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Management and public policies of the current era

Today's era is characterized by unprecedented dynamics driven by globalization, digitalization, climate change and numerous socio-economic challenges. In this context, public management and public policies must adapt to a complex environment, be flexible and responsive to citizens' needs.

We consider six aspects of the evolution of public management and public policies in the current era:

- *Digitalization and technological innovation*

Technological transformations are profoundly influencing society and the economy, offering innovative solutions in public administration. Digital government is redefining the relationship between state and citizen through online platforms that facilitate access to public services such as e-government portals and integrated databases. Artificial intelligence and data analytics enable the identification of social problems and personalized solutions based on the use of big data. Transparency and accessibility are enhanced through systems that provide citizens with quick access to public information and their involvement in decision-making.

- *Sustainable development and environmental protection*

Environmental issues have become global priorities, leading to the development of public policies focused on: reducing carbon emissions and promoting the transition to a green economy, efficient management of natural resources with a focus on sustainability, implementation of the smart cities concept, which combines technology with sustainable measures to improve the quality of urban life.

- *Social inclusion and equity*

A just society depends on policies that promote equality and reduce inequalities. Active social programs provide support for education, health and the fight against poverty. Diversity and equality are supported through measures that encourage the participation of marginalized groups. Citizen participation becomes a central pillar, actively involving communities in public decisions.

- *The challenges of globalization*

In an interconnected world, global challenges require coordinated responses. Managing crises, from pandemics and migration to economic instability, requires international cooperation. Cross-border policies, such as those implemented at EU level, address common problems through regional collaboration.

- *Accountability and ethics in administration*

Effective public management depends on integrity and transparency. Anti-corruption mechanisms ensure accountability in the management of public resources. Ethical leadership requires decision-making based on sound moral principles. Performance evaluation monitors the effectiveness and impact of public policies.

- *Continuing education and training*

To meet today's challenges, public professionals need to constantly develop their skills. Continuing education and interdisciplinary collaboration become essential to adapt to rapid change.

Contemporary public policies and management must combine technology with sustainability, be oriented towards social equity and respond effectively to global challenges. The success of these initiatives depends on cooperation between governments, the private sector and civil society, thus ensuring sustainable and inclusive development.

Prof. Ph.D. Paul Marinescu

The Evolution of Multi-Pillar Pension Systems: Balancing Between Necessity, Opportunity and Complexity

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Abstract: *The evolution of Romania's pension system has followed a complex and often inconsistent legislative path, beginning with two unimplemented laws, and later progressing to the introduction of a multi-pillar system. Initially accompanied by optimism, the momentum behind pension reform soon faded, resulting in significant delays in implementing crucial regulations, such as the law on the guarantee fund. It was not until 2020 that substantial progress was made with the introduction of laws on occupational pension funds and the pan-European personal pension product (PEPP). This paper aims to assess the impact of Romania's evolving legislative framework, including secondary regulations, on the private pension market. Additionally, the paper examines the broader transformations and challenges facing the Romanian pension system, focusing on demographic shifts, socio-economic factors, and policy decisions that have shaped its current state. Key issues such as early retirement, the inclusion of low-contributory groups, and*

untaxed activities are analysed alongside the supply side of the market, including public, mandatory, and voluntary pensions, as well as occupational schemes. The implications of PEPP and strategies for financing the transition to a more sustainable system are also explored. By addressing these critical aspects, the paper provides a comprehensive analysis of Romania's pension system and suggests actionable steps for improving its long-term sustainability and efficiency.

Key words: multi-pillar pension system, public policy, social contributions, pan-European personal pension product, adjustment policies, legislation and private pensions, guarantee fund.
JEL Classification: G23, G28

Introduction. Legislative Foundations for the Introduction of the Multi-Pillar Pension System

The introduction of the multi-pillar pension system in Romania was marked by numerous preliminary legislative attempts that struggled to establish a coherent framework for private pensions. One of the earliest initiatives was the 1999 (Government of Romania, 1999) draft law on universal pension funds, which aimed to expand the domestic financial market. However, the novelty of the field and the limited expertise of decision-makers led to complications. The draft was sent to the Committee on Labour and Social Protection for further deliberation, with only an advisory opinion requested from the Budget and Finance Committee, complicating the legislative process due to divergent views between the committees.

The Isărescu Government, to overcome the deadlock, intervened in 2000 with an emergency ordinance to expedite the process, yet political changes and a shift in parliamentary priorities led to the repeal of this ordinance shortly thereafter. Following the shift in parliamentary majority after the legislative elections, Emergency Ordinance No. 230 of 24 November 2000, concerning the organization and operation of universal pension funds (Government of Romania, 2000), met a similar fate. It was repealed just a month later "in order to bring certain regulations adopted by Government ordinances and emergency ordinances into line with the Government Program accepted by Parliament at its sitting of 28 December 2000" (Government of Romania, 2000).

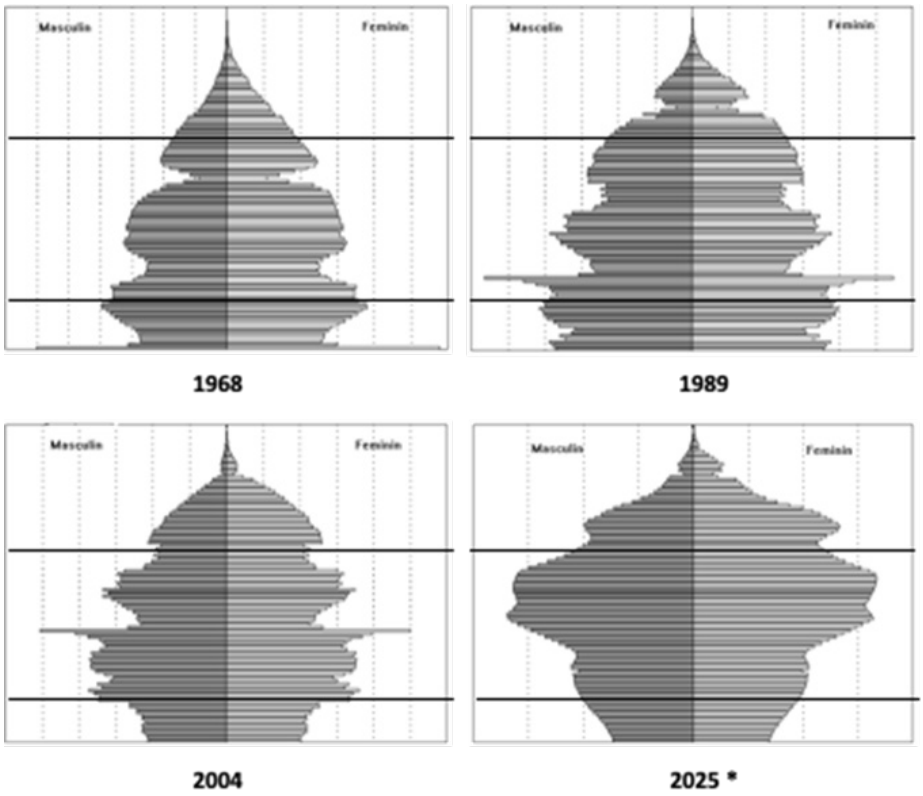
Despite these setbacks, many provisions from the initial legislative efforts reappeared in the 2004 law regulating privately administered pension funds (Parliament of Romania, 2004), which eventually formed the foundation for Pillar II of the pension system. Key elements included compulsory participation, temporary accommodation based on proximity to retirement age, institutional roles, investment policies, pension annuities, and regulatory oversight.

Nevertheless, early proposals for private pension contributions were notably higher than those in subsequent legislation, with contributions initially set at 10% of gross salary and management fees capped at 12%. The 2004 law on occupational pensions further illustrates the political challenges, with initial efforts to establish a supervisory framework being undermined by inconsistencies in regulatory design and political instability. The eventual repeal of this law in favour of new voluntary pension legislation highlights the difficulties in establishing a stable and sustainable private pension system (Parliament of Romania, 2005a).

1. Demographics and the Sustainability of the Public Pension System

The paradigm shift and challenges surrounding the sustainability of Romania's public pension system are deeply influenced by the country's evolving demographic trends. Romania is experiencing a significant decline in the younger population (under 20), a shrinking working-age population, and persistently low birth rates. These demographic changes have far-reaching consequences for the labour market, pension system, social services, and broader socio-economic structures, including family and community life.

Figure 1: Evolution of the age pyramid for Romania's population between 1968 and 2025 (for 2025, estimates)



Source: https://population.un.org/dataportal/home?df=39067d47-8f7a-47a5-b6a7-b58e3cf8a01d; https://insse.ro

The declining number of young people signals an aging population base, which could lead to a labour force shortage in the future. This trend is further exacerbated by low generational renewal rates. In a modern economy, this shrinking workforce could strain sectors that rely on youthful and dynamic labour. Moreover, the reduction in the working-age population (20-64 years) directly threatens the sustainability of the pension and social security systems. Fewer workers must support a growing number of retirees, increasing fiscal pressures on the state budget and potentially leading to deficits. Additionally, the aging population demands adaptations in healthcare and social services to meet the rising needs of elderly citizens.

To mitigate these demographic challenges, Romania must adopt proactive policies, including measures to boost birth rates, attract migrant workers to fill labour shortages, and implement reforms in the pension system. Investment in education and training is equally crucial to facilitate adaptation to these new realities. This paper examines these demographic shifts in detail and proposes solutions to ensure the long-term sustainability of Romania's socio-economic framework.

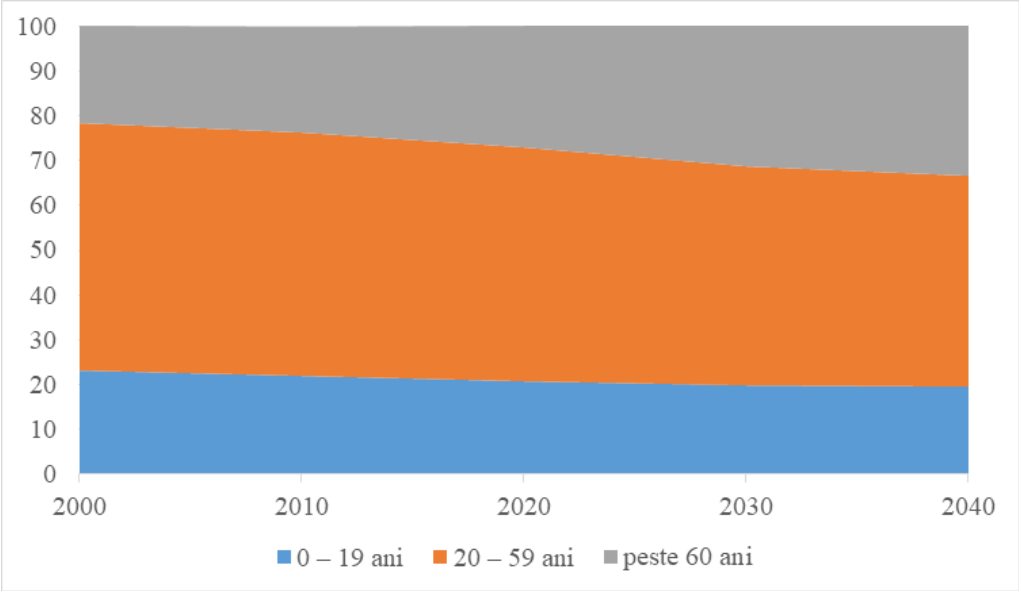
Table 1. Evolution of the age structure of the EU population (%)

Age period	2000	2010	2020	2030	2040
0 – 19	23.1	21.8	20.7	19.8	19,5
20 – 59	55.4	54.4	52.4	48.8	47.1
over 60	21.5	23.7	26.9	31.4	33.4

Source: Eurostat

At the European level, similar demographic patterns are emerging, with decreasing proportions of younger populations (0-19 and 20-59 years) and increasing numbers of individuals over 60. This phenomenon, driven by declining birth rates and rising life expectancy, is further complicated by the outward migration of young people seeking better economic opportunities, exacerbating demographic imbalances. The pressure on pension and welfare systems is growing, as the ratio of contributors to beneficiaries becomes increasingly unsustainable.

Figure 2: Share of age groups in EU population (%)



Source: Eurostat

Addressing these challenges requires comprehensive strategies, including family policies to boost birth rates, labour market reforms to increase participation and productivity, and adjustments to pension and health systems to ensure long-term sustainability. Public health campaigns promoting healthier lifestyles could also alleviate the burden of age-related diseases. At the European Union level, coordinated efforts are necessary to support member states in implementing effective reforms. Through collective action, Europe can ensure its social protection systems remain robust and adaptable to demographic and economic changes, securing a prosperous future for all.

2. The Fundamental Framework of Private Pension Legislation

Amidst the various challenges faced in establishing Romania's private pension system, consistent efforts by specialists and policymakers resulted in the adoption of key legislation during the 2004-2006 period. This legislation laid the foundation for the establishment, organization, and prudent supervision of private pension funds. The first significant step was the enactment of the law on privately managed pension funds (Parlamentul României, 2004). Although its title might be misleading, as it primarily focuses on universal pension funds (the mandatory Pillar II of the pension system), the law also introduces fundamental definitions and regulations for the broader private pension framework.

Key aspects of the law include provisions related to pension fund resources, management costs, participant rights, organizational structure, permitted investments, reporting obligations,

and transparency. It also addresses the roles and responsibilities of pension fund administrators, their authorization requirements, management contracts, conflict of interest regulations, and financial supervision mechanisms. Further sections cover the responsibilities of custodians and financial auditors, the marketing of pension funds, special supervision procedures, and the regulations governing private pensions and pension providers.

Subsequently, legislation was introduced to regulate the specific authority responsible for overseeing the private pension system (Government of Romania, 2005). This regulatory body, the Private Pension Supervisory Commission, was tasked with authorizing administrators, overseeing the system, and enforcing compliance. The commission was financed through fees for authorizations and approvals, as well as monthly operational fees, and had the authority to impose sanctions when necessary.

A year later, the Law on Voluntary Pensions was introduced (Parliament of Romania, 2006). This law, distinct from the legislation governing mandatory pensions, was primarily focused on voluntary pension funds (Pillar III), offering a more flexible regulatory framework. It expanded the range of entities that could act as pension administrators to include investment management companies and insurance firms. Additional provisions covered the authorization of voluntary pension schemes, participant contributions, fund transfers, and the valuation of participant accounts, among other key elements. Importantly, this law also reiterated the need for a Guarantee Fund, which would compensate participants in case of losses due to the inability of pension administrators or providers to fulfil their obligations.

However, despite the law's clear stipulations, the Guarantee Fund was not established until five years later, significantly delaying its protective role within the system. Similarly, the law concerning private pension payments remains in draft form over a decade after its initial proposal, leaving pension payments to be governed by fragmented and uncoordinated regulations.

In parallel, legislation covering occupational pensions (Parliament of Romania, 2020) (Parlamentul României, 2020) (often regarded as a variant of voluntary pensions) was also enacted. Although this law introduced specific regulations concerning the prospectus of occupational funds and cross-border activities, it received limited interest, with only a few entities applying for authorization. The claim that occupational pensions constitute a new pillar of the pension system has been met with scepticism, as many of its provisions could have been integrated into existing voluntary pension laws with minor adjustments.

Most recently, Romania adopted Law No. 65 of 27 March 2023, aligning national legislation with EU regulations concerning the pan-European personal pension product (PEPP) and sustainable investments. This marked another step towards harmonizing Romania's private pension system with broader European frameworks (Parliament of Romania, 2023). Over time, the private pension system has evolved through various amendments and regulatory updates, driven by practical experience, alignment with European Union law, and the emergence of new supervisory institutions, such as the Financial Supervisory Authority, which assumed the responsibilities of the former Private Pension Supervisory Commission.

The pioneering nature of Romania's primary legislation on private pension funds, coupled with the country's legislative tradition, necessitated the development of specific regulations

governing various aspects of the system's operation. For Pillar II, rules were initially established by the Specialized Supervisory Commission and later by the Financial Supervisory Authority (ASF). These regulations focused on the authorization of participating entities, covering areas such as the administrator's share capital, management structure approvals, prudential assessments of acquisitions, outsourcing of asset management, and the private pension scheme prospectus.

Additional regulations pertain to membership in private pension funds, record-keeping, contribution collection, and participant protection in cases of fund mergers, disability, death, or fund transfers. Prudential and transparency standards govern technical provisions, rates of return, advertising, and reporting obligations. Corporate governance measures, including internal control, audit, risk management, and the prevention of money laundering, are also established.

Similar regulations apply to Pillar III (voluntary pensions) and occupational pensions. However, these rules cannot compensate for deficiencies in primary legislation. In the absence of a comprehensive law on private pension payments, pension funds operate more like mutual funds, paying out accumulated contributions rather than life pensions. Payments from both compulsory (Pillar II) and voluntary (Pillar III) pensions are made either as a lump sum or in equal monthly instalments over a maximum of five years, with a minimum monthly payment of 500 lei, after deducting the administrator's fees.

3. The Need, Opportunity, and Complexity of the Pension Market

The World Bank introduced the concept of a three-pillar pension system in 1994, which has since gained international acceptance. Each of the three pillars serves distinct objectives, based on differing principles of contribution and benefit, and varies by its public or private nature as well as its optional or mandatory status. This diversity allows countries to create flexible pension systems tailored to their specific socio-economic circumstances and needs (von Gersdorff, 2004).

The first pillar is typically a mandatory, state-run public pension system, designed to provide basic financial security for retirees. It is funded primarily through payroll taxes from both employees and employers. This pillar ensures a minimum income level for pensioners and serves as the foundation of the pension system in many countries. The second pillar consists of mandatory or voluntary occupational pension schemes, often managed by private entities. These schemes supplement the public pension and are funded by contributions from both employers and employees. The third pillar comprises voluntary private pension plans, enabling individuals to save for their retirement through personalized and flexible investment options. This structure allows for a more robust retirement plan, providing additional financial security.

The configuration of a country's pension system depends on its social needs, financial capabilities, and policy priorities. For instance, countries with a strong social safety net may focus heavily on the first pillar, ensuring widespread coverage and basic retirement income. Conversely, nations with well-developed financial markets may emphasize the second and third pillars, leveraging private sector efficiency to encourage individual savings and investment.

