Research Article

Characterization of Pre COVID-19 poverty associated with human capital in rural areas of Perú

Belinda Navarro[a*], Hector Carlos[b], Edwin Delgado[c], Marina Oré[d], Karim Roca[e]

[a] San Luis Gonzaga, National University (lca - Perú), belinda.navarro@unica.edu.pe
[b] San Luis Gonzaga, National University (lca - Perú), hector.carlos@unica.edu.pe
[c] San Luis Gonzaga, National University (lca - Perú), edelgado@unica.edu.pe
San Luis Gonzaga, National University (lca - Perú), marina.ore@unica.edu.pe
[e] San Luis Gonzaga, National University (lca - Perú), Karim.roca@unica.edu.pe

Abstract

The study was carried out in order to determine the influence of human capital on household poverty in the province of Ica, in the period 2019.

The research was of an applied type, explanatory level and ex post-facto design, correlational of transactional cut, using a sample of 384 households, for data collection the survey technique and documentary analysis were used.

From the comprehensive diagnosis, (54.69%) their monthly income is from 931 to 1500 soles, where (54.17%) their expenses are in food, (50.78%) carry out temporary jobs, (13.28%) has completed university education, In the event of illness, (50.26%) goes to a rural health post, When contrasting the hypothesis, the null hypothesis is rejected, accepting the alternative hypothesis, where (75%) determines that human capital significantly influences poverty in households in the province of Ica.

Keywords: Human capital, poverty, unemployment, well-being

1. Introduction

As a result of globalization, the world is in constant motion and has undergone tremendous changes, the struggle for markets predominates, where developed countries prevail in creating inequality in several countries through their multinational companies, such as Peru, which continues being an exporter of raw materials, where governments do not allow the development of human capital, which generates high rates of poverty.

Poverty is defined when people within society are in a lower state level of socioeconomic well-being. It is a condition in which one or more people have a level of well-being below the socially accepted minimum. [1]

On the other hand, they define poverty as a long-standing phenomenon that deprives people of their basic needs and prevents them from enjoying a better life. [2]

Likewise, poverty means lack of monetary resources and lack of goods and services necessary to satisfy demand. [3] With respect to the process of variation in the poverty level (PV), it is due to the variation of the average income (IV) and the variation in the income distribution (DV), where: [4]

PV=IV+DV (1)

It can be inferred that the change in average income directly affects poverty and produces a growth effect, as a income distribution effect, with a significant long-term relation with the economic growth of average income, which means a better income distribution, leading to a decrease in inequality. In this sense, economic growth and the appropriate distribution of incomes are the determinants of the evolution of poverty. [4]

In this sense, the economic growth of a country depends mainly on the education and health of its population, because enhancing human capital is the decisive factor in reducing poverty. [4]

Latin American countries have high rates of inequality and poverty, in 2017, where (30.2%) of the estimated population (184 million) lives in poverty, (10.2%) was in extreme poverty, also revealed that a (40%) of the employed population receives labor incomes lower than the minimum wage established by their country, denoting (48.7%) in the female sector, (55.9%) in the age range of 15 to 24 years. [5]

In Peru, poverty is measured by spending, because this variable is close to the quantification of the standard of living by measuring the amount of consumption, purchase and acquisition of people and households.

Furthermore, it was pointed out that people living in poverty are considered as people whose per capita expenditure is below the poverty line (PL), which is the monetary equivalent of minimum food and non-food expenditure baskets.

Another consideration is the period of time to measure the standard of living, poverty is a temporary phenomenon, so its measurement should not be affected by temporary or final circumstances, consumption should be measured within a year so that it can capture seasonal consumption and minimize short-term deviations. [6]

