rationality. Management's response to risk depends on these factors in addition to their risk appetite. However, to adopt a holistic vantage point on enterprise risk, not only financial risk, but indeed systems and people risk must be considered. A holistic enterprise risk approach is one where all managers, including those responsible for human capital, are involved in managing risk. Human capital risk is defined as an investment in the improvement of human capital that does not meet the expected outcomes [23].

To date, measuring, reporting on and managing human capital risk is an emerging concept and still very foreign to most policy makers, in private as well as public organisations. It is no surprise then that managers do consider the loss of pivotal employees, adverse employee conduct leading to reputational damage, or union militancy as material enterprise risks, but do not record and quantify it as such. Equally, many hidden risks and opportunities may be present when managers fail to evaluate the cost and benefits of their investment in training.

Since organisations achieve their strategic objectives by optimising the dynamic capabilities of its human capital, the human capital strategy should be aligned to the organisation's annual strategy. Human capital is a significant distinguishing factor in the competitive strategies of all organisations and every part of the organisation depends on human involvement. Apart from the obvious risks in human capital development, such as losing key personnel or compliance risk, there are also less obvious risks such as management attitudes and perceptions or risk, or the earnestness with which we implement newly acquired knowledge after training (see the

KBV above). What is most important though is that all levels of management need to be aware of, record and report on human capital risks. Such a strategy, formalised in a policy, will remove uncertainty, provide management with more information and improve their chances of making informed decisions.

Acqui-hiring is an example of management striking a fine balance between active opportunity pursuit, and managing the parallel risk. In the case of acqui-hiring, usually the acquiring organisation pays lucrative salaries to attract this expertise and if knowledge is not transferred, the acquired expertise leaves the organisation or the team does not achieve its goals [12], there is a risk of financial loss. The emphasis of acqui-hiring is the human capital acquisition, and not the customer base, products, or goodwill of the target organisation, and could introduce major risks,

Early studies in human capital risk have presented a holistic view of the Kirkpatrick-Phillips Five-Level Training Evaluation Model, and innovatively added a pre-training assessment step and a risk management component, in what is referred to as The Risk and Return Framework for Human Capital Development [24]. Although not previously tested, this study findings were based on empirical research. It is important that a holistic and systematic view is adopted of training evaluation, commencing with understanding the performance gap, and concluding with the measures executed to manage the risk of not closing the gap. So much remains contingent on management attitude, ability and willingness to manage human capital risk, their bounded rationality, and that in itself presents a risk [25].

2.5 Global practices in HCD

Globalisation continues to lead to interconnectedness among economies everywhere in the world [16]. Through globalisation, money, skills, improved livelihoods and prosperity are channelled from rich countries, where investors are perhaps running out of investment opportunities, to developing or emerging economies. This process is called foreign direct investment (FDI) and is defined as the acquisition of a foreign enterprise with the aim of obtaining lasting control [26]. Through globalisation and FDI, a multinational community is resulting, and everybody, including HCD practitioners has to adjust to new ways of working. For example, e-learning is taking the place of instructor-led training, and immediately language becomes a consideration, as well as access to computers and the internet. Many host nations expect the foreign investor to make available expatriates, albeit temporarily, who will create jobs, recruit and empower the local workforce, and through the systematic transfer of skills and expertise, which is ultimately expected to improve organisational efficiency. For example, the branded sport shoes you find in your local store could have been partially manufactured in your home country, by your compatriots, through foreign direct investment in skills, expertise and capacity building.

In general, a country's prosperity is expected to improve due to FDI. In addition, human capital is also expected to improve, as multinationals provide on-the-job training, and through labour turnover, those imparted skills spill over into other organisations. FDI can be in the form of government policies and priorities to help create human capital, by providing incentives to FDI investors who provide on the job training, and by encouraging higher education to train students the skills demanded by industry [26]. Cognitive skills have been found to be a major drawcard for foreign FDI [27].

Foreign direct investment is already complex, and further complicated by language proficiency and the host nation's human capital endowment [28]. Language proficiency refers to that of the investor and that of the host nation.

Researchers found that the effectiveness of HCD is greatly dependent on language proficiency, implying that the effective absorption and retention of knowledge can be improved when the language barrier is reduced or eliminated. A significant consideration is the lack of acceptance, and therefore low trust level of foreign investors and the expatriates working for them. The use of expatriates and their eventual repatriation to their home country is expensive, and multinationals prefer to use local human capital for menial tasks that do not require specialised skills. Furthermore, an investment in the human capital of the host nation helps to increase the perceived legitimacy and acceptance of the multinational investor, who are often not welcomed in the host nation, due to perceptions of plundering and exploitation. Foreignness increases mistrust, conflict and low levels of acceptance between host country nationals and multinational investors, translating into a risk for the investor. However, high language proficiency, coupled with the perceptions of expatriate professional competence, improve acceptance, social integration and therefore knowledge transfer improves [6].