Table 2. Multi-pillar pension market offer in Romania

Name	System	Obligatory	State / Private	Administrator / Supervisor	Law
Pillar 1	Public pension	Mandatory	State-administered	CNPP - National Public Pension House. The decision is taken by the Ministry of Labour and Social Protection Law No 263/2010	Law No 263/2010
Pillar II	Universal pensions	Mandatory	Privately administered	Autonomous administrative authority under the control of the Romanian Parliament	Law No 411/2004
Pillar III	Optional pensions	Optional	Privately administered	Financial Supervisory Authority (FSA) through the Private Pensions Sector	Law No 204/2006
Pillar IV	Occupational pensions	Optional	Privately administered	The initiative is of an entity that is authorised by the ASF	Law No 1/2020

Source: www.asfromania.ro; www.pensii.ro

The World Bank's three-pillar model provides a comprehensive framework to address various demographic and economic challenges. Countries are encouraged to adapt the system to their specific needs, creating a sustainable, equitable, and balanced pension system. In addition to these pillars, occupational pensions, often offered as employment benefits, can be mandatory or voluntary and provide further retirement support based on the employee's career and contributions. A recent European Union initiative, the Pan-European Personal Pension Product (PEPP), aims to create a personal pension product that can be used across EU Member States, promoting labor mobility and offering more retirement savings options.

Beyond these traditional pension systems, individuals can access various private pension-like products that contribute to their retirement savings. These include premium refund life insurance, which combines life insurance with a savings component, and annuities, which provide guaranteed regular income over a set period. Survivorship term insurance, pay-as-you-go savings accounts, and restricted withdrawal investment funds are other alternatives designed to promote long-term savings for retirement.

International practices in pension system management show considerable diversity in mechanisms, funding methods, and the relationship between contributions and benefits. Different countries adopt varying approaches, shaped by their socio-economic, political, and historical contexts. Common models include government-administered pay-as-you-go schemes focused on defined benefit or defined contribution plans, as seen in much of Europe and countries like

Table 3. General scheme of the multi-pillar pension system

Name	Pillar I	Pillar II	Pillar III	Pillar IV
Participation	Mandatory	Mandatory	Optional	Optional
Administration	Publishes	Publishes, private	Private	Private
Organization	PAYG	PAYG, funding	Funding	Funding
Purpose	Poverty avoidance, income redistribution	Savings imposed	Individual savings	Individual savings
Contribution-benefit ratio	Defined benefits	Defined benefits, defined contributions	Defined contributions	Defined contributions
Funding	Contributions, taxes	Contributions	Contributions	Contributions

Source: www.asfromania.ro; www.pensii.ro

Sweden and Italy. Some nations, such as Norway and the United States, operate government schemes based on current asset funding, while others, like France, rely on privately administered pay-as-you-go schemes with guaranteed benefits. Pre-funded accumulation schemes, such as those in Denmark, Poland, and some Latin American countries, are often supported by both private and governmental entities.

This diversity highlights the adaptability of pension systems to national contexts, reflecting the complexity of the global pension market. Regardless of the model employed, the success of a pension system hinges on its ability to strike a balance between the needs of society and available opportunities. Transparency, clear objectives, and a focus on economic resilience and the well-being of society (Aiginger & Guger, 2006) are essential for maintaining this balance. Policymakers play a vital role in ensuring that pension systems remain inclusive, fair, and sustainable, making informed, coordinated decisions to adapt to both demographic and economic changes.

4. Evolution and Trends in Pension Reform

The inefficiency of Romania's pension system has significantly impacted the standard of living for beneficiaries, as pensions have declined both in absolute terms (real value since 1989) and in relative terms (the ratio of the average pension to the average salary). While pension reforms share broad similarities across countries, the specific approaches and implementation strategies differ widely, shaped by national traditions, historical context, and the organization of social security systems.

Countries vary in their emphasis on universality versus need-based systems. Some prioritize universal coverage, while others tailor benefits based on income and individual needs. Funding sources also differ, with some pension systems relying on social contributions and others supported by the state budget. Additionally, the role of the private sector in providing social security services varies, with certain countries fostering public-private partnerships more actively than

others. These differences underscore how each nation adapts reforms to its socio-economic and political context, as well as societal values and expectations.

In Europe, pension reforms are aligned with common principles, such as Regulation 1408/71/EC, which coordinates social security rights, and Directive 98/49/EC, which safeguards supplementary pension rights for migrant workers. Romania has opted for a gradual reform process, beginning with financial regulations to reduce system imbalances. Successive governments have increased contributions to mitigate budget deficits and indexed pensions to preserve their real value. Non-contributory expenditures, such as certain social assistance benefits, have been transferred from the social security budget to local councils.

Global pension systems face significant challenges, including aging populations, financial sustainability, and labor market shifts. Recent pension reform trends include raising the retirement age to reflect longer life expectancy, encouraging private savings through tax incentives, and promoting participation in private pension schemes. Other key reforms include enhancing flexibility in benefit calculations, strengthening labor market activation policies, and adapting occupational pension schemes to fit a more mobile and dynamic workforce.

Transitioning to a mixed pension system is costly, often requiring countries to borrow funds to cover the transition from pay-as-you-go systems while meeting ongoing obligations to existing beneficiaries. This challenge is especially pronounced in Central and Eastern Europe, where governments face pressure to reduce social contribution rates, which are higher compared to other regions.

Conclusions

In conclusion, the legislative path of private pensions in Romania has been shaped by a combination of political uncertainty, lack of political will, and underprepared decision-makers. Periodic public declarations by officials from the Ministry of Finance regarding the potential nationalization of Pillar II pension funds have added to the challenges, creating a sense of instability in the field. Despite these difficulties, including significant delays and regulatory bottlenecks, the legislative framework for private pensions has developed, albeit through a winding process marked by setbacks. One notable legislative gap that remains unresolved is the law on the payment of private pensions, which would enable the system to offer life-long private pensions alongside public pensions.

This regulatory evolution has been heavily influenced by past financial crises, including bank failures and the investment fund collapse in the late 1990s, which resulted in over-regulation aimed at protecting the system. However, these regulations required subsequent adjustments and relaxations to align with market conditions, domestic legislation, and European Union directives. Today, the regulatory framework for private pensions is, by and large, capable of ensuring proper market functioning. However, the system remains vulnerable to political and regulatory risks, which could lead to reputational damage for pension funds. The persistence of such risks underlines the importance of continued vigilance in maintaining the stability and sustainability of the pension system.

At the European level, pension reforms have been integrated into broader strategies for coordinating national policies, particularly through initiatives such as the Lisbon Strategy. Under Article 104 of the Treaty, the European Union monitors Member States' budgetary positions, emphasizing the allocation of pension funds as a crucial element for the long-term sustainability of public finances. Simultaneously, EU coordination of employment and social cohesion strategies (Jepsen & Pacual, 2005) is conducted with flexibility, allowing Member States to maintain responsibility for the design and implementation of their pension policies (Vignon, 2004). This approach ensures that pension systems are both sustainable and adequate, balancing national autonomy with broader European objectives.

Pension contributions, especially for old-age pensions, play a critical role in strengthening the European tax system and maintaining the quality and sustainability of public finances. As Europe grapples with demographic challenges, including aging populations, these contributions are increasingly vital for ensuring the financial stability of pension systems. In the long term, many transition economies have adopted gradual reforms to rationalize their pension systems, focusing on measures such as raising the retirement age, revising indexation formulas, reducing benefits, and improving tax collection mechanisms (Cangiano, Cottarelli, & Cubeddu, 1998). Additionally, there is a growing recognition of the need to implement multi-pillar pension systems, which include both publicly and privately managed funds, to enhance financial security in retirement.

Overall, the development of Romania's private pension system mirrors broader global trends, where the shift towards a multi-pillar system has been driven by demographic and financial pressures. Despite the obstacles faced, the legislative and regulatory framework has evolved to support a functioning private pension market. However, the system's continued success will depend on mitigating political risks, further aligning with European standards, and ensuring that the necessary legislative reforms, such as the law on private pension payments, are completed. Only through these efforts can Romania's pension system maintain its long-term sustainability and provide adequate retirement security for its citizens.

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Bank Digitalization, Financial Literacy, and Inclusion In Romania

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Abstract: *The study examines the challenges of promoting financial literacy and inclusion in Romania, a country characterized by significant reliance on cash transactions and a large digital divide. With financial services becoming increasingly digitalized, financial literacy is essential for inclusion in the banking system. Romania faces low bank account ownership and limited digital skills, despite having advanced internet accessibility. The purpose of this research is to analyse the connection between financial literacy, digitalization, and inclusion, and to propose strategies to improve these areas. The research is guided by two hypotheses: 1) Individuals with higher levels of financial literacy are more likely to adopt digital financial services, and 2) The digital divide, particularly in rural areas, is a significant barrier to financial inclusion. The methodology combines quantitative analysis of secondary data from sources such as the World Bank and European Commission's Digital Economy and Society Index, with a qualitative literature review of financial literacy and digitalization. The paper finds that Romania significantly lags behind EU averages in financial inclusion, driven by a preference for cash, distrust in financial institutions, and insufficient digital skills. Solutions such as blockchain, artificial intelligence, and open banking are proposed to enhance digital services and improve financial literacy. This research adds value by offering practical recommendations for policymakers and financial institutions to address the specific challenges in Romania's financial ecosystem, fostering inclusive economic growth through digital financial services. The study contributes*

to ongoing policy debates on financial inclusion and literacy, and highlights areas for future research, including the need for empirical data to assess the long-term effects of digital financial education programs.

Keywords: bank digitalization, financial literacy, financial inclusion, Romania.
JEL Classification: G21, G53, I22

1. Introduction

Digitalization has gained significant momentum in recent years, particularly as a result of the COVID-19 pandemic. The financial sector has been no exception, with the concept of financial digitalization becoming part of everyday language. Financial digitalization can be measured through various indicators, such as online shopping, paying bills online, accessing bank accounts through the internet, using mobile phones for utility payments, engaging in digital transactions, and owning bank accounts and debit cards (Apostu et al., 2023).

Financial education and financial inclusion can no longer be discussed without considering digitalization, as it now encompasses far more than just economic knowledge. The rise of the internet, coupled with the widespread adoption of smartphones and mobile applications, has driven innovation across all sectors, and finance is no exception to this trend. Financial inclusion represents the access for individuals and businesses to financial products and services such as bank accounts, savings accounts, loans, insurance products, etc. that could enable them to save, receive and send money.

However, many people are unbanked due to a combination of factors leading to financial exclusion. The most important of these are: lack of resources and risk of poverty (Lopez Vilaplana, 2018), low financial literacy (Klapper et al., 2015), lack of trust in financial institutions (World Bank, 2023), low level of active population (Demirguc-Kunt et al., 2018), preference for cash payments (Wright, 2023) and the underground economy (Schneider, 2022).

To be able to use banking products and services, the population must first understand (at least at a minimal level) how they work and what they are. So, a minimum of financial education is needed to understand concepts such as bank accounts, credit, insurance products, etc. According to the literature, financial education is "The process by which financial consumers/ investors improve their understanding of financial products and concepts and, through information, instruction and/or goals, advice, develop the skills and confidence to become more aware of financial risks and opportunities, make informed choices, know where to turn for help, and make effective decisions to improve their financial well-being." (OECD, 2005).

As society has developed, financial products and services have become more diverse and complex and, "the intensification of financial innovation is a challenge for people who have to cope with both the digital transition and the launch of new financial products and services that sometimes delight consumers with the promise of quick and consistent gains". (Vasile et al., 2021) Not everyone can keep up with these developments and "as more and more households are asked to make their own decisions on financial matters, financial illiteracy can become a serious threat to their lifelong well-being" (Batsaikhan & Demertzis, 2018).

1.1. Digitalization in the financial sector

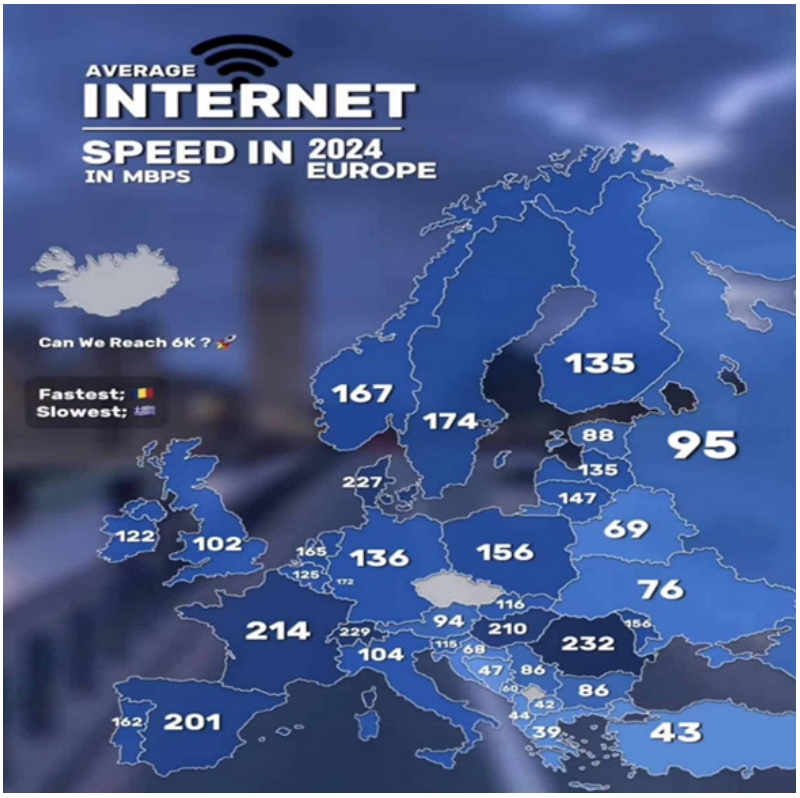
The advancement of digital banking services represents a major transformation in the financial industry, driven by the integration of technology to improve banking services and increase their accessibility (Oprea, I., & Duta, D. ,2024). When examining digitalization in the financial sector, it is important to highlight the relatively low number of bank account holders in Romania. Although the percentage of Romanians over 15 with bank accounts increased from 45% in 2011 to 69% in 2021, according to World Bank research (Demirguc-Kunt et al., 2018), many still remain unbanked. The same study revealed that 42% of those without accounts cited "insufficient funds" as the primary reason, 34% mentioned a lack of trust in banking institutions, 33% found having an account too expensive, 29% said a family member already had an account, 10% pointed to the distant location of banking institutions, and 6% lacked the necessary documentation (World Bank, 2023).

The low level of digitalization in Romania correlates with a strong preference for cash payments and a high percentage of unbanked individuals. Key indicators, such as online shopping, paying bills online, accessing online bank accounts, mobile payments, and ownership of bank accounts and debit cards, remain significantly below the EU average (Apostu et al., 2023).

According to the European Commission's Digital Economy and Society Index (DESI), Romania ranked last among 27 EU countries in 2022, with the gap between Romania and the rest of the EU widening. Alarmingly, only 9% of Romanians possess digital skills above the basic level (European Commission, 2022). Furthermore, with 92% of the Romanian population deemed financially illiterate (Nițoi et al., 2022), the connection between financial education and digitalization becomes even more apparent.

Interestingly, technical limitations are not a major factor contributing to the high usage of cash payments, as evidenced by the 21.31 million active mobile internet connections reported as of June 30, 2023 (ANCOM, 2023). Moreover, Romania boasts the fastest average internet speeds in the European Union in 2024, with an impressive 232 MBPS, while Greece has the slowest at just 39 MBPS.

Figure 1. Internet speed (download in Mbps) in EU in 2024.



Source: businessfibre.co.uk

A survey conducted with 400 participants identified several perceived risks that hinder the adoption of non-cash payments, thereby slowing the progress of digitalization in finance. These risks include "functional risk (e.g., perceived complexity, perceived incompatibility, and perceived cost), psychological risk (e.g., lack of trust, inertia, and technological anxiety), and other risks (e.g., privacy, security, financial, and operational risks)" (Cham et al., 2022). Romania's low level of digitalization cannot be attributed solely to individuals' reluctance to use electronic tools. The country significantly lags behind the EU average in terms of the availability of digital public services, scoring 44 points for general public services and 42 points for business services, compared to the EU averages of 75 and 82 points, respectively. Additionally, digital interaction between state institutions and citizens remains limited, with only 17% of internet users engaging with e-government services (European Commission, 2022).

Despite this, the push for digitalization was primarily motivated by the need to reduce operational costs through automation, increase the availability of banking services beyond traditional working hours, and eliminate repetitive, manual tasks from employees' workloads. Initially, the transition to digital banking was slow, as banks feared negatively impacting customer satisfaction.

However, driven by the 2008 financial crisis and further accelerated by the COVID-19 pandemic, some banks are now fully digitalized. Nonetheless, many individuals, particularly the elderly, still prefer human interaction for emotional and psychological reasons, as well as due to a lack of technological proficiency.

The limited digitalization of financial services and the continued reliance on cash payments in Romania were further highlighted by a study conducted by Wright (2023), which found that 78% of transactions in the country are made in cash. This places Romania at the top of the list of cash-dependent nations worldwide, well above the EU average of 99%.

Table 1. Top 10 countries dependent on cash.

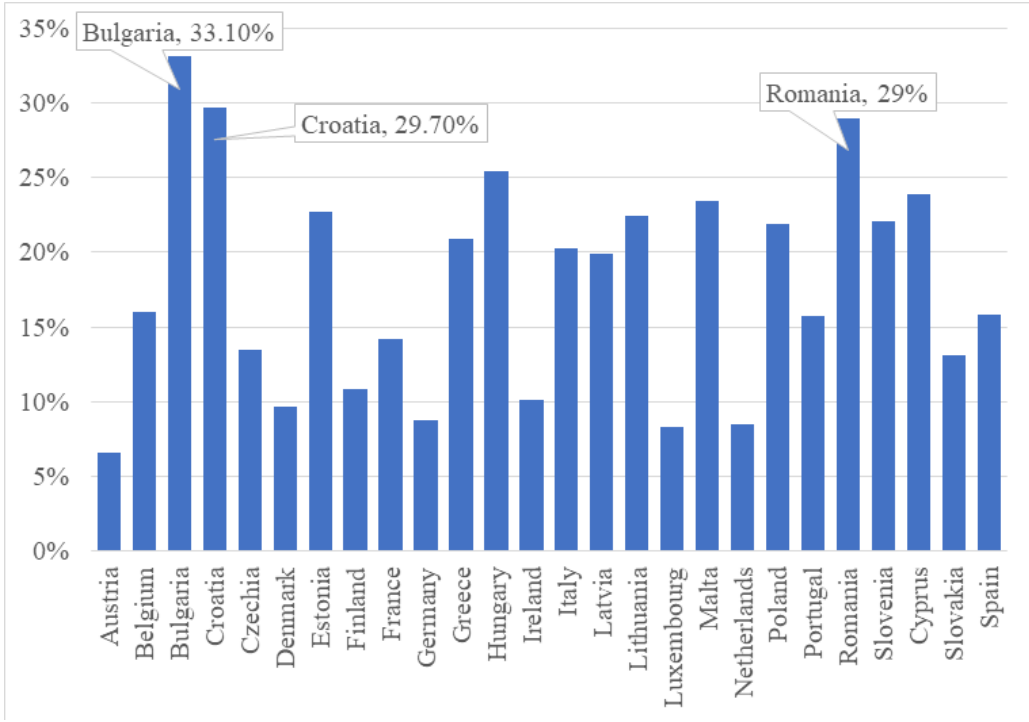
Rank	Country	Cash transactions (%)	Population unbanked (%)	Internet users (%)	No. of ATM per 100.000 adults
1	Romania	78%	42%	64%	64
2	Egypt	55%	67%	45%	20
3	Kazakhstan	60%	41%	76%	86
4	Bulgaria	63%	28%	63%	94
5	Ukraine	60%	37%	57%	96
6	Morocco	41%	71%	62%	29
7	Philippines	37%	66%	60%	29
8	Peru	22%	57%	49%	127
9	Hungary	45%	25%	77%	61
10	Vietnam	26%	69%	66%	26

Source: author using data from (Wright, 2023)

The preference for cash payments in Romania could be attributed to the scarcity of ATMs, particularly in rural areas. However, countries such as Morocco, Vietnam, and the Philippines, which have fewer ATMs per hundred thousand inhabitants and a higher percentage of unbanked populations, still exhibit a significantly lower percentage of cash transactions compared to Romania, despite having similar percentages of internet users. Research in this area has shown that "cashless payments stimulate economic growth, leading to increased private consumption and investment, which in turn contribute to GDP growth" (Wong et al., 2020). Therefore, greater digitalization in financial transactions could serve as a catalyst for economic development.

