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Preface

Lectori Salutem!

It has long been recognised that scientific collaboration transcends borders. This truth is clearly illustrated by the growing relationships among researchers from North-West University in South Africa, the University of Miskolc in Hungary, and Metropolitan University.

What has brought scholars from these three institutions together – beyond personal affinity? The answer is clear: a shared understanding that knowledge has become the most valuable natural resource of the 21st century. The long-term sustainable development of nations depends on value systems and institutional structures in which educators play a pivotal role. This demands a paradigm shift.

The remarkable economic growth witnessed in recent decades has come at a profound cost: the biosphere has undergone severe degradation. At the same time, many countries have experienced rising budget deficits and widening inequalities. It is becoming increasingly evident that, in its current form, economic growth is unsustainable – both in the short and long term. Compounding this challenge is the rapid acceleration of information technology and an evolving geopolitical landscape.

History teaches us that technological revolutions often deepen income inequality, as labour income declines relative to capital income. In extreme cases, this can lead to such social polarization that political and economic instability becomes inevitable. A crucial question, therefore, is whether we are adequately preparing the intellectuals of the future to respond to these emerging challenges.

In this regard, the "developmental state" plays a vital role. We are gradually realising that the weakening of state responsibilities – once seen as a guiding principle – was misguided. The state has essential duties in fostering education and research and safeguarding sustainability.

This fourth issue of our journal presents studies aligned with our shared interests – sustainability, economic analysis, and the role of the developmental state – as well as a jointly edited volume of research contributions.

We offer these studies to our readers in the hope that they will serve as the "first swallows," signalling the beginning of a long-term and fruitful educational and research collaboration.

Potchefstroom – Miskolc – Budapest, December 2025.

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TANULMÁNYOK / STUDIES

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Strategies of overcoming barriers to talent management: an African tribal perspective

Africa as a continent has lost its talent to the international countries due to the brain drain. Limited research has been done on the African perspective on talent management under the tribal authorities. Strategies to get beyond these barriers and establish a more welcoming and encouraging atmosphere for tribal talent is necessitated. The purpose of the paper was to determine the strategies needed to overcome the barriers to talent management from an African tribal leadership perspective. Further, to determine how to attract and retain talent from an African tribal leadership perspective. Traditional leaders representing their respective tribes in the North-West Province were interviewed in the form of focus group discussion. A non-probability judgemental sampling was used for the study: a non-probability judgmental sampling method was used to identify traditional leaders in the North-West Province, and a thematic analysis was applied to analyse the data. Succession planning was highlighted in the findings of the study as a complicated matter. Furthermore, poor rural and socioeconomic development were identified as the push factors of the best performers and skilled individuals from the local communities. African leaders should recognise the human capital, which encompasses the skills, knowledge, and abilities of their citizens, because is a crucial factor for economic development and social progress.
Keywords: Africa tribal, strategic leadership, succession planning, talent management
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Introduction

Much research has been done on talent management (TM from a Western perspective, however there are still an array of shortcomings on the concept. Evidence can be found in academic work and articles on TM on a global and macro level (Robbins & Judge, 2023). The world continues to face the crisis of talent and TM. Tansley (2011) refers to talent as the human capability to reach the greatest heights. A plethora of studies done in relation to TM has indicated that an African perspective is still lagging behind on the concept with much attention being dedicated to Western Perspective (Feng & Jansen, 2021). The fundamental principle of African leadership as described by Mbigi and Maree (2014) is culture. April et al. (2010) conducted their studies on Afrocentric paradigms which put more emphasis on collectivism as a way of doing things in a traditional society. Hanges et al. (2016) conducted a leadership study on cultural diversity and cross–culture which revealed that leaders have influence in the politics, economy and social aspects and it is also the gateway through which changes are facilitated because they are capable of influencing others. Docquier (2017) stated that Africa as a continent has lost its talent to the international countries due to the brain drain. Limited research has been done on the African perspective on TM under the tribal authorities. The primary purpose of the paper is to determine the strategies needed to overcome the barriers to talent management from an African tribal leadership

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perspective. Further, to determine how to attract and retain talent from an African tribal leadership perspective. Determining and removing any obstacles or difficulties that can prevent tribal talent from being recognised and evaluated. These difficulties may include a lack of opportunities, prejudice, cultural biases, restricted access to resources, or inadequate acknowledgement of tribal talent. Strategies to get beyond these barriers and establish a more welcoming and encouraging atmosphere for tribal talent is necessitated.

Literature review

Talent management from an African perspective

Talent management (TM) is not aligned with strategic management. In a way, TM can be used for knowledge management, sustainability, organisational effectiveness and efficiency as well as for a competitive advantage. Various scholars (Barkhuizen et al., 2014; Meyers et al., 2017) define TM as the process of identifying, attracting and retaining talent. Adamsen (2016) further elaborates on TM as the process of enhancing the human capability thereby performing capacity building through incorporating talent acquisition, development and deployment. In contrast Cappelli and Keller (2014) and Collings et al. (2017) perceive TM as critical for optimal organisational performance.

Africanisation is a way of defining and interpreting African identity and culture (Barkhuizen et al., 2014). It involves integrating different cultures into one to form unity for evolution and transformation. Africanisation gives the sense of belonging and embracing one's culture. Patriotism remains at the fore in Africanisation. The traditional values and norms are taught at school from different levels and offered in one's mother tongue. However, the mother tongue is not compulsory in the liberal society which is the reason why education plays a pivotal role. The key success factor of Africanisation is primary socialisation. Barkhuizen et al. (2014) defines primary socialisation as the process whereby the child learns the traditional customs, values and norms that should be reflected on their behaviour in accordance with culture. Family plays an important role in this instance of primary socialisation. Furthermore, Afrocentric and Eurocentric worldviews differ. Afrocentric worldview focuses on the African cultural values with the perception that the African history has been undermined, with the Western world being considered as more superior to that of the African world. Moreover, the Afrocentric world applies collectivism, whereas the Western worldview applies individualism.

Understanding the African tribal context

It is important to explore the unique cultural, social, and historical aspects of African tribes and how they shape TM practices. This includes examining the values, norms, traditions, and belief systems that influence talent identification, development, and retention within the tribal context. The critical factors to consider for African tribal context, as analysed by Harahap and Choirunnisa (2023), are as follows:

- *Diversity of African Tribes*: Africa is a vast continent with diverse ethnic groups and tribes. It is essential to acknowledge and understand the wide range of tribes present, each with its distinct culture, language, traditions, and social structures (Harahap & Choirunnisa, 2023). Cultural diversity may result in xenophobia, tribalism and racism.
- *History and Origins:* Exploring the historical context of African tribes helps to understand their origins, migration patterns, and interactions with neighbouring tribes (Harahap & Choirunnisa, 2023).
- *Cultural Practices and Beliefs:* African tribes often have rich cultural practices and beliefs that are deeply rooted in their history and environment. These can include religious rituals, ceremonies, dances, music, art, storytelling, and traditional healing practices (Nanda & Warms, 2019). Examining these aspects helps to appreciate the diversity and significance of tribal cultures.

- *Social Organisation and Kinship Systems*: Tribal societies typically have unique social structures and kinship systems that influence their social interactions and roles within the community. Understanding concepts such as lineage, clan systems, age sets, and hierarchical arrangements can provide insights into how power, authority, and decision-making are distributed (Nanda & Warms, 2019).
- *Subsistence Patterns and Economic Activities* (Nanda & Warms, 2019): Different African tribes have traditionally engaged in various subsistence patterns and economic activities based on their geographic location and available resources. These can include agriculture, pastoralism, hunting and gathering, fishing, and trade. Analysing these practices sheds light on the economic dynamics within tribal societies.
- *Political Systems and Governance* (Nanda & Warms, 2019): Examining the political systems and governance structures of African tribes is crucial for comprehending their social and political organisation. Some tribes have traditional systems of leadership, while others have experienced the influence of colonial and post-colonial political frameworks. Studying these aspects helps to grasp tribal governance and decision-making processes.
- *Intergroup Relations and Conflict Resolution*: African tribes often have intricate relationships with neighbouring tribes, involving trade, alliances, conflicts, and mechanisms for resolving disputes. Investigating intergroup dynamics provides insights into the historical and contemporary interactions between tribes and their impact on social cohesion (Nanda & Warms, 2019).
- *Challenges and Modern Influences*: Understanding the tribal context should also encompass an examination of the challenges faced by these communities in the modern world. These challenges may include globalisation, urbanisation, environmental changes, political marginalisation, and socioeconomic disparities (Nanda & Warms, 2019). It is important to note that Africa is a diverse continent, and each tribal context is unique. Therefore, specific details, case studies, and regional variations should be considered to acquire better understanding of individual African tribes under specific contexts.

African tribal leaders often face challenges in TM due to limited financial and infrastructural resources. Insufficient funding for education, skills development programs, and research institutions can hinder the effective nurturing and retention of talent. Leaders need to address resource constraints to create an enabling environment for talent development. Strategy and policies for TM shapes the organisation and can be used for retention, success planning and individual development for psychological-contract fulfilment and employee relationship (Aryee *et al*., 2015). Understanding the challenges and opportunities in TM helps African tribal leaders shape their strategies, policies, and interventions. By addressing the challenges and capitalising on the opportunities, leaders can create an environment that fosters talent development, innovation, entrepreneurship, and regional integration, contributing to sustainable economic growth and development across the continent. Strategies to overcome these obstacles and create a more inclusive and supportive environment for tribal talent and retention.

Strategies to overcome barriers on talent management by African tribal leaders

African tribal leadership often operates within traditional structures and systems. Exploring how these traditional structures impact TM is essential. This can involve discussing the roles and responsibilities of tribal leaders, the influence of customary practices, and the interplay between modern TM approaches and traditional values. The following are the strategies to explore on how traditional structures can impact TM within African tribal leadership:

Roles and Responsibilities of Tribal Leaders

Tribal leaders play a crucial role in TM within traditional African societies. They often serve as custodians of cultural values, norms, and traditions (Logan et al., 2019). Their responsibilities may include identifying and nurturing talent within the community, facilitating skills development, and guiding individuals towards leadership roles. Tribal leaders act as mentors and role models, instilling a sense of pride, identity, and purpose in the younger generation.

Influence of Customary Practices

Traditional customary practices, rituals, and ceremonies can influence TM within tribal leadership. These practices often emphasise communal values, respect for elders, and collective decision-making. Customary practices can shape talent development by emphasising the importance of cultural knowledge, traditional skills, and community-oriented contributions (Logan et al., 2019). They provide a framework for transmitting knowledge and skills from one generation to another. Tribal leaders attract talent from a different angle and counteract the turnover, with people so eager to work with the leader that they will take a pay cut. The best approach for decolonisation of narratives which harnesses the indigenous knowledge and customary practices and harmonise the different cultural practices uprooted from socio-cultural and socio-political relationships. The strategies and approaches for decolonisation harmonise the relationship between socio-cultural and with socio-political factors (Lyons et al., 2020).

Interplay Between Modern Talent Management Approaches and Traditional Values

African tribal leaders often navigate the interplay between modern TM approaches and traditional values (Jyoti & Rani, 2014). While modern TM approaches emphasise skills development, meritocracy, and individual aspirations, traditional values prioritise collective well-being, communal harmony, and respect for authority. Tribal leaders strive to strike a balance between these approaches, integrating modern practices without compromising their cultural heritage and community centred values. TM model complements the modern talent management by focusing on hiring the best candidates and considers career development for optimal performance of the organisation. The modern talent management approaches look beyond the talent identification thereby taking into consideration other strategies of TM which include attraction, training and development, succession planning and retention (Collings et al., 2017; Khilji et al., 2015).

Recognising Local Expertise and Knowledge

Traditional tribal leadership recognises the value of local expertise and knowledge in TM (Uge et al., 2019). Tribal leaders often possess deep knowledge of their communities, including their strengths, talents, and unique cultural practices. They draw upon this knowledge to identify, nurture, and promote talent within the community. Tribal leaders may prioritise local knowledge and skills, blending modern approaches with traditional practices to develop talent rooted in their cultural context (Lyons et al., 2020). Both local language and wisdom embraces culture thereby taking into consideration the philosophy, values, norms, ethics, rituals, beliefs, habits, and customs (Rohmadi & Hartono, 2011: 284). Thus, tribal leaders are a source of reference for local wisdom and for cultural norms and values which govern the behaviour.

Community Participation and Decision-making

TM within tribal leadership often involves community participation and decision-making. Tribal leaders engage the community in identifying and developing talent, seeking consensus and collective input (Musavengane, 2019). This participatory approach fosters a sense of ownership and belonging among community members, ensuring that talent management efforts align with the community's needs and aspirations. Community participation promotes a sense of belonging and ownership when one is engaged in decision making.

Addressing Gender Dynamics

Traditional tribal structures can influence gender dynamics in talent management. Some tribal societies may have specific gender roles and expectations that affect the opportunities available for men and women (Allen et al., 2019). Tribal leaders play a crucial role in challenging gender disparities, promoting gender equality, and creating opportunities for women's talent development. They can advocate for inclusive practices and empower women to participate fully in talent management efforts.

Preservation of Cultural Heritage

Tribal leaders prioritise the preservation of cultural heritage in talent management. They recognise that cultural practices, artistic expressions, and traditional knowledge are integral parts of talent development (David et al.,2020) Tribal leaders may support initiatives that promote cultural preservation, such as traditional arts and crafts, storytelling, and indigenous knowledge systems. By preserving cultural heritage, they ensure that talent development remains connected to the community's roots and collective identity. Understanding the impact of traditional structures on talent management within African tribal leadership is essential for appreciating the complex dynamics at play. By navigating the interplay between traditional values and modern talent management approaches, tribal leaders can create environments that nurture talent while preserving cultural heritage and community cohesion. They play a vital role in identifying, developing, and promoting talent within their communities, shaping the next generation of leaders grounded in their cultural traditions.
By valuing and leveraging cultural assets, tribal leaders demonstrate innovative approaches to talent development within their communities. They preserve cultural heritage, incorporate traditional knowledge, promote cultural arts and crafts, and foster community participation. Through these efforts, tribal leaders ensure that talent development is deeply rooted in cultural identity, strengthening both the individuals and the community as a whole. By addressing these aspects, a comprehensive discussion on how African tribal leadership overcomes barriers in TM can be conducted. It is important to recognise the diverse approaches taken by different tribal communities, as the challenges and strategies employed may vary significantly. From an African tribal leadership perspective, the attraction and retention of talent can be approached in various ways. Such practices may differ across different tribes and regions.

Research method

The study adopted a phenomenological qualitative research design because of its ability to provide comprehensive information on human experience. A phenomenological qualitative research approach aims to answer questions about the complex nature of a phenomenon as it occurs in the real world with the purpose of understanding it from the perspective of an individual furthermore, the approach investigates the everyday experiences of human beings while suspending the researchers' preconceived assumptions about the phenomenon. The targeted population was the tribal councils which includes the traditional leaders and tribal authorities from the North-West Province in South Africa. The study was conducted in the North-West Province in three districts, namely: Ngaka Modiri Molema District (NMMD), Dr Ruth Segomotsi Mompati Disticat (DRSMD), and Bojanala District (BD) where the villages are situated. The researcher targeted the rural areas consisting of villages where traditional councils are situated. The following traditional leaders representing their respective tribes in the North-West Province were interviewed, as shown in Table 1, in the form of focus group discussion.

Table 1:Summary of demographics of the population

Tribal authority Code	Code	Sub-district	Position	Gender
Traditional Authority 1	TA 1	Ramotshere Moiloa (NMMD)	Tribal Council	Four Males
Traditional Authority 2	TA 2	Ramotshere Moiloa (NMMD)	Tribal Council	Five Males
Traditional Authority 3	TA 3	Mahikeng (NMMD)	Tribal Council	Eight Males
Traditional Authority 4	TA 4	Taung (DRSMD)	Tribal Council	Ten males and one female
Traditional Authority 5	TA 5	Moses Kotane (BD)	Tribal Council	Twelve Male
Traditional Authority 6	TA 6	Moses Kotane (BD)	Tribal Council	Ten Male
Traditional Authority 7	TA 7	Moses Kotane (BD)	Tribal Council	Three Male
Traditional Authority 8	TA 8	Moses Kotane (BD)	Tribal Council	Twelve Male

Source: Own compilation

A non-probability judgemental sampling was used for the study: a non-probability judgmental sampling method was used to identify traditional leaders in the North-West Province. A judgemental sampling allowed the selection of individuals who are likely to provide information relating to the research problem. The tribal authorities were chosen from the database of the house of traditional leaders to represent the villages where communities are led by traditional leaders and herdsmen which form part of the traditional council. Prior to data collection, the researcher briefly explained the consent form and requested the participants to sign the forms in conformance to the ethical principles. Further, the researcher translated the research questions into Setswana, the participants' first spoken language to avoid any misunderstanding, also considering that some of the participants were elderly persons who could not read and write. The literacy level of the participants varied from literate, semi-illiterate to relatively illiterate with indigenous knowledge as a common factor. Also, Setswana was the relevant language to use hence the researcher had to translate the research questions from English to Setswana to accommodate those who could not understand, read and write English. Lastly, a focus group discussion was used to collect data from the participants and the group ranged from 12-14 members. The sample size was made up of the eight villages in the North-West Province representing the three districts, as shown in Table 1. The researcher continued to do research until data saturation was reached because the study was qualitative in nature. Data saturation means the continuous collection of data until the additional data does not propose new themes or offer any new information. Raw data was recorded in the form of video or audio. The researcher was the facilitator by leading the traditional councils on the discussion on a topic of barriers to TM and strategies used to overcome the barriers. Note-taking and tape-recording during the session were used for capturing the verbatim discussion. Data extracted was analysed using Atlas.ti and this enabled for the coding of data into themes and codes.

Results and discussion

This phenomenological qualitative study was based on structured interviews held in the form of a focus group discussion with tribal authorities, as shown in Table 1. The steps involved in data analysis were to scan the data to extract main themes and other relevant opinions that may not fall within the predetermined initial themes but may be important for further analysis. Different themes were identified, and the data was then classified into themes and subsequently codes, as indicated in Table 2. Furthermore. the researcher focused on the most important aspect of each theme and which aspects of the data set it covers, creating a coherent narrative of how and why the coded data within each theme provides unique insights, contributes to the overall understanding of larger questions, and interacts with other themes. A list of codes was developed through the analysis and clustered into two broader themes that are of relevance to this paper.

Table 2:Layout of themes

Research question	Theme	Codes
How do we overcome barriers on talent management from African tribal leadership perspective?	4.1. Barriers to talent management and the strategies to address the barriers	4.1.1 School curriculum 4.1.2 Land, farming and mining 4.1.3 Tourism 4.1.4 Natural resources
What are the complexities of talent attraction and retention from African tribal leadership perspective?	4.2. Complexity of talent attraction and retention	4.2.1 Talent acquisition 4.2.2 Talent attraction 4.2.3 Talent retention 4.2.4 Talent development and training 4.2.5 Succession planning

Source: Own compilation

Barriers to talent management and the strategies to address the barriers

School curriculum

The school curriculum promotes equity from national up down to the local level since it is standardised. The curriculum is designed to accommodate every learner irrespective of the gender, class and race. The curriculum serves as an enabler for growth and development in terms of learning without compromising quality. Beyond development and growth, the curriculum creates a culture of learning and collaboration. One respondent (TA05) pointed out:

"*...gone are days when school curriculum has value as compared to the Bantu education. Previously, the school curriculum was not debatable and was very inclusive. Today, the revised curriculum aligned with school policy is weak as rand compared to dollar. I propose that school curriculum be revised and reverted"*.

Respondent (TA06), emphasized that:

"School curriculum channels the children. The school curriculum policy is not applied accordingly. There are schools that do not have teachers to teach certain streams e.g. commerce. Local teachers have relocated to urban areas because there are no enough resources for attraction and retention. School buildings are too old and not maintained and no access to internet or Wifi. Previously, the teachers used receive the allowance by working in rural areas, but the allowance was withdrawn by the current minister of basic education as from the year 2022. There are no incentives to attract teachers to work in rural areas. Solution proposed is that there is a need for rural development programme for schools in villages. The school curriculum need to be redesigned to fit into todays 'world. Things really look bad. Freedom has opened room for disappointment in our society. There is a need to collaborate with the relevant stakeholder for sustainable development..."

Both respondents share the same sentiments on the school curriculum that it needs to be revised so that it fits the purpose. They propose that the school curriculum be redesigned taking into consideration the previous one so that it be comprehensive for the benefits of learners with different backgrounds and for career advancement. The school curriculum can incorporate different fields of study and be standardised for the benefits of learners at different locations in line with equity and inclusion regardless of demography. Everyone should be given equal access to development opportunities, recognition and career advancement. Redesigning the curriculum will bridge the gaps identified between education and employment, improve the employability of graduates and foster a talent pool that meets industry requirements (Ferns et al., 2019).

Land, farming and mining

The wealth of the local communities in rural areas depends on the use of land, farming and mining. These assets generate revenues for both economic development and sustainable livelihood. Job opportunities emerge from farming and mining. Most of the areas in North-West Province have minerals (natural resources). Furthermore, the Province is well known of for maize meal and cattle farming. The land can be used for so many things, for example forestry and fisheries to in the places where there are rivers and dams.

One respondent (TA01) explained:

"The land was taken away from the hands of the traditional leaders by the today's government. We were covered by CLARA Act. The land was under the control of the traditional leaders until the political interference."

In contrast, respondent (TA02) mentioned that:

"The land is still controlled by the traditional leaders. It is up to the community leaders to look after their asset before we remain in a state of absolute poverty."

Respondent TA06 concurred with respondent TA01 by stating that:

"We used to have power on the land allocation and use but no more since the governance structure oversight the importance of land be controlled by the community leaders with no political interference. Similar thing is happening in the mines and farming. Mines are situated in our community but our children are left behind for the job opportunities. The introduction of acts and policies was a way of suppression our local economic and community development. We lease the land to the foreigners who owns mines around our community for mining."

The respondents indicated that the power and authority had been taken away from the traditional leaders since the new democracy. Tribal leaders formed partnerships with foreigners who owned mines for community development. Tribal leaders promote community development initiatives that allow talented individuals to make a positive impact on the community's well-being. These initiatives can include projects related to education, healthcare, infrastructure development, or environmental sustainability. By emphasising the opportunities for individuals to contribute to community development, tribal leaders showcase the potential for personal and professional growth within the community. Examining the political systems and governance structures of African tribes is crucial for comprehending their social and political organisation. Some tribes have traditional systems of leadership, while others have experienced the influence of colonial and post-colonial political frameworks. Studying these aspects helps to grasp tribal governance and decision-making processes.

Tourism

Tourism generates revenues and attracts talent at local levels. Tourism embraces culture and economy in the country. The preserved buildings for tourism like museums and game reserves, and parks for instance need to be well maintained for attraction. The diverse cultural heritage and natural landscapes attract both international and domestic tourists. Currently, tourism contributes 8.6% of South African Economy and provides for 9.2% of total employment in the country according to Statistics South Africa. Respondent TA06 alluded that:

"Most buildings are dilapidated in this community because authority and power are with local government. The heritage sites which were used to embrace our culture and generate revenues are neglected. I recommend that government looks into this matter because criminals are using

these sites for criminal activities. There is an airport, museum, hotels that generate revenue but with local community not benefitting from this. Our children are not given first preference for any job opportunities."

Respondent TA08 explained that:

"Tourism attract people outside of North-West Province and even globally. Our district is well known as the tourist area in the province and attract many because there are caves, museum, game reserve, National Parks nearby airport and hotels. Furthermore, places that attract tourist are dams and rivers still in this district. Priority for job opportunities are not given to the local community members but to the people who have a skill and knowledge for job requirement".

Both respondents indicated that attractive places at local community exist, but however there are still buildings that are not maintained. Tribal leaders aim to provide modern amenities and improve the quality of life within the community without compromising cultural values. This can involve initiatives such as improving infrastructure, healthcare facilities, access to clean water, and recreational opportunities. By balancing modern amenities with the preservation of cultural values, tribal leaders create an environment that appeals to talented individuals seeking a balanced and fulfilling lifestyle. Tribal leaders leverage cultural tourism and cultural exchanges to develop talent and generate economic opportunities. They collaborate with tourism agencies, organisations, and institutions to promote cultural tourism initiatives that showcase traditional practices, lifestyles, and artistic expressions (Ostonov et al., 2020). Cultural exchanges allow community members to interact with individuals from different cultures, fostering cross-cultural learning and talent development.

Natural resources

Countrywide the natural resources are an asset. The North-West Province is well known for minerals and maize meal farming which attracts everyone including the foreigners. At local level, they still practice forestry and fishery because it is regarded as indigenous knowledge but needs licencing. There is a water valley and falls which attract the foreigners for tourism and make contributions to South Africa's economy. The problem that local community members are facing which affects the country is shortage of water when it is not raining which also affects grazing.

Respondent TA07 stated that:

"There are minerals, slate, rivers surrounding our area which we perceive as our wealth, but we are not in control These minerals attract foreigners in our land. Previously, we had no shacks but because everyone come into our community to look for the jobs …villages are turned into informal settlement because of these minerals. Movement is not restricted in our country…everyone can pass through with or without passport.

Respondent TA06 concurred with respondent TA07:

"Minerals are the reason why we have cultural diversity and we are multilingual, for example: in mines we speak fanagalo which is the mixture of languages. Our African brothers and sisters come and work at home. Resources are not managed locally by the tribal authorities."

Respondent TA02 reiterated that:

"Shortage of water is a challenge. Villages struggle with water as a result of the use of boreholes, rivers and dams for survival. The talented youth go es to urban areas to avoid the challenge of water and sanitation. Majority of local community members use pit toilets. There are only few who use the flushing system. Therefore, the environment is a push factor of talent attraction and retention. The residents fail to take care of the environment. Despite the overarching challenge of water, there are people who still do littering in the rivers and the dams. The use of the pipe system which replaced reservoir has increased theft. The local community members steal the pipes. Climate change (extreme temperature) is a challenge. Therefore, lack of resources and poor environmental management pushes people out of the villages".

Most respondents support each other about the natural resource's problems e.g. environmental hazards and other problems. Partners can contribute resources, such as funding, infrastructure, technology, and training opportunities, to support talent development initiatives and build the capacity of tribal communities to implement and sustain effective talent management frameworks. Conducive environment is a pull factor, and the opposite is the push factor. Push factor – pushes and flashes away talent, whereas pull factors- attract talent and retain it.

Complexity of talent attractions and retention
Talent acquisition

Talent acquisition is way of talent identification. Talent can be identified from the child as young the toddler but not maintaining that talent makes it impossible to retain it in future. For instance during child development stage as early learning centre the teacher can identify that the characteristics of the child reflect the social work knowledge and be encouraged so that the child grows up with that capability of social care and provide motivation in any form. One respondent TA07 indicated:

"…talent acquisition is a scarce resource in our village. We cannot identify talent and retain it because of lack of knowledge and poor infrastructural development to attract local community members even the foreigners. For example, we still have dilapidated and vandalized buildings".

Further, respondent TA06 stated:

It is not easy to identify the talent. We are still struggling to identify talent and with the socio-economic problems that we are faced with making matters worse."

