Human capital theory: Implications for human resource development

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Human capital theory: implications for human resource development

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Abstract: This article reviews definitions of 'Human Capital Theory' by leading economists and HRD scholars. The origin of the term 'capital' is explained, and the link between Human Capital Theory and HRD is discussed. It is argued in the article that HRD scholars and practitioners should explore further the link between human capital, HRD and development at individual, organizational, community and international levels.

Keywords: human capital, human resources, Human Resource Development, intellectual capital, international development

Introduction

Human Resource Development (HRD) as an emerging field has borrowed from other disciplines such as systems theory, psychological theory and economic theory (Swanson 1999). Although often thought of as a discipline of assumptions and theories, economics has played a major role in the development and application of HRD. In this article, we seek to explore Human Capital Theory and its implications for HRD research and practice. We explain the origin of the important term 'human capital' and its definitions. This is followed by an exploration of the links between human capital and HRD.

Human capital: its origins and links to investment

In the 1950s, the main factors of production consisted of physical capital, labor, land and management (Mincer 1962; Becker 1993). However, in the early 1960s, economic growth accounting studies had difficulty explaining the growth of the United States economy in terms of these four traditional factors of production (Denison 1962; Krueger 1968; Schultz 1961). The gap, known as the 'residual factor', was identified as 'human capital' (Schultz 1961). Thus, 'capital' became multidimensional in the economic literature of the twenty-first century and has been extended to include such terms as 'financial capital, organizational capital, intellectual capital, human capital, structural capital, relational capital, customer capital, social capital, innovation capital, and process capital' (Edvinsson and Malone 1997: 52).

The fundamental principle underpinning Human Capital Theory is the belief that peoples' learning capacities are of comparable value to other resources involved in the

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production of goods and services (Lucas 1988, 1990). When the resource is effectively utilized, the results are profitable for the individual, organization and society at large (Schultz 1961). Becker (1993: 15–16), noted: 'I am going to talk about a different kind of capital. Schooling, a computer training course, expenditures on medical care, lectures on the virtues of punctuality and honesty are capital too, in the sense that they improve health, raise earnings, or add to a person's appreciation of literature over much of his or her lifetime.'

Human Capital Theory therefore seeks to explain the gains of education and training as a form of investment in human resources (Aliaga 2001), and the main proposition is that people are considered a form of capital for development (Aliaga 2001; Becker 1993, Benhabib and Spiegel 1994; Engelbrecht 2003; Hendricks 2002). From this perspective, education and schooling are seen as deliberate investments that prepare the labor force and increase productivity of individuals and organizations, as well as encouraging growth and development at the international level.

With its emphasis on viewing people as capital, Human Capital Theory, like the field of human resource development, faced criticisms in its early development. As observed: 'It may seem odd now, but I hesitated a while before deciding to call my book Human Capital ... the concept of human capital remains suspect within academic circles that organize their thinking about social problems around a belief in the exploitation of labor by capital' (Becker 1993: 16).

Exploring the links between human capital and human resource development

Definitions of 'Human Resource Development' (HRD) vary internationally in scope of activities, intended audiences and beneficiaries, with factors influencing variations including national economics, the influence of government and legislation, and the influence of other countries (McLean *et al.* 2003: 41). Some countries have recognized the links between developing human resources and national productivity and performance (McLean *et al.* 2003), and this is also reflected in many definitions of HRD, including:

- Swanson and Holton's (2001: 4) definition of HRD as 'a process for developing and unleashing human expertise through organization development and personnel training and development for the purpose of improving performance'.
- McLean and McLean's (2001: 10) definition of HRD as 'any process or activity that, either initially or over the long term, has the potential to develop adult's work-based knowledge, expertise, productivity and satisfaction, whether for personal or group, team gain, or for the benefit of an organization, community, nation, or ultimately, the whole of humanity'.

The link between HRD and human capital can also be examined by exploring the definition of Human Capital Theory chronologically. Such a chronological analysis permits us to view the contextual elements that fostered the relationship between the theory and the field of HRD in a systematic manner. Table 1 shows the points of analysis that were compiled from a review of the literature.

Table 1 Definitions of Human Capital Theory by leading economics scholars

Author	*Year*	*Definition*	*Dependent variable*
Shultz, T. W.	1961	Human capital as the knowledge and skills that people acquire through education and training being a form of capital, and that this capital is a product of deliberate investment that yields returns.	Investment in people that has returns
Mincer, J.	1962	Theory of human capital as education and schooling that will prepare the workforce.	Quality workforce
Denison, E. F.	1962	Theory of human capital as a form of education that contributes to economic growth by attributing a proportion of economic growth not explained by increases in capital, labor and productive land to improvements arising from increased educational levels in the workforce.	Improved workforce
Becker, G. S.	1964	Theory of human capital as a form of investment by individuals in education up to the point where the returns in extra income are equal to the costs of participating in education. Returns are both private to the individual in the form of additional income, and to the general society in the form of greater productivity provided by the educated.	Private and social returns to investment in education
Bowman, M. J.	1969	Theory of human capital as a form of investment. Expenditures on social services, health and education are analogous to investment in physical capital.	Investment
Blaug, M.	1976	Human capital as the idea that people spend on themselves in diverse ways, by purchasing education and training not for the sake of present enjoyments, but for future pecuniary and non-pecuniary returns. Individuals and governments incur direct and indirect costs, and a link exists between investment in education and individuals' lifetime earnings.	Pecuniary and non-pecuniary returns
Psacharopoulos, G. and Woodhall, M.	1985	Human capital as investing in both formal and informal education and training, which provides and enhances individual productivity by providing knowledge, skills and attitudes and motivation necessary for economic and social development.	Productivity in the workforce
Romer, P. M.	1986	Human capital as a form of 'new growth theory', which regards knowledge creation as endogenous responding to market incentives such as improved profit opportunities or better education.	Improved profit
Psacharopoulos, G.	1985	Human capital as being formed through investment in education and training. This results in increased productivity among the employees in the workplace.	Increased productivity
Romer, P. M.	1987	Human capital as a continuation of the growth theory, which regards knowledge as more endogenous. Increasing returns to organizations are due to investment in human capital through specialization.	Increasing stock of knowledge