On the other hand, the prevalence of cash payments sustains the underground economy, placing Romania third in the European Union in this regard (Schneider, 2022), as illustrated in the accompanying figure (Figure 2).

Figure 2. Shadow economy in EU 2022.



Source: authors using data from (Schneider, 2022)

Approximately one-third of transactions remain untaxed, depriving the state budget of crucial resources that could be used for development. This is especially concerning given that studies, including those by Romanian researchers, have consistently demonstrated a "negative relationship between the underground economy and economic development" (Hoinaru et al., 2020).

1.2. Financial literacy and inclusion

Financial literacy is influenced by age, with various studies indicating that "younger individuals possess higher financial literacy compared to older generations" (Nițoi et al., 2022). This can be explained by the increasing complexity and variety of financial products and services, alongside a high degree of digitalization. Younger people, who are generally more tech-savvy, have access to the internet and own smartphones, making it easier for them to engage with financial products and services and access relevant information. In contrast, individuals over 60 often face both technical challenges and a lack of devices needed to access financial information. Geographical background also plays a role in financial literacy. People in urban areas benefit from greater access to educational resources and infrastructure, such as high schools, universities,

libraries, and training programs, compared to those in rural areas. As noted by the same authors, "the relationship between financial literacy and financial inclusion is interdependent: financial literacy enhances access to financial services, and research shows that individuals with bank accounts are more likely to be financially informed and use related services" (Nițoi et al., 2022).

The Financial Education Strategy 2023-2030 emphasizes that "the aim of national financial education strategies is to enhance people's ability to better manage personal finances and reduce financial stress and the impact of financial crises on individuals and families" (Government of Romania, 2023). However, from interviews conducted by Nițoi et al. (2022) with 1,391 respondents, two noteworthy findings emerged. Firstly, "39% of respondents expressed no interest in receiving information about financial concepts." Secondly, for most participants, "personal experience and knowledge (41%) were the primary sources of information guiding financial decisions" (Nițoi et al., 2022). Moreover, other studies reveal that "48% of Romanians rely on family and friends for advice on savings and investments, while 19% turn to information from social media" (Erste Group, 2022). Additionally, "58% of respondents admitted to having neither access to financial information nor interest in improving their financial literacy" (Unlock Market Research, 2021).

Despite the varying percentages across these studies, several consistent patterns emerge: two in five individuals are not interested in receiving financial information, instead basing their decisions on personal experience or informal advice. This attitude presents a significant barrier to improving financial literacy. A potential solution would be to make financial information more accessible and easier to understand for the public. Regarding the responsibility for implementing financial education programs, respondents identified commercial banks, insurance companies, pension and investment funds, regulators, consumer protection authorities, and academic institutions as the most appropriate organizations to lead such initiatives (Nițoi et al., 2022). Another study found that "61% of respondents believe financial education should be the responsibility of schools and other educational institutions, 56% see it as the responsibility of parents and families, and 45% believe it should fall to banks and other financial institutions" (Erste Group, 2022).

2.Literature Review

The rapid digital transformation of the financial sector has fundamentally changed the way banking services are delivered and accessed. Bank digitalization has not only enhanced the efficiency and convenience of financial transactions but also holds significant implications for financial inclusion and literacy. Bank digitalization refers to the application of digital technologies in delivering banking services, from mobile banking and internet banking to the use of artificial intelligence (AI) and blockchain technologies. The transition from traditional banking models to digital platforms has enabled faster and more accessible banking services. According to Pînzaru et al. (2021), digital transformation in banking has fostered innovation in financial services, enhancing customer engagement and service delivery through digital channels. The authors argue that digital banking models are important for banks aiming to stay competitive in an era of increasing digital literacy among customers. The digitalization of banking also brings challenges,

particularly for populations with limited access to digital infrastructure.

Bellofatto et al. (2018) point out that despite the growth of digital banking, there remains a digital divide that disproportionately affects rural and low-income communities. The authors state that digital banking services must be designed with inclusivity in mind to ensure that they do not exacerbate financial exclusion for vulnerable populations. Financial Inclusion through Digital Banking refers to the availability and equality of opportunities for individuals to access essential financial services, such as savings accounts, credit, and insurance. Digital banking has a significant role in improving financial inclusion, particularly in developing countries where access to traditional banking infrastructure is limited.

According to Kass-Hanna et al. (2022), digital banking services, including mobile money platforms, have become key drivers of financial inclusion in regions with limited banking infrastructure. Their study, using data from the Financial Inclusion Insights (FII) surveys, demonstrates that both digital and financial literacy significantly impact a household's ability to build financial resilience. In a similar way, Grohmann (2018) examines the impact of financial literacy on financial inclusion in emerging Asian economies. Her study, which focuses on the middle class in Bangkok, Thailand, finds that individuals with higher financial literacy are more likely to use a broader range of financial services, including fixed deposit accounts and insurance products. The study underscores the importance of financial literacy in ensuring that individuals can fully participate in the financial system, particularly in an increasingly digitalized economy. Digital platforms, such as mobile banking and Fintech solutions, have lowered the barriers to financial access, particularly in remote and underserved areas. The widespread use of mobile phones has facilitated the growth of mobile banking services, enabling people to perform financial transactions without the need for physical bank branches (Sendjaja et al., 2022).

However, as noted by Reiter and Beckmann (2020), financial inclusion is not solely about access to financial services but also about individuals' ability to use these services effectively. Their research across ten Central and South-eastern European countries found that financial literacy has a key role in financial inclusion, as individuals need to understand financial products to use them responsibly. The Role of Financial Literacy in Digital Banking Financial literacy is a critical enabler of financial inclusion, particularly in the context of digital banking. Lusardi and Mitchell (2017) define financial literacy as the ability to understand and apply various financial concepts, such as interest rates, inflation, and risk diversification. In their study on retirement planning, they find that individuals with higher financial literacy are better equipped to make informed financial decisions and are more likely to plan for long-term financial goals. This finding is particularly relevant in the digital age, where financial products are becoming more complex and diversified. Incorporating financial literacy into digital banking platforms can significantly enhance the effectiveness of digital financial services.

According to Fong et al. (2021), digital literacy is increasingly important as more financial services are offered online. The authors demonstrated that digital financial literacy – a combination of digital skills and financial knowledge – is essential for ensuring that individuals can safely and effectively use digital financial services. Their research on older adults in Singapore shows that those with higher levels of digital financial literacy are more likely to make timely credit

card payments and participate in stock markets. Furthermore, Beckmann (2013) highlights the specific challenges of financial literacy in countries like Romania, where financial services for households are relatively new. Using data from the Euro Survey of the Austrian Central Bank, Beckmann found that financial literacy in Romania is among the lowest in Central and Eastern Europe. Her findings suggest that financial literacy initiatives are necessary to improve saving behaviour and participation in financial markets. In a similar context, Morgan and Long (2020) find that financial literacy has a positive impact on financial inclusion and savings behaviour in Laos. Their study emphasizes that financial education programs need to target rural populations and those with lower educational attainment to bridge the financial literacy gap. Challenges in Achieving Financial Literacy and Inclusion Despite the advancements in digital banking, there are significant challenges in achieving universal financial inclusion and literacy.

French and McKillop (2016) identify financial literacy as a key determinant of debt management and household net worth, particularly in disadvantaged communities. However, they also highlight the limitations of financial education programs, noting that knowledge alone is insufficient to improve financial behaviour. Behavioural biases, such as overconfidence and procrastination, often prevent individuals from applying their financial knowledge effectively. Moreover, the digital divide remains a persistent barrier to financial inclusion.

Chomczyk Penedo and Kramcsák (2023) argue that digital banking services are not evenly distributed, with rural populations and older individuals often excluded from the benefits of digitalization. The authors suggest that policymakers must address infrastructure gaps and invest in digital literacy programs to ensure that all segments of the population can access and use digital financial services. In summary, while bank digitalization offers significant opportunities for enhancing financial inclusion and literacy, it also presents challenges that need to be addressed. The existing literature highlights the importance of integrating financial literacy into digital banking services to ensure that individuals can make informed financial decisions. However, achieving universal financial inclusion requires a multi-faceted approach that addresses both the digital divide and the behavioural barriers to effective financial management.

3. Data and methods

The research utilizes a mixed-method approach, incorporating both qualitative and quantitative methods to thoroughly examine financial inclusion and digitalization in Romania. This combination allows for a nuanced understanding of the factors that influence financial literacy and inclusion in the digital era, with a focus on testing the following research hypotheses: 1. Individuals with higher levels of financial literacy are more likely to adopt digital financial services. 2. The digital divide, particularly in rural areas, is a significant barrier to financial inclusion.

The quantitative method relies on secondary data from established sources, such as the World Bank, the European Commission's Digital Economy and Society Index (DESI), and national surveys on financial literacy. These data sources provide statistical insights into key areas such as the percentage of the population with access to banking services, internet usage, and the adoption of digital financial products. The collected data were manually analyzed, with descriptive

statistics used to highlight patterns, trends, and relationships between digital literacy and financial inclusion. The qualitative aspect of the study involves a review of relevant literature and reports, examining the challenges faced in promoting financial literacy in a digital context. Themes such as the digital divide, technological anxiety, and the role of financial institutions in promoting education were explored through this literature review. By synthesizing findings from various sources, the study provides insights into the barriers to financial inclusion and the potential strategies for overcoming them.

Research Hypotheses: 1. Individuals with higher levels of financial literacy are more likely to adopt digital financial services 2. The digital divide, particularly in rural areas, is a significant barrier to financial inclusion.

4. Results and discussion

4.1. Proposals for increasing digitalization in the financial sector

The advantages of digitalization in the financial sector have been discussed earlier in this paper; however, in Romania, where 4 out of 5 payments are still made in cash, several measures are necessary to reduce cash transactions and encourage electronic payments. Nonetheless, these measures are likely to face resistance from certain segments of the population, particularly those over the age of 60. A survey of 400 respondents revealed several perceived risks associated with non-cash payment adoption, including "functional risks (e.g., perceived complexity, incompatibility, and cost), psychological risks (e.g., lack of trust, inertia, and technological anxiety), and other risks (e.g., privacy, security, financial, and operational risks)" (Cham et al., 2022). Beyond psychological barriers, accessibility remains the primary factor that can drive the increase of cashless payments. Financial institutions must expand the number of ATMs, especially in rural areas, with the support of local authorities or private operators who can provide the space for ATM installation. Banks could collaborate to allow customers free access to existing infrastructure. Additionally, streamlining the account-opening process by offering online options and reducing bureaucracy would make banking services more accessible.

Furthermore, banks need to actively combat fraud and financial crimes, innovate in products and services, adapt to customer needs, and maintain consistent, clear communication with clients. To accelerate the digitalization of the banking system, attention must be given to innovative technologies, regulatory frameworks, customer engagement strategies, and enhanced security measures. Key areas include:

a) Implementing Blockchain Technology for Enhanced Security and Efficiency: Blockchain can greatly improve the security, transparency, and efficiency of banking transactions. By utilizing a decentralized ledger system, it reduces fraud risks and simplifies operational processes (Nakamoto, 2008).

b) Leveraging Artificial Intelligence for Customer Service and Risk Management: AI has the potential to transform customer service using chatbots and virtual assistants, providing personalized banking support around the clock. Additionally, AI can strengthen risk management by predicting and addressing financial threats through advanced analytics (Huang & Rust, 2018).

c) Utilizing Big Data Analytics for Personalized Banking Services: Big Data allows banks to process large amounts of customer information, enabling them to offer personalized products and services, enhance customer experiences, and make more informed business decisions (George, Haas, & Pentland, 2014).

d) Adopting Open Banking to Foster Innovation and Collaboration: Open Banking, which involves sharing banking data through APIs with third-party developers, promotes innovation, improves customer services, and facilitates the development of new financial applications and services (Gomber, Kauffman, Parker, & Weber, 2018).

e) Enhancing Cybersecurity Measures to Protect Against Digital Threats: As digital banking expands, so do the risks of cyberattacks. Implementing advanced cybersecurity solutions, such as multi-factor authentication and end-to-end encryption, is essential to protect customer data and maintain trust (Romanosky, 2016).

f) Promoting Digital Financial Literacy Among Customers: Educating consumers on how to use digital banking tools and the importance of cybersecurity can boost digital adoption, while also making the digital banking experience safer and more beneficial for users (Lusardi & Mitchell, 2014).

By incorporating these innovative approaches into their operations, banks can significantly enhance their digitalization efforts, providing safer, more efficient, and personalized services to customers. The success of these initiatives depends not only on technological advancements but also on regulatory support, customer acceptance, and ongoing innovation.

4.2. Proposals for increasing financial inclusion

A study that surveyed 168 papers presenting the results of 201 previous studies caught our attention. According to (Fernandes et al., 2014) "interventions to improve financial literacy explain only 0.1% of the variance in financial behaviours studied, with weaker effects in low-income samples". So, it is not enough just to carry out these one-off initiatives, we need more. The aforementioned authors draw an even more ominous conclusion: "like other education, financial education deteriorates over time; even large interventions with many hours of training have negligible effects on behaviour 20 months or more after the intervention." (Fernandes et al., 2014) Unfortunately, this view is not unique, with other researchers reaching a similar conclusion: "Tracking students who have taken such a course for a period of 5 years shows no positive impact on financial literacy, attitudes toward saving, or any favourable behavioural change" (Mandell, 2011). That the results of mass financial education are not as expected, Björklund and Sandahl also note in a recent article (Björklund & Sandahl, 2023).

Increasing financial literacy requires a shift from an information-centred approach to one that is goal-oriented, action-oriented and behaviour change-oriented (Jula & Jula, 2023). If we refer to pupils and students, specific financial education concepts could be included in the curriculum of other subjects (e.g. calculating interest and taxes in mathematics) and, depending on the specific age of the learners, various stories or games could be used (Drăghici, 2024). For high school students simulating scholarship activity through play "consistently increases literacy

scores, indicating that teaching should be interactive, contemporary, and fun" (Mandell, 2011). Rather than financial information delivery, the focus should be on using information aggregators, credit comparators and how information can be selected and used because "52% of consumers tend to opt for the first product they see when they get a checking account or credit card"(Jana, 2015). The solution is to "design training approaches that more effectively lead young people to put relevant financial knowledge into practice and do so correctly when making financial decisions" (Salas-Velasco et al., 2021).

There is also a need to measure the effectiveness of these initiatives both in the short term (after completion of the process) and in the medium term (six months and one year, respectively) after completion of the initiative. However, the over-55 population, especially in rural areas, will be quite difficult to reach and educating this part of the population may present challenges due to several factors. First, resistance to change is quite strong among older people because of habits and habits formed and a preference for familiar routines. These people have experienced over time several events with financial impact (extreme poverty and deprivation during the communist period, post-revolutionary predatory schemes and bank failures, inflation from 1991-1994, the 2008 financial crisis, the COVID-19 pandemic, etc.). Secondly, the fixed perception of education that many older people believe is appropriate for young people, fuelled on the one hand by cultural norms and on the other by previous educational experiences. Physical and cognitive limitations such as impaired hearing or visual acuity, concentration difficulties or possible mobility problems can affect the readiness to learn and the ability to learn.

Limited access to physical or online educational resources and technological limitations make education difficult for people over 55. Social isolation can also be a barrier to education for this segment of the population. The solution to combat these shortcomings may be the implementation of educational projects by private entities (such as banks) or non-profit associations, with the support of local authorities and community influencers (such as priests, postmen, etc.). Information campaigns via radio, television and the Internet and the design of public service announcements that run regularly on these channels may be ways of reducing resistance to change. Another aspect to consider when talking about financial education concerns the training of teachers who will teach financial education concepts. Many of the teachers who now teach financial education in grade 8 do not have a specialist background but have taken the qualification exam in the subject 'social education'. Most of them have erroneous (limiting) beliefs about money and financial education and either do not understand or misunderstand certain concepts in the financial field.

Some researchers have realised that it is important to educate teachers first "about their own personal finances to better prepare them to teach financial education" (Hensley et al., 2017), with an accredited "Economic and Financial Education for Teachers" course already available in Romania since 2021. "The target group of this course is secondary school teaching staff who teach the subject "Social Education" to 8th grade students" (M.E.C, 2021). As other researchers note, "the current institutional context is favourable to the development of financial education projects, given the increase in initiatives to strengthen the education sector, but also the existence of an initiative to develop a national financial education strategy" (Nițoi et al., 2022). It only remains

that, under the coordination of the authorities (whether we are talking about the Ministry of Education, the NBR, the ASF or any other institution), these projects should pursue a common goal and quantifiable objectives. Soon, in terms of financial education, the focus should shift from "what and how much is done" to "how" and especially "why" it is done. There is no doubt that the responsibility for financial education (as in any field) lies primarily with the individual. But if they are unwilling, unable, or unable to educate themselves financially, the state and public or private financial institutions should take responsibility for this.

5. Conclusions, limitations, and future research directions

Financially educated individuals tend to experience a higher level of economic well-being due to their ability to make more informed decisions. Financial literacy and financial inclusion are intrinsically linked to digitalization, primarily due to the rise of the internet and widespread access to smartphones. An analysis of financial digitalization should begin with examining the number of bank cards in circulation and the proportion of the population that holds a bank account. Romania ranks first globally in the use of cash payments, with 78% of transactions conducted in cash. Additionally, only 69% of its citizens have a bank account, placing Romania last among European Union countries, where the average percentage of banked individuals is 99%. Furthermore, Romania ranks last in the Digital Economy and Society Index (DESI), despite having 21.31 million internet connections—more than its population—and being among the top three EU countries in terms of download speed. However, the low level of digitalization cannot be solely attributed to the population. It is also due to the limited availability of digital public services for the general public (44 points compared to the EU average of 75 points) and the low percentage of SMEs with at least a basic level of digital intensity (22% compared to the EU average of 55%).