When multinationals invest in identified countries, the quality of human capital is an important consideration [27]. In the absence of standardised evaluation tools, the number of years of university education is often used, although that measure is inaccurate, as it does not reflect skill attainment through short courses attended or on-the-job training. In that sense, a host country with an abundant endowment of skilled knowledge workers, may be more attractive to foreign direct investors, who expect to exchange knowledge easier, thereby lowering their operating costs [16]. High quality human capital therefore becomes an important attractor of FDI, while on the contrary, perceived insufficient human capital translates into a risk of attracting FDI.

Many more emerging market multinationals (notably Brazil, India, China and South Africa), compared to mature market multinationals, have invested in Africa in recent years [27] and the observed differences in investment practices are thought-provoking. For instance, emerging market multinationals seem to value access to the market more than access to skills and talent. Corruption and bribery in the host-nation is of little consideration, and in some instances, even welcomed. To that end, Chinese MNC's do not capacitate the host-nation workforce, and instead employ expatriates for menial jobs, regardless of the risk of lawsuits, bribes demanded or the socio-political chagrin this may attract [28]. The local workforce is not capacitated for the duration of the investment, especially if the multinational's top management does not support HCD practices other than organisation-specific HCD, for fear of employee mobility or demands for higher salaries [29]. These practices introduce other risks as well, such as low levels of trust, isolation of the expatriates, or in extreme circumstances, xenophobia [30].

3. Wrapping up and looking back

The importance of a dynamic national stock of human capital, with world class education, skills and competencies, can never be emphasised enough for its significance in improving country competitiveness. Country competitiveness is enhanced through training or human capital development, which is the collective skills and competencies of a team, including on-the-job training, built upon high school or university education. Collectively, the human capital possessed by a team, contribute to both individual and organisational productivity, national wealth and long-term sustainability. However, although it has been proven over and over that human productivity improves as human capital improves, the matter of estimating the benefits versus the cost to investors who are typically employers, remains top of mind for management practitioners, academics and policy makers alike.

The complexity of the operating environment and the myriad of influences from the external environment, necessitates the continuous monitoring, fine-tuning and impact evaluation of human capital development. Dynamic teams that can adapt to a volatile external environment with greater ease and a management team that is able to anticipate volatility and market demands, sense, seize and reconfigure VRIN resources in good time, is in itself a dynamic capability for any organisation. However, the agents involved may have varied agendas, such as legal compliance or spending allocated budgets, and not necessarily real outcomes in the form of productivity gains. Continuous management efforts to calculate the benefits of training will help inform future spending on human capital development, for which more and more justification is required in the face of tightening financial constraints. If management can perform training evaluation systematically, and with the use of an accurate instrument, the benefits of training on a micro and macro level will become visible and manageable. On the contrary, continuous failure to prove the return on an investment in human capital, may lead to a number of risks, such as ill-informed spending decisions, loss of critical members of a workforce, and non-compliance to organisational policies or strategies. Management may be held personally accountable for such failure.

Good corporate governance makes it a management responsibility to ensure adequate human capital and the efficient enhancement of it through training. Efficiency can only be determined with the use of a tool, such as the Kirkpatrick-Phillips Five-level ROI framework or similar recognised evaluation tools. Risk management is an integral element of corporate governance following a number of corporate scandals and a terrorist attack such as 9/11 that led to the loss of entire teams. However, early research has found that human capital development risk is not yet a vital consideration for many organisations. Not managing human capital development risk may be material, but due to the novelty and complexity of the concept, not widely researched and there is definite scope for future investigation.

Making informed management decisions about the costs and benefits of human capital development and the resultant risk of failing of such a calculation, may have further reaching consequences than merely meeting compliance requirements. As western multinationals are exploring new corners of the earth as investment targets, they are attracted by the quality of the country's human capital. A country failing to attract FDI due to inefficient levels of HCD may lose out on such investments, and eventually find its sustainability under threat.

Author details

Cashandra C. Mara
School of Management, University of Johannesburg, Johannesburg, South Africa

*Address all correspondence to: cmara@uj.ac.za

References

[1] Becker, G.S. Human Capital. New York, USA: Columbia University Press; 1962.

[2] Mincer, J. Investment in human capital and personal income distribution. Journal of Political Economy. 1958; 66(4): 281-302.

