

**CHALLENGES IN THE DEVELOPMENT OF HUMAN CAPITAL IN ANGOLA**  
**DESAFIOS DE DESENVOLVIMENTO DO CAPITAL HUMANO EM ANGOLA**  
**DESAFÍOS DEL DESARROLLO DEL CAPITAL HUMANO EN ANGOLA**



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**ABSTRACT**

This study aimed to analyze the challenges and prospects of human capital in Angola, considering its relationship with education, the labor market, and public policies. It was a descriptive-exploratory research with a mixed-methods approach, combining quantitative and qualitative analyses. Data were collected through a structured digital questionnaire administered to a sample of 264 participants. The results revealed a highly educated profile but one marked by difficulties in labor insertion and career progression, associated with the absence of effective employment policies, nepotism, and job scarcity. Furthermore, a low organizational appreciation of human capital was observed. Despite the predominantly critical perception, respondents identified priority areas such as quality basic education, technical and vocational training, and technological innovation. Accordingly, six practical and strategic recommendations were developed to strengthen human capital. The study concludes that reinforcing human capital in Angola requires consistent public policies, closer education–labor market integration, and professional valorization strategies, which are essential for sustainable development.

**Keywords:** Human Capital. Employability. Public Policies. Education and Training. Sustainable Development.

**RESUMO**

O presente estudo teve como objetivo analisar os desafios e perspectivas do capital humano em Angola, considerando a sua relação com a educação, o mercado de trabalho e as políticas públicas. Trata-se de uma investigação de carácter descritivo-exploratório, com abordagem mista, que combinou análise quantitativa e qualitativa. A recolha de dados foi realizada por meio de um questionário digital estruturado, aplicado a uma amostra de 264 participantes. Os resultados revelaram um perfil altamente escolarizado, mas marcado por dificuldades de inserção e progressão profissional, associadas à ausência de políticas de emprego eficazes, ao nepotismo e à escassez de vagas. Além disso, constatou-se baixa valorização do capital humano nas organizações. Apesar da percepção predominantemente crítica, os inquiridos identificaram áreas prioritárias, como educação básica de qualidade, formação técnico-profissional e inovação tecnológica. É por isto que foram elaboradas seis recomendações Práticas e estratégicas para o fortalecimento do capital humano. conclui-se que o fortalecimento do capital humano em Angola exige políticas públicas consistentes,

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integração ensino–mercado e estratégias de valorização profissional, fundamentais para o desenvolvimento sustentável.

**Palavras-chave:** Capital Humano. Empregabilidade. Políticas Públicas. Educação e Formação. Desenvolvimento Sustentável.

## RESUMEN

El presente estudio tuvo como objetivo analizar los desafíos y perspectivas del capital humano en Angola, considerando su relación con la educación, el mercado laboral y las políticas públicas. Se trata de una investigación de carácter descriptivo-exploratorio, con un enfoque mixto, que combinó análisis cuantitativo y cualitativo. La recolección de datos se realizó mediante un cuestionario digital estructurado, aplicado a una muestra de 264 participantes. Los resultados mostraron un perfil altamente escolarizado, pero con dificultades de inserción y progresión profesional, asociadas a la ausencia de políticas de empleo eficaces, al nepotismo y a la escasez de vacantes. Asimismo, se constató una baja valorización del capital humano en las organizaciones. A pesar de la percepción predominantemente crítica, los encuestados identificaron áreas prioritarias como la educación básica de calidad, la formación técnico-profesional y la innovación tecnológica. Por ello se elaboraron seis recomendaciones prácticas y estratégicas para el fortalecimiento del capital humano. Se concluye que dicho fortalecimiento en Angola exige políticas públicas consistentes, integración educación–mercado y estrategias de valorización profesional, fundamentales para el desarrollo sostenible.

**Palabras clave:** Capital Humano. Empleabilidad. Políticas Públicas. Educación y Formación. Desarrollo Sostenible.

## 1 INTRODUCTION

Human capital is one of the central pillars of economic growth and sustainable social development. Since the classic contributions of Schultz (1961) and Becker (1964), the economic literature recognizes that investments in education, health and professional qualification increase productivity, stimulate innovation and sustain long-term growth. Contemporary approaches reinforce that the effects of human capital depend not only on the volume of investments, but also on their quality, equity in access and the articulation between training systems, the labor market and institutions.

In African countries, the debate on human capital is particularly relevant due to the coexistence of high demographic potential with structural weaknesses in education, health and employment systems. These limitations make it difficult to convert human potential into effective gains in productivity and social inclusion, requiring integrated public policies oriented towards sustainable development.

In Angola, a country rich in natural resources, but historically dependent on the extractive sector and marked by persistent socioeconomic inequalities, the development of human capital is a strategic imperative. According to the United Nations Development Program report (2022), the country has human development levels below the regional average, reflecting weaknesses in education, health, and income. In addition, data from the World Bank (2023) show challenges in the labour market, namely high youth unemployment, informality and low job quality.

Recognizing these constraints, the Angolan State approved the National Human Capital Development Plan 2023–2037, aimed at strengthening the qualification of the population and aligning training and production needs. However, challenges remain related to the quality of training, employability, talent retention and institutional effectiveness. In this context, this article critically analyzes the development of human capital in Angola, identifying central obstacles and discussing strategic paths for more inclusive and sustainable growth.

### 1.1 RESEARCH PROBLEM

What are the main challenges limiting the development of human capital in Angola and how can they be overcome to ensure sustainable and competitive growth?

## 1.2 OBJECTIVES

### 1.2.1 General Objective:

To analyze the challenges of human capital development in Angola, identifying limiting factors to propose strategies to overcome them.

### 1.2.2 Specific Objectives:

- To examine the historical, social and economic factors that influence the formation and valorization of human capital in Angola;
- Identify gaps in education, health and employability policies;
- To assess the integration between higher education, vocational training and the labour market;
- Propose practical and strategic recommendations for the improvement of human capital in the country.

## 2 THEORETICAL FOUNDATION.

### 2.1 CONCEPT OF HUMAN CAPITAL

#### 2.1.1 Human Capital

Human capital plays a central role in contemporary economic theory and strategic management, and is widely recognized as a critical determinant of productivity, innovation and organizational competitiveness.

The classical theory of human capital establishes that investments in education, vocational training and health are fundamental mechanisms of capital accumulation, with direct and indirect impacts on economic growth. Schultz (1961) introduced a paradigmatic shift by conceptualizing human capital as capital embodied in people, arguing that the quality of the workforce represents a key factor in explaining disparities in economic growth between countries.

Becker (1964) deepened this theoretical framework by developing formal models that show the economic returns of investments in human capital, both at the individual and organizational levels. According to Chiavenato (2020), human capital should be understood not only as the sum of technical qualifications, but as a strategic set that encompasses people's knowledge, skills, creativity, attitudes, and innovative potential.

In addition, authors such as Marr (2019) underline the importance of human capital in the digital age, in which artificial intelligence and automation intensify the valorization of creative, analytical and relational skills. In this sense, human capital is not only a factor of production, but a strategic differential that ensures sustainable competitive advantage.