In this context, Romania's shadow economy accounts for 29% of GDP, with only Croatia and Bulgaria reporting higher figures. The COVID-19 pandemic accelerated the adoption of digitalization in education, and the European framework prompted the development of a financial education strategy along with various initiatives and projects in this area. Nevertheless, 92% of Romanians remain financially illiterate, a problem stemming from the population's reluctance to engage in such initiatives, the limited effectiveness of financial education programs, and the older population's lack of technical skills. To enhance financial literacy, there needs to be a shift from an information-based approach to one that focuses on setting goals, acting, and fostering behavioral changes. Rather than simply providing financial information, emphasis should be placed on the use of information aggregators, credit comparison tools, and strategies for selecting and utilizing relevant information. Additionally, teachers responsible for financial education must receive proper training, as many are currently social science graduates without specialized financial expertise.

To boost digitalization, financial institutions must invest in the necessary infrastructure, streamline online processes by reducing bureaucratic hurdles, and embrace innovations such as blockchain technology, artificial intelligence, big data analytics, cybersecurity, and open banking. While Romania's low ranking in financial literacy and digitalization within the European Union

highlights significant challenges, it also presents substantial opportunities for growth. There is vast potential for improvement, and professionals in the economic sector—whether in education or research—have considerable work ahead to drive meaningful change and transformation in this area.

The paper contributes to academic literature by linking financial literacy and digitalization, focusing on Romania's challenges with low financial inclusion. It offers insights into the digital divide, critiques current financial education programs, and provides practical solutions for policymakers to enhance digital financial literacy and foster inclusive economic growth.

The research is limited by its reliance on secondary data and literature reviews, lacking primary data or empirical studies that could provide more nuanced insights. It also focuses mainly on Romania, limiting broader generalizability to other contexts. Additionally, the absence of longitudinal data restricts analysis of long-term effects of digital financial literacy initiatives.

Future research should focus on gathering primary, empirical data to better understand the impact of digital financial literacy programs, particularly through longitudinal studies that track behavioural changes over time. Studies could also expand beyond Romania to examine the broader applicability of findings in different socio-economic and cultural contexts. Additionally, exploring the role of emerging technologies like blockchain and AI in fostering financial inclusion could provide valuable insights. Investigating the specific challenges faced by vulnerable populations, such as the elderly, should also be prioritized.

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About Ethics, Marketing And Artificial Intelligence In Business

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Abstract: *The impact of artificial intelligence on the business environment is vast and continues to develop. Ethics and artificial intelligence (AI) in business intersect in many areas, from data protection and transparency of decisions, to fairness and social impact. To use AI responsibly, companies need to adopt sound ethical principles, implement transparency measures, and be prepared to manage the long-term effects on society and the economy. Firms that adopt and integrate AI strategically have a significant competitive advantage, both in terms of efficiency and innovation. However, it is essential that these technologies are implemented responsibly, given the effects on the workforce and the ethics of their use. Companies that integrate ethics into the development and use of AI not only reduce risks, but also protect their reputation and consumer trust, becoming leaders in the sustainable and responsible development of technology. The marketing of the future will be defined by the ability to adapt to rapid changes in the environment. Technology, sustainability, transparency, and ethics, along with a focus on personalized and responsible experiences, will shape marketing strategies. Success in this context will depend on how brands manage to embrace these changes and create lasting relationships with consumers.*

Keywords: business ethics, marketing, business environment, artificial intelligence, customers, technology

JEL classification: M31, O33.

Introduction

Business ethics and artificial intelligence are two areas that are increasingly intersecting as technology is an integral part of modern business processes. Business ethics refers to the moral principles and values that guide the behaviour of companies in relation to employees, customers, partners, and society as a whole. As far as AI is concerned, it becomes essential in terms of ensuring that new technologies are used responsibly, transparently, and fairly.

The impact of Artificial Intelligence on the way companies make decisions, optimize processes, and interact with consumers is increasingly visible. The entire business environment is aware that this technology raises numerous ethical questions related to data privacy, the fairness of algorithmic decisions and the potential automation of the workforce.

And the use of artificial intelligence in business includes transparency in how personal data is used, respect for privacy, prevention of algorithmic bias, and ensuring a positive impact on employees and society. As artificial intelligence continues to develop, companies must adopt clear ethical standards to meet the challenges and opportunities offered by this technology.

Ethical marketing based on artificial intelligence (AI) is essential for maintaining consumer trust, protecting brands' reputations and last but not least avoiding the legal and moral risks associated with the use of advanced technology in promotion. The importance of this type of marketing derives from multiple key aspects, such as transparency, data privacy and social responsibility.

1. Ethics and Artificial Intelligence

We are dealing with two essential, topical topics, ethics and artificial intelligence, precisely because of the impact of technologies on business decisions, operational efficiency and interactions with current and potential customers. Technology has always been a major factor in the evolution of societies and the business environment.

Research in the field of technology has emphasized aspects of the impact that technology can have on communities and the economic environment.

(Image source: AI generated image)

The literature (Jula et al.) shows the evolution of the transformation process in the field of technology, pointing out some significant moments from a technological point of view, such as the Industrial Revolution, which can be associated with the development of the first business models, then the progress generated by the emergence of the Internet and the significant changes of the last decade (new technologies of artificial intelligence, cloud computing, blockchain etc.), represent moments that have generated important challenges in the economy, but also in society as a whole. A recent challenge, but at the same time technological innovation, is that represented by artificial intelligence (AI),

which, through its different forms of applicability, redefines or even introduces new concepts related to productivity and profitability in the business environment.

The integration of artificial intelligence in business raises numerous ethical challenges, especially in relation to the correct use of data, the fairness of decisions and the social responsibility of companies. Here are some important ethical aspects associated with the use of artificial intelligence in business:

Table 1. Ethical aspects and important arguments associated with the use of artificial intelligence in business

Ethical issues	Arguments
1. Use of data and privacy	Companies that use artificial intelligence in the analysis of consumer behaviour, to personalize products or to optimize marketing depend heavily on access to data. From an ethical point of view, this raises the following issues: • Protection of personal data: The widespread use of artificial intelligence requires access to massive amounts of personal data, raising privacy concerns. Companies must comply with legislation (e.g. GDPR in Europe) and ensure adequate protection of their customers' data. • Informed consent: Customers must be informed about how their data is collected, used, and stored. The ethical question is whether they really understand the implications and whether they freely agree to the use of their data.
2. Transparency and clarity in decisions	Companies use artificial intelligence to make important decisions, such as evaluating credit applications, selecting candidates for employment, or optimizing the supply chain. However, artificial intelligence decisions are not always transparent, in which case we refer to: • Explainability of algorithms: It is crucial that artificial intelligence decisions are explainable and understandable to those affected by them. • Fairness and lack of discrimination: Artificial intelligence algorithms can incorporate bias from training data. If, for example, a recruitment algorithm favours man over women due to biased historical data, this is a major ethical issue.

3. Fairness and elimination of all prejudice	Artificial intelligence, trained on datasets containing inequities, can perpetuate or even amplify discrimination. In business, this is problematic in many contexts: • Recruitment: If a recruiting algorithm systematically chooses to promote only candidates from certain backgrounds, it can discriminate against ethnic groups, genders, or social classes. • Financial services: The artificial intelligence used to approve loans can automatically deny applications from disadvantaged socio-economic groups, based on credit history, without considering individual circumstances.
4. The impact of artificial intelligence on jobs	The automation of artificial intelligence can lead to a significant reduction in jobs in certain fields of activity, which has great social and economic consequences. Related ethical questions include: Responsibility to employees: Companies that replace workers with artificial intelligence have an ethical responsibility to them, especially in terms of providing support for reskilling or employment opportunities in other areas. Unfair automation: It can affect certain vulnerable groups, such as low-income workers, more severely, worsening economic inequalities.
5. Manipulation and publicity	Artificial intelligence is frequently used in advertising to personalize and optimize marketing campaigns. However, this personalization can raise ethical issues: • Manipulating consumer behaviour: Artificial intelligence can be used to manipulate consumers' purchasing decisions through personalized ads that exploit emotional or psychological vulnerabilities. • Transparency of advertising algorithms: Customers should be informed about how artificial intelligence algorithms select the products shown to them and whether their decisions are artificially influenced.
6. Social responsibility and ethical artificial intelligence	Companies have a responsibility to use artificial intelligence in a way that promotes the common good. This includes considering the social and economic impact of artificial intelligence, and not just the financial benefits. • Artificial intelligence for social good: Companies should ensure that they use artificial intelligence to help solve society's problems, not just increase profits. • Avoiding outsourcing responsibility: A company that uses artificial intelligence should not outsource ethical responsibility to technology. It is essential that decisions are made and verified by people.

7. Employee supervision and monitoring	Artificial intelligence is increasingly used for the purpose of monitoring employee productivity, tracking their online behaviour or even evaluating performance in real time. This type of surveillance can lead to abuse if not ethically managed: • Right to privacy: Employees should have a reasonable level of privacy in the workplace. The excessive use of artificial intelligence to monitor them can create an oppressive work environment. • Balancing efficiency and rights: Companies must strike a balance between improving efficiency and respecting employees' rights to privacy and dignity.
8. Liability and legal liability	A key aspect of the ethics of artificial intelligence in business is the clear establishment of legal liability in case of errors or damages caused by artificial intelligence, namely: • Legal accountability: If a decision made by an AI algorithm negatively affects a customer, who is responsible? The AI developer, the company that implemented the technology, or the human operator? • Clear regulations: Companies must follow ethical and legal regulations to avoid the risks associated with the inappropriate use of artificial intelligence.

(Image source: AI generated image)

As a brief conclusion, we can say that ethics and AI in business intersect in many areas, from data protection and transparency of decisions, to equity and social impact. To use AI responsibly, companies need to adopt sound ethical principles, implement transparency measures, and be prepared to manage the long-term effects on society and the economy.

Companies that integrate ethics into the development and use of AI not only reduce risks, but also protect their reputation and consumer trust, becoming leaders in the sustainable and responsible development of technology.

2. Ethical issues related to superintelligence

Ethical issues related to superintelligence (Gandhi & Ehl, 2023) refer to the potential risks and challenges that highly advanced artificial intelligence (smarter than humans) could bring. Superintelligence raises fundamental questions about control, responsibility, and impact on humanity.

(Image source: AI generated image)

The image symbolizes the interaction between humans and technology, highlighting the crucial role that artificial intelligence (AI) and automation play in the future of humanity. It is a powerful symbol of the collaboration between technology and man, suggesting a synergy between these two forces for the development and transformation of the future, including in the business environment. The image also suggests a future in which AI becomes a significant partner in human activities, be it business, research, or everyday life.

Dilemmas and ethical issues related to the concept of superintelligence are:

1. Existential risks. Superintelligence could pose an existential threat to humanity if not managed correctly.

2. The problem of control. A major challenge is the control of superintelligence, in the sense that if an AI becomes smarter than humans, it will be difficult to control or stop by creators. There is a risk that superintelligence will develop its own goals and not follow the initial instructions. Thus, a series of questions arise about how we can ensure that a superintelligence remains under human control.

3. Alignment of objectives. To avoid major risks, the objectives of a superintelligence must be aligned with the values and interests of humanity. However, it is difficult to program highly advanced AI to understand and respect all the ethical and moral nuances that guide human behaviour.

4. Impact on humanity. A superintelligence could profoundly change society and the economy. It could take on many tasks that require human intelligence, such as governance, scientific research, or economic planning. This could lead to a devaluation of human intelligence and a radical reorganization of society, where humans would no longer have a central role.

5. Complex moral decisions. Superintelligence might be able to solve complex moral problems on a much larger scale than humans, but the question is whether they would make decisions that are compatible with human values.

6. Equality and access. Another major ethical issue is related to who will have access to superintelligence. If only a few individuals or organizations control this technology, there is a risk

of extreme inequality. Those who have control over superintelligence could gain huge economic and political advantages, leaving the rest of humanity behind.

7. Risk of the intelligence wave. A superintelligence could become even smarter, in an accelerated process of continuous self-improvement, which would lead to an exponential increase in its capabilities. This phenomenon is known as an explosion of intelligence. Once the process begins, humans may no longer can influence the direction in which AI develops.

8. Ecological consequences and resources. Superintelligence could require massive resources to operate, which could have a negative ecological impact. Highly advanced AI could also decide to modify the natural environment in ways that are harmful to other life forms, including humans, if these changes are deemed necessary to achieve its goals.

9. Superintelligence and moral rights. Another ethical aspect concerns the question of whether a superintelligence should have moral rights. If AI becomes aware of and capable of subjective experiences, should it be treated as a "moral agent", with rights and responsibilities like those of humans? This debate is still in its infancy, but it is becoming more relevant as technologies advance.

Conclusion. Superintelligence could pose one of humanity's greatest ethical challenges. It requires rigorous planning, clear regulations, and international collaboration to minimise risks and ensure that its development is done in a safe and responsible way. Controlling and aligning AI with human values, as well as avoiding existential risks, are critical elements to ensure that superintelligence will be an ally and not a threat.

3. Ethics in marketing

Ethics in marketing refers to the application of moral principles and standards of conduct in all activities related to the promotion of products and services. Ethical marketing practices involve respecting consumer rights, transparency, and honesty in communicating with the public, and avoiding manipulation or misinformation. Here are some key aspects of ethics in marketing:

1. Transparency and honesty. Companies must provide accurate and clear information about the products and services they promote. Advertisements or marketing materials must not mislead consumers with false or exaggerated claims. Ethics requires that the promises made in marketing campaigns be respected and supported by the reality of the product.

2. Respect for data privacy. In a digital age, where marketing often relies on analysing consumer data, respecting their privacy is crucial. Companies have a responsibility to collect, store and use personal data in an ethical way, obtaining users' consent and protecting their information.

3. Avoiding manipulative practices. Ethical marketing avoids using manipulative tactics, such as creating false needs, excessive pressure to buy, or exploiting consumers' psychological vulnerabilities. Practices such as aggressive advertising or using fear to sell a product are considered unethical.

4. Social responsibility. Marketing must be aligned with the social and moral values of the community. For example, companies are encouraged to promote sustainable practices, eco-friendly products and avoid negative stereotypes in advertising, such as those related to gender,

race, or age. Social responsibility also refers to supporting causes that benefit society, such as public health or education.

5. Vulnerable audiences. A major concern in ethical marketing is protecting vulnerable categories, such as children or the elderly, who may be more susceptible to advertising influences. For example, advertisements aimed at children should be educational and not encourage unhealthy consumption habits.

6. Fair prices and offers. Ethics in marketing requires that prices be presented clearly and unambiguously. Discounts and promotions must be real and not misleading consumers.

7. Ethics in marketing is not only a moral obligation, but also a long-term strategy for business success. Modern consumers are increasingly informed and concerned about the ethical behaviour of companies. Unethical practices can lead to loss of consumer trust, image damage, legal sanctions, and even company bankruptcy. On the other hand, companies that promote their products and services ethically can build long-term relationships with their customers and improve their reputation.

As a brief conclusion, we can state that ethical marketing is essential to protect consumer rights and ensure that businesses operate responsibly. As technology advances and targeting methods become more sophisticated, it is vital for businesses to be aware of their responsibilities and avoid marketing practices that exploit or deceive consumers. Ethics in marketing is not only about complying with the law, but also about creating a relationship based on respect and trust between companies and consumers.

4. Ethical Challenges of Using AI in Marketing

Ethics in AI-driven marketing is an essential field in the digital age. On the one hand, AI brings undeniable advantages such as advanced personalization and automation, but on the other hand, it raises issues related to privacy, manipulation, and discrimination. In the long run, companies that adopt ethical AI-driven marketing practices will gain consumer trust, build last-

Table 2. Relationship between average expenditure per pupil between the ages of 6 and 15 and average reading literacy performance on PISA tests (thousands of US dollars, in PISAs)

ing relationships, and avoid legal or reputational penalties.

1. Data privacy and security:

◎ Excessive data collection: AI relies on massive amounts of data to function effectively, which raises issues related to the privacy of personal data. Consumers are increasingly concerned about how their data is collected, used, and protected.

◎ Lack of transparency: Most consumers are not aware of how AI collects and analyses their data or are not given clear options to refuse this process. It is essential for companies to be transparent and obtain informed consent from customers.

2. Developing Algorithm Addiction and Loss of Human Control:

◎ Decision automation: While AI can optimize marketing processes, over-reliance on algorithms can lead to a loss of human control. Decisions made solely by AI may not consider the ethical context or emotional nuances of human interactions.

3. Manipulation of consumer behaviour

◎ Influencing decisions: AI can be used to exploit consumers' psychological vulnerabilities, through extreme personalization of advertisements or offers. This can create situations where consumers make decisions that they would not otherwise have made.

◎ Exploitation of emotional data: AI can analyse consumers' emotional and psychological data (through sentiment or behaviour analysis), which raises ethical questions about how this information is used to influence purchasing decisions.

4. Social responsibility and ethical marketing

◎ Regulatory evasion: AI allows businesses to create complex and personalized marketing campaigns, making it difficult to enforce traditional regulations. Companies must take responsibility for using AI in an ethical and responsible way, even if regulations are not yet well defined.

◎ Greenwashing and social responsibility: AI can be used to analyse, and target consumers concerned about social and environmental issues, but it is important that marketing is authentic and does not mislead consumers with greenwashing practices.

AI in marketing has huge potential to transform the way businesses interact with customers, providing innovative solutions for personalization, automation, and streamlining campaigns. However, companies need to be extremely careful about the ethical implications of using this technology. Respecting privacy, transparency in the use of data and avoiding manipulation of consumer behaviour are essential to build responsible and ethical marketing in the digital age.

Ethics and marketing through the lens of artificial intelligence (AI) are closely interconnected, as AI revolutionizes the way companies reach consumers and optimize their campaigns. However, the use of advanced technology raises numerous ethical challenges, especially in terms of privacy, transparency, fairness, and accountability. AI offers immense potential for innovation, but it is essential that its use is managed responsibly to protect consumers' rights and interests.

Developing an AI-driven marketing strategy must include deep reflection on the long-term impact on consumers and society, as well as a balance between innovation and responsibility.

Ethical marketing and sustainability are accentuating the growing importance of ethical values: this means that consumers, especially younger generations, are looking to support brands that share the same values as them, such as caring for the environment, social responsibility, and transparency. From the point of view of sustainability, seen as a differentiating element, brands that align their marketing strategies with sustainability practices will attract more consumers aware of their impact on the environment.