Figure 1: Poverty and Extreme Poverty 2004-2018 (% of the Peruvian population)
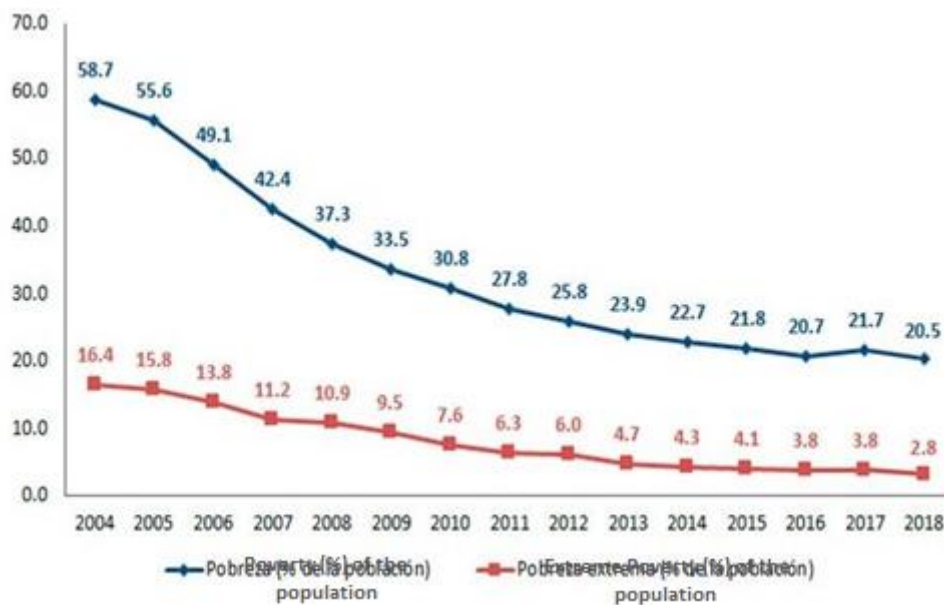
Source: National Institute of Statistics and Informatics (INEI -2018)

At the end of 2018, it should be noted that compared to 2017, the national poverty rate was reduced by 1.2% and the extreme poverty rate by 1.0%, which means that 313,000 Peruvians have risen out of poverty, of which 305,000 were risen out of extreme poverty. [6]

Figure 2. Evolution of the incidence of total monetary poverty, According to area of residence 2007-2018
(Percentage with respect of the total population)
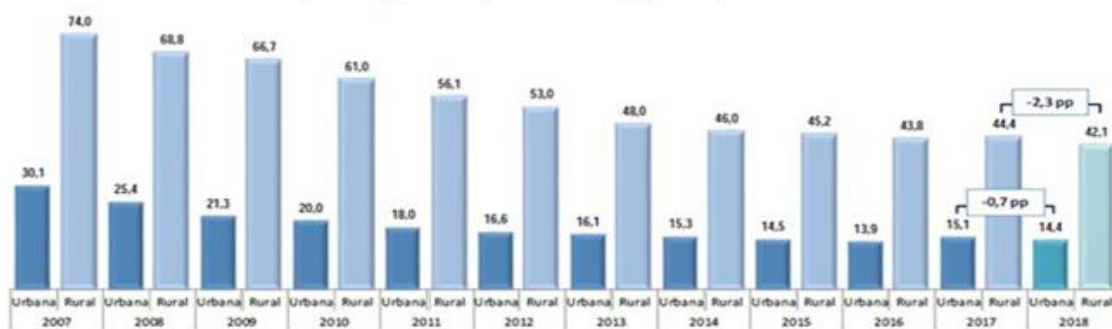
Source: National Institute of Statistics and Informatics (INEI – 2018)

In terms of habitable surface, the decrease in rural areas was (-2.3%), while the decrease in urban areas was (-0.7%), urban poverty has not recovered from the increase in poverty in 2017, in 2018, the ratio remained unchanged at 14.4%, compared to 13.9% in 2016, in absolute terms, this means that the number of poor in urban areas has increased by 225,000 people. [6] Different investigations have concluded that poverty reduction is caused by changes in education and health variables, they affirmed that poverty reduction through economic growth depends not only on the potential of human capital in education, but also on nutritional factors. and health, the macroeconomic nuances are described below: [7] Human capital (education, health) - economic growth - poverty. (2)

They affirmed that educational variables are the most important determinant of human capital, according to different studies, effective changes in education have reduced the poverty rate, from the perspective of microeconomics, summarizes the causality between education and monetary poverty, as follows: Education - human skill and knowledge - employment - productivity - incomes. (3)