## 2.1.2 Structuring Dimensions

Recent literature identifies several structuring dimensions of human capital, Table 1 presents an essence of them:

**Table 1**

### *Structuring Dimensions of Human Capital*

Dimension	Description	References
<b>Education and knowledge</b>	They are considered the central core of human capital, as they condition the capacity for continuous learning and adaptation to change.	Hanushek & Woessmann (2020)
<b>Health and well-being</b>	They determine the availability and productivity of workers, and are fundamental for maintaining active and resilient human capital.	Bloom, Kuhn, & Prettner (2022)
<b>Technical and socio-emotional skills</b>	The combination of <i>hard and soft skills</i> is now considered essential for employability and organizational innovation.	Almeida & Araújo (2021)
<b>Capacity for innovation and continuous learning</b>	The <i>lifelong learning</i> paradigm reinforces the idea that human capital must be constantly updated to respond to social and technological transformations.	Candy <i>et al.</i> (2019)

Source: Authors.

Thus, human capital can be understood as a strategic asset that transcends the productivist logic, constituting itself as the foundation of human, organizational and socio-economic development. Its valorization implies consistent investments in education, health, continuous training and inclusion policies, in addition to the recognition that people's creative and innovative capacity is an essential resource to face the challenges of the 21st century.

## 2.2 TRAINING AND DEVELOPMENT

Training and development are structuring dimensions of human capital, assuming a strategic role in the qualification, updating and mobilization of individual skills in increasingly complex and competitive organizational contexts. In the current socio-economic scenario, marked by rapid technological and organizational transformations, these practices go beyond an operational logic and assert themselves as central mechanisms for value creation and organizational sustainability.

Within the framework of human capital theory, training and development are understood as strategic investments with measurable economic and organizational returns. Schultz (1961) argues that investment in continuing education and training increases the productive capacity of individuals and is a determining factor of economic growth. In a complementary way, Becker (1964) demonstrates that professional qualification increases the marginal productivity of labor and income, reinforcing the role of human capital as a central element of organizational efficiency and competitiveness.

In the field of strategic people management, Chiavenato (2020) analytically distinguishes between training and development, associating the first with the improvement of immediate performance and the second with the construction of medium and long-term capabilities. This perspective is deepened by Ulrich (2013), when he argues that human resources management should act as a strategic partner of the business, with training and development being essential instruments for building organizational capabilities that sustain competitive advantage.

Samba (2016) stresses that training and human capital development are pillars of organizational strengthening and sustainable economic development. The author argues that systematic investments in professional training simultaneously contribute to increased productivity, worker appreciation and institutional consolidation, especially in economies in the process of structuring.

### **2.2.1 Development: Evolutionary and Strategic Dimension**

Development differs from training in that it assumes a medium and long-term orientation, focused on the expansion of human potentialities and the preparation of individuals for more complex and uncertain organizational contexts. While training tends to focus on specific competencies, development involves skills such as strategic thinking, leadership, and decision-making in changing environments.

Authors of organizational psychology and behavior, such as Stephen Robbins and Timothy Judge (2019), conceptualize development as a continuous process of professional and personal growth, essential for individual and organizational adaptability. From this perspective, development reinforces not only individual performance, but also the organizational capacity to respond to strategic challenges.

### **2.2.2 Integrated Approaches and Recent Evidence**

Recent literature converges on the understanding that training and development should be conceived in an integrated way, as complementary axes of the strategic management of human capital. Empirical studies show that continuous training favors technological adaptation and operational efficiency, while development sustains leadership, innovation and organizational learning.

Samba (2016) defends integrated human capital policies that articulate technical qualification, career progression and professional development, underlining their role in institutional strengthening and sustainable economic development. Thus, the effectiveness

of training and development depends on its articulation with organizational policies and with contemporary work challenges.

## 2.3 EDUCATION, HEALTH AND EMPLOYABILITY POLICIES

Public policies on education, health and employability are structural determinants of human capital development, while influencing economic productivity and social well-being. These policies create the necessary conditions for individuals to acquire skills, maintain productive capacities and integrate sustainably into the labour market.

### 2.3.1 Education

Within the framework of the theory of human capital, education is understood as a structuring investment that expands the productive capacities of individuals and generates sustainable economic and social returns. Becker (1993) deepens the analysis by demonstrating that the accumulation of human capital explains persistent differences in income, productivity and growth between economies.

Contemporary literature reinforces that the impact of education on economic growth depends, above all, on the quality of learning, and not only on the quantitative expansion of schooling. Hanushek and Woessmann (2020) show that strong cognitive skills exert a decisive influence on aggregate productivity and international competitiveness. This perspective converges with the endogenous development approach, according to which education strengthens local capacities for innovation, technological diffusion and productive diversification (Romer, 1990).

### 2.3.2 Health

Health represents one of the fundamental pillars of human capital, directly influencing the learning capacity, labor productivity and economic participation of individuals throughout the life cycle. Grossman (1972) conceptualizes health as a stock of capital that can be expanded by investments in medical care, nutrition, and adequate sanitary conditions, generating returns in the form of higher productivity and future income.

From the perspective of endogenous development, health plays a strategic role in strengthening the productive capacities of populations and reducing structural inequalities that compromise inclusive economic growth. International evidence shows that integrated investments in health, education, and nutrition enhance substantial gains in productivity and social well-being (Bank, 2023).

### 2.3.3 Employability

In the field of labour economics, employability is defined as the ability of individuals to obtain, keep and move between jobs in a constantly changing labour market. This concept goes beyond formal qualification, incorporating transferable skills, continuous learning and technological adaptability as essential elements of sustainable labour insertion (Marr, 2019).

## 2.4 HIGHER EDUCATION AND THE LABOUR MARKET

Higher education occupies a strategic position in the development of advanced human capital, functioning as a central mechanism for the production, dissemination and application of knowledge. Within the framework of the theory of human capital, higher education is understood as a long-term investment that enhances individual productivity, innovative capacity and sustained economic growth. Becker (1964) demonstrated that the returns associated with higher education are manifested throughout the professional life cycle, in the form of higher incomes, better employability and greater occupational mobility.

More recent approaches broaden this perspective by emphasizing that the impact of higher education does not depend only on access to or duration of training, but above all on its quality, relevance and alignment with the needs of the labour market. Hanushek and Woessmann (2020) argue that higher education systems oriented towards the development of cognitive and applied skills tend to generate greater effects on the productivity and competitiveness of economies.

In this sense, higher education assumes a role that transcends mere academic certification, starting to act as an active agent in the formation of technical, analytical and socio-emotional skills, essential for the insertion and permanence of individuals in labor markets characterized by high volatility and technological demand. The effectiveness of higher education as a tool for the development of human capital thus depends on its ability to adapt to contemporary economic and organisational transformations.

### 2.4.1 University-Market Articulation Models

The international literature shows that the articulation between higher education institutions and the labor market is a critical factor to maximize the returns on investment in human capital. Models based on university-company partnerships, internship programs, applied research and knowledge transfer have been widely recognized as effective mechanisms to reduce the gap between academic training and skills demanded by the productive sector.

From this perspective, the *triple helix* model that integrates university, industry and government stands out as a relevant analytical framework to understand the role of higher education in innovation and economic development. Studies indicate that higher education systems strongly integrated with the productive fabric tend to have higher levels of innovation, employability of graduates and economic dynamism (Marr, 2019). In this way, the articulation between higher education and the labor market emerges as a strategic axis of human capital development. The absence of this articulation tends to limit the positive impacts of higher education, reinforcing the need for integrated policies and collaborative governance among the main institutional actors.