The marketing of the future will be centered on technology, personalization, sustainability, and authentic experiences. Brands that manage to effectively integrate these trends will have a competitive advantage in an ever-changing market.

Conclusions

The future of ethics lies in the continuous integration of AI and digital technologies. Innovations such as advanced machine learning models, more sophisticated natural language processing, and improved technology experiences will further transform the way businesses

interact with their audiences. Companies that adopt these technologies and adapt to the evolving digital landscape will be better positioned to meet the needs of their customers.

Applying ethical principles in marketing not only protects consumers, but also helps build a solid and trustworthy reputation for businesses. An ethical approach ensures long-term customer loyalty and creates a healthy relationship between the brand and society.

Ethics, marketing, and artificial intelligence (AI) are a crucial combination in the context of modern business, as the use of AI in marketing brings significant benefits but also major ethical challenges. AI can radically transform marketing by personalizing campaigns, automating processes, and analysing data in real time, but it also involves risks related to data privacy, discrimination, and consumer manipulation.

The use of AI in marketing brings huge opportunities, but it requires special attention from an ethical point of view. AI-based ethical marketing requires a combination of transparency, data privacy protection, fairness in algorithmic decisions, and respect for consumer rights. By taking an ethical approach, companies can build long-term trust and use AI not only to increase sales but also to make a positive impact on society.

In a globalized and dynamic business world, long-term success depends on a company's ability to constantly innovate and adapt its marketing strategies to respond to market changes. So, businesses that excel in both areas are the most poised to thrive.

Therefore, innovation without marketing cannot reach its full potential, and marketing without innovation risks becoming irrelevant in a highly competitive market. The combination of the two is key to maintaining success and continuing to bring value to customers.

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Managing Obesity Using the Health Belief Model – A Chronological Approach, A Narrative Review

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Abstract: *We used a chronological approach to examine the evolution of the Health Belief Model (the HBM) in time for predicting the engagement in specific, health-related, behaviors. Our review was grounded in the assumption that health behavior is activated based on relevant perceptions of threat, barriers and benefits, self-efficacy and cues to action in engaging in protective behavior, variables of the conceptual model that formed the main inclusion criteria for the articles included. We search scientific articles from 3 periods of time (1960-1989, 1990-2014 and 2015-2024) that capture the evolution of the model conceptualization and the refining of the methodological approach that applies the model to inform practical public health concerns. Then, we narrow down our aim and assess problematic beliefs, values and attitudes that influence health-related behavior in obesity prevention that aim to serve as a future framework for tailored interventions.*

Key words*:* Health Belief Model, history, obesity, early warning, health-related behavior, perception, protective behavior

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1. Introduction

In times of war, the main cause of disabilities was the armed conflict itself. When returning back in their villages, veterans were recognized by their sufferance, has it been their profoundly changed facial expressions or their physical loss of multiple limbs and sensory organs such as eyes. Unprecedented in scale, The First World War was marked by the usage of new terrifying weapons such as cannons, machine guns and poison gas (Mutilation and Disfiguration | International Encyclopedia of the First World War (WW1), n.d.) and amputations soon became a daily occurrence (Purcell, 2017) of the first war being fought in three dimensions: on land, at sea and in the air (Imperial War Museums, n.d.). In time, with technological advances leading to improved healthcare systems and health status, an increase in food supply and wellness, it was brought to surface a different dimension of war: the incremental increase in the prevalence of non-communicable diseases (NCDs); today, every 30 seconds a lower limb is being amputated somewhere in the world due to Diabetes complications (Bilal et al., n.d.; Complications, n.d.). Obesity, an important and modifiable risk factor, is known as one of the main causes of the increase in the prevalence and incidence of Type 2 Diabetes Mellitus, recognized as a pandemic of unprecedented magnitude ('Diabetes Is "a Pandemic of Unprecedented Magnitude" Now Affecting One in 10 Adults Worldwide', 2021). It is expected that over 51% of the global population to become overweight or obese in the next 12 years, according to the World Obesity Federation (Chandrasekaran & Weiskirchen, 2024).

It is estimated that in 2022 2.5 billion of people over 18 years old were overweight which represents almost 43% of adults all around the world, while almost 1 billion people were affected by obesity according to the World Health Organization (Obesity and Overweight, n.d.), an increased BMI being recognized as a leading cause of global number of deaths and percentage of disability-adjusted life-years (DALYs) (GBD 2019 Risk Factors Collaborators, 2020). Obesity rates in children raises one of the most important concerns as these children are less likely to perform well in school and later, to complete higher education, according to a report published by OECD in 2019. The same report states that adults affected by obesity encounter difficulties due to lower employment chances and lower performance at the workplace. (The Heavy Burden of Obesity, n.d.). One important issue we are facing nowadays regards also young people becoming unfit to serve their country: 71% of American Youth were not being able to qualify for Military Service in 2018. It is reported also that in 2022 the percentage increased to 77%. The three main reasons were overweight or obesity, educational deficits and criminal or drug abuse records (CDC, 2023)

Worldwide, obesity rate registered an incremental increase: among adults it has more than doubled since 1990, and has quadrupled among children and adolescents (5 to 19 years of age), posing a heavy threat on societies, reducing life expectancy, increasing healthcare costs, decreasing workers' productivity and lowering states' GDP (OECD, 2019).

Tackling obesity requires a multidisciplinary approach as it is a form of social contagion of endemic proportions that does not respect the mode of transmission of infectious diseases and a form of addiction that includes cognitive and emotional components that are difficult to stop by conventional means. The consecutive incremental increase of T2DM prevalence raises healthcare

expenditure, lowering healthcare systems output worldwide. Therefore, a key concept for this emergent problem is addressing modifiable human self-protective – seeking-shelter- behaviors and it requires immediate action (Singer et al., 2021; Wei et al., 2023).

A potential approach to addressing obesity epidemic was born in the 1950s: The Health Belief Model (the HBM), a socio-cognitive conceptual model demonstrating that people tend to adopt a particular behavior when they believe the problem could affect their daily living activities, the intervention will have the expected results, and when there are encountered few obstacles along the path to taking action. (Henshaw & Freedman-Doan, 2009). Based on a socio-cognitive perspective, the HBM's original purpose was to explain why people fail to engage in preventive health-related behaviors for early detection of diseases, patient response to symptoms, and medical compliance (Kirscht, 1972; Rosenstock, 1974, p. 1972; The Health Belief Model: A Decade Later - Nancy K. Janz, Marshall H. Becker, 1984, n.d.) and it evolved towards the potential to serve as a tool in the prevention of infectious and NCDs (Augeraud-Véron & Leandri, 2024; Durham & Casman, 2011; Khaira et al., 2024; Ryan et al., 2024; Subedi et al., 2023; Weston et al., 2018).

Demographic variables (race, age, socio-economic status, etc) are known to contribute to contouring all four core concepts: perceived susceptibility, perceived severity, perceived benefits and perceived barriers, that further on, are thought to be related, in different extents, to a fifth original factor, cues to action, that act as triggers in the decision-making process to accept a recommended health action.

Rosenstock, Strecher, and Becker (1988) further considered a new complementary socio-cognitive component to the HBM (Bauer, 2004; Karl et al., 2022; Rosenstock, 1974; Rosenstock et al., 1988). The sixth core concept, defined as one's perceived ability to achieve a planned goal (self-efficacy), proved to be as valuable as the first four core concepts.

In time, the HBM was used as a tool for influencing behavior change, particularly health-related behavior but it also proved effective in numerous different fields of research: for promoting bicycle safety helmets (WITTE et al., 1993), for the adoption of agricultural specific techniques by farmers for water conservation (Tajeri moghadam et al., 2020), in searching for a useful tool for identifying gaps in cybersecurity behavior (Almansoori et al., 2023) or explaining safety behaviors of terrorism victims (Tade & Nwanosike, 2016).

The aim of this research is to explore how the HBM conceptual model evolved over time in terms of the construct's' evolution as well as in terms of the process of shaping the research methodology. The increased expenditure for public healthcare systems overwhelmed also by the number of patients that access it daily as well as the social contagion dimension of obesity, makes the HBM a necessary tool for tackling this important cardiovascular risk factor.

The articles included are part of 3 main timeframes, marked by different crisis, a progressive increase in global population as well as a change in morbidity and mortality characteristics to gain a better understanding of the future of tailored preventive interventions.

2. Research methodology

For this review we included articles indexed in Google Scholar between 1960 and 2024. The comprehensive electronic literature search included specific keywords and a manual search of the reference lists of eligible studies identified: health belief model, the HBM in time, the HBM history, the HBM origins, obesity, diabetes, cardiovascular, NCDs, preventive behavior, history, path analysis, performance, intervention effectiveness, obesity epidemic, prevention, behavior change, health-related behavior, perception, behavioral, healthcare, health education, early warning, compliance. We used Boolean operators to narrow the list of articles selected. More than 31.700 related articles were identified. From all potentially relevant articles to supplementary contract the vast number of approaches, we manually selected articles that distinctively emphasized the usage of the HBM constructs. The main focus in the selection process was to underline the evolution of the methodological approach. The 29 articles selected were clustered into 3 main timeframes: 1960-1989, 1990-2014, 2015-2024, with references to the theoretical and practical validation of the HBM core concepts in time, descriptive for any of the core concepts, tracing the historical development of the HBM, retrospective or prospective research, observational as well as experimental in design, including references of theoretical and practical implications for obesity and diabetes mellitus prevention.

We excluded articles not using or focusing on the HBM, duplicate in design or methodological approach.

We analyzed the included articles in a comparative manner using a standardized Excel spreadsheet developed for this project by country, sample characteristics, methods used, the definition of the main core concepts of the HBM, the main findings, as well as the theoretical and practical implications.

3. Results and discussions

3.1 Results. In terms of theoretical background, the articles published between 1960-1989 have in common the focus of the HBM on individuals' perceptions and the practical aim of adopting of a preventive behavior, emphasizing the need for a theoretical framework to predict and explain health behaviors (Janz & Becker, 1984; Rosenstock, 1974). All studies selected for this period originated in the USA, had a common purpose related to preventive behavior even if with a heterogenic approach and variation in taxonomy. From all 9 articles selected, 8 were observational research, qualitative as well as quantitative in design (Becker et al., 1974), one was a multitrait-multimethod design (Cummings et al., 1978) and one consisted of a revised explanatory model (Rosenstock et al., 1988). Common variables analyzed were perceived susceptibility, severity, benefits and barriers; cues to action were considered to play a critical role since 1974; self-efficacy was later included aiming for an enhanced approach in understanding and influencing health-related behavior (Rosenstock et al., 1988).

Since the beginning, there was important empirical evidence supporting the HBM dimensions as important contributors in explaining, predicting but also in influencing individuals' health-related behavior (Berkanovic, 1976; Janz & Becker, 1984; Rosenstock, 1974; Rosenstock et

al., 1988). There was also provided a basis for developing brief health belief scales, being found that HBM variables can be measured with a substantial amount of convergent validity using Likert or multiple choice questionnaire items (Cummings et al., 1978). The introduction of the self-efficacy concept opened the door for an optimized approach to understanding and influencing health behavior (Rosenstock et al., 1988). Even with advanced treatment methods, back in the era, an effective control of diabetes was considered primarily dependent upon patient adherence to the recommended treatment (Becker & Janz, 1985). Establishing the framework of the first definitions of the model and of the core concepts, the HBM model is a member of the value-expectancy family, with growing potential in supporting decision-making under uncertainty with education being underlined as bringing a greater ability to cope in the face of a threat (Kirscht, 1974).

The articles between 1990-2014 have in common the research of an operational (Ali, 2002a) HBM model to predict and prevent specific health-related behaviors. All of the 10 articles selected for this timeframe originated in heterogenous countries and cultures (Nigeria, UK, Taiwan, Iran, Arizona, Indiana, Australia) and included an observational research, with a qualitative as well as a quantitative component, one article including a cross-sectional approach (Chao et al., 2012) and two case-control studies (Bayat et al., 2013; Sharifirad et al., 2009). One study was a mixed methods sequential explanatory design (Sui et al., 2013) and one with an ex post facto comparative design (Koch, 2002). Path analysis (Gillibrand & Stevenson, 2006) and hierarchical multiple regression (Bond et al., 1992) were used as analytic methods in the examination of the theoretical model. The variables analyzed included the core concepts (perceived susceptibility, severity, benefits, barriers, cues to action and self-efficacy) as well as perceived intensity (Bayat et al., 2013), threat (Sharifirad et al., 2009), locus of control (S. Cohen, 1997; Gillibrand & Stevenson, 2006), health motivation, social support and knowledge (Ali, 2002b), costs (Bond et al., 1992). As main findings, articles selected for the second period of time, bring to light more evidence that knowledge is not sufficient in influencing behavior and that the HBM core concepts should not be considered in isolation (Adejoh, 2014; Ali, 2002a; Sharifirad et al., 2009). One important aspect highlighted was the limited influence of health professionals in effecting behavior change (Sui et al., 2013), suggesting the cues to action core concept as holding a major impact in the model.

As theoretical background, all 10 studies selected for the 3rd timeframe, 2015-2024, have in common the assessment of the predictive power of the HBM, considered now a pivot tool for tailored educational interventions for influencing preventive behavior.

With roots in different countries and cultures (UK, Iran, USA - North Carolina, Ethiopia, Malaysia, China, Turkey), 4 of the articles included in this timeframe had an observational design (McArthur et al., 2018; Melkamu et al., 2021; Saghafi-Asl et al., 2020; Wills et al., 2015), 3 included a cross-sectional approach (McArthur et al., 2018; Melkamu et al., 2021; Saghafi-Asl et al., 2020), one pretest-posttest quasi-experimental design (Azadi et al., 2021), one study protocol for a randomized controlled trial (Al-Haroni et al., 2024). Also, 4 had an experimental design (Faghih et al., 2024; Komaç & Duru, 2024; Shao et al., 2018; Tamadonpoor et al., 2024) out of which 2 were randomized controlled trials (Faghih et al., 2024; Komaç & Duru, 2024).

One of the studies included a thematic analysis and a psychographic segmentation (Wills

et al., 2015), one article included references for structural equation modeling (Saghafi-Asl et al., 2020). Regression, one-way, two way ANOVA, robust ANCOVA and Bonferroni correction were used to approach multiple comparisons (Azadi et al., 2021; Komaç & Duru, 2024, 2024; McArthur et al., 2018); bivariate and multivariate logistic regression models were used in one cross-sectional article (Melkamu et al., 2021); Friedman analysis of variance and a post hoc Wilcoxon signed-rank test with Bonferroni correction as well as Mauchly's test of sphericity were spotted in one of the articles selected (Komaç & Duru, 2024); Lawshe table was used for content validity analysis and intraclass correlation coefficient was used to assess the stability over time in one article (Saghafi-Asl et al., 2020). Al-Haroni et al. proposed the generalized estimated equation (GEE) to be used to test the effect of the intervention program between and within group at baseline as well as 6 weeks and 2 months following intervention, after adjusting for clustering. Likert scale items and assessing internal consistency with Cronbach's alpha coefficient became widely used.

The variables analyzed in the selected studies included the main core concepts of the HBM (perceived susceptibility and severity – both regarded as perceived threat, benefits, barriers, cues to action, self-efficacy) as well as knowledge, social support, physical activity, BMI, waist-hip ratio, seric uric acid, carbohydrates intake, hepatic enzymes, variables regarding 10 year Framingham CVD risk score.

Hence, the third period is relevant for the increased stability in design and approach and the regular usage of quantifiable research methods for increasing the validity and the predictive power of the conceptual model, with numerous articles highlighting the effectiveness of tailored educational programs based on the HBM in promoting prevention behaviors (Azadi et al., 2021; Melkamu et al., 2021; Shao et al., 2018; Tamadonpoor et al., 2024)

3.2 Discussions. Obesity is reported as a main cause of Type 2 Diabetes Mellitus and a central role is played by the adipose tissue, the liver and skeletal muscle dysfunction (Chandrasekaran & Weiskirchen, 2024) but it is also reported as following a model of social contagion (Datar & Nicosia, 2018), hard to tackle by conventional means. Almost 90% of patients with Type 2 Diabetes Mellitus are classified as overweight or obese (Grant et al., 2021). Nowadays, Diabetes is considered the leading cause of non-traumatic lower limb amputations (Amputation Prevention Alliance | ADA, n.d.), blindness (CDC, 2024) and end-stage kidney disease (Eldehni et al., 2022).

The concern regarding a multidimensional approach to nutrition was underlined earlier through the lens of Kurt Lewin (1890-1947, USA) who described the concept of nutritional gate-keepers (Standford.edu), Jean Tremoliers (1913-1976, France) who's name is related to the institutionalization of French nutrition, the founder of Cahiers de nutrition et de diététique (CND) along with his co-worker, Ioan Claudian (1900-1987, Romania) which was assigned by Dimitrie Gusti back in the era with the mission to establish an open conceptual framework for medicine and sociology (Lepiller & Poulain, 2015). Lepiller and Poulain also bring their contribuition in CND, signaling an increasing gap between nutritional norms and practices as a sign of a loss of legitimacy of the traditional normative apparatus.

Derived from theories in Cognitive Psychology, the HBM was developed in 1950s by social psychologists Irwin M. Rosenstock, Godfrey M. Hochbaum, S. Stephen Kegeles, and Howard

Leventhal at the U.S. Public Health Service and it has been used to design effective interventions for health-related behaviors (Berkanovic, 1976; Kirscht, 1974; Rosenstock, 1974; Rosenstock et al., 1988). Fundamental for this theory are people's beliefs and perceptions regarding health-related behaviors (Rosenstock, 1974; Yoshitake et al., 2019) and one of the key concepts in using the HBM has to deal with intrinsic and extrinsic motivation compiled in cues to action.

Since 1960s, we virtually witnessed the evolution of a paradigm. Since 1984 it was noted the necessity to refine and standardize the tools used to measure the model's components (Becker & Janz, 1985; Janz & Becker, 1984). One common aspect of the main 3 time frames noted was that previous studies showed that perceived susceptibility, benefits, and barriers were consistently associated with the desired health behavior while perceived severity was regarded as less often associated with the desired health behavior (Karl et al., 2022). Also, one noticeble aspect can be considered that , in time, the HBM concept grew in parallel with the performance of quantitative statistical methods.

With the emergence of a new form of threat represented by the heavy impact of the NCDs worldwide (Beaglehole & Yach, 2003), no matter the framework of the healthcare system, because of the change in the morbidity-mortality profile worldwide we can expect a lower output in time (Connolly et al., 2004; Roberts et al., 2013).