It can be inferred that education enhances knowledge and skills (personal human capital), which gives more opportunities to obtain paid employment, because people with more human capital will obtain more production, which will allow them to obtain higher monetary income, it's about improving education to reduce poverty. [8]

The relation between human capital and economic development is tight, a study carried out in Latin America showed that the country's poverty is due to the fact that there is not enough investment in human capital, an active formation of human capital, can quickly remove the region from the poverty, it can be called a "capital impact". [9]

Human capital is considered a factor that contributes to development and economic growth, because its training will play a variety of roles, the most important being education and professional training, because through these skills, talents and abilities can be discovered, personal development.

Human capital is the production capacity of a person and the accumulation of skills, general or specific knowledge acquired through development, which can be used as part of capital, indicating that it is necessary to invest in the education of people, who will have a a better future, a better quality of life and will help eliminate poverty. [10]

Figure 3.,Model Human Capital
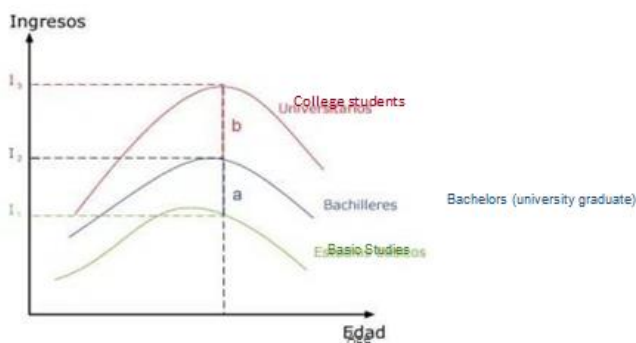
Source: Salas Velazco (2001)

Where:

It declares that income increases with age, reaching a maximum and decreasing. The higher the profile is, the higher the level of education will be. Income at any age is higher for people with more education (I3> I2> I1)

The income differential tends to increase with the level of education (b> a). The higher the level of education, the faster the increased income.

It infers that human capital, people carry their knowledge, skills, health or values; unlike financial and physical assets, which implies that people invest in education hoping for better opportunities for their personal development. [10]

Although, it refers that human capital is all the skills and knowledge accumulated over time, it is obtained through education, from different tools, which include: databases, software and general information, which are used by people to effectively perform specific tasks, promote the production of goods and services subject to patent or trademark supervision in a specific society. [11]

In the different areas of Peru and therefore in the province of Ica, a low-quality education is taught, where the curricula are imported in such a way that professionals are trained for the company and do not develop their capacities to be the entrepreneur and industrialize the country that enjoys so much wealth, It clearly denote that human capital, the orange economy, creativity and research which are the engine of development are not promoted, and getting out of the poverty levels that afflict our country and consequently the province of Ica, observing many households in extreme poverty especially in rural areas, places that lack basic services, unemployment, and low educational level, in many cases illiterate.

The purpose of the research is to provide the residents of Ica, guidelines and advantages to develop human capital and use it to face the poverty of Ica and many families in the country.

2 Methodology

The type of research is applied or technological because it presents a solution to practical problems related to the variables of human capital and poverty in rural areas, community or country, rather than to formulate theories about them. [12] Research level: According to the scope, it belongs to the explanatory level, because it characterizes the research variables as they are observed in reality, studying the relations between the dependent and independent variables, a fact that was revealed when it was shown that human capital significantly influences in the poverty of households in the province of Ica-Peru, Research design: The research design is ex post-facto, cross-sectional, correlational, emphasizing that a research is nonexperimental, when problems or phenomena are observed in a factual way, and cross-sectional variables are not manipulated. because the data will be collected in a single moment, in a single time, and correlational because it will determine the correlation between two variables. [12]

3. Results

The field research concerns in using the data collection tools and applying it to the different households in the province of Ica, which constitute the study sample.