(*continued overleaf*)

Table 1 *(continued)*

Author	*Year*	*Definition*	*Dependent variable*
Romer, P. M.	1990	Human capital as the amount of total stock of human capital that an organization, country or economy has. The economy with a larger total stock of human capital will experience a faster rate of growth.	Faster rate of growth
Becker, G. S., Murphy, K. M. and Tamura, R.	1990	Defines human capital in the form of the fertility model and argues that there is a correlation between family size and the decision to invest in human capital; therefore, societies with small families have invested in human capital and benefited from more economic growth.	Faster economic growth
Cohn, E. and Geske, T. E.	1990	Human capital as an investment in education and training that has both private and social returns. Schooling and training increase one's productivity and thus one's chances in a free market to obtain higher wages – and certainly increase the contribution to the social product.	Increased productivity
Becker, G. S.	1993	Theory of human as investment in an individual's education and training, which is similar to business investments in equipment. Looks at the economic effects of investment in education on employment and earnings, and shows how the theory measures the incentive for such investment.	Employment and earnings
Bontis, N.	1996	Expenditures made by individuals and governments in purchasing education and training is seen as an investment. This investment is expected to yield future pecuniary and non-pecuniary returns.	Pecuniary and non-pecuniary returns
Fitz-Enz, J.	2000	Human capital as the traits one brings to the job: intelligence, fulfilling work energy, a generally positive attitude, reliability and commitment. One's ability to learn: aptitude, imagination, creativity, and what is often called 'street smarts' savvy (how to get things done).	Productivity and efficiency
David, P. and Lopez, J.	2001	Human capital as acquired human capabilities that are durable traits yielding some positive effects upon performance in socially valued activities.	Quality performance

Source: Compiled by the authors.

As shown from these definitions of 'Human Capital Theory', the main outcome from investment in people is the change that is manifested at the individual level in the form of improved performance, and at the organizational level in the form of improved productivity and profitability or at societal level in the form of returns that benefit the entire society. While Human Capital Theory argues that investing in people makes them productive, HRD also advocates improved workforce development through investment in education and training (Holton and Naquin 2002). Fitz-Enz (2000), observed that peoples' intelligence, their fulfilling work energy, positive attitude, reliability, commitment, ability to learn, aptitude, imagination, creativity, and motivation to share information and knowledge make a difference that leads to innovation and process capital which have become very important to the development processes. Thus, HRD theory and practice should benefit immensely by having a clear understanding of the Human Capital Theory and its emergence. Three specific examples of the areas of benefit include:

- The field of HRD could benefit from a greater understanding of how human capital scholars have clearly defined methods of quantifying returns to investment in education and training (Pritchett 2001; Psacharoppulos 1985). This would help to address the urgent need to show the value of HRD to organizations and society.
- Like Human Capital Theory scholars who faced their critics, HRD professionals must address the criticism directed at their work, especially with regard to how HRD contributes to the wellbeing of organizations, communities and societies. As Short *et al.* (2003: 240) noted: 'Perhaps HRD professionals will educate the organization on the meaning of social responsibility and its relationship to corporate performance, demonstrating effective strategies for addressing multiple needs and negotiating various stakeholder interests. No doubt, there is risk in taking a bold position in favor of stakeholder interests, but the risk is greater in doing nothing.'
- While HRD scholars and practitioners may recognize the importance of intangible assets and their impact on productivity and growth, few appear to measure the impact of developing such assets or associate identified improvements with activities of the HRD function (Cho and McLean 2000). As seen in the definitions of 'Human Capital Theory', investment in people through training and education has a direct and indirect impact on organizations, communities and societies at large. The focus on people as assets in organizations should help in defining the research agenda for HRD scholars and, in turn, to guide HRD practice.

Conclusion

The purpose of this article was to define 'Human Capital Theory' and show its link to HRD. It has offered the origin of the important term 'capital', provided evidence from leading scholars in the field on the notion of 'human capital' and how investment in education and training is a form of capital required for development of individuals, organizations and communities, and demonstrated close links between the Human Capital Theory and HRD. In closing, we challenge HRD researchers and practitioners to further pursue research that will demonstrate the link between human capital, HRD and organizational performance. Our belief is that such research could position HRD in terms of human capital development within the context of the knowledge economy.

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