Both respondents indicated that talent identification is a problem in villages and even if identified it is still difficult to attract talent due to poor socio-economic development and infrastructural development. Thus, both rural and economic development can empower the local communities to retain the talent and their children to plough back to their communities. Talent acquisition is one of the elements of talent management under the human resource management (Ansar & Baloch, 2018; Mahfoozi et al., 2018) defined as the strategic approach used to identify and attract talent and identify the highly skilled individuals. Talent identification can be done in the form of recruitment, selection and appointment.

Talent attraction

Talent attraction is the opposite of talent retention. Poor infrastructure and socio-economic development are the main cause of children leaving their homes. Poor access to technology and internet also chase away the children from their homeland in today's society. Digital transformation is still lagging behind in villages and one of things that attract youth due to globalisation. Attractive strategies counteract turnover and a pathway through retention. Attractive strategies for the organisation include employee engagement, upward mobility, staff recognition, performance appraisal, career development, motivation of employees and satisfactory pay level. Talent attraction and retention add value to the organisation. Globally, talent is a scarce resource. Locally, Africa has lost skilled individuals and professional during the war and continues to face the same challenge. Respondent TA04 alluded that:

"Lack of rural and economic development lead to state of absolute poverty and talent loss. There is nothing that attract foreigners because buildings are not renovated. They are just abandoned and neglected. Poor maintenance of infrastructure counteract talent attraction as a result our children have left their homeland. I propose that we maintain the available resources and lobby support from external stakeholders for talent attraction and retention".

In concurrence with Respondent TA08, Respondent TA05 mentioned that:

"Poor maintenance of roads and buildings make it impossible to attract talent and retain it. Technology e.g. access to internet has driven our children outside of their homeland."

African leaders encounter competition from global markets that attract African talent with promising job prospects, higher salaries, and better infrastructure. This competition can make it challenging for African countries to retain their skilled workforce. Leaders need to develop strategies to create attractive opportunities within their own countries, providing a conducive environment for talent to flourish. TM serves as a mechanism for business success and competitive advantage in a competitive market of the twenty-first century). African leaders recognise the transformative potential of digital technologies in talent management. They embrace the opportunities presented by e-learning platforms, digital skills development, remote work, and digital entrepreneurship. Leaders can leverage digital transformation to overcome geographic limitations, reach a wider talent pool, and equip individuals with the digital skills needed for the future job market (Feng & Jansen, 2021).

Talent retention

Talent retention results from job satisfaction in the organisation. Poor communication systems and employee disengagement lead to talent turnover but once the employees are fully participating in the organisation in any form then then they will remain the organisation. Motivational factors plays a pivotal role. Job satisfaction is defined as an employee's positive feeling towards his or her own job based on the evaluation done on its characteristics (Robbins & Judge, 2023). Job satisfaction has a multitude of contributing factors. Factors such as promotion, fair payment, and good working conditions encourage the employees to stay at the workplace without experiencing the pressure of thinking about leaving the organisation. Respondent TA04 indicated that:

"…talent attraction serves as catalyst for talent retention. No ways that old buildings will attract talent. Teachers are leaving villages and work in urban areas because of poor maintenance of classrooms and no access to internet. We still use pit toilets at schools. Poor water and sanitation remains as a threat to retain talent locally. Villages are left behind."

In addition, respondent TA03 stated that:

"Safety of the people living in villages is at stake. There are areas where we do not have electricity installed and water. The reservoirs are not taken care of. Tap water system introduced for development is poorly maintained. Previously, we used water mills which gave us no problem. Today, we run out of water and even drink water that is not purified which pose as threat to our health. Hence, talent retention is a challenge. The environment does not allow one to live in that situation."

Respondent TA01, said that:

"It is impossible to retain the traditional leaders because the election happens at community level but following the family tree which is guiding tool. Members from royal family are the only one who can be appointed as the traditional leader. The appointment is done by COGTA in collaboration with the office of the Premier. The traditional council is also elected applying the 60/40 rule. Retention is impossible. Tribal authorities is not like politics whereby South African citizen vote for their President". On the other hand, retention of employees in our public institution depend on the individual's level of satisfactory at work".

The response from Respondent TA01 indicated the level of knowledge on retention strategy and further enlightens the research that traditional leaders are not politicians but royal family members. Talent retention is the opposition of intention to quit. Furthermore, it entails ability to learn and grow. Learning is a continuous process, so individuals need to be empowered through training and development programs when there is a need. Talent retention is defined as an organisation's ability to reduce attrition rate.It is further described as a mechanism used to reduce turnover.

Talent training and development

Training and development is the foundation for both personal and organisational development. Further, it improves on performance and is cost effective once mentoring and coaching are well monitored. Training and development can be considered as a refresher course for those who have been on the system and for induction to new ones. Moreover, the policies and guidelines are frequently being revised which then call for training. Respondent TA04 said:

"Tribal authorities had trust funds to award for learners that deserve to further their studies but today we longer have. Training and development is lagging behind at local and community level."

Supported by Respondent TA08:

"Training and development is a serious problem. Most of the organisations both private and public are left behind when coming to training. Digital transformation for online learning is impossible since well internet is not easily accessible in areas where there is no network. Transformation is going to take time. Illiteracy also impede development."

Both participants indicated there is work needed around training and development. They also indicated that digital transformation is lagging behind. Trainings and development follow after the performance review to harness the skills and knowledge of the employees or as corrective action based on the gaps identified. Heinen and O'Neill (2004) mentioned that career development, mentoring and coaching occurs during this stage for growth, changes and empowerment which then lead to succession planning for strategic positions.

Despite, the remove comma efforts and money involved in training and development, it is not always the case that after training, retention and attraction will be guaranteed. It can turn into a threat to the same organisation and even an opportunity to the competitors to grab for the competitive advantage. African leaders recognise the transformative potential of digital technologies in talent management. They embrace the opportunities presented by e-learning platforms, digital skills development, remote work, and digital entrepreneurship (Kunter & Holzberger, 2014). Leaders can leverage digital transformation to overcome geographic limitations, reach a wider talent pool, and equip individuals with the digital skills needed for the future job market (Feng & Jansen, 2021).

Succession planning

Retention is critical to maintain the best performers in the organisation. The weakness of currency, no promotions and bonuses drives away the best performers of the organisations which then result s in skills gap. Knowledge and talent management is at stake succession planning if not properly done. Motivational factors plays a very crucial part in succession planning to retain the skilled and qualified employees. Job satisfaction is defined as an employee's positive feeling towards his or her own job based on the evaluation done on its characteristics (Robbins & Judge, 2023). Job satisfaction has a multitude of contributing factors. Factors such as promotion, fair payment, and good working conditions encourage the employees to stay at the workplace without experiencing the pressure of thinking about leaving the organisation. These factors are concrete indicators of organisational effectiveness. Furthermore, extrinsic and intrinsic job components are determining factors of job satisfaction or dissatisfaction. Respondent TA06 supported:

"Succession planning is difficult once retention is not happening. The highly skilled individuals have left their homeland to work in urban areas where infrastructure is not a problem".

Respondent TA08 supported:

"Poor maintenance of infrastructure and weak currency chased away our children from homeland. High performers left for greener pasture which then again result in talent loss locally."

Respondent TA04, emphasised that:

"People leave our village because of lack of resources. Available resources are not taken care of. Government of today does not provide sufficient resources in the village. Previously, our resources were taken care of. For instance, one Professional Nurse left the village because of the tyre burst caused by potholes. During Bophuthatswana time, our road were in good condition".

Whilst respondents TA04 alluded that lack of resources and poor maintenance chase away the skilled personnel and cause them to leave their homeland, Respondents TA07 and 08 share the same sentiment that poor infrastructure is a push factor for succession planning. Succession planning targets the potential candidate within the organisation, suitable to do the job for the vacant post considering experience and knowledge about the job (Khilji et al., 2015). The traditional approach used for succession planning is matching the individual with the senior position available, whilst the modern approach considers the senior position competencies. Continuous learning and work-life balance forms part of competencies that the employer looks for in the individual for the leadership position. The organisation can foster the culture of learning through empowerment programs e.g. executive leadership training which forms part of the requirements for senior positions. Human capital approach for succession planning can be taken into consideration for the individual development which will benefit the organisation (Lecounte et al, 2017). The smooth transitioning and change management occurs easily once the employee is promoted within the same organisation for senior position which is cost effective.

Conclusion and recommendation

In summary the themes discussed above, talent attraction and retention are complex in the tribal authorities and their communities. The respondents elaborated intensively on the key element of talent management and how they are affected: talent acquisition, talent attraction and retention, training and development, succession planning. Therefore, talent attraction and retention have so many problems which further result in complexity. Reverting from the previous themes political interference in the form of laws and regulations (acts, policies and guidelines) has complicated matters. African leaders recognise the transformative potential of digital technologies in talent management. They embrace the opportunities presented by e-learning platforms, digital skills development, remote work, and digital entrepreneurship. Leaders can leverage digital transformation to overcome geographic limitations, reach a wider talent pool, and equip individuals with the digital skills needed for the future job market (Feng & Jansen, 2021). Succession planning was highlighted in the findings of the study as a complicated matter. Poor rural and socioeconomic development were identified as the push factors of the best performers and skilled individuals from the local communities. Succession planning targets the potential candidate within the organisation suitable to do the job for the vacant post considering experience and knowledge about the job. African leaders should recognise the human capital, which encompasses the skills, knowledge, and abilities of their citizens, because is a crucial factor for economic development and social progress. Traditional leaders can apply human capital to understand the effective way of managing and harnessing talent at local level for sustainable growth.

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Anna-Marie Pelser[5]

Human-Centric and Sustainable Digital Transformation: Are Higher Education Institutions Ready to Manage and Develop Talent in the Age of AI?

This paper examines whether Higher Education Institutions in SA are ready to strategically implement Human-centered and sustainable digital transformation in the age of Artificial Intelligence, together with its potential opportunities as well as challenges. The paper uses a qualitative research methodology using secondary sources searched from various databases and identified using carefully selected keywords. Findings show that adopting HCAI can significantly transform Higher educational outcomes along with administrative efficiency, but that its successful integration requires firstly addressing limitations such as those of infrastructure, ethical concerns, leadership, existent organizational culture as well as other strategic frameworks. The paper ends by showcasing implications for both policy and practice, as well as areas for further research.
Keywords: Artificial Intelligence (AI), Human-centric AI, Higher Education Institution, HEI Administrator, Talent management
JEL-code: L2, M2, R1

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Introduction

In the long history of human development, efforts have been continuously sought to extend our physical and mental reach to go beyond our current limitations, by means of developing technologies that meet our needs and satisfy our desires (Han, Kelly, Nikou & Svee, 2021). As a result, Artificial intelligence (AI) has grown explosively over the past few years. The definition by Berente et al. (2019) suffices, which states that "… AI is machines performing cognitive functions that we typically associate with humans, including perceiving, reasoning, learning, and interacting with others."
The higher education sector is currently undergoing profound shifts driven by digital transformation and artificial intelligence (Kayanja, Kyambade & Kiggundu, 2025). It is important to note that AI is not confined to one or a few applications in the higher education sector, but rather, it is a pervasive economic, societal, and organisational phenomenon (Tundrea, 2020). Artificial Intelligence (AI) is reshaping our lives, and in the HE landscape, by accelerating change which promises among other things, enhanced learning experiences and administrative efficiencies (Gattupalli & Maloy, 2024; (Department of Communications and Digital Technologies (DCDT), 2023). At its core, education is about people. It is about relationships between students and lecturers, mentors and mentees. An institution of Higher Learning is not just a place of knowledge transfer; it is a community where students develop holistically - as individuals, citizens, and professionals. It therefore remains undisputable that the human element is critical, and AI must be adopted while taking cognisance of this.
In spite of the promised administrative efficiencies of adopting AI in HEIs, a major challenge exists-that of talent management. Talent management in HEIs traditionally focused on hiring, appraisal, promotion, and retention; but in this era, the focus has shifted to include digital and AI competency, leadership with digital literacy, continuous professional learning, and change management (Vashist, 2025).
While there is prolific literature on how HEIs are adopting AI and other digital transformations, a gap exists in how it can be possible to adopt AI in manner that is both human-centric, sustainable

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as well as ethical. It also remains to be established how HEIs can manage and develop their talent in order to support such adoptions and still thrive in this era of AI

Existing research has by-passed the examination of digital transformation, sustainability, human-centricity as well as talent management in higher education institutions, hence this research paper seeks to answer: How do HEIs recruit, develop, retain, and even lead academic as well as administrative staff in a manner that supports sustainable and ethical AI adoption? Do HEIs have the capacity to make sure that their human capital is AI-literate, in a manner that is aligned with human-centrism as well as sustainability? Do they have in place policies, culture, governance, as well as resources to support such readiness?

Literature Review

A brief description of the keywords is necessary to put the study into perspective. *Human-centric Artificial Intelligence* (HCAI)I is the development of artificial intelligence (AI) technologies that prioritise human needs, values, and capabilities at the core of their design and operation, and emphasises the central role of the human element in the AI revolution (Interaction Design Foundation, n d). In other words, this transformation emphasises the centrality of human values: fairness, ethics, well-being, inclusivity, human oversight and emotional intelligence. HEIs adopting AI need frameworks for ethical AI, governance, oversight, transparency, bias mitigation (Radanliev, 2025).

Sustainable Digital Transformation (AI) in HEIs- why it matters

Sustainability in this context means long-term institutional resilience, socially equitable access, environmental impacts of technology, and balancing innovation with responsible practice. HEIs are being challenged to lead by example.

We find ourselves at the convergence of three seismic forces, namely: the rapid evolution of artificial intelligence, the need to preserve the human essence in higher education amidst the rising AI, and the increasing urgency to address sustainability in everything we do. In our pursuit of technological progress, we cannot lose sight of the issue of sustainability – it is not just an environmental concern (although reducing the carbon footprint of our digital infrastructure is a major priority). Rather, it is also about social and economic sustainability - but in what ways?

- Environmental sustainability: Reducing carbon footprint via online learning and efficient technological use
- Economic sustainability: Long-term cost savings through AI-driven efficiencies
- Social sustainability: Ensuring equitable access to AI resources and tools
- Sustainable development goals (SDGs) alignment in higher education

Higher Education Institutions (HEIs) have an important responsibility towards society's sustainable development (Kräusche & Pilz, 2017), more so in the education of future generations in sustainability awareness (Amaral et al., 2015). It is noteworthy that access to knowledge is not only restricted to the physical space of HEIs; but is also found in different platforms, applications and open-source browsers that are available to people who wish to learn about different subjects (Valdés et al., 2021). Given this background, HEIs - which have traditionally been the center of knowledge production and dissemination for a long time - are experiencing profound changes brought about by the social and technological trends of digital transformation (Nikou & Aavakare, 2021; Nurhas et al., 2021). This calls for a paradigm shift across institutions, and a redefinition of their business models (Rodríguez-Abitia & Bribiesca-Correa, 2021; Benavides et al., 2020). The future of AI in higher education must align with the principles of sustainability by developing technologies that not only propel us forward but also preserve the planet and create opportunities for all members of society. HEIs are therefore encouraged to support sustainable development through their physical infrastructure, decision-making processes, as well as in their pedagogical issues (Fuchs et al., 2020) so as to guide deliberations towards sustainability throughout the entire university system, which is inclusive of education, research, campus operations, community outreach, as well as assessment and reporting (Lozano et al., 2013; Kapitulčinová et al., 2018).

Talent Management and Human-Centered Artificial Intelligence (HCAI) in Higher Education

Artificial Intelligence (AI) has enabled HEIs to explore Human-Centered Artificial Intelligence (HCAI) approaches to support the strategic development, retention, and engagement of their administrative staff in order to achieve their goals (Funda, 2023). In this way, human needs are prioritised, and technology enhances rather than replaces the human being and his judgement (Shneiderman, 2020). Human beings are left in control, and this means maintaining human oversight, decision-making authority, and intervention capabilities over AI systems. This ensures that AI only acts as a tool to assist humans, rather than replacing or operating independently of human judgment; AI should augment human capabilities rather than replace them. Users should have control over AI tools and their applications, so that they remain empowered to make final decisions and use AI only as a supportive tool.

- HCAI can assist in talent acquisition processes in HEIs by providing data-driven insights while maintaining human oversight. For example, while recruitment platforms that are AI assisted can help to identify suitable candidates, a human-centered approach remains critical to ensure that selection is guided by the human element (Brynjolfsson & McAfee, 2017).
- Within the HEIs, HCAI platforms can check performance and work engagement to come up with developmental plans, a process which allows employees to upgrade themselves whilst aligning their personal growth with institutional goals (Lukin et al., 2016).
- As regards Talent management, Human-centered AI promotes ethical considerations in all applications, such as removing bias in areas such as performance evaluations, or in making decisions for promotion or retention. Maintaining human autonomy thus upholds fairness and inclusivity, which can bring about both trust and engagement amongst employees as well as management (Crawford, 2021).
- By incorporating the human element to recommendations that are proposed by AI, institutions of higher learning can improve on their strategic workforce planning, such as in timeously identifying where there are skills gaps, and in predicting what future talents will be needed as the educational landscape continues to evolve. This ensures that AI simply informs but does not necessarily replace or usurp the decisions of leadership, thereby balancing human judgement and technological support.

Figure 1 below is a diagrammatical representation of how HCAI can drive HEIs Talent management towards the accomplishment of the goals of Higher Education.
Tools that are AI-powered assist in processes such as recruitment and training, which in turn promote enhanced employee and student outcomes as well as operational efficiency, leading to a more skilled workforce which performs more efficient administrative functions, and students who are better-prepared for the job market-all contributing towards the success of the HEIs (Moola, 2024).

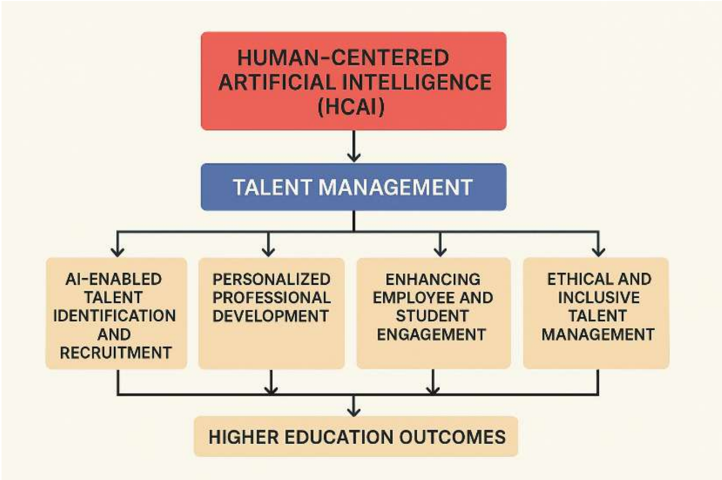

Figure 1: Interplay between HCAI, Talent Management and HEI outcomes
Source: Adapted from PMI's Business Analysis Guide

Challenges and Considerations

While the adoption of HCAI in HEIs presents tremendous opportunities for talent management, the acquisition and use of such advanced technologies in HEIs have generally remained low due to several emerging challenges (Ade-Ibijola & Okonkwo, 2023), inclusive of digital illiteracy, staff unpreparedness, and lack of integration with existing HR systems. Effective implementation of HCAI is not only about securing technological infrastructure but also entails organisational policies that prioritise ethical use, human oversight, and continuous evaluation of AI's impact on talent development (Shneiderman, 2020). According to Barnes and Hutson (2024), there is an apparent absence of strategic planning as well as of institutional frameworks to enable effective harnessing of AI in transforming HEIs. As a result, many HEIs end up adopting AI tools in an ad hoc manner, which leads to fragmented and inconsistent implementation, a phenomenon which is only reflective of a serious lack of cohesive strategy in this regard.
These challenges also include the problem of acquiring the necessary skills, the absence of a structured data ecosystem, ethical considerations, government policies, inadequate infrastructure and network connectivity (Ade-Ibijola & Okonkwo, 2023). As such, these challenges could balloon out of the HEIs and significantly affect continental economic development if left unaddressed (Chatterjee & Bhattecharje, 2023; Wang'ang'a, 2024).

HEI readiness to navigate Human-Centric AI in Talent Management

Integrating AI into HEIs can enhance administrative efficiency, improve student services as well as data-driven decision-making, but in South Africa, the adoption of AI in education remains limited (Patel & Ragolane, 2024). There is therefore a need for more and diversified research to bring about a deeper understanding on this subject of AI integration in workspaces.
As mentioned earlier, the question that needs to be answered is: Are HEIs ready to navigate AI in Talent management in a way that is both human-centric and sustainable? The answer lies in their ability to embrace both innovation and responsibility, and some of the best practices for AI integration are:
HEI Administrators and managers can embrace Human-Centered AI (HCAI) by actively integrating AI technologies that align with human values, ethics, and the specific needs of the educational environment, such as fostering an ethical and transparent AI culture, investing in AI literacy and training for staff and other faculty members; ensuring stakeholder involvement in AI

adoption as well as Human-AI Collaboration in decision-making. At national level, support for this exists through several key policy documents as well as frameworks, which are only waiting to be implemented.

Methodology

The study employed a qualitative research methodology using secondary sources which included academic journal articles sourced from various databases such as Google Scholar, JSTOR, SCOPUS, university repositories, as well as government gazettes and frameworks. These sources were identified using the following keywords: "AI," Human-centric AI, "Higher Education Institution," HEI Administrator and Talent management. The aim was to use these concepts, their components, as well as their relationships to come up with adequate information on the adoption and implementation of HCAI in HEIs in South Africa.The population comprised 104 hits of articles that closely resembled the topic as accessed from the afore-mentioned databases, but only 28 were very close to the topic under discussion. This low number is because the topic of AI has rarely been researched on in tandem with sustainability, ethical issues as well as human centeredness in HEI settings. This therefore became the sample, and the documents were from the years 2020 to 2024. Thematic analysis of direct citations gleaned from the reviewed articles was done, with the most relevant and recurring verbatims being from the works of scholars such as Czerniewicz et al. (2020); Lubinga, Maramura & Masiya, 2023; Valle-Cruz, Garcia-Contreras & Munoz-Chavez, 2024), which are mentioned under the results section, and further analysed as themes under the discussion section. Data were reported as accurately as possible in keeping with the research code of ethics (Tripathy, 2013). The study is geographically limited to universities in South Africa.

Results- are institutions ready to manage talent?

A number of studies have shown that, in spite of the numerous academic discussions on the opportunities and challenges of AI adoption in HEIs, several obstacles still exist, mostly bordering on the issue of strategic readiness. This is inclusive of resistance from both students and staff, with one of the primary concerns being the lack of adequate infrastructure and resources. For instance, as mentioned by Czerniewicz et al. (2020), many universities and TVET colleges in South Africa, more so those located in rural areas, face the acute challenges of insufficient technological infrastructure, which in turn impede the effective implementation of AI systems. Such a technological gap presents a significant problem, since access to reliable internet and modern computing facilities are essential prerequisites for leveraging AI in Higher education.

Results also show that a lack of awareness as well as of an understanding of AI's potential benefits significantly impedes the adoption of AI. Members of staff may be reluctant to adopt AI technologies due to unfamiliarity with these tools-they may never have been trained to use them (Lubinga, Maramura & Masiya, 2023) or it could be because of fear of the unknown. Lubinga et al., (2023) mention that this fear could stem from not only the apprehension about learning new technologies but also about the almost certain potential displacement of traditional teaching roles as they have known them, as well as the perceived threat of AI replacing human educators, which this paper is addressing.

The aim of this research article was to establish how HEIs can recruit, develop, retain, and even lead their academic as well as administrative staff in a manner that supports sustainable and ethical AI adoption; to establish if HEIs have the capacity to ensure that their human capital is AI-literate, in a manner that is aligned with human-centrism as well as sustainability, and to establish if these HEIs have in place policies, culture, governance, as well as resources that support such readiness. From the results, strategic readiness comes in as a remedy. HEIs can position themselves to stand ready by putting in place the relevant and necessary strategies as well as infrastructure, which will enable them to transform their staff members to be AI-ready. In their quest for such readiness, HEIs are strongly supported at national level, through policy documents such as the National Digital and Future Skills Strategy (2020), the National Development Plan (2030), as well as the DHET Strategic Plan / Revised Strategic Plan (2025–2030), amongst others. These are documents that focus on developing digital skills and preparing the South African workforce for the Fourth Industrial Revolution. Such policy documents compel HEIs to develop curricula that are aligned to national goals and thus enabling them to be AI-ready.

Discussion

Literary sources that were consulted in the writing of this paper reveal that AI adoption is influenced by many factors, such as existent perceptions and other practical obstacles (lack of resources, indecisive views on the benefits of AI, the digital skills gap existent in HEIs, as well as fear of the unknown). For the value of adoption of AI to be clarified and embraced, and for the existent challenges to be ironed out, there is need for establishing an awareness of the implications of adopting AI, more so when it becomes human-centered. This will do away with the fear of human beings being replaced by machines. There is also a need to adequately train members of staff on AI adoption, as well as look into their professional development, which will enable them to embrace AI in their daily operations, with more efficiency, all to the benefit of both the institution and the communities that they serve (Lubinga et al.,2023a)

Yet another significant challenge is the cost of implementing AI technologies. The ability of many South African HEIs to invest in AI technologies is held in check by budgetary constraints which prohibit investment in advanced AI systems as well as the accompanying support infrastructure (Czerniewicz, 2020).

Training for successful adoption and integration of AI technologies is an expensive venture, while on the other hand, the absence of managerial support (and strategic direction) can cause the manifestation of resistance towards adopting AI technology. Where strong and supportive leadership is not visible, any efforts to adopt AI technologies will be futile and held in contempt by staff members (Valle-Cruz, Garcia-Contreras & Munoz-Chavez, 2024). This underscores the need for AI to be human centered so that it will be easily embraced by the users.

Implications

This paper has implications for policy makers within the HEIs. They must carry the burden of making AI skills mandatory before hiring, for promotional purposes as well as in the periodic performance reviews. For the staff that is already within the employ, the policy makers need to establish training to ensure that they at least obtain the basic or core AI literacy, which must be compulsory, and not just taken up as elective modules. Furthermore, policy makers must ensure that they invest in adequate AI infrastructure, reliable internet as well as power, especially for HEIs that are situated in more remote areas.

The paper also has implications for practice. At HEI level, intensive capacity building could be implemented, such as on-going professional development and workshop attendance that conclude with meritorious certification of successful participants, not just certificates of attendance.

A culture of experimenting with AI technologies can be established, and safe spaces created where new AI tools can be tried out without fear of repercussions or reprisals.

Areas for further research can be on existent staff perceptions and beliefs about AI, why they resist it (where applicable) and the possible support that they need to fully embrace and trust AI, especially when it centers human needs as well as their values.

Conclusion

There are strong indications that AI has the potential to usher in more benefits when compared to any other technology ever introduced in the last century. Incorporating HCAI into talent management enables higher education institutions to strategically develop and retain their human capital while promoting fairness and ensuring employee engagement in the age of AI.

For HEIs to successfully navigate the age of AI in a sustainable and human-centric manner, talent management is critical. Literary evidence suggests that while many HEIs are aware of the opportunities presented by AI, actual readiness is mixed, as some institutions stand ready, while others are dogged by inadequate infrastructure, staff (in)competence and prevailing organisational culture.

In conclusion, success will only meet with those HEIs that not only adopt AI technologies but also take time to invest in people, align their policies and offer rewards to deserving employees. Particular attention needs to be given to under-resourced institutions so that they measure up and not get left behind.