Once the data collection was concluded, its respective analysis was carried out, using descriptive and inferential statistics, exposing the information, according to detail:

Table N° 1. According to the level of studies of the head of the household
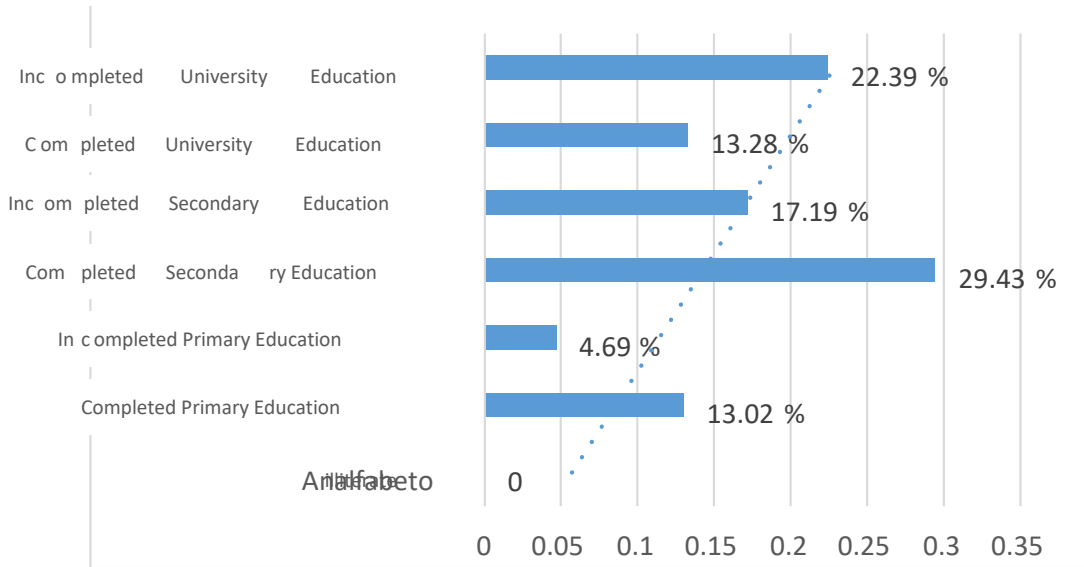
Source: own elaboration

According to the respondents, it can be observed that the heads of households in the province of Ica do not have a good level of studies, where 29.43% only have completed secondary education, 17.19% have incomplete secondary education, 13.02% have completed primary education, while 4.69% indicate having incomplete primary education , which is why the study has an arithmetic mean of 0.14, a typical error of 0.03, with a median of 0.1328, standard deviation of 0.10, with a sample variance of 0.01.

Table N° 2. Average monthly income in soles (Peruvian currency)
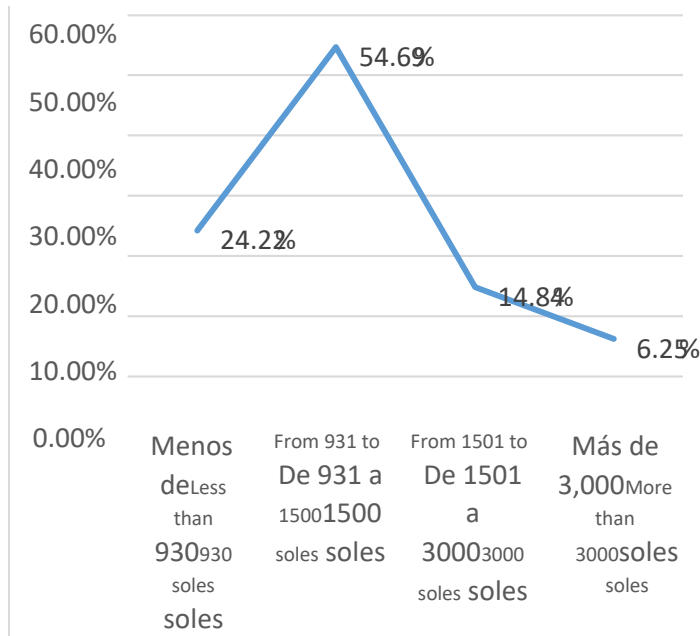
Source: own elaboration

According to those surveyed, it can be seen that (54.69%) their average monthly income is in the range of s/.931 to s/.1500 soles, a (14.84%) in the range of s/.1501 to s/.3000 soles, (24.22%) indicates obtaining an average monthly income of less than 930 Peruvian "nuevos soles", and to a lesser extent, they claim to obtain an average income greater than 3,000 Peruvian "nuevos soles", which is why the study has an arithmetic mean of 0.25, a typical error of 0.10, with a median of 0.19, standard deviation of 0.21, and sample variance. of 0.04.

