

## RESEARCH METHODS USED IN SUSTAINABLE DEVELOPMENT OF HUMAN CAPITAL

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**Abstract:** *This paper presents an analysis of human capital research methodology, regarding the usual quantitative and qualitative methods and the main ways of mixing them.*

*Human capital is a topic of major interest to many sciences (economics, development sociology, politics, etc..) and is a concept that has generated important studies made of different perspectives to approach. Therefore, the range of research methods is an eclectic one, designed to capture the complexity of the phenomenon studied.*

*The article ends with the presentation of the authors' working experience in developing sections on sustainable development of human capital, as a part of development strategies targeting rural communities in Brasov county.*

**Keywords:** social capital, sustainable development, methodology.

**JEL Classification:** M<sub>12</sub>.

### ***1. Human capital in the knowledge society***

With the knowledge society, an efficient activity is no longer based on exploitation of natural resources, but the use of information and knowledge production. According to Peter Drucker (1999), the new society represents the greatest change in the modern world, its evolution being conditioned, to a large extent, by the scientific knowledge, regarded as the main source of power for individuals and society. Knowledge-based economy is the economy in which people work with their brains instead of their hands (Gordon, R., 2000), in which knowledge and the intellectual capital represent the main source of progress of the organizations. I. Petrescu

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(2007, p. 267) described a number of features of knowledge-based economy:

- 1) there is an accelerated shift of the dominant technology in the sense that technology is challenging the designation of "top" in a certain time because the technology is improving and evolving quasi-permanent and accelerated;
- 2) increases the importance of the production centers of scientific thought and action;
- 3) the (re) equipment of the work will become permanent and comprehensive;
- 4) the process of personnel training and adaptation of technology management will be a permanent and without a strict set intervals.

The changes imposed by the dynamics of the new requirements of the knowledge based society lead to the development of a new organizational model, capable to develop and use the creative potential of employees, to structure new responsibilities regarding the creation, management and dissemination of knowledge (Dragomir, C., 2013, p. 82). In this context, approaches of human capital is a fundamental change. For example, career counseling becomes a process of becoming more dependent on the use of new information technologies (NIT), as we have seen by doing a research on the county of Brasov, in a total of 1223 persons: 358 eighth grade students, 258 twelve grade students, 370 parents of students enrolled in the study, 172 teachers and 65 counselors students (Andronic, A. and Andronic, R., 2010, pp. 244-248). Information on careers using NIT (especially Internet sources) is the main option for eighth graders (77%) and those of twelve (78%), teachers (81%). NIT is not the first option information for school counselors, they still preferred literature (79%), while the Internet is used by 48% of school counselors. This research - like other similar - underlines the importance of studying human capital, especially as regards its development trends, in conjunction with the fast pace of technology change in the knowledge society.

## ***2. Human capital research methodology***

Study of human capital is a type of applied research, because it aims to develop a specific character (Stefănescu-Dragomir, 2009, p. 31). Currently, the study of these issues involves a mix of quantitative and qualitative methods. The distinction between the two types of methods is an

evident when taking into account two criteria: the method of data collection and sampling (Creswell JW, 2003, p. 212):

- Data collection procedures differ in the methods of quantitative type (where are preferred pre-coded answers) versus qualitative research (where it prefers open answers). From this point of view, the same methods (interview or observation, for example) can produce qualitative or quantitative data type, depending on how data is collected;

- Quantitative research presuppose the existence of random samples, while in qualitative research sampling is made from select individuals that have experience central phenomenon (of interest).

There are several types of strategies to structure the work using a mix of qualitative and quantitative methods (Creswell JW, 2003, p. 230):

- Sequence type: when a type of methods (quantitative or qualitative) is presented, followed by the second type. The end of the study underline the qualitative data that contributed to a better understanding of the quantitative and vice versa;

- Competitor type: qualitative and quantitative data are also presented separately, but clearly aimed at the analysis and interpretation of the convergence of results. In other words, the interpretation doesn't put the accent on the distinction between two types of data obtained;

- Transformer type: unlike other types mentioned above, the end of the study will include a special sequence, dedicated to presenting the change or reform that has been developed as a result of research.

### ***3. Application mix of methods in developing strategies for human capital development at Community level***

Human capital development strategies have a secondary character, being functional strategy (being developed for only a specific area of activity of the organization, proposing appropriate goals and resources significantly lower compared with the overall strategy). Any human capital strategy must meet the following criteria (Petrescu, I., 2007, p. 315):

- Be clear, in writing and contain the basic sectors of the area of concern of the organization;

- Be transparent and attract human capital from its conception and its implementation in life;

- Be consistent with existing legislation, particularly employment law;

- To emerge from the overall strategy and contribute to its basic objectives;
- Sequential and coordinate efforts so that they correlate them to support and influence each other.

The authors of this article have contributed to the development of strategies for sustainable development of human capital as part of sustainable development strategies of three municipalities in the county of Brasov. The research methodology included both quantitative type methods (representative sample survey, structured interviews, etc.) and qualitative (focus group, case studies, etc.). The mix of methods has been structured through a transformative strategy type (Creswell, JW, 2003) as development strategies drawn up at Community level aimed at producing general socio-economic control in a given period of time (seven years, in this case).

Specifically, the development strategy of each municipality (official document, approved by a City Council decision) there is a section on human capital, along with other five sections, devoted to: economic growth, ensure public services, social development civil, sustainable tourism development, urban development and environmental protection). Each section meets the criteria for human capital above (Petrescu, I., 2007), comprising: a presentation of key demographic data on employment in the village, describing the main actors of education (educational and training opportunities for adults) SWOT analysis of this area and present a consensual set of goals set in the working group (consisting of stakeholders in the field of human capital).

Sustainable development objectives set at the level of human capital each municipality were incorporated in the form of an action plan, which includes both planning time, provide the main stakeholders and potential funding sources (mainly European funding programs). This way of presentation (type "roadmap") proved to be useful strategies in the implementation phase, allowing immediate assessment of the progress made and the necessary corrections.

#### ***4. Conclusions***

Study of the sustainable development of human capital often involves a mix of quantitative and qualitative methods. If the organization develop a strategy for human capital development is an approach available to the manager. If such a strategy is developed at a local community level, this

requires the involvement of stakeholders and mixing methods within a transformative research type.

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