#### 2.4.2 Contemporary Challenges

The effectiveness of higher education as an instrument for the development of human capital depends on the alignment of curricula with emerging areas, as well as on the development of technical and socio-emotional skills. The interdependence between higher education and the labour market requires dynamic approaches geared towards quality, relevance and lifelong learning.

#### 2.5 HUMAN CAPITAL POLICY

Human capital policy can be defined as the systematic set of principles, strategies and institutional instruments aimed at the development, enhancement and efficient use of human capacities, with a view to promoting sustainable economic growth, social equity and institutional strengthening. This policy is based on the assumption that individuals are not only factors of production, but strategic assets whose development conditions long-term economic and social performance (Schultz, 1961; Becker, 1964).

From a theoretical point of view, human capital policy is based on three major complementary approaches:

1. Classical theory of human capital, which holds that investments in education, health, and training increase individual productivity and income throughout the life cycle (Schultz, 1961; Becker, 1964);
2. Endogenous development approach, according to which human capital drives innovation, technological diffusion and productive diversification (Romer, 1990);
3. Institutional and labor economics, which emphasizes the role of institutions, employment policies, and the articulation between training and the labor market in the conversion of human capital into effective growth (Barro & Lee, 2015).

### 2.5.1 Structuring components of human capital policies

The literature identifies interdependent components that should guide effective human capital policies, particularly in emerging contexts:

1. **Education and professional qualification:** Education is the core of human capital policy. Empirical evidence shows that the quality of learning has a greater impact than the number of years of schooling on productivity and economic growth (Hanushek & Woessmann, 2020). The challenge lies in improving the quality of teaching, teacher training and curricular alignment with the labor market.
2. **Health and well-being:** Health directly influences learning capacity, work productivity and economic participation. Investments in public health, nutrition, and sanitation increase the return on educational investments (Bloom et al., 2022). Poor countries face problems of regional asymmetries in access to health services, negatively affecting the accumulation of human capital.
3. **Talent management and development:** Strategic talent management involves continuous training, lifelong learning, and the development of transferable skills. According to Noe (2017), these practices are essential to reduce the mismatch between skills supply and labor demand.
4. **Appreciation and incentives:** Fair remuneration policies, career progression, and recognition of merit increase motivation and talent retention, with positive impacts on productivity (Chiavenato, 2020).
5. **Multisectoral integration:** The articulation between government, private sector and educational institutions is essential to align training and the labor market, maximizing the social returns on investment in human capital (Carneiro & Heckman, 2003).

### 2.6 ENHANCEMENT OF HUMAN CAPITAL

The valorization of human capital refers to the set of policies and practices aimed at recognizing, stimulating and enhancing the skills and talents of individuals, creating conditions for their full productive and social use. This concept transcends the strictly economic logic of investment in training, incorporating dimensions such as motivation, well-being, career development and quality of the work environment (Chiavenato, 2020; Marr, 2019).

The valorization of human capital can be analyzed from three main dimensions:

1. Organizational dimension, associated with motivation, recognition and alignment between individual and institutional objectives;
2. Social dimension, related to equity, inclusion and decent working conditions;

3. Strategic dimension, linked to innovation, talent retention and sustainability.

4.

## 2.7 SOCIO-ECONOMIC SITUATION AND HUMAN CAPITAL DEVELOPMENT

The socio-economic situation is a transversal and determining factor in the development of human capital, since living conditions, economic structure and access to basic services condition the opportunities for training, valorization and productive integration of individuals (Sen, 1999; Piketty, 2020).

### 2.7.1 Human development indicators

The Human Development Index (HDI) synthesizes three fundamental dimensions: education, health and income. Countries with high HDI levels tend to have a greater capacity to transform economic growth into social well-being (UNDP, 2022).

In the case of Angola, despite the progress made in recent decades, structural challenges persist associated with:

1. Regional inequalities in access to education and health;
2. Limitations in the quality of social services;
3. Vulnerability of specific population groups.

These constraints reduce the effectiveness of human capital policies and undermine inclusive development.

### 2.7.2 Economic structure, employment and informality

The productive structure directly influences the quality of employment and the absorption of human capital. Diversified economies generate more skilled and stable jobs, while economies dependent on a few sectors face greater job insecurity (Bloom et al., 2016).

In Angola, three main constraints stand out:

1. Strong dependence on the oil sector;
2. High labor informality;
3. Low creation of skilled jobs outside the extractive sector.

These factors limit the conversion of investment in human capital into sustained economic growth (ILO, 2021).

### 2.7.3 Social inequality and multidimensional poverty

Income inequality and multidimensional poverty are structural barriers to human capital development. Piketty (2020) demonstrates that high levels of inequality restrict social mobility and access to quality education.

Multidimensional poverty includes:

1. Limited access to sanitation and clean water;
2. Inadequate housing conditions;
3. Food insecurity;
4. Poor access to health services (UNICEF, 2021).

These dimensions directly affect the population's learning capacity, health, and productivity.

## 2.8 HUMAN CAPITAL DEVELOPMENT AND ECONOMIC GROWTH

The relationship between human capital and economic growth is one of the most robust consensuses in the economic literature. Investments in education, health and professional training increase productivity and generate positive externalities for the economy (Becker, 1993; OECD, 2021).

However, the literature stresses that the impact of human capital on economic growth depends on complementary factors, such as:

1. Quality of institutions;
2. Efficiency of public policies;
3. Absorption capacity of the labor market (Barro & Lee, 2015; Pelinescu, 2015).

## 2.9 THE ANGOLAN CASE

The development of human capital in Angola has made significant institutional progress, although it remains conditioned by structural challenges that limit the conversion of these investments into sustainable gains in productivity and social well-being. The main strategic framework in this area is the National Human Capital Development Plan 2023–2037, approved by Presidential Decree No. 122/24, which guides the expansion of education, the strengthening of technical and vocational training, and the improvement of the articulation between the training system and the labor market (Government of Angola, 2024).

The plan defines medium and long-term goals aimed at increasing the qualification of the population, providing for the reinforcement of public investment in human capital compared to the levels observed in the early 2020s. Among the priorities are the expansion

of the training of primary education teachers, the growth in the number of graduates in higher and technical-vocational education and the consolidation of institutional mechanisms for the regulation of qualifications and competences (MAPTSS, 2024). These guidelines reflect the recognition of human capital as a central element of economic diversification and sustainable growth.

Despite this strategic framework, significant constraints to policy implementation persist. Regional inequalities in access to education and training remain widespread, especially between urban and rural areas, as a result of infrastructure constraints, shortages of skilled human resources and indirect costs of schooling that penalise lower-income households. In addition, there is a mismatch between the training offered and the needs of the production system, evidenced by situations of underemployment and unemployment among graduates, which compromises the efficiency of investments made in human capital.

Another structural challenge refers to the retention of qualified staff. Empirical evidence indicates that the brain drain of professionals with high levels of training is associated with the limited supply of postgraduate courses, restrictions on professional progression, uncompetitive salary conditions, and weaknesses in quality of life, configuring a relevant loss of strategic skills for national development (Samba dos Santos, 2025).

In summary, Angola has a consistent strategic framework for the development of human capital. However, the transformation of this potential into an effective driver of sustainable development requires overcoming challenges related to territorial equity, the quality and relevance of training, the articulation with the labor market and the retention of talent, as well as the strengthening of information, monitoring and evaluation systems of public policies.

### **3 METHODOLOGY**

The present research adopts a mixed approach, combining qualitative and quantitative methods in a complementary way.