Table N°3 In what concept do you spend the most to maintain your home
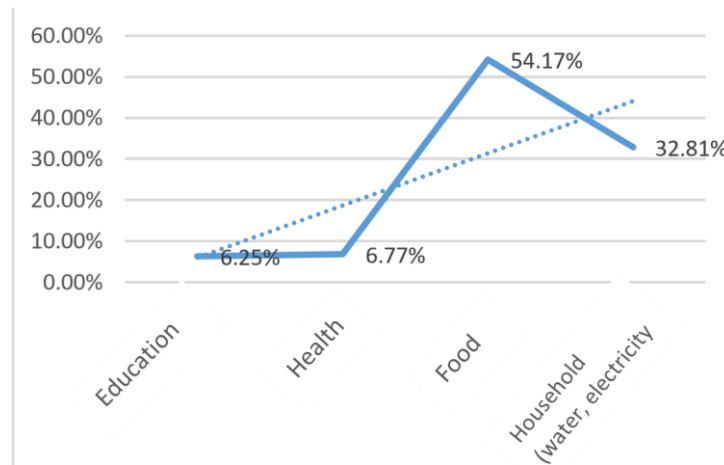
Source: own elaboration

In what concept do you spend the most to maintain your home Source: own elaboration. According to the respondents, it can be seen that a (54.17%) spends in a greater proportion to maintain their home on food, another percentage (32.81%) declares that they spend more on electricity, water, telephone services, rental housing, others), (6.77 %) indicates spending more on preventive health, and only (6.25%) invests in education, which is why the study has an arithmetic mean of 0.25, a typical error of 0.11, with a median of 0.19, a standard deviation of 0.23, sample variance of 0.05.

Table N° 4 In the last six months, you or a family member have had a disease
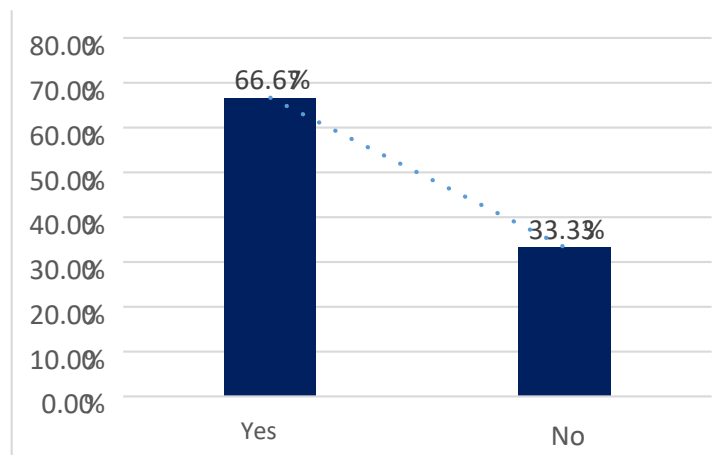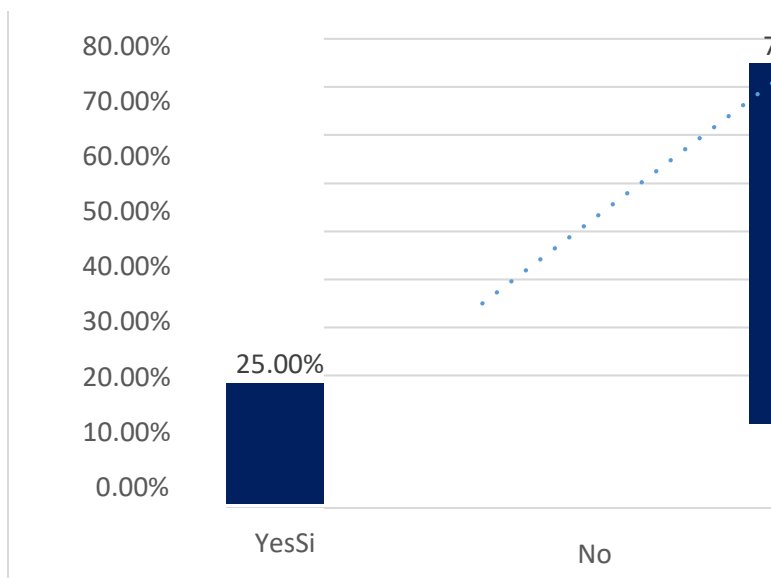