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Measuring Efficiency in the Practice of the Developmental State

The financial crisis that followed the turn of the millennium in 2008, and subsequently the global pandemic in 2020, once again highlighted the significance of efficiency in governmental and municipal operations. Contrary to the predictions of neoliberal opinion leaders – who envisioned the rise of international organizations in place of the state, and simultaneously the decline of state autonomy and a process of de-statization – opposite tendencies have emerged in many parts of the world since the beginning of the twenty-first century. It has become increasingly evident that without an effective state and without governments and municipalities capable of embodying such effectiveness, stability cannot be sustained. In their absence, uncertainty, social dissatisfaction, and vulnerability grow, and the likelihood of asymmetric interdependencies increases.
In this study, following a review of the literature concerning the efficiency of governance and municipal work and the measurability of such efficiency, we seek to answer the question of under what conditions and in what ways performance measurement methods applied in the competitive sector can be transferred to the practice of the new developmental state and public administration.
Keywords: state efficiency; good governance; performance measurement; new public management; new developmental state.
JEL-code: H7, O16, H11, Z1.

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1. INTRODUCTION

After World War II, political science, sociology, and economics have continuously focused on the "modernization" of state functioning. Sociology primarily examines new possibilities for changes in social structures and values, participation, and conflict resolution. Political science sees the solution in the advancement of democracy. Economics investigates ways to increase the efficiency of state operations, including institutional frameworks, sectoral policies, and local governments.
Among scholars holding divergent, sometimes even extreme, positions, convergence is scarcely perceptible. This divergence has both political and economic roots. Not unrelatedly, certain neoliberal sources envision the decline of nation-states and the rise of supra-national governance (Hein, 2005).
Entering the new millennium, humanity has once again confronted crises that shook societies and economies. The consequences of the 2008 financial collapse – arguably – were comparable to the global financial and economic crisis of 1929–1932. The COVID-19 pandemic that erupted in 2020 further highlighted the limits of our health resilience. It is therefore unsurprising that, following these recent global disruptions, policymakers have increasingly focused on the functioning of the state, its institutional framework, and local government operations. There is a renewed recognition that one fundamental prerequisite for well-organized and effective decision-making is the measurement and monitoring of the performance and outcomes of public service delivery. Without such mechanisms, policymakers lack feedback on which areas require intervention to enhance the public good, social satisfaction, and trust.
Over the past one hundred to one hundred and fifty years, the role of the modern state has undergone several paradigm shifts across both time and geographical space, as confirmed by the specialised literature in public finance, economics, political science, philosophy, and sociology. Inevitably, the resource needs associated with state functions have also evolved, a process

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reflected in the expansion of public budgets. From the second half of the twentieth century onward, member states of the Organisation for Economic Co-operation and Development (OECD) have increasingly participated in the regulation of social and economic processes, as well as in the distribution and redistribution of resources. (OECD, 2024, 2025) Welfare expenditures have grown in every member state, although the extent of this growth varies considerably. (Table 1.) France, Italy, and Austria occupy the upper range of this spectrum, while Hungary appears near its lower end. Comparable challenges are observable in the wealthier member states of the European Union, where economic growth has slowed since the crisis that began in 2020. In Hungary, budgetary expenditure on social protection has increased continuously since 2016, reaching 12,466 billion Hungarian forints in 2022. (Figure 1.)

Table 1: **Public Sector Expenditures in Selected OECD Countries**

COUNTRY	Public social expenditure as a % of GDP (2022)	Total net social spending as a % of GDP (2019)
France	31,6	30,1
Italy	30,1	24,4
Austria	29,4	24,8
Belgium	29	25,6
Finland	29	24,4
Spain	28,1	23,2
Germany	26,7	25,4
Denmark	26,2	24,7
Portugal	24,6	21,7
Greece	24,1	20,7
Sweden	23,7	23,4
Slovenia	22,8	19,8
United States	22,7	29,4
Poland	22,7	18
United Kingdom	22,1	24
Czech Republic	22	18
Luxembourg	21,9	17,9
OECD average	**21,1**	**20,9**
Iceland	20,8	21,4
Norway	20,7	22,6
Lithuania	19,8	15,6
Latvia	19,7	14,4
Slovakia	19,1	17
Netherlands	17,6	25,3
Estonia	17,2	14,9
Hungary	17,2	15,8
Switzerland	17	24,1
Ireland	12,8	13,4

Source: OECD, 2024

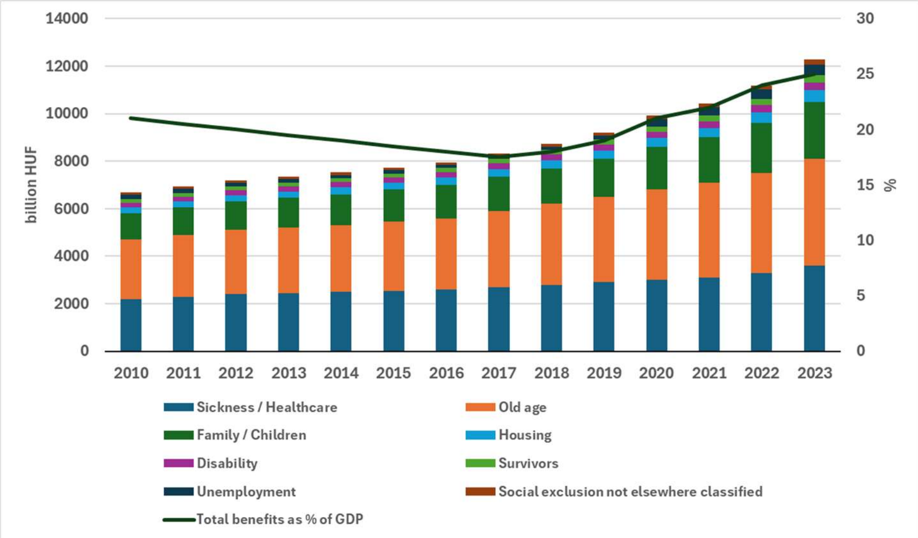

Figure 1. Functional Distribution of Social Protection Benefits in Hungary
Source: KSH, 2014.

Measured as a proportion of gross domestic product, social protection expenditure in Hungary decreased until 2022, owing to the more rapid growth of gross domestic product, falling to 16.4 percent, and subsequently stagnated in 2023 at 16.6 percent. A significant rise occurred only in the first year of the pandemic, 2020, when this proportion increased to 17.9 percent as a result of governmental measures intended to protect public health and the labour market. (Boxed text 1.)

It has become clear that the governments of European countries are currently engaged in an intensive search for a delicate and sustainable balance between public revenues and the rising expenditures associated with the expanding scope of state responsibilities. In Hungary as well, the fulfilment of public tasks and the responsibilities entrusted to state and municipal institutions impose substantial burdens on the national budget. Consequently, the efficiency with which the available—and inherently limited—resources are utilised becomes a question of critical importance.

On the basis of the aforementioned considerations, the present study seeks to address three central questions:

a) What justifies the measurement of performance within the public sector, particularly with regard to public policies and municipal operations?
b) How can public-sector performance be measured effectively?
c) What specific characteristics must be taken into account when measuring performance within individual sectors and in municipal governance?

Boxed text 1.
The Deficit of the Hungarian Budget and the Development of Public Debt

In the 2020s, Hungary's budgetary processes have been characterized by a higher fiscal deficit than in the previous decade. The economic crisis triggered by the COVID-19 pandemic, followed by the Russian-Ukrainian war, alongside significant increases in global energy prices and inflation, have resulted in Hungary's public finances showing a persistent budget deficit exceeding 6 percent of GDP since 2020 (Figure 2).

Inflation in 2023 continued to place a substantial burden on public finances, both through tax revenues falling well below projections due to reduced consumption, and through inflation-linked expenditures—most notably sharply increased government spending on energy, interest payments, and pensions.

For 2024, inflation is expected to decline significantly. Following last year's GDP contraction, real economic growth of approximately 1.0–1.8 percent is projected, which may improve the budgetary situation relative to 2023.

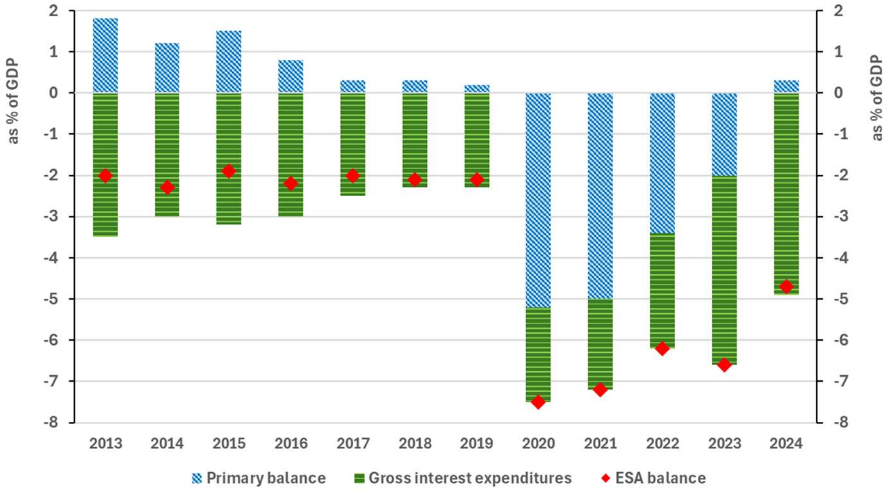

Figure 2. Government Sector Balance as a Percentage of GDP

Source: KSH, MNB

The decline in Hungary's public debt-to-GDP ratio was primarily supported by a high GDP deflator, as nominal GDP increased by nearly 14 percent despite the contraction in the real economy. The appreciation of the forint also contributed to the reduction of the debt ratio. (Figure 3.)

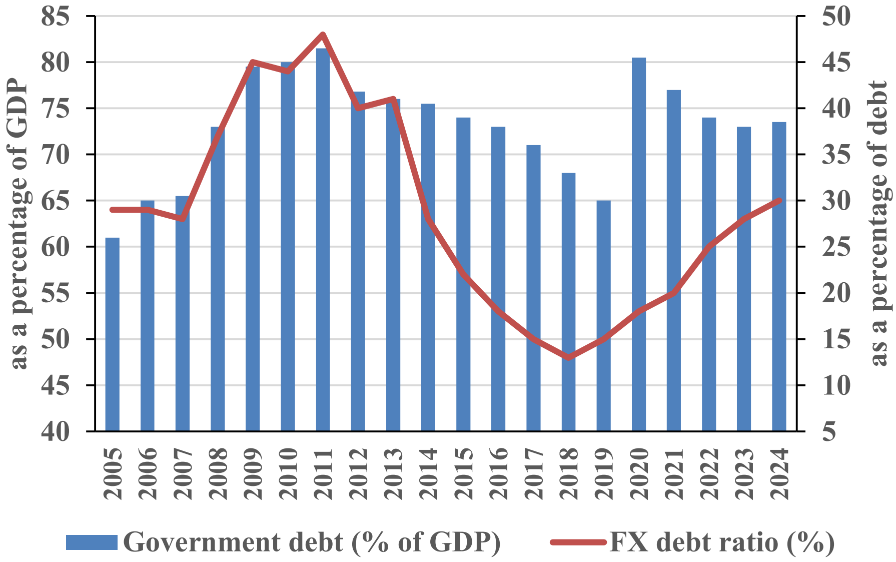

Figure 3. Forecasted Gross Public Debt as a Share of GDP
Source: ÁKK, MNB.

2. LITERATURE REVIEW

The concept and evaluation of good and effective governance have evolved significantly across time and space. In earlier historical periods, questions related to the functioning of the "good state" were primarily addressed by philosophers and moral theologians, later complemented by artistic representations – such as Ambrogio Lorenzetti's fresco from 1339 in Siena – which portrayed the societal effects of good and bad governance. Over time, political science, sociology, and eventually economics also became deeply engaged in the broader discourse surrounding the nature of good governance.
In the twentieth century, six principal state types emerged in the academic literature based on the extent and nature of their involvement: the passive state, the active state, the command state, the neoliberal (or "lean") welfare state, the developmental state, and the new developmental state. (Table 2.) Each corresponds to the dominant intellectual, political, and economic paradigm of its era.
It is worth highlighting the reasons behind these paradigm shifts. After World War II, Western Europe developed a welfare state model that promised its citizens a stable social safety net financed by high tax rates. This form, famously known as the "Scandinavian model" eventually became fiscally unsustainable.

Table 2: **Changes in State Functions**

NO.	TYPE OF STATE	INDICATORS
1.	***Passive State (Invisible Hand)***	• Protection of public order • Guarantee of property rights • Ensuring market conditions • Maintenance of the state
2.	***Active State***	• • Crisis management • Characteristics of the passive state
3.	***Command (Planned) State***	• Price regulation • State control over all sectors of the economy • State decides on resource reallocation • Primacy of state ownership
4.	***Neoliberal (Welfare) State***	• Lean state • Market self-regulation • Support for market competition
5.	***Developmental State***	• Development of priority economic sectors (e.g., industry) • Interventionism
6.	***New Developmental State***	• Effectiveness, economy, efficiency • Service-oriented public administration • Regulation of sustainable social, economic, and ecological conditions

Source: Author's own compilation

From the 1970s onward, both external shocks (such as the oil price crises of 1973 and 1979) and internal structural limitations contributed to the fiscal crisis of the welfare state (Glatz, 2003; Matsaganis, 2013; Sapir, 2006)

In search of solutions, numerous countries embarked on processes of deregulation. These included the restructuring of public support systems, the expansion of administrative autonomy, the development of new public contracting models, and efforts to adapt efficiency-enhancing methods from the private sector into public-sector settings.

As a result of these reforms, the concept of New Public Management emerged. This approach represented a new culture of public administration and governance, emphasising partnership instead of excessive state control, performance instead of mere rule compliance, cooperation instead of hierarchical subordination, and market-based competition instead of monopoly structures (Hajnal, 2004).

New Public Management quickly became a prominent theme within neoliberal academic discourse. (König, 1995; Laux, 1993; Müller, 1993; Mutius, 1997) Its central premise was succinctly captured by Holtkamp (2012, p. 205), who stated:

"New Public Management is the application of business administration methods in the public sector."

At the beginning of the 1990s in the Federal Republic of Germany, governmental reforms were launched with the aim of modernising public administration, enhancing its performance, and improving public-service quality. The literature from this period includes several seminal documents (KGSt, 1991; 1992; 1993 a,b; 1994 a,b; 1995; 1996) that set out strategies for marketisation, managerial decentralisation, and the introduction of business-like operational models into public institutions.

According to the neoliberal perspective, public administration is fundamentally similar to the private sector in terms of organisational logic, and therefore private-sector management tools can be successfully applied within public administration as well, particularly in the case of public-service providers.

The main characteristics traditionally associated with good governance include:

- a lean state operating with minimal resource expenditure;
- transparency, meaning openness and traceability of governmental decisions and processes;
- legality, responsibility, and accountability;
- efficiency and effectiveness, that is, the goal-consistent and results-oriented use of resources;
- participation, meaning the involvement of citizens in fundamental decisions;
- legal certainty, that is, the application of stable norms equally binding for all citizens;
- equal treatment of citizens based on consistent principles.

Analyzing the literature on New Public Management (NPM) published in the German context – based on 900 studies and 22,000 citations – Vogel (2009) concluded that, from the early 2000s, interest among local governments in Germany significantly declined, as NPM methods developed in the Anglo-Saxon environment were perceived as less compatible with the German administrative culture.

By contrast, in the Anglo-Saxon literature, there has been enthusiastic support for the governmental application of NPM since the 1980s (Lounsbury et al., 2002; 2007). This was partly due to the continuous expansion of the NPM concept itself.

The current NPM approach defines six main objectives (Gruening, 2001):

- reduction of state functions, implementing the principle of "smaller government";
- decentralization and the development of service- and performance-oriented organizations;
- transformation of administrative processes into "value-adding" procedures, whereby every procedural step contributes additional value perceived by the client;
- increasing the proportion of automated (electronic) data processing;
- goal-oriented political and administrative leadership;
- integration of competitive elements into the public sector.

Thus, NPM did not merely aim to transplant management practices from the private sector into public administration; it sought to make state operations more economical and efficient. Its overarching goal was to transform the social (welfare) state into a neoliberal state responsible only for the most essential societal functions (Nachold et al., 1993, 2000; Laux, 1993, 1994).

However, European countries have applied these business-derived methods in the public sector only partially, due to their social and cultural traditions and the historical role of the state. This was particularly true for Central and Eastern European post-transition countries, which primarily regarded these methods as tools for addressing their immediate problems.

Following the 2008 financial crisis, the conflicting experiences made it clear that public management could only offer a limited solution to public sector challenges, both temporally and spatially, and primarily in the post-welfare state crisis context. Since then, new narratives (e.g., good governance, joined-up government, whole-of-government) and methods have emerged, providing responses to the changes that have occurred in the interim.

Critics of the approach argue that the adoption of management methods from the private sector entails several challenges:

- Divergent logics of public administration and the private sector: Concepts and processes such as profit maximization or strict supply-and-demand dynamics cannot be meaningfully interpreted or applied in the public sector, which primarily focuses on service provision and equity (Reinhard, 2001).

- Public interest vs. profit: Excessive marketization prioritizes economic efficiency and profit over the public interest, potentially leading to a decline in the quality of public services.
- Globalization and capital accumulation: Globalization facilitates further capital accumulation by business enterprises, with privatization serving as a strategic instrument in this process.
- Neoliberal ideology: The adoption of private-sector methods is seen as an expression of neoliberal economic thinking, exploiting the crisis of the welfare state to introduce changes in public administration.
- Questioning efficiency gains: Over-adoption of private-sector methods does not necessarily produce genuine economic or social benefits; indeed, the privatization of public bodies may facilitate capital accumulation rather than improve service outcomes.

Criticism of NPM has intensified. As Dunleavy et al. (2006, p. 12) stated, "New Public Management is dead." The convergence of the business and public sectors is a myth that can never occur (Kovács, 2023).

In response, the developmental state concept emerged, emphasizing the central role of the state in economic and industrial development (Johnson, 1982).

The new developmental state represents a post-2020 financial crisis paradigm shift. This model builds upon the earlier (classic) developmental state framework but places sustainable development at its core, rather than prioritizing economic growth.

In Hungary, following the political turnaround of 2010, the government articulated a new vision, emphasizing effectiveness as its priority. Stemming from the concept of an active and engaged state, governance has been characterized by intensive, responsible, and efficient action. At times, it "destroys in order to build," breaking down rigid power structures that hinder strong governance. Strategic, goal-oriented, creative, and innovative work, coupled with public policy experimentation and intensive legislation, has become a defining feature of government activity. Greater attention has been paid to measuring and monitoring government and local government performance. The Hungarian Government's 2015 strategy remains relevant today:

"The development of public administration is an indispensable requirement, particularly in a period when the global economic crisis demands constant preparedness." (KSH, 2015, p. 2)

Persch similarly emphasizes:

"An effective and capable public administration is a fundamental prerequisite for a modern and developmental state that can manage crises in a complex political environment." (Persch et al., 2024)

The significance of public sector efficiency and competitiveness is comparable to that of the private sector, with a clear interdependence: inefficiencies in the public sector undermine the performance of the private sector and vice versa. At the same time, equity – particularly equal opportunity – has special importance in the public sector, though this does not imply that individuals can access as many services as they desire.

Effectiveness in the public sector cannot exist without rule compliance; a core requirement for public organizations is adherence to social norms and legal regulations (Domokos, 2019). A high-performing state must continuously measure and monitor both the quantity and quality of public service outputs. Without such feedback, policymakers cannot identify areas needing intervention to enhance effectiveness and, consequently, societal satisfaction.

The concept of an effectively functioning state is closely tied to the growing need for information and continuous performance measurement required to achieve objectives. Just as there is no uniform definition of good governance, there are no standardized methods for measuring it, complicating comparisons of results. Challenges arise from both the diversity of quantitative and qualitative indicators and political influence. This is reflected, for example, in the Berggruen Governance Index, which aggregates government quality, quality of life, and the state of democracy into a single index (Anheier et al., 2022).

A research report commissioned by the German Federal Ministry of the Interior (Bundesministerium des Innern) evaluated the performance of the public service sector based on seven criteria: quantitative, qualitative, economic, functional, social, competence, and external dimensions (Demmke, 2007).
The World Bank has assessed the governmental performance of over 200 countries according to political stability, absence of violence, government effectiveness, regulatory quality, rule of law, and anti-corruption measures (WGI, 2024). Due to the subjective nature of these assessments, the findings of the report have been widely criticized.
Similarly, the Bertelsmann Foundation compiled the Bertelsmann Transformation Index (BTI), evaluating the governmental performance of nearly 140 countries from political, economic, and governance perspectives (BTI, 2024).
A fundamental challenge in measuring public sector performance—unlike in the private sector—is that most public services do not have market prices. Therefore, for outputs, indicators are required that are linked to inputs and can be quantified and measured.

3. MEASURING THE OPERATIONAL EFFICIENCY OF THE PUBLIC SECTOR

The framework for evaluating the public sector is expressed through a combination of effectiveness, social satisfaction (impact), and efficiency indicators. Outcome alone is insufficient to capture the efficiency and effectiveness of the performance of public tasks. Similarly, the provision of public services cannot be properly assessed without considering both efficiency and social impact. This approach aligns with the “value for money” principle prevailing in the public finance sector, which emphasizes that all public funds must be utilized effectively and efficiently. The delivery of public tasks is fundamentally influenced by the geopolitical environment, societal values, human factors, natural environment, and the institutional framework (Figure 4.).

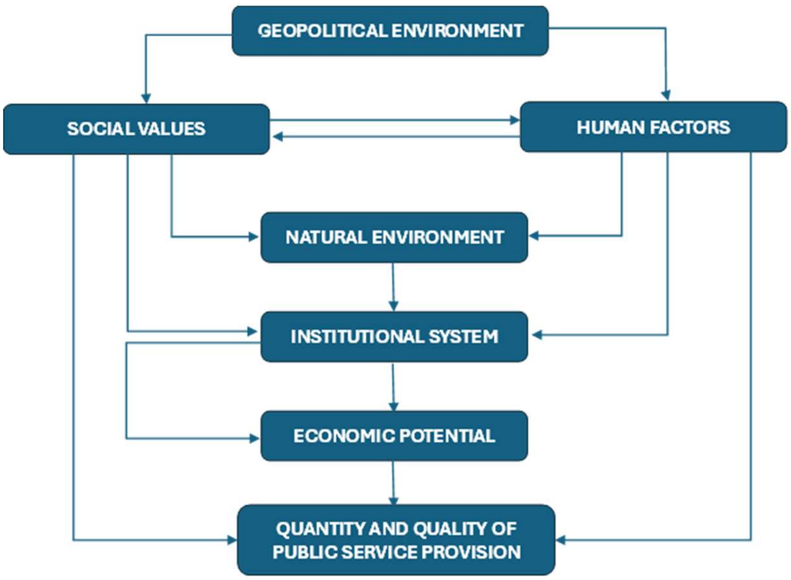

Figure 4. Factors Affecting the Performance of Public Tasks
Source: Author’s own figure

These factors define the broader context within which efficiency assessments must be interpreted. (Figure 5.).

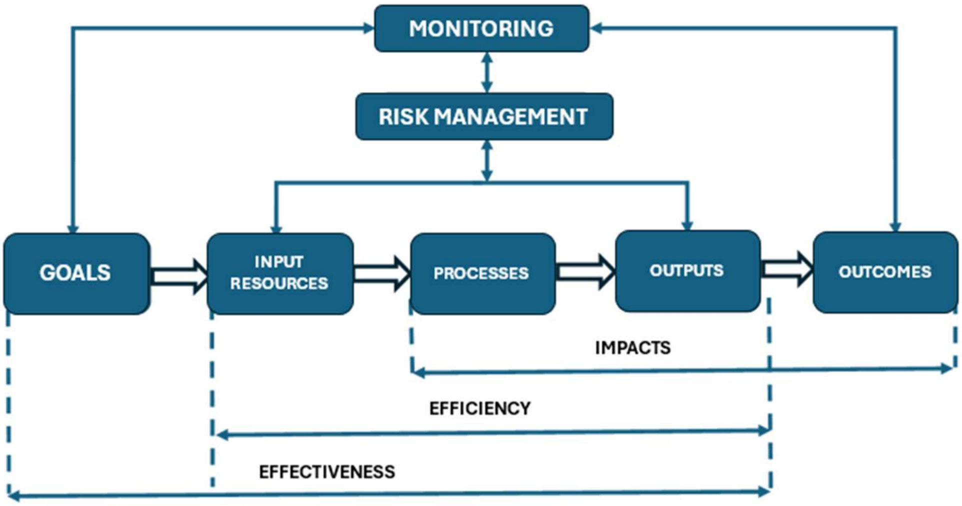

Figure 5. Logical Framework for Efficiency Measurement and Result Feedback
Source: Author's own figure

The first step involves defining the objectives of a public-interest measure, program, or project. This reflects the decision-maker's value system, which is manifested in the principles and extent of allocation, redistribution, and institutional versus market coordination.

The second step entails taking stock of the available inputs (resources). The third step focuses on the outputs, along with the measurement of their effectiveness and efficiency.

Effectiveness refers to the achievement of the set objectives, assessing the extent to which intended goals have been met. Evaluation of effectiveness examines whether the articulated objectives were achieved and considers external environmental variables that may facilitate or hinder goal attainment.

Efficiency measures the relationship between the resources used and the outputs achieved in terms of quantity, quality, and time. An activity is considered more efficient if it achieves greater results with the same inputs or the same results with fewer inputs. When assessing efficiency, the central question concerns the use of available resources: were the resources utilized optimally to achieve the intended goal?

Efficiency can be narrowly interpreted in relation to financial resources, in which case the public sector is considered efficient if each unit of government expenditure produces the maximum possible impact on societal welfare (Bókay & Domokos, 2018).

Economy refers to minimizing the financial costs of the resources employed relative to the achieved results, ensuring their use at the most favorable price, taking into account quantitative, qualitative, and time-related factors. It reflects the best price achievable at a given moment for a specified level of quality and quantity.

Economy in the public sector refers to either a reduction in the average cost of providing public services or an improvement in quality at the same cost level. The economy of performing a public task can only be measured if all costs incurred by the organizations involved – including both supervisory bodies and supporting institutions – are accounted for. This requires data collection systems capable of satisfying this need. Economy, as a standalone measure, has no meaning; it is only interpretable when compared with the same indicator in another organization or with regional or national averages.

The fourth step involves taking stock of the achieved impacts. Social impact is one of the most important indicators of public sector performance, reflecting the effect of measures on the community. In other words, it assesses whether the designated societal goal, public task, or public service has been realized, and whether the organization or public institution responsible has fulfilled its obligations as defined in its strategy, charter, or other official documents. A public

policy is considered effective if it achieves the defined social goal and produces the intended social impact as specified by the government, policy framework, or institution (Kassó, 1999).
However, the achievement of a public task does not necessarily equate to citizen satisfaction (Orbán, 2015). Factors influencing satisfaction extend beyond assessments of effectiveness, efficiency, and economy, and can only be evaluated over the long term. A social public task may be performed effectively, yet this does not always result in citizen satisfaction.
Measuring social impact requires the development of a complex evaluation and indicator system (KIM, 2000). Indicators of the effectiveness of social objectives are typically measurable only over the long term.
An essential element of the process is the monitoring of impact indicators and risk management of inputs and outputs (fifth step).
Based on this model, the following sections provide a schematic demonstration of public sector performance measurement using the examples of the cultural institutional network and local governments.