#### **3.1 TYPE OF STUDY**

The study assumes a descriptive-exploratory character. It is descriptive because it seeks to map and characterize the main challenges that limit the development of human capital in Angola, and exploratory because it aims to identify variables and relationships that are still little analyzed in the national context.

### 3.2 POPULATION AND SAMPLE

The **target population** comprises three strategic groups:

1. Workers in the public and private sectors;
2. University students;
3. Professionals linked to training and training.

The sample will be 261 participants, selected through *purposive sampling*, with the aim of ensuring diversity in terms of age, gender, academic background and area of expertise.

### 3.3 COLLECTION PROCEDURES

The data collected through the questionnaire structured in five sections (Sociodemographic Profile, Education and Training, Labor Market and Employability, Public Policies and Development, Perspectives and Recommendations), containing a total of 18 questions of an open and closed nature, were treated differently according to their typology.

The application of the questionnaire took place in digital format, through the *Google Forms platform*, which facilitated the collection, systematization and export of data for statistical and qualitative analysis.

## 4 ANALYSIS AND DISCUSSION OF THE RESULTS

In this section, the results of the questionnaire applied to 264 participants are presented and interpreted, articulating them with the literature and the problem investigated. The discussion is organized into five thematic blocks: sociodemographic profile, education and training, labor market and employability, public policies and development, and future perspectives in order to highlight trends, divergences and implications for understanding the challenges of human capital in Angola.

### 4.1 SOCIODEMOGRAPHIC PROFILE OF THE PARTICIPANTS

Sociodemographic characterization is essential to understand the perceptions and experiences of respondents, as variables such as age, gender and education directly influence the challenges of labor insertion and valorization of human capital. According to Babbie (2021), this analysis allows the identification of patterns and correlations between personal attributes and opinions expressed in the survey.

#### 4.1.1 Age

With regard to age, the age distribution of the participants can be seen in Table 1:

**Table 2***Distribution of participants by age group*

Age group	Frequency	Percentage
Under 20 years old	5	1,9 %
20–29 years old	77	29,2 %
30–39 years old	106	40,2 %
40–49 years old	52	19,7 %
50 years or older	24	9,1 %
<b>Total</b>	<b>264</b>	<b>100 %</b>

Source: Authors.

The data show that most participants are between 30 and 39 years old (40.2%), followed by the 20–29 age group (29.2%), characterizing a young-adult sample in the phase of professional insertion and consolidation. Only 1.9% are under 20 years old, showing low participation of adolescents, while 9.1% are 50 years old or older, representing the most experienced group.

These results corroborate the ILO (2021), which identifies young adults as the segment facing the greatest employability pressure in Africa. This age composition allows relevant analyses on employability, continuous training and future prospects, as it realistically reflects the challenges of human capital in Angola.

#### 4.1.2 Gender

Gender, in turn, is a central variable, since men and women experience opportunities differently to access employment, training and career progression. Table 3 characterizes this distribution among the participants.

**Table 3***Distribution of participants by gender*

Gender	Frequency	Percentage
Male	190	72,0 %
Women	74	28,0 %
Other	0	0,0 %
<b>Total</b>	<b>264</b>	<b>100 %</b>

Source: Authors.

The analysis reveals a male predominance among the respondents (72%), while women represent 28%, and there were no records in the "Other" category. This distribution reflects the masculinization typical of the engineering and industrial sector, as well as possible barriers to women's access to training and employment. Although there is a female presence, gender inequality remains evident, and should be considered in the analysis of employability

and in recommendations for inclusion and equity policies in the development of human capital in Angola.

#### 4.1.3 Educational level

As for education, this is a key variable to assess the quality of human capital, given that academic training is directly linked to employability and the development of skills. Table 4 presents the data referring to this indicator.

**Table 4**

*Distribution of participants by level of education*

Education level	Frequency	Percentage
Primary education	0	0,0 %
Secondary education	0	0,0 %
Technical/vocational high school	17	6,4 %
Higher education (Bachelor's degree)	168	63,6 %
Master's Degree	59	22,3 %
PhD	20	7,2 %
<b>Total</b>	<b>264</b>	<b>100 %</b>

Source: Authors.

The results reveal a highly qualified profile, with more than 93% of the respondents having higher education: bachelor's degree (63.6%), master's degree (22.3%) and doctorate (7.2%). This finding dialogues with Hanushek and Woessmann (2020), who point out the mismatch between high levels of formal education and low market adequacy in developing countries. The lack of participants with only primary or secondary education shows a highly educated sample, possibly related to the nature of the sectors represented and the profile of those who responded to the survey.

Despite the high qualification, challenges of employability and alignment between training and market demands persist, which reinforces the need for policies that bring higher education closer to the demands of the Angolan productive fabric.

#### 4.1.4 Current employment status

In turn, the working conditions of the participants are a direct indicator of their insertion in the labour market and allow us to capture the diversity of experiences that shape perceptions about the development of human capital. As ILO (2021) underlines, this heterogeneity reflects both structural employment dynamics and the constraints and opportunities of each context. The following table summarizes these results.

**Table 5***Current employment status of participants*

Professional status	Frequency	Percentage
Employee (public sector)	80	30,3 %
Employee (private sector)	119	45,1 %
Intern	11	4,2 %
Unemployed	42	15,9 %
Entrepreneur/Self-employed	48	18,2 %
<b>Total</b>	<b>264</b>	<b>100 %</b>

Source: Authors.

The results indicate a predominance of respondents employed in the private sector (45.1%), followed by the public sector (30.3%). This formal employment framework is complemented by a significant participation of entrepreneurs/self-employed (18.2%), evidencing the relevance of self-employment in contexts of fragility of the formal market. At the same time, 15.9% are unemployed, revealing difficulties in absorbing the qualified workforce, while 4.2% are interns, reflecting labor insertion processes among the youngest.

This configuration points to a dual reality: although there is a concentration in formal employment, a significant portion faces unemployment or resorts to entrepreneurship, simultaneously revealing the dynamism and vulnerability of the Angolan labor market, characterized by segmentation and stability challenges. This highlights both the dynamism and vulnerability of the Angolan labor market, marked by segmentation and stability challenges.

## 4.2 EDUCATION AND TRAINING

### 4.2.1 Perception of the quality of the education system

The perception of the quality of the education system is a central element in assessing Angola's ability to form competitive human capital. In this section you can learn about the perceptions of the respondents regarding this theme. Such is the case of table 6 which contains the answers obtained from the question regarding the quality of the Angolan education system.

**Table 6***Evaluation of the quality of the Angolan education system*

Category	Frequency	Percentage
Very good	0	0,0 %
Good	29	11,0 %
Regular	126	47,7 %
Weak	88	33,3 %
Very weak	21	8,0 %
<b>Total</b>	<b>264</b>	<b>100 %</b>

Source: Authors.

The results reveal that no participant considers the education system "very good" and only 11% classify it as "good". The majority evaluate it as "regular" (47.7%) or "weak" (33.3%), while 8% perceive it as "very weak". This critical perception confirms the UNDP reports (2022), which point to persistent weaknesses in the quality of education in African countries, especially in the alignment between curricula and market demands.

Despite the expansion of schooling in Angola, evidenced in the profile of the respondents, quality continues to be seen negatively, indicating a mismatch between quantity and quality in the formation of human capital. This finding converges with the World Bank (2023), which identifies the mismatch between education and the market as a central barrier to development in Africa. Table 7 illustrates this reality in the Angolan context based on the perceptions of the participants.