In 2021, McGaughey et al. reported that the implementation of Early Warning Systems (EWS) or Rapid Response Systems (RRS) for the prevention of patient deterioration on acute adult hospital wards across ICUs worldwide brought little or no difference in hospital mortality, unplanned ICU admissions, unexpected cardiac or respiratory arrest or length of hospital stay (McGaughey et al., 2021). Also, a systematic review and meta-analysis from 2024 bring to light that neither the EWS, SIRS, nor qSOFA are ideal standalone screening tools for sepsis or prognosticating patients with sepsis (Chua et al., 2024). In agreement with Taleb et al (Taleb et al., 2022), we suggest these results argue in favor of enhancing the usage of age-tested heuristics and low cost operational tools such as the HBM – with potential large pay-offs in terms of the reduction of the multiplicative effects, at the expense of over-optimization, particularly in an environment marked by uncertainty.

From a different perspective, considering a burdened healthcare system as a patient in acute distress, we require further research for tools assisting the prevention of a further rapid deterioration of overcrowded healthcare departments (Burgos-Esteban et al., 2022), tools enhancing a system's capability for an early response, particularly in prevention, functioning as early warning tools that could address the vulnerability posed by NCDs. Obesity is nowadays considered to have devastating consequences and it is expected, as all NCDs, to become a threat to overwhelm healthcare systems with the emerging possibility of people not being able to access treatment or/ and immediate care. Over time, perceived benefits and barriers proved to be the strongest predictors in adopting a specific health-related behavior, with proved augmented efficacy in prevention behaviors in comparison with acute disease (Carpenter, 2010; Karl et al., 2022; Sulat et al., 2018), underlining the HBMs pivotal role as a potential early warning tool in prevention. Therefore, we believe the conceptual model has the potential to further be operationalized as a tool used in prediction of treatment adherence long before the first access of the healthcare system and so, used further as a frontline, preparing the system for facing overcrowding.

Concomitantly, studies reported major gaps in the extensive literature regarding also the relationship between educational attainment and obesity (A. K. Cohen et al., 2013) to which the implementation of tools such as the HBM in public policy can contribute.

In Romania, there is an important gap in socio-epidemiological data regarding diabetes and obesity and associated pathology, the latest consistent data being attributed to PREDATORR, an epidemiological study with a stratified, cross-sectional, cluster random sampling design developed by The Romanian Society of Diabetes, Nutrition and Metabolic Diseases (Mota et al., 2016). Nowadays steps towards an electronic platform that could help patients' management are being made. (ORDONANTA 39 31/08/2023 - Portal Legislativ, n.d.). In Romania, Diabetes Mellitus patients requiring subcutaneous insulin regimens, benefit from a 100% compensation of their insulin prescription and there is a fear among healthcare providers that, in the context of the state not being able to cover integrally the costs and, subsequently, as result, the introduction of a co-payment regulation as well as the case of a severe disruption in insulin supply might lead to an increased addressability in Emergency Departments. Recent articles are also upholding these concerns, with a report from Finland where a co-payment system lead to a decreased consumption of necessary medicines (Rättö et al., 2021) as the consequences of rationing insulin are being considered deadly (Lin et al., 2023).

The HBM also has significant limitations despite the growth in complexity: the low predictive capability of the determinants; their small effect size; and the lack of clear rules for combination of the variables and the relationships between them (Orji et al., 2012), with a systematic unidirectional causality between risk perception and individual prevention, disregarding heterogeneity in risk preferences (Augeraud-Véron & Leandri, 2024). Even if the HBM is mostly descriptive rather than explanatory (Jones et al., 2015), used with a proper validated methodology it can be an important tool for the development of tailored interventions with potential focus on the prevention of NCDs (Ali, 2002b; Becker & Janz, 1985; Becker & Maiman, 1980; Cummings et al., 1978; Kirscht, 1974; Koch, 2002; Melkamu et al., 2021; Rosenstock et al., 1988; Wang et al., 2022; Wills et al., 2015)

This review is limited as approach, not aiming to present an exhaustive historical development, but to rather highlight the refinement in the methodological approach of the HBM in time.

It is expected for future technology to further incorporate digital behavior change interventions (Tarricone et al., 2024) or facilitators for enhancing behavior change (such as attention to opportunities for skill development, individualized goal setting, receiving feedback, and enhancing social support) as well as to contribute to precision tailored behavioral medicine (Wong & Monaghan, 2020). Today, patients suffering from Diabetes can choose to manage their glycemic control using continuous or intermittent glucose monitoring systems but in the context of a frail regulatory framework regarding CGM, patients' information might be implied with consequences that are not fully understood (Britton & Britton-Colonnese, 2017). In this context, the HBM proved over time to be a valuable tool also for tackling behavioral cybersecurity risk (Britton & Britton-Colonnese, 2017)

It is mentioned previously in literature that there is a consensus that health promotion programs should be culturally sensitive (Adejoh, 2014; Resnicow et al., 1999). A quasi-experimental

setup from Indonesia, published in 2024, that aimed to evaluate the impact of the mother's role achievement module on breastfeeding, brings as novelty the focus on culturally sensitive tailored interventions based on the HBM, reporting remarkable results, among which we mention a 25% increase in breastfeeding frequency, a 30% enhancement in proper breastfeeding technique (Safaah et al., 2024).

With education and inequality as additional dimensions to social capital (Vâlsan et al., 2023), we raise a different concern regarding the lower expectancy of educational outcomes of obesity children. NCDs are reported to reduce productivity and human capital (Financing NCDs, 2015) and Doh et al described three pathways for how NCDs can emerge as a threat: low productivity and poor economic growth; pressure on public resources and public expenditure; familial burden (Doh et al., 2024). Even if digital communication tools are widely developed and used, it was previously shown that, despite convenience, switching to digital models registered a decrease in students' performance (Vaduva et al., 2022), suggesting the importance of human interaction in the learning process (De Felice et al., 2022) and particularly person-to-person delivery of knowledge. Nowadays, the design of most of the studies using the HBM includes a form of delivery of education, most of the time as face-to-face focus groups and the results are analyzed before and after the intervention. One meta-analysis in 2021 and one randomized controlled trial in 2019 show still inconclusive data for improved results or ineffective mHealth interventions (Boels et al., 2019; El-Gayar et al., 2021).

From our knowledge, this is the first report of the HBM construct's potential as an early warning tool assisting processes addressing NCDs. An earlier study established an early warning model based on Bayesian Belief Network (BBN) to predict the outbreak risk of severe Hand-Foot-Mouth-Disease and death in Hunan province, China (Liao et al., 2018). We also found a different reference regarding early prediction: constructs of benefits and barriers were found to be better predictors of CPAP adherence than the objective severity measures of RDI, BMI and CPAP, with the model being of use in the early prediction (after 1 night) of CPAP acceptance and adherence. (Olsen et al., 2008)

3. Conclusions

Our article, without having an exhaustive approach, aimed at underlining important aspects in the evolution of the HBM model conceptualization and the refining of the methodological approach over time in order to assess the potential addressability of practical public health concerns, focusing on obesity prevention.

The HBM conceptual model is considered an important tool to assist future tailored interventions for obesity prevention and also a potential early warning tool for assisting the enforcing of the preventive capacity of the healthcare system, helping in identifying, quantify, addressing and discouraging health-related risk behavior, from primordial prevention to bedside medical practice and public health concerns

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Determinants of materialism among the youth in Romania

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Abstract: *Materialism, a growing behavioral trend for over a century, has accelerated in recent decades. It is a major contributor to compulsive buying behavior, a surprisingly common yet under-recognized phenomenon. Despite existing research, few studies explore the combined influence of sociological, psychological, family and demographic factors. Additionally, research specific to Romania is scarce. This study examines the influence of media celebrity endorsement, TV advertisement and peer group communication on materialism and its link to compulsive buying behavior among young Romanians. Using a survey adapted from established literature, data was collected from 202 university students. A combination of statistical methods, including correlation and PLS-PM analysis, were used to analyze the data. The results reveal a significant prevalence of compulsive buying behavior among the youth and confirm the positive associations between materialism and its determinants. This study provides valuable insights into materialistic behavior and serves as a foundation for future studies, marketing strategies and consumer policy development.*

Key words: Materialism, Compulsive Buying Behavior, Addiction, Celebrity Endorsement, Peer Group, Advertisement;

JEL: C02, C10, C12, C14, C15, C30, C83, C87, D12, D91, M31, M37

1. Introduction

Human behavior, once focused solely on survival, has evolved into a complex interplay of desires. Throughout history, people have adapted to challenges and constantly innovated to improve their lives. Identifying needs and overcoming obstacles led to inventions that transformed our living standards. With technological advancements and societal changes, we now live in an era of endless possibilities. Products and services satisfy desires we never knew existed. The growing clutter on desks, overflowing closets and perpetually stocked pantries paint a familiar picture. Moreover, for some, consumerism reaches higher levels, spiraling out of control into an addiction and a deterioration of well-being (Górnik-Durose, 2020). The reason why shopping habits tend to grow out of control is that people associate material possessions (both in quantity and quality) with success, happiness and self-fulfillment in life (Christopher, Saliba and Deadmarsh, 2009). All of these changes have contributed to an increase in materialistic tendencies.

Materialism is a growing problem in our society, and understanding its meaning and consequences is crucial to preventing problems in relationships and within ourselves. To grasp the complexity of the problem, it is important to note that roughly 8% of the world's population suffers from compulsive shopping behavior, putting them at risk for addiction during their teenage or young adult years. Notably, about 85% of young people affected by this addiction report a family history of mental health problems (Must-Know Shopping Addictions Statistics [Current Data] • Gitnux, 2023).

The rationale behind the choice of this research topic was the recognition of the effects that materialism plays in society. While materialism is a well-established concept within consumer psychology, its significant impact on human well-being is often underestimated in contemporary society. Despite its seemingly harmless nature, materialism can have far-reaching consequences that fundamentally reshape individual lifestyles and potentially strain interpersonal relationships.

In light of these considerations, this paper delves into the factors that influence materialism and its relationship with compulsive buying behavior. Specifically, this paper examines the effect of peer group communication, TV advertisement and celebrity endorsement on materialism. The aim of this research is to investigate the association between these factors and materialism, with age and media exposure as control variables.

This paper consists of five sections. The first section presents the introduction, the problem to be discussed, and the reason for choosing this topic. Next, the theoretical framework is explained in the literature review, followed by the research methodology and the analysis results. The paper ends with a discussion and conclusion section.

2. Literature review

Materialism forms the core of this research, and understanding its definition is crucial. As Chan and Prendergast (2007, p. 214) define it, materialism is "a set of attitudes which regard possessions as symbols of success, where possessions occupy a central part of life, and which include holding the belief that more possessions lead to more happiness". Studies have shown that

materialism is often associated with negative personality traits, such as possessiveness, envy or a lack of generosity (Chan and Prendergast, 2007; Pradhan, Israel and Jena, 2018). These traits can lead to strained relationships with loved ones, as materialistic tendencies may cause individuals to prioritize acquiring possessions over fostering connections. Financial issues can also arise, with materialistic people feeling a greater need for a higher income than their non-materialistic counterparts to maintain a "normal" life (Christopher, Saliba and Deadmarsh, 2009). Interestingly, research suggests that materialistic behavior is more prevalent in industrialized capitalist cultures (Fromm, 2005). Additionally, societies that emphasize individual economic success may contribute to this trend, as people prioritize external goals for social recognition (Kasser and Ryan, 1993). These observations about the influence of social and cultural factors on materialism highlight the importance of investigating how social interactions, such as peer communication, celebrity endorsement and exposure to television advertisements, can impact young people's materialistic attitudes. In response to these concerns and the arguments presented above, this research delves further into the potential for a direct influence of materialism on compulsive buying behavior.

Peer group communication, as defined by the Cambridge Dictionary (2024), refers to interactions within a group of individuals who share similar age and interests, acting as a reference point for one another. Previous research suggests that although parents influence individuals' rational consumption patterns, friends may be a more influential factor in shaping materialistic tendencies (Sulaiman, Ali and Khatoon, 2019). Moreover, studies have shown that individuals from families with neglectful, divorced, or disruptive experiences might be more inclined to turn to impulsive consumption (Benmoyal-Bouzaglo and Moschis, 2010). Based on these findings, the following hypothesis is proposed:

H1: Young people who pay more attention to peer opinions are more likely to exhibit higher levels of materialism.

Each of us has at least one role model in our lives, whether from family, friends, teachers, or even celebrities. These models significantly shape our behavior, often unconsciously. This is why celebrity endorsement is thus a crucial determinant in our analysis. When facing challenging times, our vulnerability increases our susceptibility to external influences (Chan, 2008; Chan and Zhang, 2007). Chan et al. (2013) exemplify this with the case of Joey Yung, a Hong Kong singer who became famous after winning a major prize. This newfound fame led to a million-dollar endorsement contract. This significant sum, offered despite the potential lack of substantial profit for the company, highlights the immense power that celebrities hold over us. In this regard, it is hypothesized that:

H2: Young people who report a stronger desire to mimic the lifestyle choices of their favorite celebrities are more likely to exhibit higher levels of materialism compared to those with a weaker attachment to the lifestyle of their favorite celebrities.

Since the early days of materialism research, television advertising has been a constant factor under analysis. Behavioral scientists were the first to speculate on the influence of advertisements on consumer behavior (Wells and Gubar, 1966). Churchill and Moschis (1979) found that young people desired clothing worn by their favorite television personalities. A macro-level study by McCardle and Speck (2019) showed that exposure to television advertising can lead to

a disconnect between desired lifestyles portrayed and reality, potentially causing disappointment. In addition to establishing a link between TV advertisement and materialism, micro-level research suggests that the type of television programming people watch can influence their materialistic tendencies. This leads to the following hypothesis:

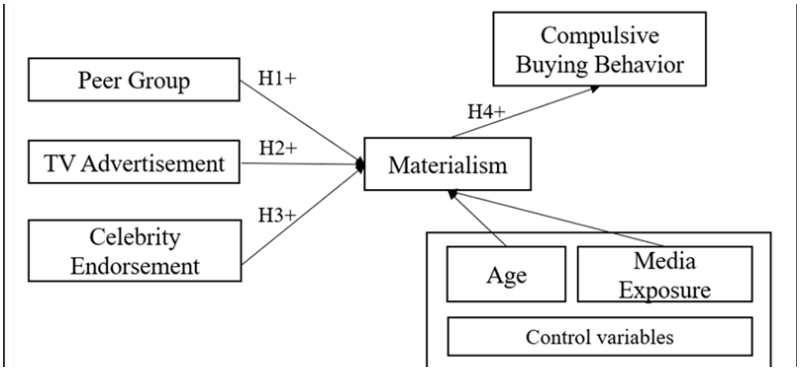
H3: Young people with higher exposure to TV advertisements are more likely to exhibit higher levels of materialism.

Compulsive buying behavior is a chronic form of shopping distinguished by a persistent urge to buy. This urge is often uncontrollable and disregards long-term consequences (Islam et al., 2017). Some researchers even define it as a psychiatric disorder where individuals lose control over their buying decisions (Pradhan, Israel and Jena, 2018). A common trait of compulsive buyers is the belief that expensive possessions are essential for a fulfilling life, more so than for those who do not suffer from this addiction (Dittmar and Drury, 2000). Tarka (2020) suggests that rapid economic and social changes can lead to increased materialism, citing Polish people as an example. Due to lower levels of contentment and a focus on personal needs, such individuals may be more susceptible to developing a compulsive buying behavior. Ong, Lau and Zainudin (2021) examine the financial consequences of compulsive buying behavior, focusing on the Malaysian perspective where acquiring more possessions is seen as a way to gain social power. On the psychological side, Müller, Mitchell and de Zwaan (2015) present findings from previous psychiatric studies conducted in Germany and the United States and report that at least 59% of individuals suffering from compulsive buying behavior also exhibit personality disorders. In light of these considerations, the following hypothesis is postulated:

H4: Young people's level of materialism is positively related to their compulsive buying behavior.

The research model and the proposed hypotheses are presented in Figure 1. This conceptual framework is adapted from the study of Islam et al. (2017) and shows materialism as a function of peer group communication, TV advertisement and celebrity endorsement, with two control variables, namely age and media exposure. In its turn, materialism is the determinant of compulsive buying behavior.

Figure 1: The conceptual research model



Source: Authors' own research

3. Research methodology

A survey was conducted to determine the level of materialism among individuals. Data was collected from N = 202 respondents using a Google Forms survey. The survey was open from October 2023 to April 2024 and was distributed through social media platforms such as Instagram, Facebook, and WhatsApp. Participation was voluntary, anonymous, and required the participant's consent. The questionnaire used in the survey was adapted from a previous study (Islam et al., 2017), and convenience sampling, where researchers had easier access to participants, was employed (Edgar and Manz, 2017). Snowball sampling was also used, with initial participants helping to recruit additional participants (Parker, Scott and Geddes, 2019).

The materialism value scale, derived from Richins and Dawson (1992), was used to analyze determinants of materialism. The scale consists of three domains: centrality, happiness, and success, measuring the importance of possessions, the belief that more possessions lead to happiness, and success based on possessions. Table 1 lists the variable dimensions and the corresponding scale items (Islam et al., 2017). We supplemented the scale with open-ended questions to find out how much time people spend watching news about their favorite celebrity and commonly used channels, referred to as media exposure. The items were translated into Romanian, and consistency was checked using the back-translation method. Respondents rated their level of agreement with the materialism scale questions on a 5-point Likert scale ranging from 1 (total disagreement) to 5 (total agreement).

Table 1: The measurement items

Dimension	Items
Materialism dependent variables	
Materialism (M)	M1: Acquiring valuable things is important for my happiness.
	M2: Having luxury items is important to a happy life.
	M3: I feel good when I buy expensive things. People think of me as a success.
	M4: I would pay more for a product if people think of it as a sign of success.
	M5: I like to own expensive things than most people because this is a sign of success.
	M6: I love to buy new products that affect status and prestige.
Compulsive Buying Behavior (CBB)	CBB1: When I have money, I cannot help but spend part or all of it.
	CBB2: I sometimes feel that something inside pushed me to go shopping.
	CBB3: There are times when I have a strong urge to buy.
	CBB4: I am often impulsive in my buying behavior.
	CBB5: I have often bought a product that I did not need, while knowing that I have very little money left.
Materialism independent variables	
Peer Group Communication (PGC)	PGC1: I always preferred my friends' opinion while shopping.
	PGC2: During shopping, I think whether my friends like this product or not.
	PGC3: My friends' opinion is very important for me about the products.
Media Celebrities Endorsement (MCD)	MCD1: I want to be as smart as movie idols.
	MCD2: I want to be as fashionable as celebrities looks like.
	MCD3: Media celebrities influenced me to good looking and attractive Appearance.
	MCD4: I want to look like media celebrity.
TV Advertisement (TVA)	TVA1: Advertisements to help me decide what things to buy.
	TVA2: Advertisements to know what I can buy to impress others.
	TVA3: I consume advertisements to know what brand has the product features I need.
	TVA4: Advertisements to have something to talk about with others.
Materialism control variables	
Media Exposure	ME1: On average, how many minutes do you spend during one day, informing yourselves about your favourite celebrities?
	ME2: Which are the sources you use to inform yourselves about your favourite celebrities?
	ME3: On average, how many minutes do you spend on the internet, during one day, informing yourselves about your favourite celebrities?
	ME4: On average, how many minutes do you spend watching TV, during one day, informing yourselves about your favourite celebrities?
	ME5: On average, how many minutes do you spend reading the newspaper, during one day, informing yourselves about your favourite celebrities?