3.1. Measuring the Performance of the Cultural Institutional Network

It is by no means a novel observation that a society's knowledge and cultural capital are resources of equal importance to financial capital, labor, and natural endowments. While the quantity of material goods diminishes with use, knowledge and culture are essentially unlimited, and their effects are multiplicative.
Culture positively influences human potential, interpersonal relationships, the formation of networks, organizational integrity, and overall economic performance. Unlike other resources, knowledge is not finite; it can be continually expanded and renewed. Accordingly, contemporary literature regards knowledge as a resource of equal significance to capital. From this holistic perspective, values, culture, knowledge, environment, economy, and institutional frameworks are closely interconnected.
Cultural policies are also expected to produce tangible results and social impact. It is therefore unsurprising that, from the last third of the twentieth century, cultural economics research has increasingly adopted an interdisciplinary approach, examining not only the micro- and macroeconomic effects of culture but also its psychological, sociological, and cultural dimensions. Consequently, research has shifted from a previously narrow focus on economic growth toward a holistic perspective, including efforts to analyze the local and regional effects of culture and education, as well as the consequences of their absence.
The foundation of economic development lies in knowledge, national and local identity, performance, added value, and moral standards. These factors are not additive but multiplicative; if any one of them is zero, society and the economy risk falling into a developmental trap.
Moral standards and values contribute to the expansion of knowledge, the strengthening of identity, and act as factors enhancing performance and added value.
Accordingly, the objectives of cultural programs are: expansion of knowledge; strengthening of local, regional, and national identity; growth of economic potential, measured through performance and added value, within a sustainable environment.
Input Indicators
Government Decree 388/2017 (XII.13.) specifies the list of activities related to public culture. The associated quantitative and fiscal indicators provide the basis for impact assessments (Table 3).

Table 3: **Input Indicators**

NO.	DESCRIPTION
1.	**Funding Volume:** *maintenance support (thousand HUF/year),* *grant support (thousand HUF/year).*
2.	**Infrastructure of Implementing Organizations:** *number of organizations (units),* *area (m²),* *IT equipment (units).*
3.	**Personnel in Cultural and Public Education:** *annual average staff number (persons/year),* *distribution by educational attainment.*
4.	**Type of Events Rendezvények jellege:** *popular science lectures, professional workshops/meetings, discussions, opinion exchanges, exhibitions, performing arts programs, club activities, cultural events, training/continuing education.*

Source: Author's own compilation

Indicators of Local (Municipal) Endowments

Local endowments – at both the municipal and district levels (Table 4) – exhibit a multiplicative effect on the output and outcome indicators of cultural processes, either enhancing or diminishing their impact.

Table 4: **Indicators of Local (Municipal) Endowments**

NO.	DESCRIPTION
1.	**Civil Sector:** *number of organizations (units),* *number of participants/beneficiaries (persons),* *absorption capacity (thousand HUF/year),* *activity: number of events (units/year).*
2.	**Religious Organizations** *Cultural activity (units/year),* *Absorption capacity (thousand HUF/year).*
3.	**Ethnic Organizations** *number of organizations (units),* *number of participants (units),* *activity: number of events (units/year),* *absorption capacity (thousand HUF/year).*
4.	**Local Government** *cultural and public education activities (units/year),* *number of cultural and public education organizations (units),* *budget allocated to culture (thousand HUF/year).*
5.	**Local Demographic Attributes** *resident population (persons),* *age distribution of the resident population,* *average per capita income (thousand HUF/person).*
6.	**Local Economic Attributes** *share of primary/secondary/tertiary sectors,* *annual investment activity (thousand HUF/year).*

Source: Author's own compilation

Municipal-Level Outputs of Cultural Programs

Data reporting on outputs is mandated by Government Decree 388/2017 (XII.13.) (Table 5).

Table 5: **Relationships Among Indicators**

1.	*Revenues*	**Operating revenue** (thousand HUF)
2.		of which ticket, participation, membership fees (thousand HUF)
3.		**Capital and investment-related revenues** (thousand HUF)
4.		**Grants, supplements, and transferred funds** (thousand HUF)
5.		from row 4. support from supervising/maintaining authority (thousand HUF)
6.		from row 4. earmarked budgetary support (thousand HUF)
7.		from row 4. grant support (thousand HUF)
8.		from row 7. received from EU funds (thousand HUF)
9.		**Other revenues** (thousand HUF)
10.		**Total revenues** (sum of 1., 3., 4., 9. rows) (thousand HUF)
11.	*Expenditures*	**Personnel expenses** (thousand HUF)
12.		**Employer contributions** (thousand HUF)
13.		**Material expenses** (thousand HUF)
14.		**Renovation expenses** (thousand HUF)
15.		**Capital expenditures** (thousand HUF)
16.		**Other expenses** (thousand HUF)
17.		**Total expenditures** (sum of 11., 12., …, 16. rows) (thousand HUF)
18.		from row 17. VAT and other tax-type expenditures (thousand HUF)
19.	*Personnel*	**Number of communities (units)**
20.		**Number of events (units)**
21.		**Number of participants (persons)**
22.		**Number of groups (units)**
23.	*Training*	**Own programs (units)**
24.		**Outsourced/Transferred programs (units)**
25.	*Exhibitions/ Performances*	**Number of events (units)**
26.		**Number of participants involved (persons)**

Source: 388/2017. (XII.13) Korm. rendelet

Local Impacts of Programs (Outcome Indicators)

The impact of cultural and educational services, programs, and organizations is complex and can be measured through:

- satisfaction, local identity, values, and lifestyles of the affected population;
- effects on the local economy, including consumption, employment, and service provision;
- changes in the town’s image, environment, and reputation;
- number of self-organizing groups and participants, as well as the events they organize, reflecting the strength of collaboration and social cohesion.

Evaluation and Monitoring of Impacts

Based on responses to outcome indicators, multi-dimensional and multi-stage evaluations can be conducted.

Temporal dimension: Assessments can be single-point (static) or repeated (dynamic). Dynamic evaluation traces developmental trajectories over time, whereas static assessment provides a snapshot of the effects at a given moment.

Spatial dimension: Analyses can be conducted at the local (municipal) or regional (e.g., district) level.

Methodological approaches:

- rating scales: Simple, quick, and easily applicable.
- correlation analysis: Examines the direction and strength of relationships between selected output and outcome indicators.
- regression analysis: Explores the relationship between complex indices and individual contributors.

The level of integration of the impact assessment allows for evaluations at both the municipal and district levels. For this purpose, services must be grouped—for example, libraries, exhibition spaces, archives, or by functional activities and events (which can be classified according to non-monetary support or by function such as economic, social, recreational, etc.). Aggregate scores from these groups determine municipal and district-level data and rankings.

3.2. Measuring the Performance of Local Governments

The Hungarian local government system has undergone significant changes since 1990. According to the legislator's intent, its fundamental responsibilities today include regulating local public affairs, fulfilling mandatory and voluntarily assumed tasks, providing public services, and managing municipal assets.

All tasks must be carried out effectively, efficiently, economically, and with impact. In doing so, local governments rely on entrusted assets, available financial resources, and human capacity (Table 6).

Table 6: **Resources Available for Local Government Operations**

NO.	DESCRIPTION	INDICATORS
1.	*Available Financial Resources*	• Budget revenues (thousand HUF/year) • Use of remaining funds (thousand HUF/year) • Receivables (thousand HUF/year) • Liabilities (thousand HUF/year) • Liquidity loans (thousand HUF/year) • Short-term loans (thousand HUF/year) • EU funds (thousand HUF/year)
2.	*Asset Resources*	• Value of municipal assets (thousand HUF/year) • Stock of invested assets (thousand HUF/year) • Value of ongoing investments (thousand HUF/year)
3.	*Human Capacity*	• Average staff number (persons) • Average number of participants in public employment programs (persons) • Annual wage costs (thousand HUF/year) • Annual public employment support (thousand HUF/year)

Source: Author's own compilation

The outputs of local governments can be measured in terms of resources, changes in asset positions, and the quantity and quality of services provided (Table 7).

Table 7: **Outputs of Local Government Operations**

NO.	DESCRIPTION	INDICATORS
1.	*Changes in Municipal Financial Resources*	• Change in receivables (thousand HUF, %) • Change in liabilities (thousand HUF, %) • Change in EU funds (thousand HUF, %)
2.	*Changes in Municipal Asset Position*	• Change in municipal assets (thousand HUF, %) • Change in invested assets (thousand HUF, %) • Change in completion of ongoing investments (thousand HUF, %)
3:	*Changes in Services*	• Change in healthcare services • Change in infrastructure • Change in human infrastructure

Source: Author's own compilation

Based on these indicators, the evaluation of local government outputs can be conducted.

Table 8: **Evaluation of Local Government Outputs**

NO.	EVALUATION ASPECT	DESCRITION	EXAMPLE OF MEASUREMENT
1.	*Effectiveness*	*Degree of achievement of the set objectives (%)*	• Change in poverty rate of the local population. • Change in the proportion of households with piped water. • Change in the proportion of households with central heating. • Change in the proportion of paved roads. • Change in local air quality.
2.	*Efficiency*	*Quantity of resources used to achieve the objectives (%)*	• Change in local poverty rate during a given period / resources expended to achieve it.
3.	*Economy*	*Ratio of output to input, or input to output (%)*	• Length of renovated municipal roads / EU funding received. • Number of participants in public employment programs / state support received.

Source: Author's own compilation

The operations of local governments have fundamental social, ecological, and economic impacts (Table 9).

Table 9: **Impacts of Local Government Operations**

NO.	DESCRIPTION	INDICATORS
1.	*Social Impact*	• Demographic impact • Educational attainment impact • Cultural impact • Social responsibilitY

2.	*Ecological Impact*	• Impact on air quality • Impact on wastewater discharge • Impact on solid waste generation • Impact on protected natural areas • Impact on green spaces
3.	*Economic Impact*	• Employment impact • Income impact • Segregation impact

Source: Author's own compilation

4. CONCLUDING REMARKS

The early years of the second millennium began poorly. Global crises—including financial shocks and pandemics—disrupted societies, to which institutional frameworks responded with varying degrees of effectiveness. The results of these measures, however, have been mixed. In most countries, budget deficits and public debt increased, economic growth slowed, income and regional disparities persisted, and structural problems remained unresolved.

The liberal state model failed to meet the expectations of its proponents, as it promised commitments that could not, or could only partially, be fulfilled. This prompted a thorough examination of the developmental state and its operational mechanisms. While this model has also faced considerable, and sometimes justified, criticism, there is broad consensus that greater attention must be paid to measuring and monitoring the efficiency of state intervention and ensuring the conditions for sustainable development.

The search for an optimal division of labor between the market and the state is not new. The self-regulating model spectacularly failed during the 1929–1932 global economic crisis. Today, the necessity of state involvement is widely acknowledged; the debate centers primarily on its extent and orientation.

Meanwhile, the question of public sector performance and efficiency has received comparatively less attention. In response, the 1970s saw the emergence of a new type of public service management, aimed at introducing methods from the private sector. However, these approaches only partially aligned with the objectives of the public sector.

A state model aimed at social and economic sustainability could represent a paradigm shift, contributing not only to improved public sector efficiency but also to greater acceptance of governance.

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Szabolcs Nagy [9]

Sport Socialization and Its Role in Shaping Social Innovation in European and African Contexts

This article explores how sport socialization fosters social innovation in Europe and Africa. Drawing on interdisciplinary literature and empirical studies, the research highlights how sport participation serves as a catalyst for building social capital, promoting inclusion, and fostering community engagement. The analysis identifies family, peers, coaches, organizations, and digital platforms as pivotal agents facilitating sport socialization and driving social innovation. Differences in governance, policy frameworks, and socio-economic contexts between Europe and Africa result in distinct trajectories for leveraging sport in social innovation initiatives. European cases are marked by structured policies and decentralized governance, while African examples demonstrate dynamic grassroots innovation amidst limited formal support. Despite contextual challenges, both regions harness sport to address social exclusion and empower marginalized groups. The findings underscore the need for context-sensitive, participatory approaches to optimize the societal impact of sport-driven social innovations.
Keywords: sport socialization, social innovation, Europe, Africa
JEL: L83, O35, Z13

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Introduction

The era we currently live in can be characterized as the age of global crises. The most pressing global challenges today are primarily centered around geopolitical armed conflicts, climate change and extreme weather events, societal polarization, economic instability, and technological risks, as highlighted by leading international reports in 2025 (Elsner et al., 2025; United Nations, 2025). Beyond the ongoing wars in regions such as Ukraine, the Middle East, and Sudan, alongside proxy conflicts, coups, and terrorism (IRC, 2024), severe weather phenomena including heatwaves, floods, wildfires, and hurricanes rank among the top short- and long-term risks (United Nations, 2025). Climate change also drives wider environmental issues such as pollution and biodiversity collapse. The spread of misinformation and disinformation, along with deepening social divisions, poses serious threats, fueling instability and weakening systems of governance. Heightened tensions between major global powers particularly between the United States and China along with sanctions, tariffs, and the fragmentation of the global economic system, further exacerbate these risks.
Artificial intelligence represents a major long-term risk, especially as regulatory measures struggle to keep pace with rapid technological advancement (Elsner et al., 2025). Continuing humanitarian crises, including food insecurity, displacement, and fragile state structures in countries such as Sudan, Syria, Myanmar, and Somalia, constitute critical global challenges (IRC, 2024). Moreover, inflation, unemployment, and poverty remain pervasive concerns, amplified by geopolitical and climatic factors (Nadler, 2025).
These complex problems are often closely interconnected. Addressing them increasingly relies on social innovation which encompasses novel solutions to social problems that are more effective, sustainable, or just than existing approaches, with value accruing primarily to society rather than individuals (Guenther & Guenther, 2013). Social innovation has come to represent a genuine paradigm shift in both innovation theory and the management of societal challenges. The significance of social innovation is widely regarded as commensurate with that of economic and scientific innovation (Kocziszky at. al., 2017). Frequently, it is economic and scientific

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innovations themselves that generate social issues - problems that can only be effectively resolved through social innovation. Social innovation typically originates from addressing a social need, in contrast to traditional innovation, which may be sparked by invention. The key distinction lies in its origin: social innovation begins with "problematisation" rather than deliberate intention (Neumeier, 2017). While profitability often motivates traditional innovation, social innovations frequently arise despite the absence of viable commercial markets for their products or services (OECD, 2025).

Sport socialization is generally understood as the process by which individuals internalize social norms and values through sport participation, shaping their identity, interpersonal skills, and community engagement, influenced by family, peers, coaches, and organizational contexts, however, it is not consistently defined in literature (Moustakas & Robrade, 2023).

Sport socialization can foster social innovation by creating inclusive communities, enhancing social capital, and facilitating communication across diverse social groups. Sport enables individuals to "live together" and build social innovations by reinforcing community ties (Romanelli, 2023). and has a potential in addressing social challenges like exclusion, particularly through educational and service innovations (Stănescu et al., 2020). Nałęcz et al., 2020 provides empirical backing, showing a strong correlation between sports participation, social capital, and national innovativeness. Baciu & Baciu (2015) further supports this, highlighting sport's ability to contribute to problem-solving and enhance life quality for individuals and communities.

The purpose of this study is to examine the relationship between sport socialization and social innovation, and to explore how sport socialization contributes to the advancement of social innovation. Particular attention is devoted to the identification of similarities and differences between European and African approaches, an area that has remained largely underexplored. Given that the level of social innovation tends to be higher in European countries and lower on the African continent (The Economist Intelligence Unit, 2016), the research also extends to the comparative analysis of contexts representing both socially innovation-advanced and less-developed societies.

Social Innovation

The term social innovation originated in the mid-1970s, with its dissemination notably advanced by the International Sociological Association and its dedicated working group concentrating on innovative methods of social change (Michalkó et al., 2018). Due to its interdisciplinary scope and broad range of applications, the definition of the concept remains heterogeneous, resulting in significant divergence among social scientists regarding its precise meaning. Despite the absence of a universally accepted definition of social innovation, the OECD was among the first organizations to articulate the concept in 2000, defining it as "creating and implementing new solutions that entail conceptual, process, product or organisational changes, with the ultimate goal of enhancing the welfare and well-being of individuals and communities (OECD, 2010)".

Social innovation refers to novel solutions targeting social problems that are more effective, efficient, and sustainable than existing approaches, with the value generated primarily benefiting society as a whole rather than individuals (Phills, Deiglmeier, & Miller, 2008).

Social innovation encompasses initiatives, products, processes, or programs that fundamentally alter the core routines, resource access, social processes, and belief systems of any societal structure. Successful social innovations are characterized by their sustainability and broad societal impact. The capacity of a society to generate a continuous flow of social innovations - particularly those that re-engage the most vulnerable groups - plays a crucial role in fostering the resilience of both the social and the natural environment (Westley, 2008).

According to the European Commission ESF+ Regulation (European Union, 2021), the definition of social innovation is "an activity that is social as to both its ends and its means and, in particular, an activity which relates to the development and implementation of new ideas concerning products, services, practices and models that simultaneously meets social needs and creates new

social relationships or collaborations between public, civil society or private organisations, thereby benefiting society and boosting its capacity to act".
According to the Centre for Social Innovation at the Stanford Graduate School of Business, social innovation is the development and implementation of effective solutions to complex, often systemic social and environmental challenges that aim to advance social progress. It is not confined to any specific organizational form or legal structure; rather, it transcends institutional boundaries. The creation of such solutions frequently necessitates active collaboration among stakeholders across the public, private, and nonprofit sectors (Soule, 2025).
Expanding upon the foundational work OECD (2010), the 2022 OECD Recommendation on the Social and Solidarity Economy and Social Innovation identifies social innovation as one of nine separate building blocks that establish the necessary conditions for the social economy to flourish (OECD, 2022). Social innovation has the potential to impact both urban and rural settings by addressing public service deficits, fostering experimentation with innovative business models, and enhancing community cohesion, especially in rural areas (OECD, 2024).
Social innovation provides new or novel responses to the problems faced by a given community, with the aim of improving overall well-being. The concept of social innovation potential refers to the aggregate of latent capacities that facilitate the creation of social innovations (Benedek, Kocziszky & Veresné Somosi, 2015). Consequently, the measurement of social innovation potential is both feasible and has been implemented in practice. To date, the only cross-country comparative study in this field is the report by The Economist Intelligence Unit (2016), titled "Old Problems, New Solutions: Measuring the Capacity for Social Innovation Across the World." which examines the capacity of 45 countries to foster social innovation. It focuses on measuring how well countries enable social innovation by evaluating four key pillars: the policy and institutional framework, availability of financing, level of entrepreneurialism, and strength of civil society. The report highlights the importance of supportive government policies, financing mechanisms, entrepreneurial culture, and active civil society networks in enabling social innovation to address societal challenges. It also discusses different country performances, examples of social innovations, and stresses that social innovation is a means to tackle social problems through novel solutions that benefit society broadly rather than individual profit. The report provides a comparative index that helps policymakers and stakeholders understand how to better encourage social innovation in diverse economic and social context.

Sport socialization

Sports socialization is a complex, lifelong process of learning and internalizing societal norms through athletic participation, involving behavioral, cognitive, and emotional components (Joncheray et al., 2016). The evidence in literature suggests multiple mechanisms of socialization. Sport socialization is not merely about learning to play a sport; it encompasses the acquisition of social identities, behavioral norms, and cultural values that are embedded within broader social, political, and economic contexts (Pot et al., 2016).
Early papers like Spreitzer & Snyder (1976) portray it as a dynamic process, which is often bidirectional, where children may influence parental involvement (Dorsch et al., 2009), while parents transmit values and skills (Kremer-Sadlik and Kim, 2007). They provide concrete evidence, showing that sports activities are positively associated with skill development and value transmission, with parents playing an active role in this process. Nucci & Young-Shim (2005) further notes that sports provide a "microcosm for living and society," influencing participants' social skill development.
Sport socialization is not merely about learning to play a sport; it encompasses the acquisition of social identities, behavioral norms, and cultural values that are embedded within broader social, political, and economic contexts. Individuals are not passive recipients; they actively engage with and negotiate the meanings, norms, and expectations of sport within their social environment (Benson et al., 2016). Sport socialization is culturally embedded, i.e. the process is shaped by

cultural, social, and institutional contexts, reflecting and reproducing broader societal structures, including class, gender, and race (Lenartowicz, 2016). According to Jiang et al. (2023) sport socialization is central to the development of social identity, particularly through group membership (e.g., teams, fan communities).

Across definitions, several recurring elements emerge such as social agents, internalization of values, broader social forces, as well as identity and belonging. The main social agents are the family (especially parents), peers, coaches, community organizations, and increasingly, media and digital platforms (Pot et al., 2016; Dorsch et al., 2015).

Internalization of values involves not only learning the technical aspects of sport but also internalizing values such as teamwork, fair play, and competition (Joncheray et al., 2016; Asada & Ko, 2019). Sport socialization is influenced by and reproduces broader social, political, and economic orders, including relations of gender, race, and class (Haycock & Smith, 2014, Joncheray et al., 2016). Participation in sport and sport-related communities fosters a sense of belonging and shapes individual and collective identities (Asada & Ko, 2019; Jiang et al. 2023) 2019; Mastromartino et al., 2022).

Research on sport socialization identifies multiple agents influencing individuals' participation and identity in sport. Spreitzer and Snyder (1976) first highlighted the family including parents, siblings, and relatives as primary socializing agents. Later work, such as Dorsch et al. (2009) expanded this view by showing that children can also socialize parents into sport, indicating a bidirectional influence within families. Kremer-Sadlik and Kim (2007) emphasized how parental roles are shaped by broader cultural and societal expectations. Beyond family, several researchers (MacPhail et al. (2003), Benson and Eys (2017); Dorsch et al., 2009) underscored the importance of peers and teammates in fostering motivation and belonging, while Benson et al. (2016) identified coaches and instructors as key leaders shaping both skill and character. Institutional factors such as clubs and leagues (Dorsch et al., 2009; MacPhail et al., 2003; Asada & Ko, 2019) and broader community or media influences (Beamon, 2010; Ruddell & Shinew, 2006; Mastromartino et al., 2022; Oh, 2023) further structure opportunities and meanings in sport. Social media platforms, YouTube, and online fan communities are increasingly central to sport socialization, especially among youth. These platforms facilitate new forms of engagement, identity formation, and community building (Kirkwood et al., 2019, Yadav et al., 2023). Digital fan communities create new rituals and experiences (e.g., communal viewing, social media engagement), with phenomena like Fear of Missing Out (FoMO) driving deeper involvement and identification (Choi et al., 2025). Some researcers such as Ruddell and Shinew (2006), Oh (2023) and Brown (2017) demonstrated how socialization varies by race, gender, and ability. According to Mastromartino et al., (2022), participation in fan communities enhances social capital, fosters a sense of belonging, and can influence broader social behaviors (e.g., civic engagement). Overall, the literature reflects a shift from early, family-centered models to multilayered, ecological frameworks recognizing the interplay among family, peers, institutions, and culture in shaping sport involvement.

The managerial implications of sport socialization include understanding the mechanisms and agents of sport socialization can inform policies aimed at promoting inclusive and equitable sport participation. Coaches, educators, and community leaders can leverage insights into socialization processes to foster positive sport environments and support identity development. port organizations and fan communities can harness digital platforms to enhance engagement, build community, and promote positive socialization outcomes. Sport can serve as a tool for social integration, particularly for migrants and minority groups, by facilitating both cultural adaptation and the maintenance of identity.

As for the outcomes and consequences of sport socialization, participation in sport affects individuals and families across behavioral, psychological, and social dimensions. Spreitzer and Snyder (1976) found that sport involvement shapes behavior, family relationships, and personal identity formation. Extending this, Dorsch et al. (2009) showed that sport experiences can transform parents' behaviors, emotions, and family communication, fostering greater parental engagement and psychological growth. Parents are often the primary socializing agents, shaping children's initial attitudes, values, and habits related to sport. Parental support, modeling, and involvement are critical in early sport socialization (Pot et al., 2016; Dorsch et al., 2015). Kremer-Sadlik and Kim (2007) linked sport participation to reduced delinquency and improved academic and social performance, emphasizing the development of values and life skills. MacPhail et al. (2003) noted outcomes ranging from friendship and social integration to public health and elite sport aspirations, suggesting sport as both a personal and societal asset. Benson et al. (2016) highlighted the tension between conformity and individuality in sport, showing how socialization shapes identity alignment within teams. Conversely, Beamon (2010) documented negative outcomes, such as identity narrowing and unrealistic career expectations, particularly among racialized youth who experience overrepresentation in sport. Ruddell and Shinew (2006) emphasized that sport fosters character, discipline, and moral development.

While the core process of sport socialization is widely recognized, its specific manifestations and outcomes are deeply shaped by cultural, institutional, and socioeconomic contexts. This underscores the need for context-sensitive research and theory such as comparing sport socialization in different cultures as well as developing and developed countries.

Sports Socialization as a Catalyst for Social Innovation

Analyzing the relationship between sports socialization and social innovation is crucial for understanding how sport can be leveraged as a catalyst for social change, particularly in addressing health disparities, social exclusion, and organizational transformation. To examine the relationship between sport socialization and social innovation, this study conducted a comprehensive literature analysis using Scopus-indexed publications spanning from the 1980s to 2024, with particular emphasis on research published from 2000 onward. My analysis encompassed interdisciplinary contributions from the fields of sport management, social innovation, public health, organizational studies, digital media, and social psychology.

Sports socialization is a multi-level, lifelong process influenced by individual, organizational, and societal factors, while social innovation encompasses new ideas, practices, organizational forms, and digital tools that address social needs, enhance social inclusion, and create social value. In the context of sport, social innovation is often linked to Sport for Development and Peace (SDP) initiatives, social entrepreneurship, and the use of sport as a platform for public health, gender equality, and community empowerment (Cardella et al., 2021). Sport for Development and Peace (SDP) refers to the strategic use of sport and physical activity as instruments for advancing broader social objectives, including youth empowerment, peace-building, health promotion, and gender equality (Darnell, 2012). Innovation capacity in SDP organizations is a key predictor of social innovation practices and mediates organizational performance. Five dimensions including human resources, finance, partnerships, infrastructure, and planning explain significant variance in social innovation outcomes (Svensson et al., 2020; McSweeney et al., 2025). Shared leadership and a mission-driven culture enhance innovative work behavior and adaptability, while entrepreneurial mindsets and intentional management practices are critical for sustaining innovation (McSweeney et al., 2025; Svensson & Mahoney, 2020). Bricolage, i.e. adaptive resource use is positively associated with higher levels of social innovation, except for process-focused innovations, which are significantly associated with environmental turbulence (Andersson et al., 2024). Community size and group cohesion shape early-stage sport socialization by influencing perceptions, group identity, and self-efficacy, which in turn mediate well-being and social innovation outcomes (Lin et al., 2022; Asada & Ko, 2019). Social capital developed through sports participation is foundational for broader social innovation, with bonding and bridging capital supporting both individual and community-level outcome (Lin, 2022).