#### 4.2.2 Adequacy between education and the labour market

**Table 7**

*Assessment of the adequacy between education and the labour market (scale 1–5)*

<b>Level of suitability</b>	<b>Frequency</b>	<b>Percentage</b>
1 – Not at all suitable	37	14,0 %
2 – Not very suitable	95	36,0 %
3 – Partially adequate	106	40,2 %
4 – Suitable	22	8,3 %
5 – Very suitable	4	1,5 %
<b>Total</b>	<b>264</b>	<b>100</b>

Source: Authors.

The data reveal that the vast majority of respondents evaluate the adequacy of teaching as low to median: 50% of the participants scored 1 (Not at all adequate) or 2 (Somewhat adequate). Another 40.2% consider it partially adequate. Only 9.8% perceive teaching as adequate or very adequate.

Thus, the results show that the expansion of education in Angola has not been accompanied by an effective adaptation to the needs of the labor market, reinforcing the need for curricular reforms, strengthening of technical-vocational education and greater articulation between universities, technical institutes and the productive sector.

Identifying the factors that hinder access to quality training is also essential to understand the obstacles to human capital development, the following table 8 contains the findings on these types of factors that the respondents determined.

### 4.2.3 Difficulties in accessing quality training

**Table 8**

*Greater difficulties in accessing quality training. (multiple answers – choose up to 3 options)*

Category	Frequency	Percentage
High costs	153	58,0 %
Precarious infrastructure	144	54,5 %
Lack of qualified teachers	55	20,8 %*
Geographical distance / Accessibility	146	55,3 %
Outdated curriculum	103	39,0 %
Other (open-ended responses, 1 each)	-	4 %

Source: Authors.

The main barriers pointed out focus on four critical dimensions:

- High costs (58%): it shows the limitation of access for economic reasons, consistent with the theory of Becker (1993), which understands education as an investment conditioned to the financial capacity of individuals and families.
- Precarious infrastructure (54.5%) and distance/accessibility (55.3%): reveal structural difficulties in physical and logistical access.
- Outdated curriculum (39%): indicates content flaws that hinder training aligned with market needs.
- Other factors (open-ended responses): range from lack of internships and excessive theorism to corruption and mismanagement of the education budget, pointing to problems of governance and policy implementation, also highlighted by UNDP (2021).

In general, the data confirm that the barriers to access to quality training in Angola are not only economic, but also structural and institutional, involving the quality of teachers, curriculum updating and the political management of the sector.

### 4.2.4 Technical and vocational training

Attendance at technical and professional training is very important, as it reflects on the updating and strengthening of human capital skills. Table 9 below collects the answers obtained with the application of this questionnaire regarding the participation of the in professional technical training in the last 5 years of the research.

**Table 9**

*Participation in technical-professional training in the last 5 years*

Reply	Frequency	Percentage
Yes	180	68,0 %

No	75	28,0 %
Others*	9	4,0 %
<b>Total</b>	<b>264</b>	<b>100 %</b>

Source: Authors.

The results show that more than two-thirds of the respondents (68%) have participated in some technical training in the last five years, revealing a high demand for complementary qualification. This data contrasts with the low rates of adequacy of formal education to the market (Graph 6), suggesting that individuals resort to additional training to fill gaps.

The areas mentioned in "Others" show a strong practical and vocational orientation, linked to management, accounting, oil and mining, safety and quality, leadership, etc. On the other hand, the fact that almost a third (28%) did not have access to these trainings raises concerns in line with UNDP (2021): the lack of opportunities for continuous training perpetuates inequalities and compromises the competitiveness of part of the workforce.

#### 4.3 LABOUR MARKET AND EMPLOYABILITY

The articulation between educational institutions and the labor market is pointed out as one of the most critical elements to ensure that academic training results in skills effectively valued by companies. And knowing what Angolan professionals think about it in Angola is vitally important. Table 10 below presents the perceptions of the elements surveyed regarding the integration between education and the labour market.

##### 4.3.1 Integration between education and the labour market

**Table 10**

*Perception of the integration between education and the labor market in Angola*

Category	Frequency	Percentage
Yes	9	3,4 %
Partially	135	51,1 %
No	120	45,5 %
<b>Total</b>	<b>264</b>	<b>100 %</b>

Source: Authors.

The data indicate that only 3.4% of the respondents perceive an effective integration between education and the market, while 51.1% recognize it only partially and 45.5% affirm the lack of this articulation. In Angola, this means that, despite the expansion of schooling, curricula remain far from the demands of the market, reinforcing the criticisms already pointed out in Table 6.

The low perception of full integration highlights the absence of solid policies for the articulation between education and work, which are fundamental to boost human capital and increase employability. In this sense, the identification of barriers to labor insertion becomes crucial. As the ILO (2021) highlights, structural unemployment, institutional failures, and social inequalities are recurrent obstacles to the inclusion of young people and adults in developing countries.

### 4.3.2 Integration into the labour market

**Table 11**

*Main obstacles to insertion in the labor market*

Obstacle	Frequency	Percentage
Lack of experience	113	42,0 %
Shortage of vacancies	166	62,9 %
Nepotism/cronyism	174	65,9 %
Inadequate training	41	15,5 %
Lack of effective employment policies	194	73,5 %
Other (open-ended responses)	5	–

Source: Authors.

Others (open-ended responses):

- Lack of opportunities
- Insufficient support from universities in the search for jobs
- "All of the above"
- Vacancies that are too specific
- Scarcity of opportunities for new talent

The results point out as the main obstacles to employability the absence of effective employment policies (73.5%), nepotism/cronyism (65.9%) and the scarcity of vacancies (62.9%). These structural and institutional factors show that unemployment in Angola goes beyond individual qualifications, reflecting failures in public policies and hiring practices.

Lack of experience (42%) is an additional obstacle, especially in a market marked by a high youth presence, while inadequate training (15.5%), although less mentioned, is related to the mismatch already identified between education and the market.

In summary, employability in Angola is multifaceted, combining structural (shortage of vacancies), institutional (nepotism and fragility of policies) and individual (lack of experience) factors. Thus, the strengthening of human capital requires not only greater qualification, but also active public policies, transparent labor governance, and incentives to the private sector to absorb qualified labor.

### 4.3.3 Valuing human capital in Angolan organizations

The valorization of human capital in organizations expresses the degree to which workers perceive recognition, opportunities and return for the investments made in education and experience. For Becker (1993), individual productivity only generates collective benefit when institutions offer conditions for the effective use of human capital. Table 12 presents the perceptions of the respondents about this process in the Angolan context.

**Table 12**

*Level of human capital enhancement in Angolan organizations (scale 1–5)*

Level of appreciation	Frequency	Percentage
1 – Nothing valued	43	16,3 %
2 – Little valued	99	37,5 %
3 – Partially valued	110	41,7 %
4 – Valued	10	3,8 %
5 – Highly valued	2	0,8 %
<b>Total</b>	<b>264</b>	<b>100 %</b>

Source: Authors.

The data reveal a mostly negative or moderate perception:

- 53.8% of the participants say that human capital is not at all or little valued (categories 1 and 2).
- 41.7% consider that it is only partially valued.
- Only 4.6% evaluate it positively (levels 4 and 5).