[3] Schultz, T.W. Investment in human capital. American Economic Review. 1961; 51: 1-17.

[4] African Development Bank. The Bank's Human Capital Strategy for Africa. [Internet] 2014. Available: https://www.afdb.org/fileadmin/uploads. [Accessed 2017-05-15].

[5] World Economic Forum (WEF). Towards a Reskilling Revolution. [Internet]. 2018. Available: www.weforum.org. [Accessed 2018-06-04].

[6] Wright, P.M. Rediscovering the "Human" in strategic human capital. Human Resource Management Review. 2020; Article in Press.

[7] Erasmus, B.J., Loedolff, P.v.Z, Mda, T.V. & Nel, P.S. Managing Training and Development. 5th edition. Cape Town, South Africa: Oxford University Press. 2016.

[8] Teece, D.J., Pisano, G. & Shuen, A. Dynamic Capabilities and Strategic Management. Strategic Management Journal. 1997; 18(7): 509-533.

[9] Schweizer, L., Rogbeer, S. & Michaelis, B. The dynamic capabilities perspective: From fragments to meta-theory. Management Research Review. 2015; 38(7): 662-684.

[10] Burisch, R. & Wohlgemuth, V. Blind spots of dynamic capabilities: A systems theoretic perspective. Journal of Innovation & Knowledge. 20161; 109-116.

[11] Teece, D. Explicating dynamic capabilities: The nature and micro-foundations of (sustainable) enterprise performance. Strategic Management Journal. 2007; 28(13): 1319-1350.

[12] Chatterji A. & Patro, A. Dynamic capabilities and managing human capital. The Academy of Management Perspectives. 2014; 28(4): 395-408. http://dx.doi.org/10.5465/amp.2013.0111.

[13] Zaman, S. Salman, A. & Malik, O. Linking Strategic Orientations, Dynamic Capabilities, and Firm Performance: Evidence from the Pakistani Pharmaceutical Industry. Global Social Sciences Review (GSSR). 2019; 4(3): 215-226.

[14] Hilman, H., & Kaliappen, N. Market orientation practices and effects on organizational performance: Empirical insight from the Malaysian hotel industry. Sage Open. 2014; 4(4) 90.

[15] O'Dwyer, M., & Gilmore, A. Competitor orientation in successful SMEs: an exploration of the impact on innovation. Journal of Strategic Marketing. 2019; 27(1): 21-37.

[16] Mara, C. (Ed.). Business Management of the Future: For South African students. Johannesburg, South Africa: Pearson; 2020.

[17] Keller, W. & Yeaple. S.R. The Gravity of Knowledge. American Economic Review. 2013; 103 (4): 1414-1444.

[18] Kirkpatrick, D. L. Techniques for evaluating training programs. Journal of the American Society of Training and Development. 1959; 11: 1-13.

[19] Kirkpatrick D. Great ideas revisited. Training and Development. 1996; 50(1):54-9.

[20] Phillips, J.J. & Phillips, P.P. Using Action Plans to measure ROI. Performance Improvement. 2003; 42(1): 24-33.

[21] Baldwin, T.T & Ford, J.K. Transfer of training: A review and directions for future research" Personnel Psychology. 1988; 41 (65).

[22] Broad, M. L., & Newstrom, J. W. Transfer of training: Action-packed strategies to ensure high payoff from training investments. Reading, Massachusetts: Addison- Wesley. Perseus Publishing.1992.

[23] Koerselman, K. & Uusitalo, R. The risk and return of human capital investments. Labour Economics. 2014; 30: 154-163.

[24] Mara, C. Manager perceptions of risk and return in human capital development. Unpublished PhD Thesis. University of Johannesburg. South Africa. 2019.

[25] Addison, T., Guha-Khasnobis, B. & Mavrotas, G. Introduction and overview. The World Economy. 2006; 1-7.

[26] Baranwal, G. Links between foreign direct investment and human capital formation: Evidence from the manufacturing sector in India. The Journal of International Trade & Economic Development. 2019; 28: 137-160.

[27] Choi, N. Accounting for quality differences in human capital and foreign direct investment. The Journal of International Trade & Economic Development. 2015; 24: 228-246.

[28] Konara, P & Wei, Y. The complementarity of human capital and language capital in foreign direct investment. International Business Review. 2019; 28: 391-404.

[29] Tenzer, H., Terjesen, S., & Harzing, A. Language in international business: A review and agenda for future research. Management International Review. 2017; 57: 815-854.

[30] Wood, G., Mazouz, K., Yin, S., & Cheah, J. Foreign direct investment from emerging markets to Africa: The HRM context. Human Resource Management. 2014; 53: 179-201.