Source: own elaboration

It is clear that (66.67%), express that in the last 06 months some member of their household has suffered some illness, and only (33.33%) declares the opposite, for which an arithmetic mean of 0.5 is estimated, with a standard error of 0.16, a median of 0.5, with a standard deviation of 0.23 and a sample variance of 0.05.

Table N°5 For the health care of a member of the family, which health center you usually go to. Source: own elaboration
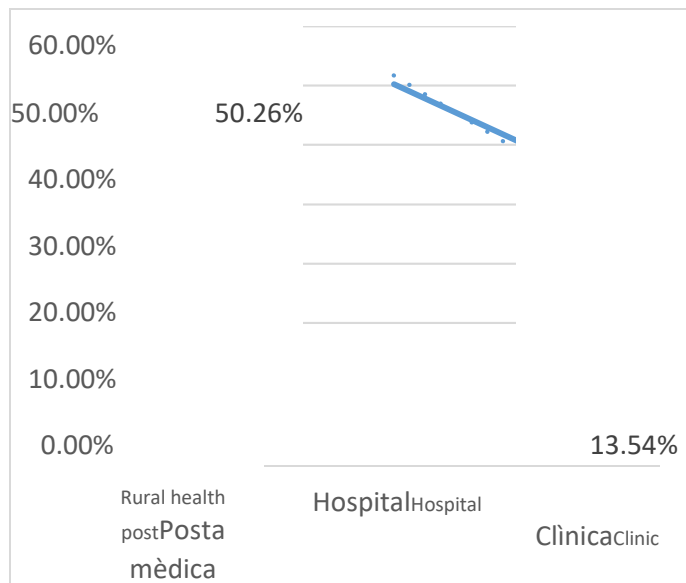
According to the respondents, it can be seen that the majority (50.26%) of the family go to the rural health post, when they get sick, a (36.20%) declare they go to a hospital and only one (13.54%) go to a clinic, This is why the study has an arithmetic mean of 0.33, with a standard error of 0.10, a median of 0.36, a standard deviation of 0.18 and a sample variance of 0.03.

Table N° 6 Do you consider yourself having an adequate financial well-being

Source: own elaboration

It is clear that in a greater proportion (75%), states that in the conditions that are currently found, they do not enjoy adequate economic well-being, and only (25%) reveals that they have adequate economic well-being, a reason that is estimated to be an average of 0.5, with a typical error of 0.25, a median of 0.5, standard deviation of 0.35 and sample variance of 0.12

Even though there is an economic boom in the province of Ica, for the agro-export companies, this is not reflected in human development, Since the aforementioned companies do not pay fair salaries, labor rights are not respected, allowing staff to work more than 8 hours a day, inequality persists, causing families not to

develop their human capital in that sense, respondents declare that the economic situation influences poverty, unemployment being another factor, where the central and regional government do not propose a factual development in the province of Ica, being an agricultural sector, they must evolve the infrastructure, ports, airports and cutting edge technology, for the grow of agribusiness and have the ability to compete in different international markets, and generate fair jobs, enhancing human capital, in the same way the respondents mostly affirms that education and health directly influence poverty, therefore that it is imperative that the government increase investment in education and health, according to the Theory of Human Capital are the most identified components to banish poverty, every person with greater human capital becomes more competitive in different fields such as economic, social, cultural, deducing that the development of potential human capital is crucial to banish poverty.