This panorama suggests that, despite the increasing investment in education identified in the sample (Table 4), workers do not perceive a proportional return in terms of recognition, appreciation and use in organizations.

This result dialogues with the reports of the UNDP (2021), ILO (2021) and the contributions of Sambas (2025), which emphasize that, in many African countries, the scarce appreciation of human capital contributes to demotivation, talent drain and low retention of qualified staff.

### 4.3.4 Opportunities for professional advancement in Angola

The results on the perception of professional progression opportunities in Angola (table 13) are presented below, which is fundamental to assess the potential for retention and motivation of human capital.

**Table 13**

*Professional advancement opportunities in Angola*

Category	Frequency	Percentage
Many	5	1,9 %
Moderate	76	28,8 %
Few	148	56,1 %
Almost non-existent	35	13,3 %
<b>Total</b>	<b>264</b>	<b>100 %</b>

Source: Authors.

The results indicate a negative perception of career progression in Angola: more than two-thirds of respondents consider opportunities few or non-existent, while only a minority evaluate them as significant. This picture confirms the low valuation of human capital already pointed out in Table 12, evidencing a restrictive organizational environment, with limited internal mobility. In the light of Becker (1993), the absence of progression compromises the expected returns of education and experience, favoring demotivation and talent drain.

#### 4.4 PUBLIC POLICIES AND DEVELOPMENT

##### 4.4.1 Effectiveness of government policies for human capital development

The effectiveness of public policies is a determining factor for the valorization and strengthening of human capital, as already analyzed in the epigraph related to the theme in the theoretical foundation of this research. Knowing the opinions of the sample tested (Table 14.) is very useful because it will allow us to understand how efficient Angolan public policies regarding human capital can be.

**Table 14**

*Evaluation of the effectiveness of government policies for the development of human capital*

Category	Frequency	Percentage
Very effective	0	0,0 %
Effective	20	7,6 %
Not very effective	192	72,7 %
Ineffective	52	19,7 %
<b>Total</b>	<b>264</b>	<b>100 %</b>

Source: Authors.

The results show a largely negative assessment:

- No participant considered the policies to be very effective.
- Only 7.6% consider them effective.
- The overwhelming majority (72.7%) classify the policies as ineffective, and another 19.7% even consider them ineffective.

This critical perception confirms the diagnosis of international organizations: in Angola, human capital policies suffer from discontinuity, low budget execution, lack of supervision and deficiencies in implementation.

Thus, the results suggest that advances in schooling and training (Tables 4, 6 and 7) are not being sustained by robust public policies, which compromises the transformation of this potential into effective economic and social development.

#### 4.4.2 Priority areas in public policies to strengthen human capital

The definition of priorities in public policies is essential to direct strategic investments. countries that prioritize basic education, health, health at all levels and technical-professional training; they can build solid foundations for the sustainable growth of human capital. The following are the areas identified in this case by the respondents in Table 15.

**Table 15**

*Areas that should be a priority in public policies*

Area	Frequency	Percentage
Quality basic education	207	78,4 %
Technical and professional training	168	63,6 %
Higher education and scientific research	121	45,8 %
Health and well-being	130	49,2 %
Innovation and technology	90	34,1 %
Employability and entrepreneurship	111	42,0 %
Opportunities for new ones (open-ended response)	1	0,4 %

Source: Authors.

The results point to quality basic education (78.4%) and technical-professional training (63.6%) as priority areas, followed by health and well-being (49.2%) and higher education and research (45.8%), evidencing an integrated view of human development.

Emerging areas such as employability/entrepreneurship (42%) and innovation and technology (34.1%) reinforce the need for economic diversification and digital adaptation. In line with the UNDP (2021), the data reveal that strengthening human capital requires multidimensional policies, ranging from the educational base to labor and technological insertion.

#### 4.4.3 Impact of factors on human capital development in Angola

Respondents' perception of the factors that most affect human capital development is a key data point for understanding priorities and weaknesses in the national context, and the following table (Table 16) contains them.

**Table 16**

*Assessment of the impact of factors on human capital development (scale 1–5)*

Factor	1	2	3	4	5	Total
Quality of education	57	101	51	21	34	264
Quality of the health system	95	78	47	16	28	264
Technical and professional training	59	89	56	36	24	264
Employment policies	106	71	41	28	18	264
Access to technology and innovation	100	69	47	19	29	264

Legend: 1 = very low impact; 5 = very high impact.

Source: Authors.

### Analysis of the results

1. Quality of education: More than 60% of respondents gave values between 1 and 2 (low impact), but 34 participants (12.9%) highlighted very high impact (5). This polarization suggests disbelief in the effectiveness of the current system, but also recognition of its transformative potential if it were strengthened, consistent with the recurrent criticisms of the adequacy of teaching (Table 7).
2. Health system: The highest percentages are concentrated in grades 1 and 2 (65.5%), revealing that the population perceives major limitations in the sector, in line with the UNDP diagnoses (2021) on weaknesses in the Angolan health system.
3. Technical-professional training: Although 56 (21.2%) gave a score of 3, low valuation still predominates (1 and 2 add up to 56.0%). This reinforces the idea that, despite the demand (Table 9), the technical training system is perceived as ineffective or insufficient to generate a real impact on human capital.
4. Employment policies: The most poorly evaluated factor 177 respondents (67.1%) gave grades 1 or 2, revealing disbelief in the capacity of public policies to generate opportunities. This confirms the finding in Box 11 about the lack of effective policies as the main obstacle to employability.
5. Access to technology and innovation: 63.9% gave grades of 1 or 2, confirming that the population perceives great technological backwardness as a critical barrier to development. Only 29 (11%) see this factor as having a very high impact, showing that innovation is not yet perceived as a structuring lever.

In general, the data show that respondents perceive all the factors evaluated as having a low current impact on the development of human capital, not because of irrelevance, but due to their fragile implementation in Angola.

## 4.5 PERSPECTIVES AND RECOMMENDATIONS

### 4.5.1 Major current challenges for human capital development in Angola

The open responses presented show a strong convergence around some main axes. Table 17 summarizes the participants' perceptions of the challenges in thematic categories:

**Table 17**

*Main challenges for human capital development in Angola (open responses)*

Thematic Category	Examples of representative responses	Interpretative synthesis
Education and training	"Low quality of education and inability to prepare the population for the labor market"; Expansion and qualification of the educational system, lack of teachers, infrastructure and integration with market demands", Scarcity of opportunities for professional internships".	Education is seen as the biggest obstacle, highlighting weaknesses from the base to higher and technical-professional education, as well as the absence of practice and continuous training.
Public policies and governance	"The biggest challenge is the government's policies"; "Nepotism is injustice"; "Corruption that has taken deep root in almost all sectors"; "Lack of a clear strategy for the implementation of public policies"	Respondents point to inconsistent policies, clientelism and corruption as critical obstacles to strengthening human capital.
Valuing and retaining talent	"Lack of appreciation of the national workforce"; "Brain drain"; "Companies and institutions do not create conditions for training and talent retention"; "Expatriate staff is valued to the detriment of the local staff"	The responses denounce weak meritocracy, devaluation of national staff and difficulties in retaining qualified professionals.
Health, well-being and socio-economic conditions	"Lack of quality education and health"; "Child malnutrition combined with poor educational quality"; "Well-being (quality of life)"; "High cost of living, with an impact on access to education and health"	Social well-being is considered the basis of human capital, with emphasis on limitations in the health system, nutrition, and living conditions.
Innovation, technology and adapting to the future of work	"Unequal access between education and technology"; "Automation and artificial intelligence"; "Adaptation to new technologies"; "Lack of innovation and incentive to scientific research"	The digital transition and innovation are perceived as insufficient, increasing the risk of Angola being left on the sidelines of global changes in the labor market.