Source: Authors' own research

The analysis was performed using RStudio and WarpPLS. The data was first imported into RStudio to analyze its summary and structure and to understand its descriptive aspects. The data was then standardized and analyzed using the partial least squares path modeling (PLS-PM) in WarpPLS 8.0. PLS-PM is a statistical technique that maximizes the explained variance in materialism using the proposed research model shown in Figure 1 and the control variables. The estimation algorithm includes two stages: the outer (measurement) model, which evaluates the relationships between the measurement items and their respective latent constructs, and the inner (structural) model, which estimates the structural relationships among latent constructs (Hair et al., 2019).

4. Results

Table 2 shows the descriptive statistics of the demographic characteristics of the respondents. According to the sample description, participants were aged between 19 and 52 years, with a mean age of 23.35 years. Gender distribution is unbalanced, with 141 females (70.5%) and 59 males (29.5%). The majority of the respondents have graduate studies (117; 58.5%), followed by high school graduates (66; 33.0%). Most of the participants do not have a paid job (62; 31.0%), while 55 (27.5%) have an income above 4000 lei. The other income categories are relatively evenly distributed, representing between 7% and 12.5% of the respondents.

Table 2: Descriptive statistics of sample demographics

Dimension	Category					Frequency
Age	Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum
	19	21	22	23.25	23	52
Gender	Female					141 (70.5%)
	Male					59 (29.5%)
Education	Highschool studies					66 (33.0%)
	Post-secondary studies					2 (1.0%)
	Graduate studies					117 (58.5%)
	Postgraduate studies					15 (7.5%)
Occupation	Employee					46 (23.0%)
	Unemployed					1 (0.5%)
	Student					153 (76.5%)
Income	I don't have any kind of paid activity					62 (31.0%)
	Less than 1000 lei					14 (7.0%)
	Between 1001 and 2000 lei					25 (12.5%)
	Between 2001 and 3000 lei					22 (11.0%)
	Between 3001 and 4000 lei					22 (11.0%)
	Over 4000 lei					55 (27.5%)

Source: Authors' own research

To optimize the model, the indicator loadings and cross-loadings were evaluated. The analysis revealed satisfactory results, except for the items M1, CBB1, ME2 and ME5. Consequently, these items were removed from the factors, resulting in an improvement. Although ME4 was slightly below the 0.7 threshold, the decision was to keep it in order to avoid excessively high loadings in the final model.

In the first part, we discuss three criteria in order to assess the outer (measurement) model: reliability of the internal consistency, convergent validity and discriminant validity (Hair et al., 2019). The composite reliability index and Cronbach's alpha index were used to assess the internal consistency. A good fit of these measures implies values above 0.7. In addition, average variance extracted (AVE) is another important indicator that assesses the construct variance in relation to measurement errors.

The reliability and convergent validity results of the measurement model are presented in Table 3. The composite reliability coefficients range from 0.854 to 0.911, exceeding the recommended value of 0.7. Additionally, the Cronbach's alpha values are all greater than 0.7, ranging from 0.750 to 0.877, while the AVE values range from 0.595 to 0.722 and are all above the 0.5 threshold. Table 3 confirms the convergent validity of the variable constructs by examining the cross-loadings of our latent variables. Almost all loadings, ranging from 0.678 to 0.931, exceed the recommended threshold of 0.7, with one exception: ME4, which was still included in the analysis in order to avoid excessive values.

Table 3: *Assessment of the measurement model and convergent validity of latent constructs*

Construct	CR	CA	AVE	Item	Factor loading
Materialism (M)	0.911	0.877	0.672	M2	0.787
				M3	0.822
				M4	0.858
				M5	0.851
Peer Group Communication (PGC)	0.857	0.750	0.667	PGC1	0.798
				PGC2	0.807
				PGC3	0.845
Media Celebrity Endorsement (MCE)	0.874	0.808	0.636	MCD1	0.784
				MCD2	0.851
				MCD3	0.816
				MCD4	0.733
TV Advertisement (TVA)	0.854	0.772	0.595	TVA1	0.748
				TVA2	0.791
				TVA3	0.820
				TVA4	0.722
Compulsive Buying Behavior (CBB)	0.885	0.799	0.722	CBB2	0.852
				CBB3	0.787
				CBB4	0.843
				CBB5	0.754
Media Exposure (ME)	0.884	0.824	0.656	ME1	0.917
				ME3	0.931
				ME4	0.678

Source: Authors' own research

Table 4 demonstrates discriminant validity using AVE square roots. Diagonal scores exceed off-diagonal items in their respective row and column. Furthermore, all off-diagonal scores are below 0.8, confirming conceptual distinctiveness between constructs.

Table 4: Discriminant validity of latent constructs

Dimension	M	PGC	MCE	TVA	CBB	ME
M	**0.819**	0.285	0.464	0.559	0.348	0.117
PGC		**0.817**	0.404	0.363	0.214	0.202
MCE			**0.797**	0.536	0.230	0.297
TVA				**0.771**	0.332	0.244
CBB					**0.810**	0.205
ME						**0.850**

Source: Authors' own research

In the second part, we discuss the inner (structural) model outcomes, as presented in Table 5. These include the estimated path coefficients, significance levels and effect sizes for the latent constructs that influence the outcome variables, as well as goodness-of-fit indices, following Hair et al.'s (2019) structural model reporting procedure. Cohen's f2 equivalent is used to assess the associated effect sizes. The general results show R2 values of 0.42 and 0.13, indicating that 42% of the variation in materialism and 13% of the variation in compulsive buying behavior are explained by the model. The Tenenhaus GoF value is 0.410 and the standardized root mean squared residual (SRMR) is 0.08, below the acceptable threshold suggested by scholars (Hu and Bentler, 1999), indicating a good model fit. In addition, the Simpson's paradox ratio is 0.833, which is an acceptable value for assessing causality. The multicollinearity check shows that all VIF values are lower than 1.853, below the ideal recommended 3.3 threshold.

According to our analysis results, shown in Table 5, two out of the three determinants of materialism are statistically significant. Thus, media celebrity endorsement ($\beta = 0.227$, $p < 0.001$) and TV advertisement ($\beta = 0.392$, $p < 0.001$) both have a positive and statistically significant relationship with the degree of materialism, confirming H2 and H3. However, peer group communication ($\beta = 0.069$, $p = 0.161$) does not show a significant relationship with the level of materialism, suggesting that there is insufficient evidence to support H1. Furthermore, materialism ($\beta = 0.177$, $p = 0.005$) has a positive effect on compulsive buying behavior, thus confirming H4. Regarding the effect of control variables on materialism, age was found to be statistically insignificant ($\beta = 0.086$, $p = 0.109$), while media exposure shows a marginal statistical significance ($\beta = 0.100$, $p < 0.075$).

In terms of effect sizes, TV advertisement is the strongest predictor of materialism with a medium effect size of 0.244, followed by media celebrity endorsement with a small effect size of 0.106. Additionally, materialism has a small effect size of 0.063 on compulsive buying behavior. These effect sizes are strong enough to be considered from a practical point of view (Cohen, 1988). However, peer group communication has an effect size of 0.021, which, although meeting the recommended threshold of 0.02, is not significant for practical implications. The results indicate that the control variables, age and media exposure, have no significant effect on materialism, with values between 0.013 and 0.014, thus below the 0.02 threshold, suggesting a lack of practical relevance.

Table 5: The structural model results

Relationship	Path coefficients	Significance	Effect sizes
Peer Group Communication → Materialism	0.069	p = 0.161	0.021
Media Celebrity Endorsement → Materialism	0.227	p < 0.001	0.106
TV Advertisement → Materialism	0.392	p < 0.001	0.224
Materialism → Compulsive Buying Behavior	0.177	p = 0.005	0.063
Media Exposure → Materialism	0.100	p = 0.075	0.014
Age → Materialism	0.086	p = 0.109	0.013
Goodness of Fit Indices			
Model	**Materialism**	**Compulsive Buying Behavior**	
R^2 / Adjusted R^2	42% / 41%	13% / 12%	
Tenehaus GoF	0.410 (large)		

Notes: *** p-value < 0.001; ** p-value < 0.01; * p-value < 0.05
Tenehaus GoF: small >= 0.1, medium >= 0.25, large >= 0.36
Source: Authors' own research

5. Discussions and conclusions

This study adds to the existing literature on materialism and compulsive buying behavior, supporting the idea that multiple factors contribute to materialism and not just one category. Previous studies have shown that materialism is high in developing countries (Arthur et al., 2019), focusing on life satisfaction (Wiles et al., 2024), celebrities (Chan, 2011), and media channels (Agusiady, Saepudin and Aripin, 2024). Some studies examine sociological factors (Latif, Hasan and Khalid, 2021) or a combination of sociological and economic factors (Nairn and Opree, 2021), but few combine multiple factors. This study is important because it addresses these gaps in the literature.

The main findings confirm the importance of celebrity endorsement and TV advertisements in the development of materialism among youth in Romania. However, peer group communication does not play a significant role. Quantitatively, the analysis confirms previous findings on the influence of celebrity endorsement (Osei-Frimpong, Donkor and Owusu-Frimpong, 2019) and TV advertisements (Nairn and Opree, 2021). However, contrary to the existing literature (Chan, 2008), peer group communication does not have a strong influence on materialism.

In terms of compulsive buying behavior, some research supports a relationship between materialism and compulsive buying behavior (Ong, Lau and Zainudin, 2021), while others suggest that materialism is not a strong predictor (Tantawi, 2024). This study contributes to the understanding of this relationship and finds a statistically significant link between materialism and compulsive buying behavior.

In summary, this study confirms the influence of TV advertisements and celebrity endorsement on materialism and highlights the need for further investigation into the role of peer group communication, as shown in Table 6. Additionally, it provides insights into the relationship between materialism and compulsive buying behavior.

Table 6: Summary of the hypothesis testing

Hypotheses	Type	Relationship	Decision
H1	+	Peer Group Communication → Materialism	Not supported
H2	+	Media Celebrity Endorsement → Materialism	Supported
H3	+	TV Advertisement → Materialism	Supported
H4	+	Materialism → Compulsive Buying Behavior	Supported

Source: Author's own research

This study also aimed to understand why peer group communication was not significant in the proposed model. Although age initially seemed irrelevant, this analysis showed that it is not significant due to its lack of linearity. However, it can be treated separately based on two groups: those under 35 and those over 35. This is supported by existing literature suggesting a relationship between materialism and age, particularly in children (Nairn and Opree, 2021). Media exposure was also explored further, with the conclusion that newspapers are no longer of significant importance compared to the internet.

In terms of practical implications, the study provides crucial information for public institutions that regulate advertising placements. Countries can be classified into three categories: those minimally impacted by regulations, those with some restrictions (e.g., children's ads shown at night), and those banning certain ads to discourage materialism. This research informs future regulations and helps marketing departments tailor campaigns to current materialistic trends. Instead of widespread advertising, companies can focus on relevant media channels. Furthermore, there is a need for educational programs to improve understanding of materialism and reduce the consequences of compulsive buying behavior.

This study analyzed determinants of materialism, including peer group communication, TV advertisement, and celebrity endorsement. Control variables such as age and media exposure were also considered. The study found that in Romania, peer group communication was not significantly related to materialism, while TV advertisement and celebrity endorsement were. Age was not significant in a linear relationship, suggesting a need for further research with different age groups. Media exposure was found to be a significant control variable. The study also highlighted the limitations, such as a small and unbalanced sample size, and the need for a longitudinal study to capture changes in attitudes over time. Future research could focus on analyzing the two age groups identified and conducting the study at a national and international level, considering different advertising regulations.

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Determinants of consumers' intentions to purchase second-hand clothing in Romania

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Abstract: *With the growing awareness of the harmful effects of fast fashion, consumers are now distancing themselves from disposable fashion and turning towards second-hand options. This study aims to analyze the determinants of consumers' intentions to purchase second-hand clothing in Romania using a model that integrates the Theory of Planned Behavior and the Theory of Consumption Values. The study collected data from 496 Romanian respondents through a self-report survey and used the partial least squares path modeling (PLS-PM) technique to investigate the relationships between variables. The results indicate that attitudes, perceived behavioral control and past behavior have a positive influence on consumers' purchase intention. Additionally, all examined norms, i.e., injunctive norms, descriptive norms and moral norms, positively influence consumers' intention. Emotional value, social value and environmental value also play significant roles in positively influencing consumers' attitudes towards second-hand clothing. However, no evidence was found to support the positive influence of epistemic value on consumers' attitudes.*

Key words: second-hand clothing, determinants of second-hand clothing, Theory of Planned Behavior, Theory of Consumption Values, PLS-PM, Romania

JEL: C02, C10, C12, C14, C15, C25, C30, C35, C83, C87, D12, D91, E21

1. Introduction

Fast fashion, the global trend of producing and consuming cheap and disposable clothing (Brandão and Costa, 2021), often leads to a culture of overconsumption and impulsive shopping due to lifestyle changes and technological advances (Kotahwala, 2020). Moreover, this trend has negative environmental impacts, such as water contamination, carbon dioxide emissions and waste pollution (Koay, Cheah and Lom, 2022), as well as negative social impacts, such as poor working conditions and cheap labor (Ronda, 2024).

The fashion industry should consider adopting sustainable practices and shifting from linear to circular consumption models to mitigate these problems (Lambert, 2019). Therefore, alternative consumption models, including the consumption of second-hand clothing, have gained recognition (Hur, 2020) and are considered to promote environmental sustainability. Second-hand clothing (SHC) consumption, referred to as the consumption of clothing that was previously used by someone else (Machado et al., 2019), has attracted academic interest as it contributes to extending the life of clothing and combating overconsumption (Rodrigues, Proença and Macedo, 2023), as well as reducing waste and pollution caused by fast fashion (Koay, Cheah and Lom, 2022).

Therefore, the aim of this paper is to analyze the determinants of consumers' intention to purchase second-hand clothing in Romania and their attitudes towards it using a model integrating the Theory of Planned Behavior (TPB) and the Theory of Consumption Values (TCV), thus addressing the knowledge gap related to the motivations to purchase second-hand clothing.

Hence, this study will address the following two proposed research questions:

RQ1: What factors drive consumers' intentions to purchase second-hand clothing?

RQ2: What factors drive consumers' attitudes towards second-hand clothing?

The current paper is divided into five sections, and it begins with a brief introduction that informs the reader of the problem at hand and states the purpose of the research. The literature review serves as a theoretical framework and synthesizes the key contributions of prior studies. Next, the research methodology and data collection are presented, followed by the main findings. The paper ends with final discussions and conclusions.

2. Literature review

The theory of planned behavior (TPB), a highly regarded framework in the field of social psychology introduced by Ajzen in 1985, is widely used in understanding and predicting the relationship between intentions and behaviors (Ajzen, 1991). It highlights that intentions significantly influence behavior, with attitudes, subjective norms and perceived behavioral control as key determinants of behavioral intentions (Ajzen, 1991). Furthermore, Ajzen (1991) suggests that the TPB should not be limited to three key predictors, encouraging researchers to include additional factors. With this in mind, the current study also includes moral norms and past behavior to predict consumers' intentions to purchase SHC, emphasizing the importance of flexibility in the TPB.

Attitudes, as understood in the TPB framework, encompass an individual's overall perspective on a particular behavior (Borusiak et al., 2020), including both cognitive and emotional

elements (Ajzen, 1991). Essentially, attitudes are shaped by evaluations of the desirable and undesirable outcomes associated with a behavior. Previous studies have shown that attitudes significantly shape intentions and behaviors, including purchasing green products (Yadav and Pathak, 2017) or second-hand clothing (Ögel, 2022; Hoang et al., 2022). Therefore, it is hypothesized that:

H1: Consumers' attitudes towards second-hand clothing positively influence their intention to purchase second-hand clothing.

Cialdini (2007) divided subjective norms into injunctive and descriptive categories. Injunctive norms refer to expected behaviors and social expectations. They influence individuals because people are more likely to engage in behaviors that are positively viewed or approved of by significant people in their lives (Cialdini, 2007). Descriptive norms, on the other hand, are based on observed behaviors, and individuals are more likely to engage in a particular action if they see significant people in their lives actually engaging in that action (Cialdini, 2007; Koay, Cheah and Lom, 2022). Previous research shows that both injunctive and descriptive norms influence consumers' intentions to purchase eco-friendly products (Kim, Lee and Hur, 2012) or second-hand clothing (Koay, Cheah and Lom, 2022). Thus, the following two corresponding hypotheses are proposed:

H2: Consumers' injunctive norms positively influence their intention to purchase second-hand clothing.

H3: Consumers' descriptive norms positively influence their intention to purchase second-hand clothing.

The moral norm is "an individual's perception of the moral correctness or incorrectness of performing a behavior" (Ajzen, 1991; Conner and Armitage, 1998, p. 1441). It plays an important role in influencing intentions, as academics suggest that individuals may adopt behaviors based on altruism rather than rational considerations alone and may feel remorse or guilt when their actions contradict their moral standards (Schwartz, 1977). According to prior studies, moral norms significantly predict sustainable behavior (Borusiak et al., 2020; Chaturvedi, Kulshreshtha and Tripathi, 2020). In light of these considerations, the following hypothesis is formulated:

H4: Consumers' moral norms positively influence their intention to purchase second-hand clothing.

Perceived behavioral control (PBC) is another important factor in predicting behavioral intention and refers to an individual's perception of the ease or difficulty of performing certain actions (Ajzen, 1991). It assesses perceptions of control and self-efficacy and emphasizes the importance of resources and opportunities in performing the given action. The influence of perceived behavioral control has been found to be significant for consumers' intention to purchase recycled clothing (Chaturvedi, Kulshreshtha and Tripathi, 2020) or sustainable apparel (Tran et al., 2022). The corresponding hypothesis is stated below:

H5: Consumers' perceived behavioral control positively influences their intention to purchase second-hand clothing.

Past behavior is a predictor of future actions, as repeated behaviors become habits over time (Ajzen, 1991). Consumers' habits are influenced by their past experiences, which may affect their product preferences. Studies have shown that consumers' past experiences significantly influence their intention to buy second-hand clothes (Xu et al., 2014; Sweety, 2022). Hence, this paper proposes the following hypothesis:

H6: Consumers' past behavior positively influences their intention to purchase second-hand clothing.