As for the actor roles and mechanisms in sport social entrepreneurship, it is found that intermediaries (e.g., NGOs, local facilitators) play crucial roles in linking actors, building communities of social innovators, and supporting social business ecosystems (Ho & Yoon, 2022).

Collaboration mechanisms (e.g., Design Thinking, co-creation) are essential for effective social innovation but require intentional design and management (Pinheiro et al., 2020).
Sport-driven social innovation programs promote social inclusion and public health by enhancing social cohesion, trust, and community engagement, especially among vulnerable groups (Bunde-Birouste et al., 2022). Challenges include limited transferability for highly vulnerable youth, sustainability issues, and management skill gaps, underscoring the need for tailored, context-sensitive approaches (Philip et al., 2022). Digital social innovations show promise but face adoption challenges including the resistance toward the technology (Harith et al., 2025)
Social innovation in the context of sport can be conceptualized as a political and organizational form grounded in social entrepreneurship (Schenker et al. 2021). They further argue that prevailing theories of social innovation often lack clear conceptualizations of the actors involved, whereas the theoretical framework of social entrepreneurship places central emphasis on the figure of the social entrepreneur.
Glocalization - the concept that combines globalization and localization, referring to the process by which global products, ideas, or practices are adapted to fit local cultures - balances global strategies with local cultural identities, enabling sports organizations to foster social innovation through adaptation and localized engagement. Empirical evidence from global events (e.g., FIFA World Cup, Tour de France) shows that glocalization enhances fan engagement, economic sustainability, and cultural diversity (Li et al., 2025). Glocalization facilitates social innovation by enabling context-sensitive adaptation, but outcomes are shaped by local realities and organizational strategies.
The current literature indicates that sports socialization and social innovation are interconnected through a complex interplay of individual agency, intraorganizational practices, and digital behavioral interventions. Research on sports socialization and social innovation is expanding (239 publication on social innovation in sport published between 1990 and 2022 (Sobarna et al., 2024)), with increasing thematic diversity and international collaboration in sports sociology. Integrated theoretical frameworks such as glocalization help explain how sport socialization contributes to social innovation by fostering empowerment, social capital, and transformative leadership. However, causal mechanisms between sports socialization and social innovation are often inferred rather than directly tested. Under-representation of marginalized groups and non-Western contexts can be found in much of the empirical literature.
As far as the implications concerned, building innovation capacity and shared leadership in SDP organizations enhances social innovation and organizational performance. Community-based and digital interventions can effectively promote social inclusion, health, and empowerment, but must be tailored to local contexts and address structural barriers. Grassroots sports clubs and digital platforms are critical for sustaining participation and social innovation legacies. Sports participation is an effective tool for improving mental well-being, cognitive health, and social capital, especially among older adults and marginalized groups. Digital media and social support mechanisms can amplify these effects but require careful design to ensure accessibility and equity. Entrepreneurial bricolage and resourcefulness are key drivers of social innovation in resource-constrained environments. Intentional management, participatory culture, and adaptive leadership are essential for fostering innovation and resilience.
Future research should prioritize mixed-method, interdisciplinary approaches, with a focus on digital innovation, marginalized populations, and the operationalization of agency and constraint negotiation. Addressing these gaps through interdisciplinary, critical, and technologically advanced research will be essential for realizing the full potential of sport as a vehicle for social innovation.

Comparative Insights from Africa and Europe

The social innovation performance of European and African countries reveals notable differences rooted in their institutional frameworks, financing availability, entrepreneurial culture, and civil society strength (The Economist Intelligence Unit, 2016). European countries generally score higher than African countries on the overall social innovation index (Figure 1).

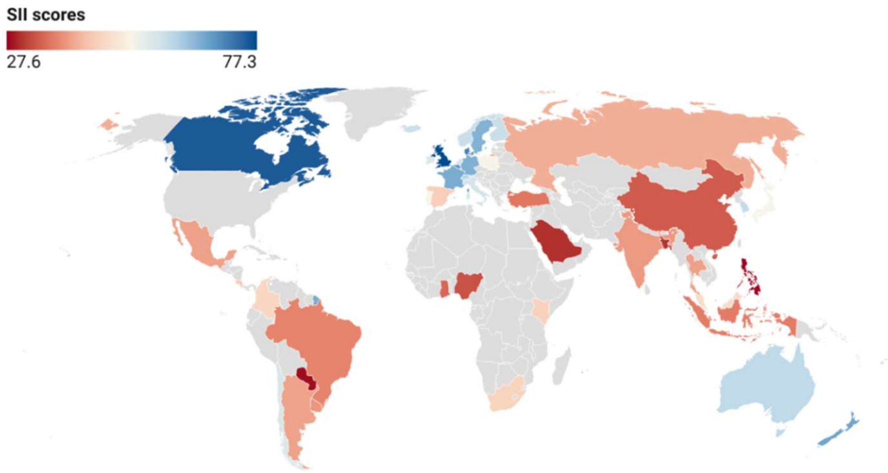

Figure 1: Social Innovation Index (SII) - Overall scores
Source: The Economist Intelligence Unit, 2016

Comparing Europe and Africa reveals both convergences and divergences rooted in governance structures, cultural and socioeconomic contexts, and historical legacies (Riordan & Krüger, 2003; Petry et al., 2004; McSweeney et al., 2023; Tchimgungule et al., 2024). Understanding these similarities and differences is crucial for advancing inclusive sport policies, effective talent development, and equitable social outcomes. Table 1 summarizes similarities and differences in sport socialization between Europe and Africa.

Similarities in sport socialization between Europe and Africa include a shared emphasis on sport as a tool for social cohesion, identity formation, and community integration, as well as involvement of family and community institutions. Differences stem largely from governance structures and socioeconomic contexts. While both continents use sport as a means for social integration and identity construction, European models benefit from decentralized systems and structured policies, whereas African contexts are influenced by centralized governance, economic constraints, and colonial legacies. In Europe there is progression toward decentralized, multi-stakeholder governance enhances flexibility and grassroots integration.

Table 1: Sport Socialization in Europe and Africa

Dimension	Europe	Africa	Similarities	Differences
Governance Structures	Decentralized, multi-stakeholder, flexible, grassroots integration	Centralized, state-controlled, colonial legacies, elite focus	Sport as socialization tool; family/community involvement	Governance models; grassroots vs. elite focus; colonial impact
Cultural/ Socioeconomic Contexts	Identity, social cohesion, welfare policies, structured sport systems	National identity, economic empowerment, post-	Sport for social cohesion, identity, integration	Emphasis on economic empowerment, migration, colonial legacy

Dimension	Europe	Africa	Similarities	Differences
		colonial legacies, migration		
Family and Community Influence	Lifelong engagement, integration, clubs, immigrant support	Traditional structures, emotional/social support, economic constraints	Family/community as key agents	Structure, resources, historical/cultural practices
Methodological Challenges	Integrated, participatory, intersectional approaches emerging	Limited indigenous perspectives, colonial influence, need for decolonization	Need for robust, culturally sensitive comparative methodologies	Underrepresentation of indigenous perspectives

Source: Own compilation based on literature review

Welfare state frameworks and local authorities play significant roles, with voluntary sports clubs (VSCs) and community programs fostering broad participation (Ibsen et al., 2022). Decentralization supports grassroots sport, multi-level governance, and stakeholder involvement. In Africa centralized, state-controlled regimes dominate, especially in French-speaking countries, with sport managed through Ministries of Youth and Sports and National Olympic Committees. Colonial legacies persist, focusing on elite athlete development and limiting grassroots diversification (Du Plessis & Koen, 2024). Centralization prioritizes elite development, legalistic control, and administrative rigidity. Political interference, resource constraints, and gender disparities hinder grassroots participation and social inclusion (Burnett, 2023).

Sports socialization in Africa, particularly South Africa, functions as a dynamic tool for social innovation by improving social cohesion and facilitating community development through grassroots, bottom-up approaches that leverage sport for conflict resolution, empowerment, and addressing exclusion (gender, racial, disability). Sports can serve as a vehicle for reconciliation and social cohesion in South Africa, with initiatives at national, community, and individual levels potentially contributing to peace building and conflict resolution (Höglund & Sundberg, 2008).

One of the best examples of sport socialization programmes in Africa is the Mighty Metres programme, which is a school-based, incentive-driven sport-for-development initiative implemented in South Africa. It aims to promote regular physical exercise among primary school children in underserved communities. The programme has shown positive impacts in several areas including improved school attendance, fitness levels, social recognition, independence, and identification among participants. It involves giving medals and certificates to children for their achievements, which boosts their confidence and self-esteem and encourages parental and community support. Beyond physical benefits, the Mighty Metres programme fosters pro-social behavior, supporting better relationships with teachers and adults, and enriching children's personal lives beyond school hours (Burnett, 2014).

European approaches tend to emphasize individual skills and structured sport policies, whereas African contexts frequently intertwine sport with national identity (Burnett, 2021), economic empowerment, and migration dynamics. Addressing literature gaps and methodological challenges especially the underrepresentation of indigenous African perspectives and the need for participatory, intersectional research will be essential for advancing inclusive sport socialization policies and practices across both continents.

Conclusions

The study provides compelling evidence that sport socialization serves as a significant catalyst for social innovation, shaping both individual and collective capacities for addressing societal challenges. In Europe, strong policy frameworks and vibrant civil societies enable structured support for social innovation, while Africa's entrepreneurial vitality compensates for limitations in formal infrastructure through grassroots initiatives. Despite divergent governance structures, both continents demonstrate the potential of sport to foster social capital, enhance community integration, and drive innovative responses to complex social problems.

For policymakers and practitioners, fostering innovation capacity within sport organizations, promoting shared leadership, and leveraging community-based and digital interventions are essential strategies for maximizing the societal benefits of sport socialization. By advancing context-sensitive strategies and critical research, stakeholders can unlock the transformative potential of sport as a tool for social innovation across diverse settings, ultimately contributing to more inclusive and resilient societies.

Summary

This article investigates the complex relationship between sport socialization and social innovation, emphasizing the comparative context of Europe and Africa. Drawing on multidisciplinary literature and empirical studies, the research explores how the process of sport socialization can foster social innovation by building social capital, promoting inclusion, and facilitating community engagement.

The study identifies that sport socialization operates through multiple agents, including family, peers, coaches, organizations, and increasingly, digital platforms. These agents contribute to the development of individual and collective identities and shape the values and behavioral norms necessary for vibrant communities.

Key findings highlight both similarities and differences in the mechanisms and outcomes of sport socialization and social innovation between Europe and Africa. While both regions leverage sport for social cohesion and community development, European models are characterized by decentralized governance and structured policies, whereas African models often reflect centralized control and socio-economic constraints. Despite systemic obstacles, African countries display dynamic grassroots social innovation, demonstrating resilience and adaptability.

The article concludes that the synergy between sport socialization and social innovation can significantly contribute to addressing contemporary societal issues, particularly when tailored to local contexts and inclusive of marginalized groups. Future research should prioritize interdisciplinary, context-sensitive, and participatory approaches to better operationalize these linkages and enhance the societal impact of sport-driven social innovation.

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Determinants of income poverty in an underprivileged area of Hungary

This study investigates the determinants of income poverty in Borsod-Abaúj-Zemplén county, one of Hungary's most disadvantaged areas. Using household-level survey data collected through online and community-based channels, we apply multiple regression analysis to identify the socio-economic factors most strongly influencing per capita monthly net income. Our results highlight three significant determinants of income poverty: education level, household size, and distance from the county seat. Higher educational attainment substantially increases income, underscoring the importance of human capital in reducing poverty risks. Conversely, larger household size reduces per capita income, reflecting demographic pressures on limited resources. Distance from the county center also has a strong negative effect, pointing to the role of spatial inequalities and infrastructural disadvantages in shaping poverty outcomes. These findings highlight the importance of education, regional development, and demographic factors in shaping poverty risks. Policy implications include the need for integrated strategies that strengthen educational opportunities, improve infrastructure and accessibility, and target support for disadvantaged groups. Such measures are essential to break persistent cycles of deprivation and promote inclusive regional development.
Keywords: poverty; education; household composition; spatial accessibility; Borsod-Abaúj-Zemplén
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Introduction

Poverty is a social and economic problem that spans across continents, affecting Africa the most. The poverty situation of the African continent remains one of the most critical issues in global development policy. According to data from the United Nations Development Programme (UNDP, 2024) and the World Bank (2023), Sub-Saharan Africa is the region with the highest poverty rate in the world: approximately 35–40% of the population lives on less than USD 2.15 per day. The causes of poverty are complex and closely linked to historical, economic, social, and environmental factors. The legacy of colonization, marginalization within the global economy, political instability, low levels of industrialization, and the effects of climate change (particularly drought and desertification) all contribute to persistent impoverishment (African Development Bank, 2025).
Among the countries on the continent, South Africa occupies a distinctive position: despite its economic strength, it is characterized by extremely deep social inequalities. According to the World Bank's 2024 report, the Gini coefficient exceeds 0.63, making South Africa one of the most unequal countries in the world. The roots of this inequality lie in the legacy of the apartheid system, which for decades maintained racially based economic and geographical segregation. Although the political transition to democracy occurred after 1994, much of the economic structure has remained unchanged: more than 70% of land remains in the hands of a small portion of the population (Land Audit Report, 2021).

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Poverty is concentrated primarily in rural areas and urban slums (townships). The unemployment rate remains around 30%, and among the 15–24 age group it exceeds 55% (Statistics South Africa, 2023). The quality of education is highly unequal along spatial and social lines: there is a deep divide between urban, middle-class schools and rural, underfunded institutions. In the field of healthcare, the long-term social and economic impacts of the HIV/AIDS epidemic continue to exacerbate the reproduction of poverty.

The South African government seeks to alleviate extreme poverty through its system of social transfers. The Social Grants Programme provides monthly support to more than 18 million people—about one-third of the population (South African Social Security Agency, 2023). While these programs help prevent a humanitarian crisis, they do not resolve the structural problems: the lack of land reform, educational reform, and labor market integration continues to hinder sustainable development.

From an international economic perspective, South Africa represents a “dual economy” in the classical sense. A modern, capital-intensive, export-oriented sector (particularly mining, finance, and technology) coexists with a large, informal, low-productivity economic sphere. The COVID–19 pandemic and recent inflationary pressures have further deepened inequalities, while social tensions – such as energy supply disruptions (“load shedding”) and corruption – continue to undermine investor confidence (OECD, 2025).

Addressing poverty in Africa – and within it, South Africa – is not merely an economic issue but also a structural and socio-political one. Economic growth alone cannot guarantee poverty eradication: it is essential to promote social justice, improve access to quality education, and implement profound reforms in land and wealth distribution. South Africa’s example clearly illustrates that the sustainability of development depends on eliminating historical inequalities and building an inclusive institutional system.

Considering that poverty is a problem not only in Africa but also — to a lesser extent — in Europe, this study presents poverty and the development of its determinants in Hungary. This study focuses on Borsod-Abaúj-Zemplén county, one of the areas most severely affected by poverty. To understand the case of poverty in the county, the study below provides an overview of poverty in Hungary.

Poverty has long been one of the most pressing socio-economic challenges in Hungary, deeply influenced by the country’s transition from socialism to a market economy in the early 1990s. This transformation was marked by high unemployment, inflation, and widening social inequalities, leading to a substantial increase in poverty (Andorka, 2006). Over time, multiple studies have identified a complex interplay of factors shaping poverty in Hungary, including education, labor market conditions, regional disparities, demographic characteristics, and ethnic background (Gábos & Szivós, 2002; Darvas & Tausz, 2002; Szoboszlai, 2004).

Regional differences are particularly striking, with peripheral areas in northeastern and southwestern Hungary consistently facing deeper poverty than more developed central regions (Pénzes 2014). Long-term unemployment, limited economic opportunities, weak educational outcomes, and infrastructural deficits contribute to the persistence of poverty, especially among marginalized communities such as the Roma population (Spéder, 2000; Hegyi-Kéri & Horváth, 2017). These factors not only undermine individual well-being but also reinforce cycles of social exclusion and intergenerational disadvantage. Borsod-Abaúj-Zemplén County, located in Northern Hungary, provides a critical case study of these dynamics. Once a heavily industrialized area, the county suffered disproportionately from deindustrialization, leading to structural economic decline, high unemployment, and significant emigration (Blazek & Netrdová, 2011; Bakos, 2006). Despite attempts at re-industrialization, the county continues to struggle with persistent poverty, a distorted labor market, and the social exclusion of disadvantaged groups, particularly the Roma community (Siposné 2021). Against this backdrop, understanding the determinants of poverty in this region is essential for formulating targeted policies that address not only income disparities but also the structural and demographic roots of deprivation.

The present study examines the determinants of poverty in Borsod-Abaúj-Zemplén County using household-level survey data. Specifically, we investigate the effects of education, employment status, household composition, and regional accessibility on per capita income through multiple regression analysis. By focusing on a region emblematic of Hungary's socio-economic challenges, this research contributes to a deeper understanding of the structural and individual-level drivers of poverty.

Poverty and its determinants in Hungary

Poverty is a complex and multidimensional concept, and scholars have proposed several approaches to define and measure it. The three most widely discussed perspectives are absolute, relative, and subjective poverty, each of which captures different aspects of deprivation (Posel – Rogan 2014).

Absolute poverty is usually understood as the lack of basic necessities required for survival, such as adequate food, safe drinking water, shelter, and access to health care. This approach establishes a fixed threshold below which individuals are considered poor, regardless of the broader societal context. The World Bank's international poverty line of USD 1.90 per day (PPP) is a widely used indicator of extreme poverty (World Bank, 2018). This definition is particularly useful for global comparisons and for highlighting life-threatening deprivation in low-income countries. However, it has been criticized for being too rigid and for failing to account for social and cultural variations in what constitutes a "basic" standard of living (Alkire & Foster, 2011).

In contrast, relative poverty focuses on inequality within a given society. Rather than assessing whether people can survive, this perspective examines whether they can participate fully in the social, cultural, and economic life of their community. Accordingly, individuals can be considered poor if they lack the resources necessary to achieve the living standards that are customary in their society. Relative poverty is often measured by setting the poverty line at 50% or 60% of median household income (OECD 2011, European Commission 2010). This approach emphasizes social exclusion and inequality, making it particularly relevant for high-income countries. However, its dependence on societal averages means that relative poverty can persist even when general living standards rise.

A third perspective, subjective poverty, highlights people's own perceptions of their economic situation. It is typically measured through survey questions asking whether households consider their income sufficient to make ends meet or whether they feel deprived compared to others. Subjective poverty acknowledges that poverty is not only an objective condition but also a lived experience shaped by expectations, reference groups, and cultural norms (Ravallion, 2016; Bila – Biyase 2023)). Another way of measuring subjective poverty is to examine what people think about poverty in general. This approach captures aspects of well-being that income-based measures may miss, but it is also sensitive to individual biases and cultural differences in self-assessment.

Taken together, these definitions underscore that poverty cannot be reduced to a single indicator. Absolute poverty captures material deprivation at its most severe, relative poverty highlights inequality and exclusion, while subjective poverty reflects people's perceptions and lived realities. Many contemporary studies therefore adopt a multidimensional approach that integrates objective and subjective measures to better reflect the complexity of poverty (Alkire & Santos, 2014).

Poverty in Hungary has been a big issue for long decades. The economic and political transition around 1990 in Hungary resulted in a significant rise in unemployment and inflation, leading to a dramatic increase in poverty and income inequality. The wealthiest decile saw their income share grow, while the lowest decile and middle-class experienced declines (Andorka 2006) (see Figure 1).

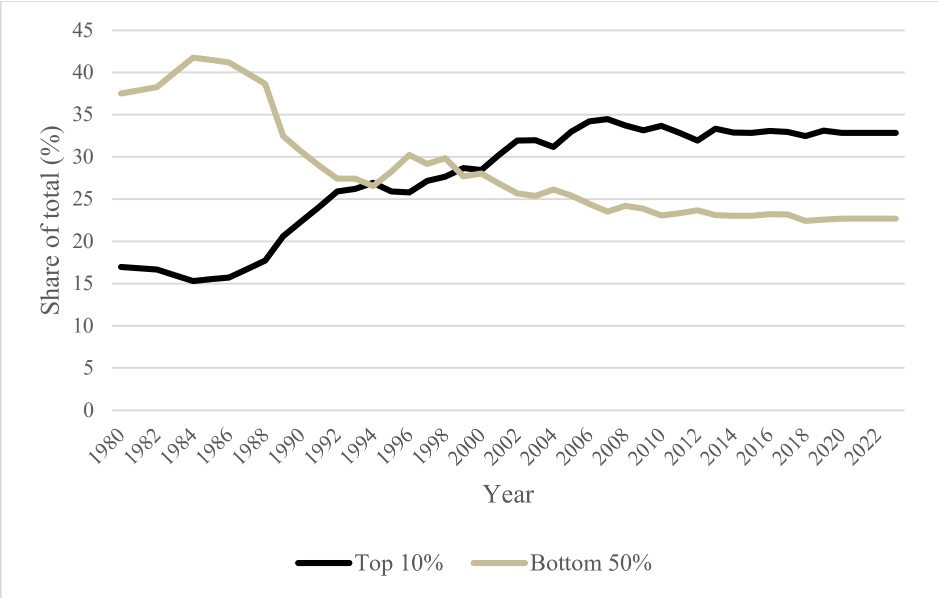

Figure 1 Income inequality (share of top 10% and bottom 50%) in Hungary, 1981-2023
Source: own compilation based onWorld Inequality Database
(https://wid.world/country/hungary/)

By the late 1990s, poverty levels remained stable until the early 2000s (Branyiczki - Gábos 2018). Research by Gábos and Szivós (2002) identified key factors contributing to poverty risk around 2000, including unfavorable labor market conditions, low education levels, adverse territorial characteristics, and demographic factors.
Darvas and Tausz (2002) highlighted additional risk factors such as large households with many children, poor housing conditions, and belonging to the Roma minority, which faces significant socio-economic challenges.
Social exclusion was attributed to ethnic origin, age and religious discrimination, cultural deficits, and rising unemployment rates by Szoboszlai (2004) as well. The Roma population, Hungary's largest ethnic minority, suffers from deep poverty, characterized by lower education levels and high unemployment rates (Havasi 1999, Hegyi-Kéri - Horváth 2017).
Following the Great Recession of 2008, income poverty and material deprivation worsened, particularly affecting groups such as the poorly educated, unemployed individuals, large families, and those living in less populated areas. (Branyiczki - Gábos 2018) However, since 2012, there has been a reversal in trends, with decreases in income poverty and severe material deprivation. Győri (2017) noted that issues like housing crises, ethnic origin, and large family sizes are interconnected, creating compounded disadvantages for affected groups.
During the first wave of the COVID-19 pandemic in 2020, many low-income workers (like those employed in hospitality, tourism, and seasonal agricultural jobs) lost their jobs or a significant portion of their income due to economic shutdowns. Long-term unemployment and income loss considerably increased poverty risks, especially among already vulnerable groups (single parents, Roma communities, and elderly people with small pensions). In peripheral, disadvantaged regions, the economic downturn had more severe consequences, as these areas already had fewer job opportunities and weaker social infrastructure (Dávid et al. 2021).
The main research works that have described the determinants of poverty since 1990 are summarized in Table 1.

Table 1 Some research works about the determinants of poverty since 1990 in Hungary

Author	**Gábos – Szivós**	**Darvas – Tausz**	**Szoboszlai**	**Győri**	**Branyiczki – Gábos**	**Dávid -Szabó – Huszti - Bukovics**
Year of publication	2002	2002	2004	2017	2018	2021
Determinants of poverty	unfavorable labor market conditions	large households with many children	age	poor housing conditions	low education levels	unfavorable labor market conditions
	low education levels	poor housing conditions	religious discrimination	large households with many children	unfavorable labor market conditions	adverse territorial characteristics
	adverse territorial characteristics	belonging to the Roma minority	cultural deficits	belonging to the Roma minority	large households with many children	belonging to the Roma minority
	age		belonging to the Roma minority		adverse territorial characteristics	single parent, elderly people with small pensions

Source: own compilation

Numerous research works (like Gábos-Szivós 2002, Branyiczki – Gábos 2018, Dávid et al. 2021) revealed that poverty in Hungary is a regionally highly differentiated phenomenon, which is most evident in the country's northeastern and southwestern peripheral areas (Pénzes 2014). The social and economic situation of the population living in these regions is influenced by numerous factors that interact with each other, reinforcing the persistence of disadvantage. Among the regional determinants of poverty, deficiencies in transportation and infrastructure play a particularly significant role. In peripheral settlements, access to public services, healthcare, and quality education is limited. The lack of accessibility also reduces employment opportunities, as mobility poses difficulties for residents. Low levels of infrastructural development further entrench territorial disadvantages. Almost 20% of the peripheral settlements in Hungary is situated close to the border line between Hungary and Eastern Slovakia in Borsod-Abaúj-Zemplén county (Pénzes 2018).

Unfavorable labor market conditions can also significantly contribute to impoverishment. Long-term unemployment is one of the most important determinants of poverty. Disadvantaged regions are characterized by a lack of jobs, multigenerational unemployment within the Roma population, child poverty, the backwardness of the economic structure, and the decline of agricultural employment. For the population with low educational attainment, the labor market offers few opportunities, while skilled young people often migrate to more developed regions or abroad. This process further weakens local human resources and sustains the reproduction of poverty (Spéder 2000).

Low education attainment often results in impoverishment. Education plays a key role in reducing poverty; however, in disadvantaged regions the performance of educational institutions often lags behind the national average. High rates of early school leaving, low progression to higher levels of education, and segregated forms of schooling all contribute to limiting children's chances of social mobility. Educational disadvantages particularly affect Roma communities, which are present in large numbers in these areas. The weakness of human capital in the long run also narrows labor market opportunities.

Overall, the socio-economic landscape in Hungary has been shaped by a complex interplay of factors leading to persistent poverty and inequality, particularly among marginalized communities.