Source: Authors.

The perceptions of the respondents reveal that the biggest challenge for human capital in Angola is not only in initial training, but in a set of structural factors: a fragile educational system, inconsistent public policies, institutional practices that limit meritocracy, devaluation of national talents, precariousness in health and insufficient adoption of technologies.

Overall, the respondents reinforce the need for a national pact for human capital, in which government, the private sector and civil society are articulated around clear priorities: quality basic education, technical and professional training, employability policies, health and technological innovation.

#### 4.5.2 Strategic measures for the enhancement of human capital

The analysis and discussion of the results obtained in the question asked about what measures the respondents could propose is summarized in Table 18.

**Table 18**

*Proposals for strategic measures for the enhancement of human capital*

Thematic Category	Examples of representative responses	Interpretative synthesis
<b>Quality education and training</b>	(a) Investing in basic education, research and higher education; (b) Commitment to technical-professional and continuous training; (c) More schools, more teacher training and capacity building centres; (d) Curriculum review aligned with the market.	Education is seen as the central axis: it requires curricular reforms, expansion of the school network, teacher appreciation and greater integration with the labor market.
<b>Continuous training and innovation</b>	(a) Permanent training of cadres; (b) Creation of corporate academies; (c) training in digital and technological skills; (d) reskilling and lifelong learning programmes.	There is a strong emphasis on continuous learning, with a focus on digital skills, innovation and adaptation to changes in the world of work.
<b>Valorization, remuneration and working conditions</b>	(a) Better wages and social benefits"; (b) Merit-based career paths; (c) Employee recognition and reward; (d) First appreciation of people: health and psychological well-being in the company.	Worker recognition, through fair remuneration, professional progression and decent conditions, is pointed out as a key to talent retention.
<b>Public policies and governance</b>	(a) the political will expressed by the investment; (b) Combat nepotism and corruption" (c) Strict supervision of compliance with labour law; (d) Transparency in the application of public resources.	The responses highlight the need for consistent, fair and inspected public policies, combating clientelist practices and promoting social equity.
<b>Teaching-business integration</b>	(a) Partnerships between universities and companies"; (b) national traineeship and first job programmes; (c) targeted integration between training and the market; (d) Companies should collaborate in the definition of resumes.	The articulation between educational institutions and the productive sector is perceived as strategic to align trained skills with the real needs of the market.
<b>Health, well-being and quality of life</b>	(a) Investment in health and well-being; (b) Supporting housing and transport; (c) work-life balance programmes; (d) Affordable basic food basket.	Human capital development is also associated with improved social and economic well-being, going beyond education and employment.
<b>Inclusion, meritocracy and talent retention</b>	(a) To give merit to those who really deserve it"; (b) Greater appreciation of the national framework compared to the expatriate; (c) Talent retention policies; (d) Incentives for the inclusion of youth and women.	Meritocracy, gender equity and prioritizing national talent are seen as essential conditions for creating fair opportunities and reducing brain drain.
<b>Innovation, technology and entrepreneurship</b>	(a) Invest in innovation and <i>startups</i> ; (b) Policies to encourage entrepreneurship; (c) Introduce digital skills from an early age; (d) Technological innovation integrated into training.	The answers point to the need to diversify the economy and modernize technology, strengthening entrepreneurship and adapting to Industry 4.0.

Source: Authors.

The answers reinforce that the valorization of human capital in Angola requires a pact between government and companies, where the State guarantees solid, transparent and inclusive public policies, while the private sector invests in training, meritocracy and innovation. Quality education, decent working conditions, teaching-business partnerships and the fight against corruption appear as the structuring pillars.

#### 4.5.3 Future prospects for human capital in Angola

To conclude this study, respondents were asked to project their perceptions (Table 19) about the future of human capital in Angola over the next ten years. This question is particularly relevant because it allows us to understand not only the evaluation of the present, but also the expectations and concerns about human development in the medium and long term.

**Table 19**

*Insight into the future of human capital in Angola (next 10 years)*

Answer Option	Frequency	Percentage
Very promising	7	2,7 %
Promising	83	31,4 %
Uncertain	120	45,5 %
Not very promising	48	18,2 %
Negative	6	2,3 %
<b>Total</b>	<b>264</b>	<b>100 %</b>

Source: Authors.

Most respondents face the future of human capital in Angola with uncertainty (45.5%) or pessimism (20.5%), while only 34.1% perceive it as promising or very promising. This scenario reveals a cautious view, marked by distrust in public policies and current structural conditions. However, the presence of an optimistic minority suggests that, with strategic investments and appropriate policies, human capital can become an engine of sustainable economic and social development in the country.

#### 4.6 SYNTHESIS OF THE ANALYSIS AND DISCUSSION OF THE RESULTS

The results show that Angola has a young and increasingly educated human potential, but faces serious structural limitations. The quality and adequacy of education remain fragile, making it difficult to integrate with the labor market, marked by scarcity of opportunities, nepotism practices and low valuation of professionals.

Public policies are seen as ineffective, reinforcing the need for deep reforms in education, health, innovation and employment. Respondents point to clear paths: investment

in continuous training, salary enhancement, meritocracy and education-business partnerships.

As for the future, an uncertain view prevails, although there is moderate confidence in the possibility of advances, as long as the government, companies and society act in an articulated manner. In summary, Angola is faced with a decision point: to maintain the current weaknesses or to transform its human capital into the engine of sustainable development.

#### 4.7 PRACTICAL AND STRATEGIC RECOMMENDATIONS

Based on the results obtained and the reviewed literature, six practical and strategic recommendations are identified that can contribute to the strengthening of human capital in Angola:

- 1. Reinforcement of basic education and technical-professional training.** The results revealed the perception that basic education and vocational training are priority areas. Systematic investment in improving pedagogical quality, updating curricula and expanding the technical training network is recommended, ensuring that citizens acquire essential skills for labour market integration.
- 2. Higher education-labour market integration.** The disconnect between curricula and market demands was identified as one of the main weaknesses. It is recommended the creation of university-company cooperation programs, professional internships and applied research projects, in order to bring academic training closer to productive and technological needs.
- 3. Implementation of effective and transparent employment policies.** The high perception of nepotism and the absence of effective employment management mechanisms are structural barriers. It is recommended the development of public policies that ensure transparency in the recruitment and promotion processes, based on objective criteria of merit and performance.
- 4. Valuing human capital in organizations.** The survey showed that workers perceive low recognition and few opportunities for career progression. It is recommended to implement structured career plans, recognition policies and incentives for talent retention, promoting internal mobility and professional motivation.
- 5. Promotion of entrepreneurship and technological innovation.** Faced with the fragility of the formal market, entrepreneurship and innovation emerge as strategic alternatives. It is recommended to create support programs for entrepreneurs, business incubators, lines of financing and tax incentives, aiming at economic diversification and sustainable job creation.

**6. Strengthening institutional governance and international cooperation.** The results pointed to limitations in institutional coordination and in the effectiveness of human development policies. It is recommended to strengthen interministerial articulation, improve labor inspection mechanisms and intensify international cooperation, in order to favor the transfer of knowledge and the adoption of good practices.