The results concur with other studies where they demonstrate that the low educational level of its inhabitants is related to the scarce probability of accessing jobs that allows them to have decent income to support their family, where 90% are located in lower level jobs and only 10% in intermediate level being employees and technicians, it also revealed that 70% of the population under study shows low educational level, resulting in informality in the labor force, low income level, and poor health care, poverty indicators, [13], It also coincides with the study that mainly concludes that there is a mechanism by which the conditions of education and health are transmitted by generation since children of the heads of household are sensitive to the education and health sector, taking into consideration that human capital is the set of knowledge and abilities, which not only includes the education sector but also health, important indicators of economic growth and poverty rates. [14]

A percentage of (50.26%) states that education influences poverty, having most of them a monthly income between 931 and 1500 peruvian nuevos soles (54.69%), spending more at home on food (54.17%), where they mostly states that the economic situation directly influences poverty (69.01%), in the health part they declare that in cases of illness the majority go to the rural health post (50.26%), where there is a high rate of sick people in the homes (66.67%), not having improved their income in the last four years (77.60%), manifesting in a greater proportion being unemployed (50.78%), declaring that employment influences poverty (69.79%), where they reveal that there are poor people who need support from the programs from the government and do not receive it (77.86%), expressing the surveyed population not having adequate economic well-being (75%), concluding that human capital significantly influences poverty in households in the province of Ica.

References

[1]   National Institute of Statistics and Informatics (INEI) (2015)

[2]   Keeley, B. (2015). From Aid to Development: The Global Fight against Poverty. Essentials OCDE, OECD

[3]   Publishing, París.

[4]   [3]Kathleen, S. Short (2016). Child Poverty: Definition and Measurement. Academic Pediatrics 16(3): 46-51.

[5]   [4]Kakwani, N. (1993). Poverty And Economic Growth With Application To Côte D'Ivoire . Review of Income and

[6]   Wealth : 121 - 139

[7]   Barrera A. Executive Secretary of the Economic Commission for Latin America and the Caribbean (ECLAC) press conference in Chile (2018)

[8]   National Institute of Statistics and Informatics-National Household Survey. (Living conditions in Peru) 2018   [7] Galor, O., y Mayer, D. (2004). Food for Thought: Basic Needs and Persistent Educational Inequality. Washington:

[9]   Pan American Health Organization

[10]   [8]Tilak, J. B. C. (2002) Education and poverty. In M. Melin, Education, a Way out of Poverty? (p. 12-23). Stockholm:

[11]   Swedish International Development Cooperation Agency

[12]   Londoño, J (1996), "Poverty, inequality, and human capital development in Latin America, 1950-2025", Word

[13] Bankl, Washington, EE.UU

[14] Becker, G. (1964), Human Capital: A Theoretical and Empirical Analysis , Office for National Economic Research, London

[15] UN (1998), "General Information", United Nations Information Center, México.

[16] Ñaupas et.al. (2018)   Methodology of quantitative-qualitative research and writing of the thesis, Colombia: U

[17] Editions

[18] Flórez K., Tovar Y. (2018) Poverty and Human Capital in Bolívar: case of Cartagena de Indias D.T. and Colombia.

[19] Calle Y. (2015) Causal Mechanisms of Poverty: Intergenerational Transmission of Human Capital in Colombia

Authors' background

Your Name	Title*	Research Field	Personal website
Belinda Navarro	**Dr.**	**Universidad San Luis Gonzaga**	belinda.navarro@unica.edu.pe
Hector Carlos	**Dr.**	**Universidad San Luis Gonzaga**	hector.carlos@unica.edu.pe
Edwin Delgado	**Dr.**	**Universidad San Luis Gonzaga**	edelgado@unica.edu.pe
Marina Oré	**Dr.**	**Universidad San Luis Gonzaga**	marina.ore@unica.edu.pe
Karim Roca	**Dr.**	**Universidad San Luis Gonzaga**	karim.roca@unica.edu.pe