Social and economic position of Borsod-Abaúj-Zemplén County, Hungary

The significant increase in regional disparities in wealth and deprivation in the transition period of 1989-1990 in Hungary was particularly evident in Northern Hungary, specifically in Borsod-Abaúj-Zemplén County, where the economic landscape was drastically altered by deindustrialization. (Blazek – Netrdová 2011; Keller et al. 2016)

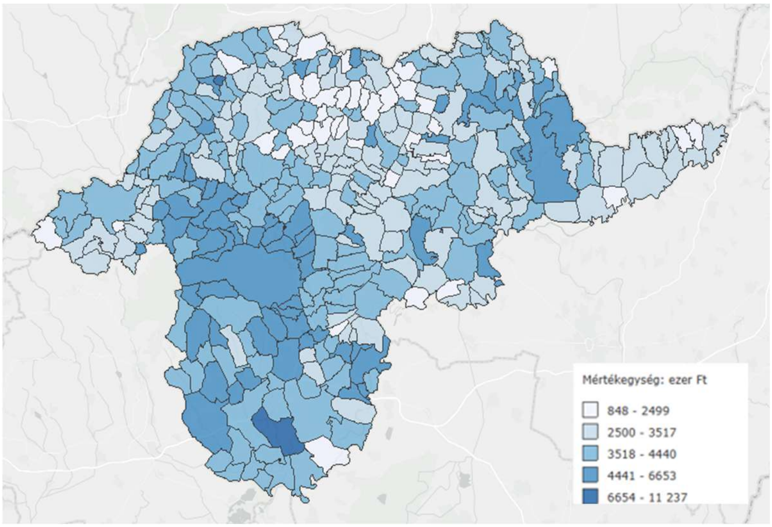

Figure 2: Personal income tax base income per taxpayer, 2023 (thousands HUF)[13]
Source: HCSO TIMEA

The decline of industrial activities, particularly in metallurgic companies, led to a regional crisis characterized by high unemployment, a distorted economic structure, and large-scale emigration. The 1990s were especially challenging for this region, as failed privatization efforts and underdeveloped infrastructure further exacerbated the situation (Bakos 2006). Reindustrialization did not begin to take shape until after 2003, with a focus on the industrial and energy sectors, which brought some structural changes to the economy(Barta et al. 2008).
Despite these developments, Borsod-Abaúj-Zemplén County continues to struggle with high unemployment and poverty rates, alongside a significant outflow of its population caused by limited economic opportunities (Varga – Tóth -Nagy 2021). The average personal income tax base income per taxpayer is one of the lowest in Borsod-Abaúj-Zemplén County, with the deepest poverty found in the northern part of the county (Figure 2). The region has the highest emigration rate in the country, with many residents relocating to Central Hungary in search of better prospects. Socioeconomic challenges are further compounded by the large proportion of ethnic Roma people, who represent the country's most disadvantaged minority.

[13] The current HUF/USD mid-exchange rate is 1 USD = HUF 335. Accordingly, the categories shown in the figure are: USD 2,531–7,460; USD 7,461–10,499; USD 10,500–13,254; USD 13,255–19,860; and USD 19,861–33,543.

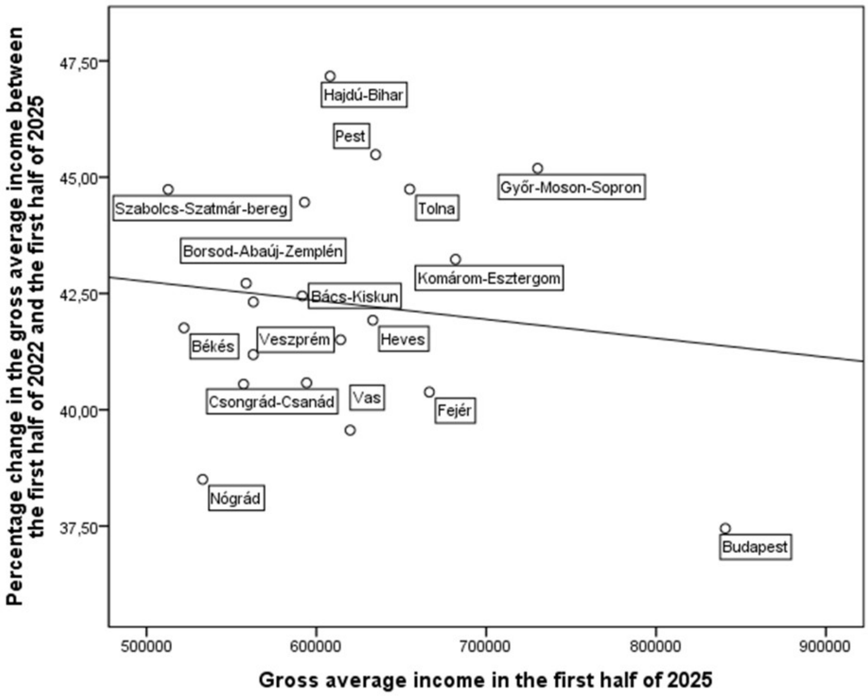

Figure 3 Gross average income in 2025 and its percentage change between 2022 and 2025 in the counties of Hungary, HUF
Source: own compilation based on HCSO data

Data on income levels also highlight the county's unfavorable position While Győr-Moson-Sopron stands out as the most prosperous county, and Nógrád the most disadvantaged with both low per capita income and minimal growth, Borsod-Abaúj-Zemplén lies close to the lower part of the national trend line, marked by relatively low income levels and only moderate income growth (Figure 3).

Borsod-Abaúj-Zemplén County exemplifies the challenges faced by post-socialist regions in Hungary, particularly in terms of economic disparity and the integration of marginalized communities such as the Roma. Persistent unemployment, poverty, and social discrimination continue to hinder the region's development and undermine the well-being of its inhabitants.

Methodology

The aim of our research was to find the main determinants of poverty in Borsod-Abaúj-Zemplén County. We used household-level survey data to test whether the determinants of poverty revealed by other research works (described in Table 1) still have a significant effect on income level.

To collect data about poverty in Borsod-Abaúj-Zemplén County, we created a questionnaire focusing on the households' socio-economic and demographic characteristics.[14] Our questionnaire asked closed-ended questions about income, education, ethnicity, number of children, and distance from the county seat.

The questionnaire was created using Google Forms and distributed from November 2024 to February 2025. Online convenience sampling was employed for this investigation. The results should not be extrapolated due to bias (Malhotra et al. 2017). For exploratory study, however,

[14] We thank Mohammad Jaber for his assistance with the conceptualization and the development of the questionnaire.

convenience sampling is adequate. Due to resource restrictions, Facebook was used to engage with local populations in the study area for data gathering. Facebook was effective in data collection during the COVID-19 epidemic (Jaber – Szép, 2024). By 2024, Hungary had over seven million Facebook users out of a total population of ten million (Facebook Users by Country, 2025), making it easier to reach the study's target group and gather results quickly. Most cities and towns have Facebook groups for local issues and communication. These locally embedded platforms for survey dissemination can boost research credibility and respondent confidentiality. We conducted the survey through community-based Facebook groups to reach and engage the intended participants. Sample collection did not involve paid ads. Besides the online platform, we asked the representatives of local municipalities to put on ads with a QR code leading to our questionnaire outside their building. In this way, even people without a Facebook profile could get access to our questionnaire.

As a result, a total of 404 people completed the questionnaire, of which 336 valid responses remained after data cleaning.

A multiple linear regression analysis was conducted to examine predictors of poverty. The dependent variable was the per capita monthly net income of the household, which we calculated using the answers for questions about the informants' income level and the number of people living in the household. For the question about the income level, informants could choose from nine options (less than HUF 145,000; between HUF 145,000 and HUF 199,999; between HUF 200,000 and HUF 304,999; between HUF 305,000 and HUF 499,999; between HUF 500,000 and HUF 699,999; between HUF 700,000 and HUF 999,999; between HUF 1,000,000 and HUF 1,499,999; between 1,500,000 and HUF 2,199;999; more than HUF 2,200,000).

The independent variables entered the initial model were number of children living in the household, distance from the county seat (as an indicator of adverse territorial differences), level of education, and employment status. The effect of ethnicity was not examined, as only 7 informants indicated ethnicity. Education level among respondents was assessed using a categorical variable (0: none, 1: primary education, 2: secondary education, 3: tertiary education). As for employment status, two categories were defined: 1: employed, 2: not employed. The distance from county seat was calculated from the city/village where the informant lives. Then these distances were categorized into the following categories: 1: 0-10km, 2: 10.1-30km, 3: 30.1-50km, 4: 50.1-70km, 5: 70.1km.

To examine the relationships between the dependent variable, per capita monthly net income, and the above -described set of candidate independent variables, we employed multiple linear regression with a backward elimination procedure. This approach begins with a full model that includes all candidate predictors, then sequentially removes variables that contribute least to the model until only statistically meaningful predictors remain. This approach is particularly useful when the goal is to identify the most parsimonious model while avoiding the exclusion of potentially important variables at the outset, as can occur with forward selection procedures.

Results

The distribution of the indicator of poverty, measured as per capita monthly net income, is skewed to the right, exhibiting a long tail that extends beyond the main cluster of data points (Figure 4). This positive skewness in income distribution is a well-documented and widely observed phenomenon consistent with established income distribution research. In fact, income data across various populations and contexts almost universally display positive skewness: the majority of individuals earn incomes concentrated around lower or middle values, while a smaller fraction of high-income earners create an extended right tail in the distribution (Cowell 2011; Atkinson & Bourguignon 2015). This asymmetry reflects structural economic inequalities where wealth and income are unevenly distributed, highlighting the persistent presence of high earners in contrast to more populous lower-income groups.

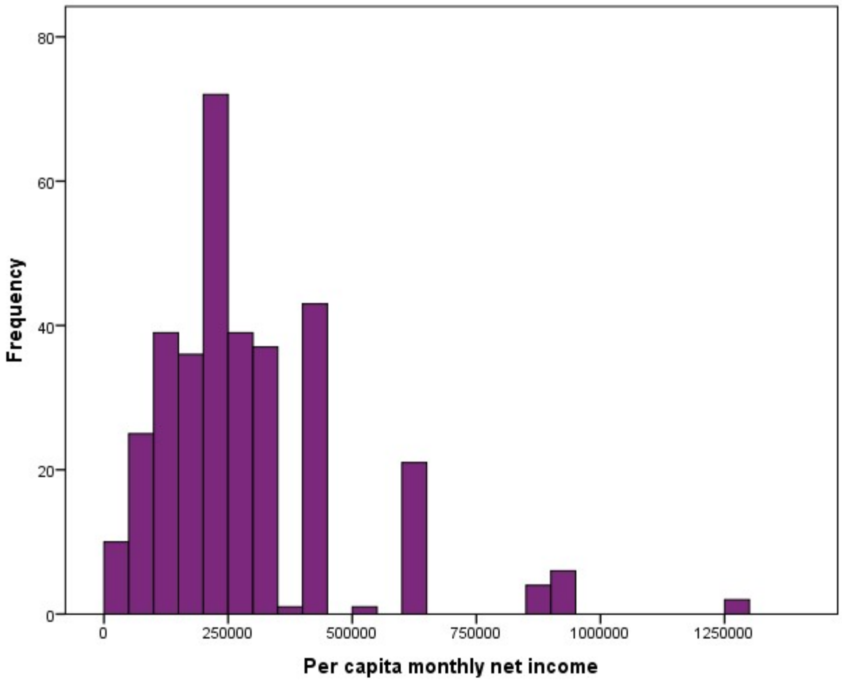

Figure 4 Frequency distribution of the income level of the respondents
Source: own compilation

In terms of model refinement, backward elimination procedures yielded a more parsimonious second regression model in which employment status was removed from the set of predictors, suggesting it did not add significant explanatory power beyond the other variables (Table 2). This streamlined model identified several key predictors significantly impacting per capita income and thus poverty levels.

One important predictor retained in the final model is the distance from the county seat, which showed a significant negative effect on income (see Table 2). This indicates that as the physical distance from the county administrative center increases, per capita income tends to decrease.

Similarly, the level of education emerged as a significant positive predictor of income, reinforcing the well-established relationship between higher educational attainment and increased earning potential. Individuals with more advanced educational qualifications likely have access to better-paying jobs, contributing to higher household incomes and thus lower poverty scores.

Additionally, the number of children in the household had a significant negative association with per capita income. This suggests larger household sizes dilute available income among more dependents, reducing income per capita and potentially increasing poverty risk within the family unit.

Collinearity diagnostics confirmed the robustness of the model, with all Variance Inflation Factor (VIF) values hovering around 1.0, indicating that multicollinearity among the predictors is not a concern. This ensures that each predictor's effect can be interpreted reliably without undue inflation from correlations with other variables.

Overall, the regression model exhibited a moderate yet meaningful explanatory power, with an R-value of 0.482 and an R^2 of 0.232 (adjusted $R^2 = 0.225$). This indicates that about 23 percent of the variability in poverty scores, as measured by per capita income, is accounted for by the three predictors included in the model. The model's statistical significance was confirmed by a highly significant omnibus F-test ($F = 30.88$, $p < .001$), which demonstrates that the combination of these predictors effectively distinguishes varying levels of poverty across the sample.

Table 2 Determinants of poverty

Predictor	***B***	***SE (B)***	***β***	***t***	***p***	***VIF***
(Constant)	135,136.9	47436.5	—	2.85	0.01	—
Number of children	-65,125.84	9672.57	-0.338	-6.733	0.00	1.00
Distance from county seat	-2,110.06	589.9	-0.18	-3.58	0.00	1.01
Education level	90,418.35	17,596.80	0.259	5.138	0.00	1.01

Source: own compilation

Conclusion

Our findings demonstrate that education, distance from the county seat, and household size significantly influence per capita income, while employment status did not remain significant in the final model. These results suggest that regional accessibility and human capital formation are critical drivers of poverty, and that demographic pressures such as large household size further exacerbate economic disadvantages.

The persistence of poverty in the region cannot be fully explained by labor market status alone but is instead reinforced by structural and spatial inequalities. Limited infrastructure, poor access to services, and weak educational outcomes sustain cycles of disadvantage, particularly in peripheral settlements. The findings are consistent with previous research emphasizing the interrelated roles of education, territorial disparities, and demographic factors in shaping poverty risks in Hungary (Darvas & Tausz, 2002; Spéder, 2000; Branyiczki & Gábos, 2018; Győri, 2017; Gábos & Szivós, 2002).

This analysis underscores the multifaceted nature of poverty, driven both by demographic factors like household size and education, as well as geographic aspects such as proximity to economic centers, and highlights the importance of targeted policies addressing these determinants to alleviate poverty. Policy responses must therefore move beyond short-term welfare measures and prioritize investments in education, regional development, and infrastructure to break the cycle of poverty. Supporting disadvantaged communities, especially Roma populations, through inclusive education and targeted local development programs could enhance opportunities for social mobility and reduce regional disparities.

A noteworthy result of this study is that employment status did not emerge as a significant determinant of per capita net income in the final regression model. This contrasts with the conventional understanding that employment is a primary safeguard against poverty, as shown in the research of Branyiczki and Gábos (2018) and Gábos and Szivós (2002). One possible explanation lies in the role of education and regional accessibility, which may overshadow the simple employed–unemployed distinction, since better-educated individuals and those living closer to economic centers tend to access higher-quality jobs. Another possible reason for the exclusion of employment status is that the sample is not representative of the total population. For example, most respondents (98%) had attained secondary or tertiary education, resulting in a much higher average education level than in the general population (77% in 2022 in Hungary). Further research, particularly field studies focused on poorer populations, is needed to better understand the effect of employment status on poverty.

Although based on a convenience sample, this study provides valuable exploratory insights into the socio-economic dynamics of poverty in one of Hungary's most disadvantaged counties. Future research using representative samples and longitudinal designs would allow for more robust conclusions and better inform policy interventions. Overall, addressing poverty in Hungary requires an integrated approach that recognizes the intersection of education, demography, spatial inequality, and social exclusion in shaping the life chances of vulnerable populations.

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Understanding Contextual Variations in the Trust–Well-Being Nexus: An Examination of Social Mechanisms in Austria and Hungary

This study analyzes ESS Wave 11 data using PLS-SEM to assess how generalized trust shapes subjective well-being in Austria and Hungary through two mediators: social life (social contacts, participation) and solidarity/helpfulness (value-based prosocial orientations). In Austria, trust significantly predicts both mediators, which transmit its positive effects on well-being. In Hungary, trust relates only to social life, while solidarity shows no connection. Overall, results reveal strong context-specific differences in the trust–well-being relationship.
Keywords: social capital, PLS-SEM, cross-country comparison
JEL-code: I31, Z13

https://doi.org/10.32976/stratfuz.2025.38

Introduction

This comparative study investigates the mechanisms through which generalized trust shapes subjective well-being and welfare, with a particular focus on how these relationships unfold differently in Austria and Hungary. While trust is widely recognized as a foundational element of social capital, its influence on individual well-being is neither uniform nor universal. Instead, it is embedded within distinctive socio-cultural environments that shape how trust is formed, expressed, and translated into social outcomes. By examining two countries that differ markedly in their levels of interpersonal trust and social capital structures, the study provides a unique opportunity to explore the contextual nature of the trust–well-being nexus.

The analysis centers on two key mediating mechanisms: social life and solidarity & helpfulness. These dimensions capture how individuals interact within their social networks and how they engage in prosocial behaviors −both of which may serve as pathways linking trust to well-being. Previous research has shown that trust is associated with greater social participation and a stronger sense of community, which in turn support higher well-being; however, the strength and structure of these pathways vary considerably across societies (Glatz & Eder, 2019). By scrutinizing these mediators, the present study seeks to determine whether trust improves well-being primarily by fostering social connectedness and prosocial orientations, or whether it exerts its influence independently of these mechanisms.

To address these questions, the study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) using data from Wave 11 of the European Social Survey, allowing for a rigorous assessment of both mediating and moderating relationships. This methodological approach is particularly well-suited to cross-country comparative analyses, as it can accommodate cultural variability in how latent constructs such as trust and well-being are expressed. It also allows for simultaneous estimation of direct, indirect, and interaction effects, providing a more holistic understanding of their interplay.

The research is grounded in a growing body of literature that highlights the multidimensional structure of trust and its complex associations with subjective well-being. Trust has been shown to correlate with life satisfaction, happiness, and perceived quality of life, both through direct effects and through its role in enabling social engagement and reciprocity (Glatz & Schwerdtfeger, 2022). Institutional mechanisms—such as consumer protection and market regulation—also play a critical role in maintaining the conditions that support interpersonal trust (Berg, 2022). Yet the pathways linking trust to well-being are far from straightforward. Empirical work increasingly emphasizes the importance of mediational processes, in which trust facilitates social interactions

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that in turn enhance well-being (Adedeji et al., 2023). These insights motivate the present study's focus on disentangling the relative contributions of social life and solidarity-oriented behaviors within different societal contexts.

At the same time, national differences in historical legacies, institutional quality, and patterns of digital development may moderate the way trust functions within social systems (Karabchuk & Shomotova, 2021). Austria's comparatively high-trust environment and robust civic culture contrast sharply with Hungary's more fragmented social capital landscape, making these countries ideal cases for examining how context shapes the trust–well-being relationship. Understanding these cross-national differences is crucial, as the salience and functioning of trust ‒and its capacity to foster well-being ‒may vary markedly across European societies (Glatz & Eder, 2019).

Beyond its comparative contribution, this study also broadens the conceptualization of social capital by incorporating a wider array of relational and prosocial factors. By doing so, it responds to recent calls for more nuanced analyses that move beyond generalized trust alone and consider how different forms of social connection contribute to well-being (Gómez-Balcácer et al., 2022). The resulting model provides a richer understanding of how trust interacts with social dynamics to influence subjective well-being, offering theoretical insights and practical implications for strengthening social cohesion and enhancing societal welfare.

Hypotheses development

A substantial body of research demonstrates that various dimensions of trust ‒particularly social and institutional trust ‒ are positively associated with subjective well-being across diverse populations (Glatz & Schwerdtfeger, 2022; Glatz & Eder, 2019). This association is often explained by the idea that trust facilitates social participation, strengthens interpersonal connections, and expands individuals' social resources, all of which enhance well-being (Adedeji et al., 2023). Engaging in civic activities, volunteering, and community interactions rooted in trust has been shown to function as a key source of emotional support and relational satisfaction, thereby improving subjective well-being (Adedeji et al., 2023). Conversely, low levels of generalized trust tend to reduce social engagement and increase social isolation, ultimately contributing to diminished well-being (Growiec & Growiec, 2013).

Building on these findings, this study examines the mediating roles of *social life* and *solidarity & helpfulness* in the trust–well-being relationship. This approach provides a more nuanced perspective than earlier research that treated social participation as a single, aggregated construct (Adedeji et al., 2023). Importantly, we investigate whether these mediational pathways differ across national contexts, focusing on the contrast between Austria's relatively stable, cohesive social structure and Hungary's more transitional and fragmented social environment (Grajczjár et al., 2019). Such contextual differences are critical, as historical legacies and institutional frameworks contribute to cross-country variation in how social capital is formed and how trust translates into well-being outcomes (Growiec & Growiec, 2013; Glatz & Schwerdtfeger, 2022).

Prior comparative research reveals that while generalized trust predicts both social life and solidarity in Austria, its influence on solidarity appears markedly weaker or absent in Hungary (Glatz & Bodi-Fernandez, 2020; Glatz & Eder, 2019). At the same time, social life and solidarity play a significantly stronger role in shaping subjective well-being in Hungary, suggesting that close interpersonal relationships are more central to well-being there than generalized trust itself (Grajczjár et al., 2019). These findings point toward a more fragmented social capital structure in Hungary, where well-being depends more heavily on strong ties and personal networks, in contrast to Austria, where trust, solidarity, and social participation reinforce one another within a more integrated system (Glatz & Bodi-Fernandez, 2020).

This divergence underscores the context-sensitive nature of trust and highlights the need to explore cultural, institutional, and socio-economic factors that may condition how trust influences well-being. Cross-national differences in economic development, historical trajectories, and cultural norms – such as Hungary's stronger emphasis on financial security – may shape the formation and expression of trust and its effects on social capital (Venczel, 2024). Broader multi-level evidence further indicates that both individual-level expectations of others and national-level trust climates jointly influence voluntary membership, collective action, and social participation (Sánchez-García et al., 2025), reinforcing the complexity of trust as a determinant of well-being. Moreover, international studies show that the relationship between trust and well-being is shaped by cultural and institutional contexts, suggesting that the underlying mechanisms are not universal but contingent on societal characteristics (Calvo et al., 2012; Chen et al., 2024).

Taken together, these insights suggest that the pathways linking generalized trust to subjective well-being likely involve both mediation – via social life and solidarity – and moderation, where trust strengthens or conditions the effects of social connections on well-being. Accordingly, the study formulates hypotheses examining the direct, indirect, and moderating relationships among these constructs.

The conceptual model (Figure 1) of the study proposes that *Generalized Trust* influences individuals' *Subjective Well-being and Welfare* through several interconnected pathways. First, the model includes direct effects, suggesting that higher trust not only enhances well-being directly but also promotes stronger social life (social participation) and increased solidarity and helpfulness, both of which independently contribute to well-being. In addition, the model incorporates indirect (mediated) pathways: trust is expected to improve well-being indirectly by fostering richer social interactions and encouraging prosocial orientations, thereby channeling its effects through social life and solidarity. Finally, the framework acknowledges moderating effects, whereby the impact of social life and solidarity on well-being depends on the level of generalized trust. In this way, trust not only initiates but also strengthens the positive influence of social connectedness and prosocial behaviors on subjective well-being. Together, these direct, indirect, and moderating relationships form a comprehensive structure that explains the multifaceted role of trust in shaping individual welfare.

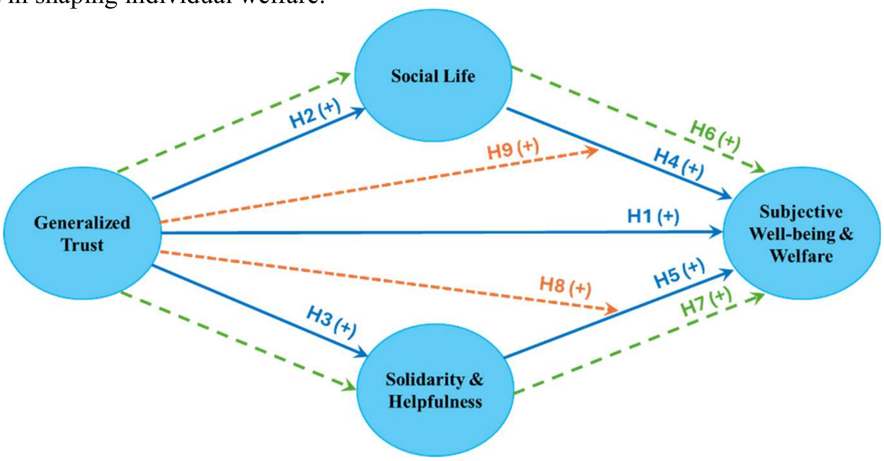

Figure 1. Conceptual model
Source: author's edition

The study formulates *nine hypotheses* to capture the direct, indirect, and moderating relationships between Generalized Trust, Social Life, Solidarity & Helpfulness, and Subjective Well-being & Welfare:

Direct Effects

H1 (+): Generalized Trust positively influences Subjective Well-being & Welfare.

H2 (+): Generalized Trust positively influences Social Life.

H3 (+): Generalized Trust positively influences Solidarity & Helpfulness.

H4 (+): Social Life positively influences Subjective Well-being & Welfare.

H5 (+): Solidarity & Helpfulness positively influence Subjective Well-being & Welfare.

Indirect (Mediated) Effects

H6 (+): Generalized Trust increases Subjective Well-being & Welfare indirectly through Social Life.

H7 (+): Generalized Trust increases Subjective Well-being & Welfare indirectly through Solidarity & Helpfulness.

These hypotheses propose that social engagement and prosocial tendencies act as mediators through which trust enhances well-being.

Moderating Effects

H8 (+): Generalized Trust moderates the effect of Solidarity & Helpfulness on Subjective Well-being & Welfare, strengthening this relationship at higher trust levels.

H9 (+): Generalized Trust moderates the effect of Social Life on Subjective Well-being & Welfare, such that the positive effect of social life on well-being is stronger when trust is higher.

Study design

This study employs a comparative cross-sectional research design to examine how generalized trust influences subjective well-being and welfare in Austria and Hungary, and how these relationships are shaped by social life and solidarity & helpfulness. The analysis is based on data from Wave 11 of the European Social Survey (ESS 2022–2023), a high-quality, representative survey that provides harmonized indicators across European countries. The use of two countries with contrasting trust cultures enables a systematic assessment of contextual differences in the trust–well-being nexus.

Sample

Two nationally representative subsamples from the ESS were used: Austria (AT): n = 2,226; Hungary (HU): n = 2,005. Listwise deletion was applied to handle missing data. These sample sizes exceed common requirements for structural equation modeling and provide sufficient statistical power for multi-group comparisons.

Measures

The structural model included four latent constructs: Generalized Trust, Social Life, Solidarity & Helpfulness, and Subjective Well-being & Welfare. The Subjective Well-being & Welfare construct was measured by four items, whereas the remaining three constructs were each measured by three items (Table 1). All items were measured on different scales. For items marked with (R), reverse coding was applied during the analysis. Thus, for every item, higher values consistently indicate a higher level of agreement or more positive perceptions.