## 5 CONCLUSIONS

The present study analyzed the challenges of human capital development in Angola, focusing on education, the labor market and public policies, with the aim of identifying limiting factors and proposing strategies to overcome them. Based on a descriptive-exploratory investigation, with a mixed approach, supported by a questionnaire applied to 264 participants, it was possible to articulate empirical evidence with the theoretical foundation of human capital.

The results confirm the theoretical assumptions of Schultz (1961) and Becker (1964), according to which education and qualification are central investments for development, but demonstrate that, in Angola, high schooling does not automatically translate into employability, professional progression or talent enhancement. The predominant perception of respondents reveals weaknesses in the quality of education, a strong mismatch between training and labour market demands and structural limitations in the employment system.

Among the main obstacles identified are the absence of effective employment policies, the scarcity of vacancies, the perception of nepotism and the low valuation of human capital in organizations, expressed in insufficient recognition and reduced opportunities for professional progression. These factors indicate that the challenges of human capital in Angola are simultaneously formative, institutional and organizational, requiring responses that go beyond isolated interventions in the education system.

With regard to public policies, the mostly negative evaluation of their effectiveness contrasts with the clarity of the priorities pointed out by the participants, namely quality basic education, technical and vocational training, health and well-being, as well as employability, innovation and entrepreneurship. The future outlook reveals a scenario of uncertainty, reflecting distrust in the ability to effectively implement existing policies, but also recognition of the transformative potential of human capital if appropriate strategies are adopted.

It is concluded that the development of human capital in Angola depends on an integrated and multidimensional approach, which articulates consistent public policies, effective integration between education and the labor market, strengthening meritocracy and

organizational strategies for professional valorization. The recommendations made in this study offer practical contributions to this process, reinforcing the idea that only with effective institutions, transparent policies and continuous investment in people will it be possible to transform human capital into an engine of sustainable, competitive and socially inclusive economic growth.

## REFERENCES

- Almeida, R., & Araújo, C. (2021). Formação contínua e desenvolvimento de competências em contextos organizacionais. *Revista Portuguesa de Educação*, 34(2), 45–63. <https://doi.org/10.21814/rpe.23422>
- Angola24Horas. (2024, junho 6). Angola tem de gastar 80% mais com educação para cumprir metas de capital humano. <https://angola24horas.com/sociedade/item/29735-angola-tem-de-gastar-80-mais-com-educacao-para-cumprir-metas-de-capital-humano>
- Babbie, E. (2020). *The practice of social research* (15th ed.). Cengage Learning.
- Banco Mundial. (2023, dezembro 19). Angola: AFE tertiary education receives a boost to improve learning conditions for 150,000 students. <https://www.worldbank.org>
- Banco Mundial. (2025, março 21). World Bank boosts support to enhance employment opportunities for 500,000 young people in Angola. <https://www.worldbank.org>
- Barro, R. J., & Lee, J. W. (2015). *Education matters: Global schooling gains from the 19th to the 21st century*. Oxford University Press.
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis*. University of Chicago Press.
- Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis* (3rd ed.). University of Chicago Press.
- Bloom, D. E., Kuhn, M., & Prettnner, K. (2022). Health and economic growth: Reconciling the micro and macro evidence. *Oxford Review of Economic Policy*, 38(3), 500–518. <https://doi.org/10.1093/oxrep/grac021>
- Bloom, N., & Van Reenen, J. (2020). Management practices, workforce selection, and productivity. *Journal of Labor Economics*, 38(4), 823–864. <https://doi.org/10.1086/705883>
- Candy, P., Crebert, G., & O'Leary, J. (2019). *Developing lifelong learners through undergraduate education*. Routledge. <https://doi.org/10.4324/9780203417878>
- Carneiro, P., & Heckman, J. J. (2003). Human capital policy. In J. J. Heckman & A. B. Krueger (Eds.), *Inequality in America* (pp. 77–239). MIT Press.
- Chiavenato, I. (2020). *Recursos humanos: O capital humano das organizações* (11ª ed.). Atlas.

- Expansão. (2024, junho 14). Melhorar o capital humano do país até 2037 deverá custar 1,1 bilhões Kz. <https://www.expansao.co.ao>
- Fonseca, J. G., & Ferreira, M. A. S. (2020). A teoria do capital humano e a noção de empregabilidade. *Revista Brasileira da Educação Profissional e Tecnológica*, 1(20), 1–20.
- Gonzalez, J. A. (2022). Teoria do capital humano, empregabilidade e empreendedorismo. *Formação & Trabalho*, 1(1), 1–20.
- Governo de Angola. (2024). Plano nacional de desenvolvimento do capital humano 2023–2037.
- Hanushek, E. A., & Woessmann, L. (2020). Education, knowledge capital, and economic growth. In *The economics of education* (2nd ed., pp. 171–182). Academic Press.
- Heckman, J. J. (2018). *Giving kids a fair chance: A strategy to promote equity*. MIT Press.
- International Labour Organization. (2021). *World employment and social outlook 2021*. <https://www.ilo.org>
- Jornal de Angola. (2024, junho 6). Angola tem de gastar 80% mais com educação para cumprir metas. <https://www.jornaldeangola.ao>
- Le Boterf, G. (2015). *Construir as competências individuais e coletivas* (6ª ed.). Edições Sílabo.
- MAPTSS. (2024, maio 15). Plano do capital humano prevê 149 mil professores primários até 2037. <https://www.maptss.gov.ao>
- Ministério da Administração Pública, Trabalho e Segurança Social. (2025, março 21). Comunicado final do conselho consultivo. <https://www.maptss.gov.ao>
- Marr, B. (2019). *The future of work: Robots, AI, and automation*. Kogan Page.
- Noe, R. A. (2017). *Employee training and development* (7th ed.). McGraw-Hill.
- Organisation for Economic Co-operation and Development. (2021). *OECD employment outlook 2021*. <https://doi.org/10.1787/19991266>
- Organização Internacional do Trabalho. (2021). *Perspetivas sociais e de emprego no mundo: Tendências 2021*.
- Pelinescu, E. (2015). The impact of human capital on economic growth. *Procedia Economics and Finance*, 22, 184–190.
- Piketty, T. (2020). *Capital and ideology*. Harvard University Press.
- Programa das Nações Unidas para o Desenvolvimento. (2022, setembro 8). Angola regista progresso no índice de desenvolvimento humano. <https://www.undp.org>
- Robbins, S. P., & Judge, T. A. (2019). *Organizational behavior* (18th ed.). Pearson.

Samba, Z. (2016). Gestão de recursos humanos. JM Editora.

Santos Samba, Z. (2025). Estudo sobre fuga de cérebros em Angola. ARACÊ, 7(7), 37708–37717. <https://doi.org/10.56238/arev7n7147>

Schultz, T. W. (1961). Investment in human capital. The American Economic Review, 51(1), 1–17.

Sen, A. (1999). Development as freedom. Oxford University Press.

United Nations Economic Commission for Africa. (2021). Africa can benefit from artificial intelligence. <https://uneca.org>

VerAngola. (2024, maio). Plano de capital humano prevê acelerar formação de professores. <https://www.verangola.net>

Willis Towers Watson. (2021). Three challenges affecting talent and compensation in Sub-Saharan Africa. <https://www.wtwco.com>