Table 1. Descriptive Statistics of Items Representing the Research Dimensions (n_{AT}=2,226, n_{HU}=2,005)

Dimension	Item code	Item description	Scale	AT Mean (SD)	HU Mean (SD)
Generalized Trust	ppltrst	Most people can be trusted or you can't be too careful	0–10	5.91 (2.15)	4.50 (2.57)
	pplfair	Most people try to take advantage of you, or try to be fair	0–10	6.39 (2.02)	5.10 (2.21)
	pplhlp	Most of the time people helpful or mostly looking out for themselves	0–10	6.17 (2.06)	4.71 (2.36)

Social Life	sclmeet	How often socially meet with friends, relatives or colleagues	1–7	4.89 (1.22)	3.46 (1.51)
	inprdsc	How many people with whom you can discuss intimate and personal matters	0–6	2.97 (1.18)	2.48 (1.20)
	sclact	Take part in social activities compared to others of same age	1–5	2.81 (0.87)	2.54 (0.87)
Solidarity & Helpfulness	iphlppla (R)	Important to help people and care for others' well-being	1–6	5.02 (0.87)	4.55 (1.04)
	iplylfra (R)	Important to be loyal to friends and devote to people close	1–6	5.47 (0.71)	4.93 (0.98)
	ipudrsta (R)	Important to understand different people	1–6	4.91 (0.97)	4.45 (1.03)
Subjective Well-being & Welfare	happy	How happy are you	0–10	7.80 (1.60)	7.12 (1.99)
	health (R)	Subjective general health	1–5	3.94 (0.87)	3.81 (0.94)
	hincfel (R)	Feeling about the household's income nowadays	1–4	3.16 (0.71)	2.81 (0.68)
	stflife	How satisfied with life as a whole	0–10	7.83 (1.61)	6.59 (2.20)

Source: Author's own calculations using data from ESS Round 11 (2022–2023)

Austrian respondents consistently reported more positive perceptions across all examined dimensions than Hungarian respondents. Levels of generalized trust were notably higher in Austria, with mean scores on all trust items exceeding those in Hungary. Social life indicators showed a similar pattern: Austrians met others more frequently, had slightly more people to discuss personal matters with, and participated in social activities more actively. In the Solidarity & Helpfulness dimension, Austrians expressed stronger agreement with helping others, loyalty, and understanding different people. Subjective well-being indicators were also higher in Austria, where respondents reported greater happiness, slightly better perceived health, higher satisfaction with household income, and significantly greater overall life satisfaction compared to Hungarian respondents.

Measurement Model

To assess the measurement quality of the latent constructs, a reflective measurement model was estimated separately for Austria and Hungary. Indicator reliability was evaluated through outer loadings. The majority of items loaded satisfactorily on their respective constructs, exceeding the recommended threshold of 0.70 (Appendix, Table 5). However, one item (*hincfel (R)*, measuring perceived household income) showed a weaker loading in the Austrian model (0.563), falling below the commonly accepted 0.60 cutoff. Although loadings between 0.40 and 0.70 may be retained if they contribute to the construct's content validity and if composite reliability and AVE remain acceptable, this result suggests that the income-feeling item explains less variance in the latent construct of Subjective Well-being & Welfare in Austria.

Internal consistency reliability was assessed via Cronbach's alpha and composite reliability (CR). Cronbach's alpha values approached or exceeded the 0.70 benchmark for most constructs, though Social Life (AT: 0.632) and Solidarity & Helpfulness (AT: 0.613) fell slightly below this threshold. Given that Cronbach's alpha is sensitive to the number of items and assumes tau-equivalence, lower values are not unusual for constructs composed of only three indicators. Composite reliability values, which are more robust under congeneric measurement and widely recommended in PLS-SEM, showed acceptable reliability across all constructs in both countries (all CR ≥ 0.79).

Convergent validity was assessed using the Average Variance Extracted (AVE), with all constructs in both models meeting the recommended threshold of 0.50. This indicates that each latent variable explains more than half of the variance in its indicators. Overall, despite minor deviations in individual loadings and alpha values, the constructs demonstrate adequate indicator reliability, internal consistency, and convergent validity in both country samples.

The discriminant validity assessment using the HTMT criterion demonstrates acceptable construct distinctiveness in both Austria (AT) and Hungary (HU), as all values fall well below the commonly recommended threshold of 0.85 (Table 2). In Austria, the highest HTMT value is observed between Subjective Well-being & Welfare and Generalized Trust (0.413), while in Hungary the strongest association is between Subjective Well-being & Welfare and Social Life (0.527). In both countries, the weakest relationships appear between Solidarity & Helpfulness and Generalized Trust (AT: 0.162; HU: 0.064), indicating good differentiation between these constructs. Although Hungary shows generally higher HTMT values –particularly between well-being and social life –the results remain within acceptable limits, supporting adequate discriminant validity across all construct pairs in both samples.

Table 2. Heterotrait–Monotrait (HTMT) Ratios Assessing Discriminant Validity Across Constructs

Constructs	AT	HU
Social Life <-> Generalized Trust	0.248	0.230
Solidarity &Helpfulness <-> Generalized Trust	0.162	0.064
Solidarity &Helpfulness <-> Social Life	0.274	0.170
Subjective Well-being &Welfare <-> Generalized Trust	0.413	0.299
Subjective Well-being &Welfare <-> Social Life	0.384	0.527
Subjective Well-being &Welfare <-> Solidarity &Helpfulness	0.200	0.365

Source: Author's own calculations using data from ESS Round 11 (2022–2023)

Structural Model

The structural model was evaluated to assess the direct effects of generalized trust on subjective well-being and welfare, as well as its indirect effects operating through two mediators –social life and solidarity & helpfulness. In addition, the model examined the moderating role of generalized trust on the relationships between social activity, solidarity, and subjective well-being.

The overall model fit was assessed using the standardized root mean square residual (SRMR), Squared Euclidean Distance (d_ULS), and Geodesic Distance (d_G), following the recommendations for PLS-SEM evaluation. For both Austria and Hungary, the SRMR values of the saturated model (AT = 0.080; HU = 0.081) and the estimated model (AT = 0.084; HU = 0.083) fall below the commonly accepted cut-off of 0.08–0.85, indicating an acceptable model fit (Hu & Bentler, 1999; Henseler et al., 2015). The d_ULS and d_G values for both countries remain within acceptable bounds, as model fit is supported when the discrepancy values of the estimated model do not significantly exceed those of the saturated model (Henseler et al., 2016). Taken together, the results indicate that the measurement models for Austria and Hungary demonstrate adequate global fit according to established PLS-SEM criteria.

Table 3. Model Fit Indices for Austria and Hungary (SRMR, d_ULS, d_G)

	SRMR		d_ULS		d_G	
Model	AT	HU	AT	HU	AT	HU
Saturated model	0.080	0.081	0.586	0.599	0.161	0.166
Estimated model	0.084	0.083	0.650	0.627	0.166	0.167

Source: Author's own calculations using data from ESS Round 11 (2022–2023)

Results and Discussion

The structural model estimation for the Hungarian sample indicates that generalized trust exerts a significant positive direct effect on subjective well-being and welfare ($\beta = 0.219$, $p < 0.001$), supplemented by a small but significant indirect effect via social life ($\beta = 0.040$, $p < 0.001$), resulting in a total effect of $\beta = 0.259$. In contrast, the indirect pathway through solidarity is negligible and statistically non-significant ($\beta = –0.001$, $p = 0.920$), indicating that solidarity does not mediate the relationship between trust and well-being in the Hungarian model. Generalized trust also shows a significant positive effect on social life ($\beta = 0.158$, $p < 0.001$), whereas its direct effect on solidarity & helpfulness is not significant ($\beta = –0.002$, $p = 0.920$). Social life and solidarity & helpfulness both have significant and positive effects on subjective well-being ($\beta = 0.262$, $p <0.001$; $\beta = 0.265$, $p <0.001$), confirming their role as key psychosocial pathways linking trust to welfare outcomes.

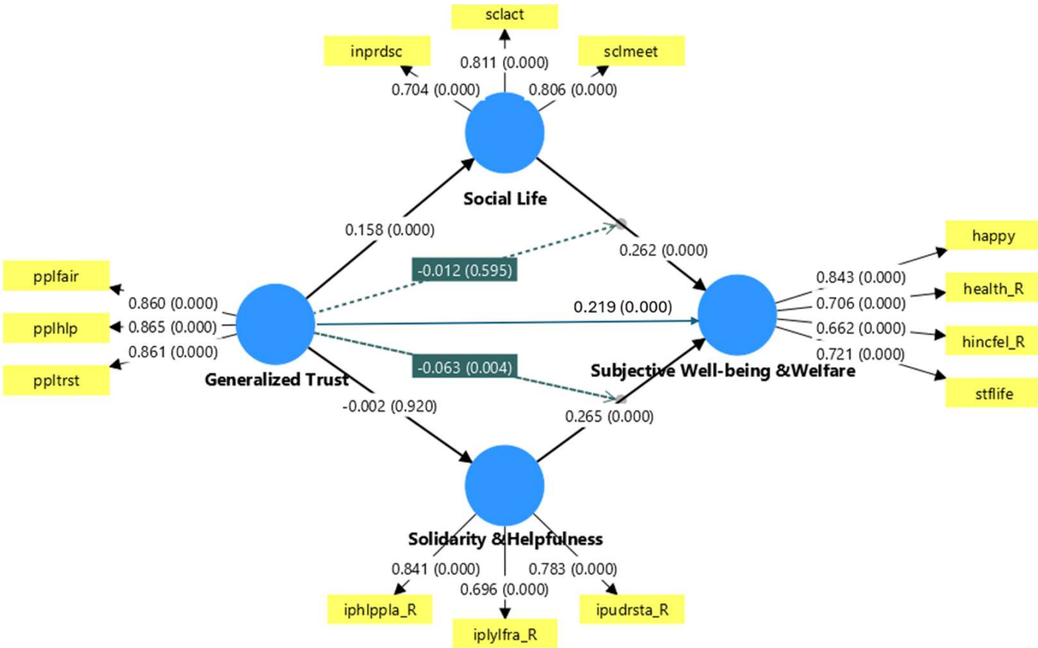

Figure 2. Estimated Structural Path Coefficients and Measurement Loadings for the Hungarian Model

Source: Author's own calculations using data from ESS Round 11 (2022–2023)

Regarding moderation, generalized trust exhibits a weak but statistically significant negative moderating effect on the relationship between solidarity & helpfulness and subjective well-being ($\beta = –0.063$, $p = 0.004$). Although modest in magnitude, this interaction suggests that higher levels of generalized trust slightly weaken the positive influence of solidarity and helpfulness on subjective well-being. One plausible interpretation is that in contexts where generalized trust is high, individuals may rely less on close personal networks for emotional or instrumental support;

consequently, the added well-being benefit of solidarity-related behaviors becomes somewhat less pronounced. In contrast, when generalized trust is lower, solidarity and helping behaviors may play a more critical compensatory role in sustaining well-being. Overall, the model supports a primarily direct and mediated influence of generalized trust on well-being, while revealing a subtle nuance in how trust shapes the function of social support mechanisms.

The findings for the Austrian sample provide clear evidence that generalized trust plays a central role in shaping subjective well-being and welfare, both directly and indirectly. First, generalized trust exerted moderate positive effects on both social life (β = 0.182, p <0.001) and solidarity & helpfulness (β = 0.119, p <0.001), suggesting that individuals with higher interpersonal trust tend to participate more actively in social relationships and express stronger prosocial orientations. These two constructs, in turn, were also significant predictors of subjective well-being and welfare, although their magnitudes differed: social life showed a substantial positive effect (β = 0.199, p <0.001), while solidarity & helpfulness showed a weaker but still significant effect (β = 0.067, p = 0.002). Importantly, generalized trust also demonstrated a strong direct association with subjective well-being and welfare (β = 0.269, p <0.001), indicating that trust shapes well-being not only through social mechanisms but also independently – likely reflecting psychological security, optimism, and lower perceived social threat.

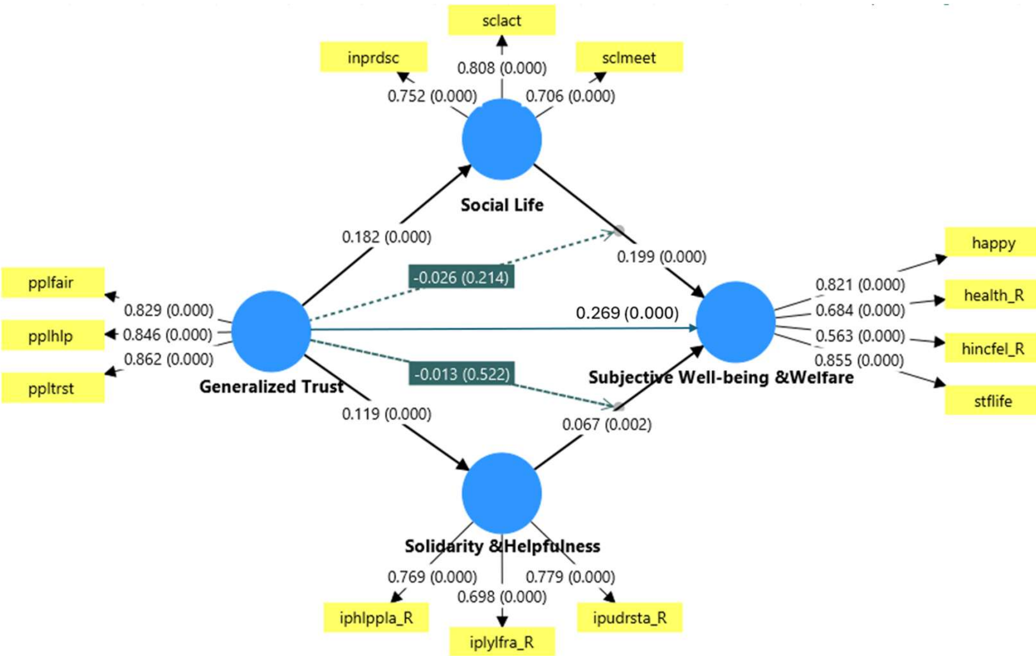

Figure 3. Estimated Structural Path Coefficients and Measurement Loadings for the Austrian Model

Source: Author's own calculations using data from ESS Round 11 (2022–2023)

Furthermore, the Austrian model revealed significant indirect pathways, reinforcing the importance of social mechanisms: trust predicted well-being indirectly via social life (β = 0.036, p < 0.001) and, to a lesser extent, via solidarity & helpfulness (β = 0.008, p = 0.004). These indirect effects accumulated to a notable total indirect effect (β = 0.044, p <0.001), and when combined with the direct effect resulted in a strong total effect of trust on well-being (β = 0.313, p <0.001). In contrast, the hypothesized moderation effects – trust × social life and trust × solidarity – were not supported, suggesting that trust enhances well-being primarily through additive (direct and indirect) pathways rather than by amplifying or buffering the effects of social interactions.

Overall, the Austrian results indicate that trust functions as a foundational social and psychological resource, promoting social engagement and prosocial orientations, which in turn elevate subjective well-being. The lack of moderating effects implies that trust does not change the *strength* of the benefits derived from social life or solidarity, but rather consistently contributes to well-being both on its own and through its influence on social relationships. This aligns with broader sociological and psychological research emphasizing trust as a cornerstone of social cohesion and individual flourishing.

Comparing Austria and Hungary, the structural models point to a broadly similar but not identical social mechanism. In both countries, generalized trust is positively related to subjective well-being and welfare, and in both cases part of this association is mediated by more active social life and prosocial orientations. However, the overall impact of trust is somewhat stronger in Austria (total effect $\beta = 0.313$) than in Hungary (total effect $\beta = 0.259$), and the Austrian model shows a clearer pathway from trust to solidarity and helpfulness, which is absent in Hungary where the direct path from trust to solidarity is essentially zero and non-significant. Moreover, while the Hungarian model revealed a small but significant negative moderation of the solidarity–well-being link by trust, no such moderation is present in Austria. This contrast suggests that in Austria generalized trust, social participation and solidarity form a more coherent "virtuous circle," whereas in Hungary the benefits of solidarity for well-being are somewhat more contingent and can even be slightly dampened in high-trust contexts. Together with the descriptive evidence that Austrians report higher average trust, social engagement and well-being than Hungarians, the comparative results support the interpretation that generalized trust is more deeply embedded in the social fabric in Austria, while in Hungary its role is still more fragile and context-dependent.

Conclusions

Across both national samples, the structural models consistently showed that generalized trust positively predicts social life, solidarity & helpfulness, and subjective well-being, although the strength of these effects differs between Austria and Hungary. Both models support the central hypothesis that generalized trust enhances subjective well-being (Table 4), but the underlying mechanisms differ. Austria shows stronger mediating pathways and no moderation, while Hungary shows weaker mediation, no indirect pathway through solidarity, and a small suppressing moderation effect. These differences indicate that although trust is an important social resource in both countries, its role is more structurally embedded and consistently beneficial in Austria, whereas in Hungary, trust interacts more subtly with social behaviors and may be shaped by a more fragile or polarized social context.

Table 4. Summary of Hypothesis Testing Results for Hungary and Austria

Hypothesized Relationship	**Hungary (HU) β (p) – Decision**	**Austria (AT) β (p) – Decision**
H1: Generalized Trust → Subjective Well-being & Welfare (direct)	0.219 ($p < 0.001$) **Supported**	0.269 ($p < 0.001$) **Supported**
H2: Generalized Trust → Social Life	0.158 ($p < 0.001$) **Supported**	0.182 ($p < 0.001$) **Supported**
H3: Generalized Trust → Solidarity & Helpfulness	–0.002 ($p = 0.920$) **Not supported**	0.119 ($p < 0.001$) **Supported**
H4: Social Life → Subjective Well-being & Welfare	0.262 ($p < 0.001$) **Supported**	0.199 ($p < 0.001$) **Supported**
H5: Solidarity & Helpfulness → Subjective Well-being & Welfare	0.265 ($p < 0.001$) **Supported**	0.067 ($p = 0.002$) **Supported**
H6: Trust → Social Life → Well-being	0.040 ($p < 0.001$) **Supported**	0.036 ($p < 0.001$) **Supported**
H7: Trust → Solidarity → Well-being	-0.001 ($p = 0.920$) **Supported**	0.008 ($p = 0.004$) **Supported**

Hypothesized Relationship	Hungary (HU) β (p) – Decision	Austria (AT) β (p) – Decision
H8: Trust × Solidarity → Subjective Well-being & Welfare (moderation)	–0.063 (p = 0.004) **Supported** (weak negative moderation)	–0.013 (p = 0.522) **Not supported**
H9: Trust × Social Life → Subjective Well-being & Welfare (moderation)	–0.012 (p = 0.595) **Not supported**	–0.026 (p = 0.214) **Not supported**

Source: Author's own calculations and edition using data from ESS Round 11 (2022–2023)

The findings align with previous research indicating that the association between social trust and well-being can vary substantially across different societal structures (Guo et al., 2021). While some studies report a clear causal relationship between social trust and subjective well-being, others find the link to be less robust or even negligible, particularly when accounting for country-level characteristics or conducting extensive robustness checks (Glatz & Schwerdtfeger, 2022). It is important to note that the pathways connecting generalized trust and well-being are not universal; they can be significantly shaped by mediating factors such as perceived social fairness and trust in government, especially in societies undergoing socio-political transformation (Ma et al., 2024). These contextual differences are also reflected in broader patterns of regional and spatial development, where the sustainability of territorial decisions has been shown to influence social cohesion and long-term well-being outcomes (Kocziszky & Szendi, 2023).

Moreover, macroeconomic conditions and income inequality may further modify these associations, underscoring the importance of exercising caution when generalizing findings to other populations or contexts (Glatz & Eder, 2019; Inaba et al., 2015). Differences in historical trajectories and cultural norms related to collective action and individual responsibility can also influence how generalized trust translates into measurable societal outcomes. Replication studies in diverse populations are therefore essential for evaluating the generalizability of these results, as individual differences‒such as personality traits or life circumstances ‒may simultaneously shape both general trust and subjective well-being (Adedeji et al., 2023).

The observed disparities between Austria and Hungary highlight that although generalized trust typically benefits societies by fostering civic engagement and economic development, its impact on individual well-being is highly dependent on the surrounding socio-cultural context (Ward et al., 2014; Glatz & Bodi-Fernandez, 2020). This underscores the importance of tailoring policies aimed at enhancing well-being through trust-building to the specific historical, political, and social dynamics of each nation (Jasielska et al., 2019). Future research should also employ longitudinal designs to establish clearer causal pathways between generalized trust, components of social capital, and subjective well-being, as cross-sectional data‒while informative ‒limit causal inference (Adedeji et al., 2023). Such longitudinal analyses would enable a more nuanced understanding of how institutional and social trust evolve over time and how these shifts subsequently influence population-level well-being (Glatz & Schwerdtfeger, 2022). Additionally, examining differences in measurement specificity for generalized trust‒such as comparing multi-item scales with single-item indicators‒may uncover further complexities in its relationship with well-being across diverse cultural settings (Chan et al., 2017). Finally, investigating the mediating roles of perceived social fairness and trust in government remains essential, as these factors have been shown to significantly shape subjective well-being, particularly in contexts characterized by variability in governance quality (Ma et al., 2024; Dufhues et al., 2023; Glatz & Eder, 2019).

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Appendix

Table 5. Measurement Model Results: Outer Loadings, Internal Reliability, and Convergent Validity for Austria and Hungary

Dimension/Item	Item Code	Loadings AT (HU)	α AT (HU)	AVE AT (HU)	CR AT (HU)
Generalized Trust			0.801 (0.828)	0.715 (0.743)	0.883 (0.897)
Most people can be trusted or you can't be too careful	ppltrst	0.862 (0.861)			
Most people try to take advantage of you, or try to be fair	pplfair	0.829 (0.860)			
Most of the time people helpful or mostly looking out for themselves	pplhlp	0.846 (0.865)			
Social Life			0.632 (0.665)	0.573 (0.601)	0.800 (0.818)
How often socially meet with friends, relatives or colleagues	sclmeet	0.706 (0.806)			
How many people with whom you can discuss intimate and personal matters	inprdsc	0.752 (0.704)			
Take part in social activities compared to others of same age	sclact	0.808 (0.811)			
Solidarity & Helpfulness			0.613 (0.671)	0.562 (0.602)	0.793 (0.818)
Important to help people and care for others' well-being	iphlppla (R)	0.769 (0.841)			
Important to be loyal to friends and devote to people close	iplylfra (R)	0.698 (0.696)			
Important to understand different people	ipudrsta (R)	0.779 (0.783)			
Subjective Well-being & Welfare			0.716 (0.716)	0.547 (0.542)	0.825 (0.824)
How happy are you	happy	0.821 (0.805)			
Subjective general health	health (R)	0.684 (0.706)			
Feeling about the household's income nowadays	hincfel (R)	0.563 (0.662)			
How satisfied with life as a whole	stflife	0.855 (0.721)			

Source: author's own calculations using data from ESS Round 11 (2022–2023)

Cecilia Szigeti[16]

The role of bottom-up influence in circular fashion business models. Experiences from participatory research in Hungary

One of the aims of this article is to illustrate the four types of circular visions, their interconnections and limitations, using examples. Although the visions (planned circularity, circular modernism, bottom-up sufficiency, peer to peer circularity) can be observed in other industries, they can be understood through the examples of the fashion industry in Hungary. By looking at the interconnections, it can be understood that none of these visions will be a solution, and that their interconnections should be used consciously. Further, the aim is to present circular solutions for the fashion industry. This is significant partly because, in addition to its direct environmental impact, the fashion industry has a very important awareness-raising effect, bringing circular solutions to several consumer groups that are not interested in environmentally conscious solutions.
Keyword: circular economy, participatory research, bottom up sufficiency, clothes swap
JEL-code:

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Environmental impacts of the fashion industry

To the best of our knowledge, without renewing the resource structure of economic growth, climate change will continue to accelerate and, as a result, the associated economic damage will continue to increase (Holczinger & Sárvári, 2025). Changing the unsustainable logic of the global economy (Nassar et al. 2024), including the fashion industry, is one of the most important challenges of our time. The constantly and rapidly changing climate and the tensions arising from growing inequalities make the responsibility of all economic actors clear. There were also high expectations that COVID would bring positive change on sustainability issues, but recent research shows that while there are temporary and partial results, no significant change has been achieved (Erdeiné Késmárki-Gally, & Kiss 2022; Varga & Csiszárik-Kocsir, 2024a, 2024b). The practical implementation of a concept of sustainability that is essentially macro-level and initially mainly linked to the environment requires interventions and conscious actions at both micro and meso levels, as the actions and impacts of actors are far from independent and determine each other's potential (Szeberényi, 2021, Borzán, & Szekeres 2023). Nevertheless, the responsibilities of the different levels and actors are typically treated separately (Körtvési, 2021). Thus, the theory and practice of Corporate Social Responsibility (CSR) (Carroll, 2008), later Environmental, Social and Governance (ESG) approach (Hardyment, 2024) and the concept of corporate greening (Harangozó, 2008; Dombi et al, 2025) on the corporate side and the expectation of conscious and responsible consumption on the consumer side (Csutora et al., 2022) have been formulated. The fashion industry is one of the most important industries with a long supply chain, which, in addition to its complexity, is also one of the most polluting industries in the world with the fourth largest negative impact on the environment and climate change in the global life cycle, and the third largest negative impact on water and land use. According to the EU Strategy for a Sustainable and Circular Textile Industry (COM (2022)141), global textile production almost doubled between 2000 and 2015 and is expected to grow at a similar rate by 2030. In the EU, the use of textile products (largely imported) currently has on average, while around 5.8 million tonnes of textiles are discarded each year, or around 11 kg per person, and globally, one truckload of textiles is dumped or incinerated every second (EURATEX, 2020).

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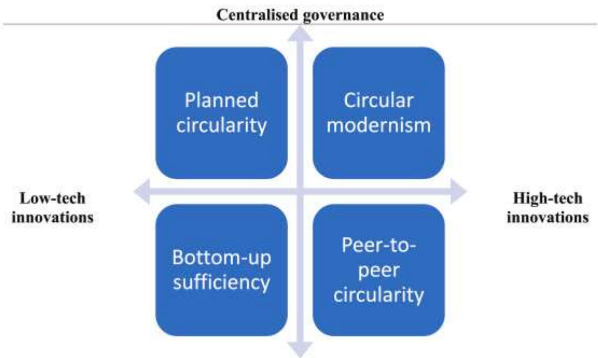
Circular models in the fashion industry

According to Jia et al (2020), much of the research focuses on the link between environmental sustainability and the circular economy, to the detriment of social sustainability (Szeberényi et al., 2024; Vágány – Erdei Késmárki-Gally, 2024). This is important because, in addition to environmental pressures, the fashion industry is associated with a number of social problems, such as child and forced labour (Bailey et al., 2022). Moreover, social concerns are linked to consumer's attitudes towards sustainability. Niero et al. (2017) also emphasise environmental issues in relation to eco-efficient circular models but also point to the importance of social determinants and consumer behaviour. Molina and Pascua (2022) also focus on the environmental impact but point to the role of consumers in ensuring that products are used as much as possible before being returned to the production cycle or even passed on to other consumers. Based on interviews conducted with owners and managers of sustainable fashion SMEs, the authors concluded that although sustainability, CSR, and business ethics are intertwined and often interpreted as synonyms, circularity does not feature prominently (Szegedi et al. 2023).
Among other things, a shift to a circular economy can address these environmental and social dilemmas and thus offer a great opportunity to achieve sustainability goals in this area. Much of the contemporary literature on the circular economy presents the transition as a simple, neutral process, implicitly characterised by techno-optimism and eco-modernism. Therefore, most research on the circular economy focuses on the practical and technical level, looking at the material and energy flows of production-consumption systems. However, the underlying worldview assumptions are largely ignored (Lowe & Genovese, 2022), and some of the professional disagreements on circularity have been attributed to the fact that the generic term circularity has been used to mean whatever all actors wanted it to mean. A positive example of attempts at definition is the research by Bowens et al. (2020), which develops four scenarios for the future of the circular economy along two dimensions. One of the dimensions examined is the degree of technical innovation and the other is the question of centralisation, on the basis of which four visions of the future were formulated (Figure 1).

Figure 1: Circular visions



Source: own ed. based on Bowens et al (2020)

1. In the vision of the '*planned circularity*', the transition is centrally managed by the government with strong coercive measures (taxes, bans, mandatory repair), which can affect producers, consumers, the whole supply chain and state actors.
2. The vision of '*circular modernism*' focuses on technological innovation and market forces, and is characterised by the decoupling of resource use and carbon emissions from human development. In this scenario, the circular transition is compatible with the

concept of "green growth", does not question the focus on growth and the capitalist model. Basically, this approach is about corporate innovation and its impact.

3. The vision of "*bottom-up sufficiency*" focuses on small-scale, local circular solutions, based on individual consumer, life choices, possibly with the second hand clothing shop as a company as an intermediary.
4. The vision of a 'peer to peer circularity' is characterised by a focus on technologies that enable collaboration, such as the emergence of internet platforms

In addition to its important sustainability aspects, the fashion industry also has an important social interest and appeal to young people, so circular visions can have a greater impact in this area. Furthermore, innovative, sustainability-focused business models and practices in the sector tend to be implemented by micro and small enterprises with higher probability (Edőcsény & Harangozó, 2021, Győri et al, 2025), thus adding further benefits for the society.

At the same time, besides the positive environmental and social outcomes, Matthews and Hodges (2015) have some concerns, based on their own research and the limited amount of previous research on similar topics. They investigated the perspective of consumer motivations and behaviour, and argue that consumers participate in such programmes primarily for self-interest, to get rid of useless clothes and to acquire new, unique, even branded clothes, and even hedonic motivations, such as meeting, eating and drinking with other participants, also appear. Interestingly, the environmental dimension hardly ever appeared among the people they interviewed.

After these experiences and expectations, we should realize that in the present, the four basic types of circularity coexist, build on each other and are interconnected. This will be illustrated by a few examples from Hungary.

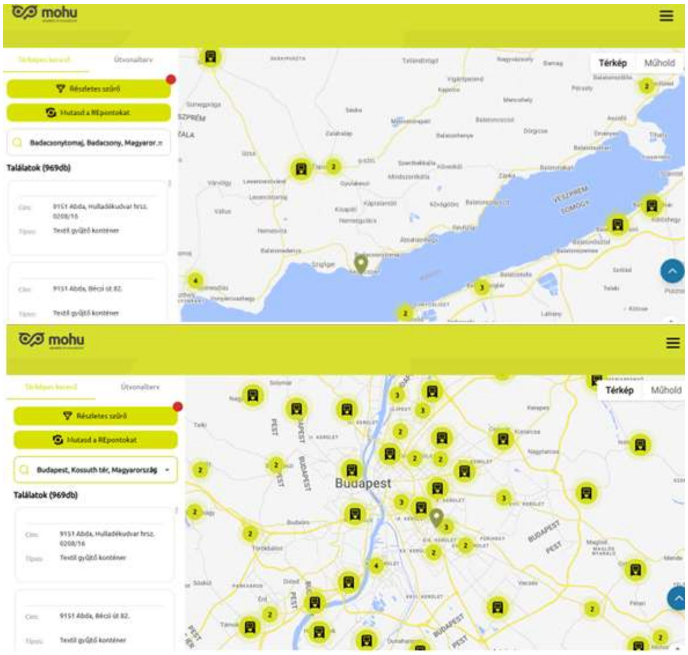
Planned cycles in the fashion industry

According to the amendment of the European Union Waste Framework Directive (Directive 2008/98/EC, Directive 2018/851/EU), Member States have to set up a separate collection system for textile materials by 1 January 2025. From 1 April 2024, waste management in Budapest and the agglomeration is carried out by MOHU BUDAPEST Zrt. According to their website, thousands of textile collection containers are available nationwide, which MOHU has installed in waste yards, at retail outlets (e.g. Tesco, Metro), schools and public areas. These new tamper-proof containers can collect 150-250 kilograms of textiles. Browsing through their map search (https://mohu.hu/hu/terkepes-kereso), the problem is that while there are many selective containers in the central districts of Budapest (especially on the Pest side), there are none at Lake Balaton, for example, between Keszthely and Balatonfüred and a lot of other territories of Hungary (photo 1).

According to the company's website, the collected textiles are sent to a sorting centre, where they are first sorted into two main categories to determine whether they can be reused as clothing or machine cloth, or recycled as textile raw material. In the case of reusable clothing, a multi-stage sorting process decides which further categories the material can be placed in according to the type of use (e.g. jacket or shirt) and quality condition - a total of 400 categories are distinguished by the end of the process. The best-rated products are then sold in European second-hand shops. The amount of work that goes into the sorting process every day is illustrated by the fact that, on average, 1 person decides on the fate of 2-3 tonnes of clothes a day. All other textile or clothing waste that cannot be classified in the wearable categories can be recycled for energy recovery.

The legislation outlined here will primarily affect waste managers and consumers, but other elements of the strategy, such as the plan to marginalise fast fashion, will also have a significant impact on producers and traders.

Photo 1: textile collection containers according to the MOHU map search



Circular modernism

Market mechanisms can support the collection and recycling of textile waste, in addition to central requirements in legislation.

In Hungary, several companies are also engaged in sorting and recycling textile waste, such as Textrade Ltd. (Székesfehérvár), Temaforg Ltd. (Kunszentmiklós) and Tesa Ltd. (Mohács). Their activities are characterised by the procurement of textile waste (not necessarily from within Hungary), sorting, sale and recycling. Clothes suitable for reuse are returned to the cycle in a variety of forms, while others are used as machine cloth. In the textile recycling activity Textrade Ltd produces and sells wool, acrylic, cotton, wool-synthetic elementary fibre decomposable materials in bales of 400-500 kg. Temaforg Ltd. produces felt, upholstery and side upholstery materials for upholstered furniture from 100% recycled fibre. Tesa Ltd. produces, among other things, carpet base material for carpets and treading material for horse tracks. The use of this additive, according to the company, results in a more flexible, uniform, well-structured soil, absorbs moisture in case of high rainfall, requires less watering in case of drought due to the stored moisture, prevents dust formation, reduces the need for track maintenance - the track can be ridden earlier in spring and longer in autumn. This additive has been used in the construction of over 400 racecourses. The growing relevance of circular economic models across sectors highlights the importance of integrating material reuse and waste reduction strategies into broader sustainability frameworks (Macher, 2022a).

Bottom-up sufficiency

This vision is characterised by a personal approach and the search for individual solutions, which can be summarised as clothing swaps, clothing repair workshops organised for environmental or social purposes by members of the local community, friendship groups, schools or NGOs. There are many different types, the organisation always adapts to the possibilities and expectations of the community. At the Budapest Metropolitan University, it has become a tradition to organise a costume swap every semester, which is accompanied by creative workshops. In the ÖKOSIKK event (photo 2), green NGOs and three restaurants launched the wardrobe exchange in the autumn of 2019 in the small town in the county's capital. People can bring up to 10 pieces of summer, temporary clothing per person. These can be women's, men's and children's clothes in perfect condition. The clothes can be exchanged or consumed, even for a cup of coffee, which can also be exchanged for clothes at the wardrobe exchange. For the sake of controllability, the gesture of purchase is kept, only the money is excluded from the circulation. Another way to show your appreciation is to give a cap for every piece of clothing you bring to the Ecoshop, as a "payment" for a new item. Typically, a clothing exchange is organised every season, and over the years, more catering establishments have joined in.

Photo 2: ÖKOSIKK in Győr

Source: ÖKOSIKK in the city centre Facebook page

Sometimes the new arrivals can't even unload their clothes, someone has already taken them from their hands. Community donations are used to get hangers, more people come to help with unloading and sorting. There is an extremely diverse range of participants, from local pensioners, large families, passing guests and holiday homeowners. There are also return visitors every year. Participants are usually ladies, often with family or friends. These kinds of grassroots initiatives reflect the increasing societal engagement in sustainability and demonstrate how local-level actions can contribute meaningfully to systemic transitions (Macher, 2022b)
This vision also includes donation bots, second-hand shops and market stalls. These connect surplus fashion items with environmentally or socially deprived or "treasure-hunting" consumer groups, usually at very reduced prices.

A peer-to-peer circularity
The exchange described in the previous point has both the advantage and the limitation of being local, only those physically present can participate. Therefore, physical exchange venues are becoming increasingly virtual. For example, in addition to the Háda shops selling useful clothes, there is now an online webshop, too. There are also online platforms where the seller and the buyer meet directly (e.g. Vinted) and solutions where the platform acts as an intermediary (e.g. Remix). The former gives the seller more room for manoeuvre but requires attention, while the latter places almost all the burden and risk (with a significant part of the profit as well) on the platform. Dekhili et al. (2025) also point out the downsides of Vinted and similar platforms: because of the low prices, they don't replace existing demand, they create new demand, moreover shipping and returning of packages add to the environmental impact. Furthermore, Vinted can also lead to

psychological addiction, as many people browse the vast number of available ads without any real purpose, often spending several hours a day doing so.

On the other hand, online craft marketplaces (e.g. Meska) are increasingly featuring more and more makers with "zero waste" products. Examples include unique jewellery designed from coffee capsules, used cutlery or plastic bottles.

Traditional online stores are often linked to Facebook groups, which provide a secondary market for the (recycled) products purchased. Here, this is illustrated by the example of double-layered flat skirts, made of recycled saris, which are marketed as socially and environmentally responsible products. India has a population approaching one and a half billion. Millions of women there wear saris as everyday wear and tons of textiles, often in perfectly good condition, end up in landfills. The sari skirts are made from such carefully selected, second-hand Indian saris. The skirts are made by Indian seamstresses, providing them with employment and a livelihood. Each skirt is unique and varies greatly in fabric and pattern, so buying them live from an online store (e.g. saarika.hu or hatka.hu) may not be to the customer's liking, in which case they are often sold in related Facebook groups instead of being returned. Sometimes the customer likes one side of the skirt but not the other, so the need to dismantle the skirt and pair it with a more harmonious skirt quickly arises. The name of this group became 'Frankenskirt', a combination of the words Frankenstein and skirt. The motivation for participation in such groups is interesting. In addition to cultural and sustainability community-building considerations, there is a strong business spirit, and a significant secondary (or tertiary) market for skirts is developing, where a group of “grey traders” seeking to evade taxes is also appearing. At the same time, it is clear that local communities play a decisive role in the entrepreneurial ecosystem (Kolnhoffer et al. 2024).

If we look at the direct environmental impact of these solutions, it quickly becomes apparent that skirts that travel thousands of kilometres are unlikely to be a meaningful solution to the waste problem. However, they can help the non-violent transition to slow fashion, they can bring into fashion that there is life beyond fast fashion, that individuality and creativity can play a significant role in fashion as opposed to uniformity. Skirts are personalised and given a name, thus expressing their uniqueness and value (photo 3).

Photo 3: Saari skirt from hatka.hu webshop

Shoppers will often spend several times the price of a fast fashion store on a second-hand, but unique skirt.

Participatory research

Our initiative and its background, described in detail in a previous article (Szigeti et al. 2022), is briefly summarised and updated here.

Participatory research is an important methodological approach that actively involves community members or stakeholders throughout the research process, rather than simply treating them as research subjects (Duea et al., 2022). This collaboration increases the relevance and applicability of research findings, as they are based on real experiences and community needs (Guillemot et al., 2023; Mthembu et al., 2023). By incorporating different perspectives, participatory research can lead to more effective interventions and solutions based on local knowledge and priorities (Mthembu et al., 2023). This is recognized as a key process for improving the identification, translation, and real-world application of research priorities, which has the potential to reduce inequalities (Han et al., 2021).

In addition, participatory approaches promote community empowerment by giving voice to those affected by the research and allowing them to take responsibility for the results (Vlegel-Brouwer et al., 2023). This methodology promotes mutual learning and respect, valuing participants' experiences as legitimate forms of knowledge that influence practice (Emke et al., 2024). Such engagement improves the quality of research at all stages, from defining relevant questions to developing methods that encourage participation and retention (Barar & Jayaweera, 2025). Ultimately, it can facilitate social change and contribute to solving complex sustainability problems by promoting collective knowledge production and empowering marginalized communities (Millar et al., 2024; Tribaldos et al., 2020). This approach is becoming increasingly popular, with some institutions requiring stakeholder involvement as a condition for funding (Duea et al., 2022). Interest in collaboration in the research process is also growing among patients and the public (Duea et al., 2022). This is especially true for individuals with personal experience, such as patients and caregivers, who have invaluable insight into the conditions being studied (Rojas-Rozo et al., 2024).

For the first time, we organised a clothes exchange - as a circular event - in Balatonakarattya in the summer of 2020, in collaboration with some friends, to raise awareness on Overshoot Day. In the summers of 2021 and 2022, we organised four exchanges, not only of clothes, but also of trinkets and books. The events continued in the same way in 2023 and 2024. We usually organise them on Saturday mornings, in several places at once, in the gardens of private houses. Some of the participants are also involved in the organization. Some offer unnecessary hangers and clothes racks. Others copy flyers or help with packing and displaying clothes. A significant proportion of those participating in the clothing swap are women, with men mainly attending as companions. The majority of the clothing is women's and children's clothing.

The main reason for organising clothing swaps is that there is no clothing shop in the municipality, so any clothing you need can be obtained from another municipality or ordered online. There is neither a container for collecting clothes in the municipality, so there is no separate collection of good quality textile waste. Unfortunately, the obligation to collect textile waste separately did not help the situation, as there are no separate containers for textile collection near Balatonakarattya. Although the basic idea came from the Ökosikk event in Győr, businesses are not participating in the exchange here. As no businesses are participating in the Balatonakarattya exchange, the rules hade to be changed. Only 5 pieces can be brought and taken by the interested person. With this quantity limit we want to prevent that we accumulate a large amount of stock. If you don't find the clothes you like, we will give you "local money" to use at another location or at the next swap. We have strict quality criteria here too: we ask that everyone brings clothes that are clean, unblemished and ready to wear. Thus, these events are emphatically not for the purpose of scrapping, but to provide an opportunity for a quality exchange, to contribute to community building, to get to know each other and to make new friends. We advertise the events in social media, in municipal and thematic groups and interested people can also find out about them in VEOL's news (news portal of Veszprém County) from Balatonakarattya. We think it is important to keep the programmes fun and family-friendly, so we do not encourage people to come from far away. Occasionally, 20-60 people turn up at a venue, which means that at least 100 items of clothing change hands. The opening set of the exchanges are the leftover clothes from the previous exchange, these will be kept and the next time this opening set will be the first to arrive. At the end of the summer season, we sort through the leftovers and offer most of them for free via social media, with a smaller portion waiting for next summer's swap. The opening stock is exchanged

very quickly on a one-off basis. Often we even receive clothes with store labels that have never been worn.
We asked 69 participants when they consider an exchange to be successful. We processed the answers using the word cloud method. The Figure 2. shows that this is much more of a community experience than a conscious action related to sustainability.

Figure 2. As an organizer, when would you consider an exchange to be successful?

Respondents said that Covid had caused them to shift toward online shopping, delivery, and avoiding crowds, which is not conducive to circular solutions (Figure 3.)

Figure 3. Have consumer habits changed due to COVID?

Conclusion

As can be seen from the examples presented, all four circular visions can be found in Hungary, but they are not really connected within or between the different types. There are corporate and consumer initiatives, each with advantages and disadvantages, but the biggest problem is that they operate in virtual isolation. This means that they cannot build on each other or learn from each other's mistakes.
In line with the literature, we also found individual motivations alongside a commitment to sustainability, which manifest themselves as profit motives in the case of businesses and as a search for personal benefit in the case of individuals. This is not a problem; it may even be the most effective incentive, as we consider environmental, social, and self-interest motives at the same time.

For consumers participating in clothing swaps, such events are more of a community experience and less of a conscious sustainability action.
Further research is needed to identify possible links between programs at different levels, as well as stakeholders who could achieve these links in practice.

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Directive 2018/851/EC of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste

An EU strategy for a sustainable and circular textiles industry (COM (2022)141)

European Union Waste Framework Directive (Directive 2008/98/EC)

KÖNYVSZEMLE / BOOK REVIEWS

Dóra Szendi [17]

Pelser, A. M. – Nagy, Sz. – Thondlana, J. – Oosthuizen, I. J. (eds.) (2023): *The necessities for Talent & Skills Enhancement in the workplace.* Global Innovative Forefront Talent Management (GIFT) Research and publications book series (vol.3).
Axiom Academic Publishers, Potchefstroom, South Africa. ISBN: 978-1-991239-21-1

https://doi.org/10.32976/stratfuz.2025.40

In the rapidly changing organizational world, the necessity for innovations in the human resource management has a high priority. The book tries to summarize empirical and practical studies to help enterprises to optimise their human capitals. One of the significant factors is talent management, which has significant importance in this book. This recent book is an international collaboration of many authors (all together 21) to present the recent processes in this field. It is a niche scientific work, which gives an overview of talent management and the role of soft factors in HRM.
The book has a sum of 359 pages, from which – not considering literature and the introduction of authors and editors – the 11 chapters cover 281 pages. After a brief introduction, we get insights into the factors of successful enterprises from the side of the human resources.
In Chapter 1, Johannes L van der Walt, deals with the question how neoliberal work environment affects the workers of the Global South. It starts from the history of the two colonization waves and applies the method of interpretivism-constructivism for analysing the topic. The interpretivism part gathers information regarding the two waves of colonialism with special regards on potential impacts, while constructivist part is dedicated for solutions for the described problem. The chapter argues that the first wave of colonisation (which began in the 1490s and lasted up to the middle of the 1960s) was characterized by colonial mercantilism. The second wave on the contrary, started from the 1940s with neoliberalism and free-market issues, was affected with some world economic problems (like collapse of the Bretton-Woods system, or the Soviet Union), and globalization played on important role in spreading capital and trade globally. It affected the workers of the Global South as actors of a new consumer market, and results anxiety among workers. The author describes after that the traditional elements of the life in the Global South, like the workers as members of collectives, where the needs of the worker group and the business come first, often ahead of the interests of the individual worker. The impacts of globalization and neoliberal turn have resulted a change in it, the author list some problems like environmental problems, social tensions or violence, where the traditional values are vulnerable. The transnational corporations are distributing business mindset also to the Global South and the "individualistic and self-centric moral approach" can be detrimental for the workers of that area. The chapter ends with some possible solutions, like the cooperative ethical orientation of the working environment, collective responsibility and trust, or creating training seminars, with a deeper understanding of how a neoliberal work environment works.
The authors of chapter 2 (Kezell Klinck, Reneilwe Sechoaro, Deborah Mokgojwa, Ajhan Laloo) examine the relationship between meaningful work, talent management, and turnover intentions, as they see highly skilled workers bring significant value to any company. They have formulated a conceptual framework model, which describes the relationship among the factors analysed. First, the theory of talent management, and the circle of it is introduced, describing the phases of recruitment, coaching and mentoring, talent retention, and employee engagement. They suppose

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that organizations that invest in their employees' development can reduce turnover intentions. Then we go further with linking meaningfulness, occupational talent management and turnover intentions into a complex model, checking the relations of the given factors in the form of four independent hypothesis. These deal with the positive link of autonomy, co-worker and supervisor support to meaningfulness, which after minimises turnover intention. To test the hypotheses, a quantitative research methodology was applied with a large sample size (300 employees), and a questionnaire. The results underly that there is a positive correlation between meaningfulness, autonomy, co-worker and supervisor support, and meaningful work minimises turnover intention. However talent management influences the meaningfulness, so the empirical study went beyond the hypothesis. The chapter ends with recommendations from the authors like how to recruit talented workers, what is the role of boss's management, or how to develop hidden talent.
The third chapter (authored by Izak J Oosthuizen, Johannes L van der Walt) starts from the assumption that to a successful business, besides talented workforce there is a need for integrity as a core value. The authors cited the Global Integrity Report of 2022 and stated that lack of integrity has negative consequences for workforce morale. The objectives of the chapter besides explaining how the lack of integrity affects the working environment is that how can be promoted integrity in the business. Most simple they define integrity as the quality to be honest and having strong moral principles which can be further developed by other characters like exemplary behaviour, or wholeness and coherence. The authors argue that integrity can be developed by the organizations by several ways, like building trust, communicating and educating the need for integrity, creating corporate agendas and directives, or applying a strong top-down perspective in leadership, or checking the role of both integrity promoters and whistle-blowers in the organization. This all can lead to increased business success in the long term.
The fourth chapter (Charlotte Jonasson, Emma Nordbäck, Jakob Lauring) analyses the role of digital learning and Artificial Intelligence and starts from the finding that the analysis of talent management in remote working environment has some limitations, and the studies for this topic are rare. That is why they have planned to examine digital learning including the use of artificial intelligence to promote talent management practices in remote work settings. Besides the desk research method (collecting bibliographic data), ten semi-structured interviews were conducted with employees in multinational companies. The authors emphasize that diverse talent management can be a challenge for the organizations, as all employees have unique values and capabilities, however the managers should differentiate their talent management focus to enhance it further. Another challenge is arising from the transformation of work environment with the improvement of digital technologies or the COVID-19 effects, as here the interpersonal communication becomes harder, however enhances collaboration. A further task is coming from digital learning together with the usage of artificial intelligence with many advantages and risks. The authors found from the interviews that many factors contribute to the challenges of talent management such as culture-related issues, harder communication by remote work, or the possible positive effects of AI on talent management. Besides the talent management the chapter is also focused on the risks and positive effects of remote work (like isolation or harder information sharing, but broader talent pool).
The fifth part of the research (by Nicola Walters, Lerato E Mdaka) deals with the workplace wellness initiatives, as some research noted that South African employees are only engaged in their work at a level of 15%. A survey gives the basis of the analysis to find out, whether employee engagement goes hand in hand with workplace wellness. They see the role of workplace wellness initiatives more than just disease prevention but also as a tool for employee engagement. In the hypothesis they examine whether the yearly utilization of workplace wellness initiatives has an effect onto the workplace engagement. The chapter defines workplace wellness and employee engagement, while also describe the occupational stress situation in South Africa, which is one of the starting points of the research. The authors applied quantitative research methods (statistical tests), and questionnaire in gathering information for the population of South Africa with a sample size of 170 employees. The Utrecht Work Engagement Scale (UWES) was adapted to measure

employee engagement. By testing the workplace wellness initiatives on employee engagement, two group of respondents were compared (who had, and who don't have such initiatives at their workplaces), while by the yearly acceptance also other clusters were defined (ranked by the frequent use of initiatives).

Starting from the finding that nowadays' leaders are facing increased stress levels because of the uncertainty and complex nature of work environment, the study of chapter 6 (by Johan Slabbert) explores the role of transpersonal coaching in managing work-related stress and increase well-being of managers. This latter method is adequate for increasing emotional resilience of the managers. The author focuses on the influence of it on leadership behaviour and stress-coping mechanism with many quantitative and qualitative methods. The study was conducted among eleven participants with varied leadership levels and demographics. Together six different tests were applied besides open-ended questions. The author describes the cycle of transgenerational trauma and the socioeconomic environment of South Africa, which gives the background of the research. The research highlights the main phases in the evolution of leadership theories and styles. The study also discusses the broader implications and holistic impacts of transpersonal coaching in leadership and organisational contexts (e.g. shift towards Authentic Servant Leadership), while it also summarizes the contributions to the research field (e.g. novelty, mixed model analysis).

The seventh chapter is a collaboration of five authors (Marian Opoku Appiah, Marian Opoku Appiah, Charles Owusu-Antwi, Christopher Sam, Dadson Awunyo-Vitor). It starts from the statement that the small and medium-sized enterprises are contributing to the economic development in a significant extent by both the developed and developing economies. In their performance the role of employees is high, which should be managed wisely. The applied literature for examining the work-life balance and related activities was the spillover theory, which emphasizes that some experiences are spreading from work to non-work activities. The authors build a framework for the relationship of work-life balance, employee commitment and engagement, and formulate the research along it. Through the analysis besides a questionnaire among the employees of SMEs, also statistical tests were carried out, while for hypothesis test the authors applied different regression models. The study supports the importance of managing work-life balance for enhancing employee commitment.

The employee performance has significant contribution to the effectivity and productivity of the enterprises (states Ntebogang Dinah Moroke in chapter 8), and from this point of view talent management and strategic decision making is critical for them. That is why the study focuses on the link between turnover and employee performance. The research question was analysed by a complex literature review (human capital, social exchange, job embeddedness theories, talent and succession planning) and builds e.g. a framework for work-life balance and employee performance, and a conceptual map based on the interconnections of the above theories indicating also the feedback loops. The chapter identifies factors influencing turnover and performance, aiming to provide insights for effective talent retention strategies (e.g. internal interactions, investing to staff development, maintaining strategies).

As AI (artificial intelligence) is transforming the business, also leadership should adapt these challenges with new skills and capabilities. The ninth chapter by Alexander Samuels, examines what critical competencies are required to adapt the situation, and the transformation strategies. The author emphasizes the advantages of AI adoption in the business, like increased productivity, decision making support, however, highlights also the possible negative consequences for labour market or ethical considerations. The AI is significant also in the different leadership models to foster innovation and economic growth and parallel with it facilitate wise decision-making. The literature review checks leadership theories and analyses which can work as best in the face of AI, and this desk analysis gives the main research method of the chapter.

The corruption (and besides that the lack of ethical and moral sensitivity) is a common and widespread problem in the business of South Africa, based on the authors (Izak J Oosthuizen, Johannes L van der Walt), and the tenth chapter investigates how it can be decreased with the example of the Code of Conduct. The chapter describes the situation in South Africa starting from the age of Apartheid until nowadays, while also highlighting the possible impact of it on the employees. The authors present the main differences and characteristics of ethics and morality, classifying the main approaches of ethical principles (consequentialism, utilitarianism, casuistic approach, situation ethics, pragmatism, teleology). It emphasizes that a balance between individual and group interests is necessary for moral stability. The main suggestions of the chapter are about the code of conduct which are obligations, procedures, rules and regulations guiding the worker on how to act.

Because of the rapid economic growth and the scarcity of high-skilled workforce, the chapter 11 analyses how to retain the talented people in the labour market of Saudi Arabia. The authors (Abdulaziz Ahmadani, Sanlie Middelberg) stress the role of talent management in globalization and introduces the definition of talent and high-potential employees. In Saudi Arabia the situation is different, as here besides salary and work-life balance, also work conditions and organisational culture are influencing factors in talent retention. In the latter also the role of leadership method is further focused. By questionnaire and deep-interview analysis in an automotive industry enterprise, the authors have developed a framework model for talent retention by five factors. The key factors include among others the influence of direct managers, organizational culture, and career growth opportunities.

The book aims to provide a comprehensive insight into the talent and skill management and improvement challenges by the enterprises. It describes the challenges of the Global South from labour market point of view. The theoretical and practical usefulness of the book is unquestionable. For easier understanding and transparency, the book uses the representation of the relevant literature and creates framework models by self-edited figures, and tables, which gives good overview of the topic. It contains important scientific findings for specialists dealing with human resources. I would recommend it to anyone with an interest in talent management who would like to get further insights into the main character of the Global South's labour market.

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A szerkesztőség kéri a szerzőket, vegyék figyelembe a formai megjelenésre vonatkozó alábbi szempontokat:

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Péteri, G. (1991). Az önkormányzatok és oktatási intézményeinek viszonya, finanszírozási kérdések. In: T. Kozma (Szerk.), *Önkormányzat és iskola* (pp. 122-154). Budapest: Oktatáskutató Intézet.

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