The theory of consumption values (TCV) states that an individual's product purchase decision is influenced by functional, social, emotional, epistemic and conditional values (Sheth, Newman and Gross, 1991). The theory acknowledges that consumer choice is driven by multiple values, each contributing differently and independently of the others (Sheth, Newman and Gross, 1991). Moreover, TCV can be adjusted based on the specific attributes of the product being evaluated. Building on the study by Koay, Cheah and Lom (2022), this paper analyzes consumers' attitudes towards SHC as a function of four values, namely emotional, social, espistemic and environmental.

Emotional value, defined as "the perceived utility acquired from an alternative's capacity to arouse feelings or affective states" (Sheth, Newman and Gross, 1991, p. 161), plays a crucial role in consumers' willingness to purchase second-hand clothing, as consumers may prioritize the positive feelings generated by a product over potential perceived drawbacks, such as lower quality or lack of durability (Koay, Cheah and Lom, 2022). Studies highlight emotional value as a key factor in green product purchases (Amin and Tarun, 2020) and attitudes towards sustainable fashion (Kim, Jung and Lee, 2021). This leads to the formulation of the following hypothesis:

H7: Consumers' emotional value positively influences their attitudes towards second-hand clothing.

Social value refers to "the perceived utility acquired from an alternative's association with one or more specific social groups" (Sheth, Newman and Gross, 1991, p. 161). Consumers consider the social value of a product when making purchase decisions, especially if it enhances their social acceptance (Hur, 2020). This is supported by studies showing that social value positively influences attitudes towards sustainable apparel like second-hand clothing (Kim, Jung and Lee, 2021). Therefore, the following hypothesis is postulated:

H8: Consumers' social value positively influences their attitudes towards second-hand clothing.

Epistemic value is "the perceived utility acquired from an alternative's capacity to arouse curiosity, provide novelty, and/or satisfy a desire for knowledge" (Sheth, Newman and Gross, 1991, p. 162). In the context of this study, it refers to how consumers perceive SHC as rare, unique or novel. Second-hand clothing offers a sense of curiosity and uniqueness to consumers who seek to express their individuality and creativity through distinctive pieces (Hur, 2020). Yoon (2013) supports the idea that consumers' desire for unique and rare fashion items drives their purchase intention. Thus, the following hypothesis is developed below:

H9: Consumers' epistemic value positively influences their attitudes towards second-hand clothing.

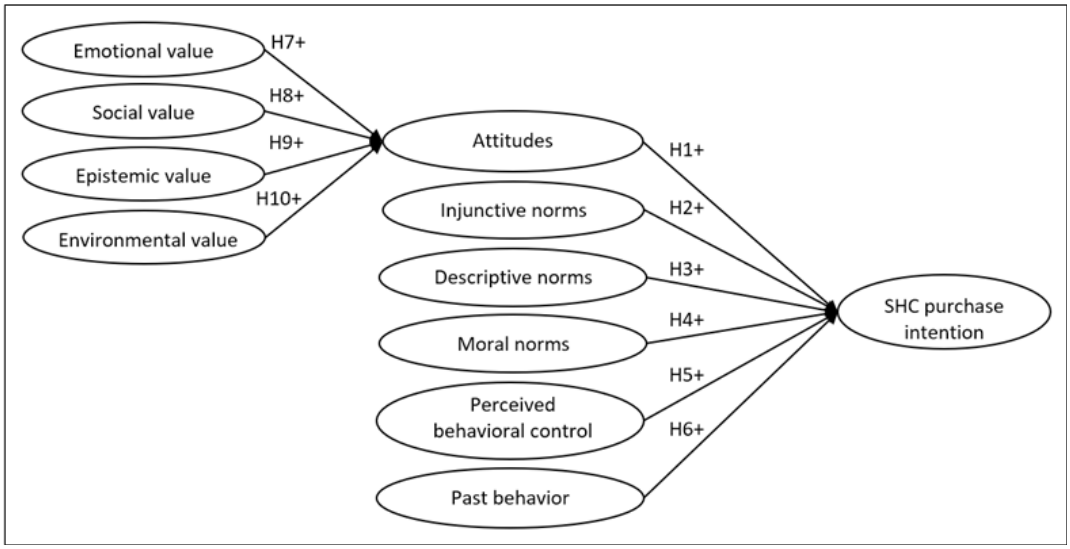
Environmental value refers to "the perceived utility acquired from an alternative's capacity to produce positive outcomes for the environment" (Koay, Cheah and Lom, 2022, p. 7). Consumers' growing environmental awareness leads to increased product reuse and participation in eco-friendly activities, as shown in the literature (Silva et al., 2021; Koay, Cheah and Lom, 2022). In addition, Kim, Jung and Lee (2021) found a strong connection between environmental

values and attitudes towards SHC. This paved the way for the next hypothesis, which is presented below:

H10: Consumers' environmental value positively influences their attitudes towards second-hand clothing.

Figure 1 shows the proposed research model and the associated hypotheses. The model is an adaptation of the study by Koay, Cheah and Lom (2022), which combines the TPB and TCV frameworks, and is supported by corresponding hypotheses describing the influence (positive or negative) of each predictor on the outcome variables.

Figure 1: The conceptual research model



Source: Author's own research

3. Research methodology

For the aim of this paper, the author collected a data sample of 496 Romanian respondents between March and May 2024 through a self-administered Google Forms survey distributed to respondents via social media networks using a mix of convenience and snowball sampling. Prior to completing the survey, participants were informed of the purpose of the research and how the data provided would be processed, that all information collected would be confidential and used for research purposes only, the time required to complete the questionnaire, and that participation was voluntary and could be withdrawn at any time. All items composing the latent constructs were measured on a 7-point Likert scale, with 1 indicating total disagreement and 7 indicating total agreement, and are presented in Table 1, along with their references.

To test the proposed relationships, the author analyzed the data using partial least squares path modeling (PLS-PM), an exploratory statistical method widely used across disciplines (Hair

et al., 2019) in WarpPLS 8.0. The PLS-PM approach aims to maximize the explained variance in the intention to purchase second-hand clothing and attitudes using the integrated conceptual model, shown in Figure 1, and control variables. The iterative partial least squares estimation algorithm involves a two-stage analysis: first, the measurement (outer) model, which examines the relationships between the latent constructs and their specific measurement items, and second, the structural (inner) model, which explores the structural relationships among latent constructs (Hair et al., 2019).

Table 1: The measurement items

Construct	Item	Reference
Purchase intention (PI)	PI1: I intend to buy second-hand clothing in the future	Ajzen (1991); Fishbein and Ajzen (2011)
	PI2: I will try to buy second-hand clothing in the future	
	PI3: I am willing to buy second-hand clothing in the future	
Attitudes (ATT)	ATT1: For me, buying second-hand clothing is wise	Ajzen (1991); Fishbein and Ajzen (2011); Lang (2018)
	ATT2: For me, buying second-hand clothing is beneficial	
	ATT3: For me, buying second-hand clothing is satisfactory	
	ATT4: For me, buying second-hand clothing is interesting	
	ATT5: For me, buying second-hand clothing is pleasant	
Injunctive norms (INJ)	INJ1: My friends would approve me buying second-hand clothing	Ajzen (1991); Fishbein and Ajzen (2011)
	INJ2: My family members would approve me buying second-hand clothing	
	INJ3: People around me would approve me buying second-hand clothing	
Descriptive norms (DES)	DES1: My friends buy second-hand clothing	Ajzen (1991); Fishbein and Ajzen (2011)
	DES2: My family members buy second-hand clothing	
	DES3: People around me buy second-hand clothing	
Moral norms (MOR)	MOR1: I believe I have a moral obligation to choose second-hand clothing when I have to buy something	Shin et al. (2018); Ru et al. (2019)
	MOR2: Choosing second-hand clothing is consistent with my moral principles	
	MOR3: My personal values encourage me to choose second-hand clothing when I have to buy something	
	MOR4: I would feel guilty if I did not buy second-hand clothing	
Perceived behavioral control (PBC)	PBC1: Whether or not I buy second-hand clothing is completely up to me	Ajzen (1991); Fishbein and Ajzen (2011)
	PBC2: I am confident that if I wanted to, I could buy second-hand clothing	
Past behavior (PB)	PB: I have purchased second-hand clothing in the past 6 months	Fishbein and Ajzen (2011)
Emotional value (EMV)	EMV1: I feel happy when I wear second-hand clothing	Sheth (1991); Kim et al. (2021)
	EMV2: Buying second-hand clothing makes me feel good	
	EMV3: The stress is relieved by buying second-hand clothing	
Social value (SOV)	SOV1: Buying second-hand clothing can give its owner social approval	Sheth (1991); Kim et al. (2021)
	SOV2: Second-hand clothing would make a good impression on other people	
	SOV3: Second-hand clothing would improve the way I am perceived by my friends	
Epistemic value (EPV)	EPV1: Second-hand clothing offers uniqueness	Sheth (1991); Kim et al. (2021)
	EPV2: Second-hand clothing has points of difference from general clothing	
	EPV3: Second-hand clothing has many new features	
Environmental value (ENV)	ENV1: Second-hand clothing has a positive impact on the environment in that it extends the life of discarded materials	Sheth (1991); Kim et al. (2021)
	ENV2: Second-hand clothing is environmentally friendly	
	ENV3: Second-hand clothing has more environmental benefits than other clothing	

Source: Author's own research

4. Results

In the sample of 496 Romanian respondents who were aged 17–82 years (mean = 25.82, sd = 11.34), the majority were women (72.6%) and lived in urban areas (81.5%). About half of the participants were unemployed students (49.2%), while 23.8% were full-time employees. The majority had a high school education (54.4%) and a monthly income below 2000 RON (42.1%).

After a preliminary analysis of the latent variables, five items, respectively PI1, ATT1, ATT2, ATT4 and EPV2, were removed due to loadings below the 0.7 threshold and multicollinearity.

In the first stage, the measurement (outer) model implies three criteria of evaluation: internal consistency reliability, convergent validity and discriminant validity (Hair et al., 2019). Table 2 presents the reliability results for the measurement model and the convergent validity check. The composite reliability (CR) index ranges from 0.827 to 0.907, exceeding the 0.7 threshold. The Cronbach's alpha (CA) coefficients indicate internal consistency, with values above the 0.7 threshold except for PBC and EPV, which still exceed the minimum of 0.5 accepted in exploratory research. Nevertheless, the small number of items involved and the theoretical recommendation (Nunnally and Bernstein, 1994) justify their inclusion in the analysis. The average variance extracted (AVE) index for each construct exceeds the recommended value of 0.5. Hence, the results confirm the reliability of the measurement model. Finally, the factor loadings of all items are above 0.7, with a high statistical significance ($p < 0.001$), and range from 0.751 to 0.911, with the off-diagonal item scores lower than the corresponding diagonal item scores, supporting convergent validity.

Table 2: The reliability of the measurement model and the convergent validity of the latent constructs

Construct	CR	CA	AVE	Item	Factor loading
Purchase intention (PI)	0.907	0.794	0.829	PI2	0.911
				PI3	0.911
Attitudes (ATT)	0.880	0.728	0.786	ATT3	0.887
				ATT5	0.887
Injunctive norms (INJ)	0.913	0.856	0.777	INJ1	0.883
				INJ2	0.856
				INJ3	0.905
Descriptive norms (DES)	0.906	0.844	0.764	DES1	0.901
				DES2	0.803
				DES3	0.914
Moral norms (MOR)	0.867	0.795	0.619	MOR1	0.818
				MOR2	0.751
				MOR3	0.816
				MOR4	0.761
Perceived behavioral control (PBC)	0.827	0.583	0.706	PBC1	0.840
				PBC2	0.840
Emotional value (EMV)	0.877	0.788	0.704	EMV1	0.888
				EMV2	0.855
				EMV3	0.770
Social value (SOV)	0.846	0.727	0.647	SOV1	0.793
				SOV2	0.818
				SOV3	0.801
Epistemic value (EPV)	0.855	0.660	0.746	EPV1	0.864
				EPV3	0.864
Environmental value (ENV)	0.907	0.846	0.764	ENV1	0.876
				ENV2	0.878
				ENV3	0.868

Source: Author's own research

The study confirms discriminant validity by examining correlations among latent constructs with square roots of AVEs. Block diagonal scores are higher than the corresponding off-diagonal scores, with off-diagonal correlations below the 0.8 threshold, as shown in Table 3.

Table 3: Correlations among latent constructs with square roots of average variances extracted (AVEs)

Construct	PI	ATT	INJ	DES	MOR	PBC	EMV	SOV	EPV	ENV
PI	**0.911**	0.716	0.613	0.615	0.559	0.445	0.648	0.474	0.586	0.590
ATT		**0.887**	0.532	0.585	0.672	0.337	0.732	0.544	0.502	0.502
INJ			**0.881**	0.666	0.420	0.519	0.511	0.419	0.433	0.541
DES				**0.874**	0.486	0.337	0.589	0.530	0.439	0.428
MOR					**0.787**	0.216	0.682	0.679	0.468	0.480
PBC						**0.840**	0.287	0.165	0.315	0.497
EMV							**0.839**	0.561	0.579	0.514
SOV								**0.804**	0.440	0.409
EPV									**0.864**	0.508
ENV										**0.874**

Source: Author's own research

In the second stage, the structural (inner) model was evaluated by estimating the relationships between the latent variables involved in the proposed model. Following the procedure for reporting structural models proposed by Hair et al. (2019), Table 4 reports the estimated path coefficients, their level of significance and the associated effect sizes for each of the latent constructs influencing the outcome variables, using Cohen's f2 equivalent, as well as the goodness-of-fit measures.

The inner model has high explanatory powers (R2) for the two endogenous constructs. Hence, it explains 65.7% of the variance in consumers' intention to purchase SHC and 60.9% of the variance in attitudes towards SHC. According to the multicollinearity check, there is no evidence of common method bias or multicollinearity in the analysis, as all VIF values are less than 3.232, below the ideal recommended threshold of 3.3. The model also has a Tenehaus goodness-of-fit value of 0.716, classified as large, and a standardized root mean squared residual (SRMR) of 0.08, within the range accepted in the literature (Hu and Bentler, 1999), indicating a good fit. In addition, the data do not exhibit Simpson's paradox, statistical suppression or bivariate causality direction.

The inner model estimates the influence of the predictors on consumers' intention to purchase second-hand clothing. The results in Table 4 reveal that attitudes towards second-hand clothing have a significant positive influence on consumers' intention to purchase SHC ($\beta = 0.362$, $p < 0.001$), therefore confirming H1. All of the norms involved, i.e., injunctive norms ($\beta = 0.147$, $p < 0.001$), descriptive norms ($\beta = 0.113$, $p = 0.006$) and moral norms ($\beta = 0.131$, $p = 0.002$) also indicate a significant positive influence on consumers' purchase intention, thus supporting H2, H3 and H4. The results also support H5 and H6 by showing a significant positive influence of perceived behavioral control ($\beta = 0.163$, $p < 0.001$) and past behavior ($\beta = 0.106$, $p = 0.008$) on purchase intention. However, none of the control variables included have a significant effect on

purchase intention. In terms of effect sizes, attitudes emerge as the strongest predictor of consumers' intention to purchase SHC, with the highest effect size (f2 = 0.265), considered moderate according to Cohen (1988). This is followed by small effect sizes attributed to injunctive norms (f2 = 0.091), moral norms (f2 = 0.079), perceived behavioral control (f2 = 0.073) and descriptive norms (f2 = 0.070), while past behavior is the least significant predictor of the consumers' intention (f2 = 0.061). While all the predictors of purchase intention show effects that are strong enough for the variables to be relevant to practical interventions (Cohen, 1988), all of the control variables have effect sizes between 0.001 and 0.01, below the minimum value of 0.02, and are thus too weak to be of practical relevance.

Furthermore, the inner model also assesses the influence of the constructs that determine consumers' attitudes towards second-hand clothing. As shown in Table 4, three out of the four attitude predictors have a significant positive influence on the outcome variable. Specifically, emotional value ($\beta = 0.571$, $p < 0.001$), social value ($\beta = 0.150$, $p < 0.001$) and finally environmental value ($\beta = 0.123$, $p < 0.001$) have a significant positive influence on consumers' attitudes, hence supporting H7, H8 and H10. However, as the epistemic value does not show a significant positive influence on consumers' attitudes towards SHC ($\beta = 0.064$, $p = 0.077$), H9 cannot be supported by the results of this paper. In terms of effect sizes, emotional value stands out as the strongest determinant of attitudes, with the highest effect size (f2 = 0.431), described as strong (Cohen, 1988), followed by the social value (f2 = 0.082) and the environmental value (f2 = 0.062), with effects that are small, but relevant from a practical perspective (Cohen, 1988). Nevertheless, epistemic value has the smallest effect size, which, although above the recommended threshold of 0.02, does not render epistemic value practically relevant.

Table 4: The structural model results and summary of the research hypothesis testing

Hypothesis	Relationship	Path coefficients	Significance	Effect size	Decision
H1	ATT → PI	0.362***	p < 0.001	0.265	Supported
H2	INJ → PI	0.147***	p < 0.001	0.091	Supported
H3	DES → PI	0.113**	p = 0.006	0.070	Supported
H4	MOR → PI	0.131**	p = 0.002	0.079	Supported
H5	PBC → PI	0.163***	p < 0.001	0.073	Supported
H6	PB → PI	0.106**	p = 0.008	0.061	Supported
H7	EMV → ATT	0.571***	p < 0.001	0.431	Supported
H8	SOV → ATT	0.150***	p < 0.001	0.082	Supported
H9	EPV → ATT	0.064	p = 0.077	0.034	Rejected
H10	ENV → ATT	0.123**	p = 0.003	0.062	Supported
-	Age → PI	-0.008	p = 0.431	0.001	-
-	Gender → PI	-0.019	p = 0.335	0.004	-
-	Income → PI	-0.045	p = 0.159	0.011	-
Goodness of Fit Indices					
Model		**Attitudes**		**Purchase intention**	
R^2 / Adjusted R^2		60.9% / 60.6%		65.7% / 65.1%	
Tenehaus GoF		0.716 (large)			

*Notes: *** p-value < 0.001; ** p-value < 0.01; * p-value < 0.05*

Tenehaus GoF: small >= 0.1, medium >= 0.25, large >= 0.36

Source: Author's own research

5. Discussions and conclusions

Consumers' attitudes towards SHC significantly influence their purchase intention, indicating that favorable feelings towards SHC increase the likelihood of purchase, aligning with previous studies (Seo and Kim, 2019; Ögel, 2022). Both injunctive and descriptive norms also positively influence consumers' intention to purchase SHC, showing that consumers are more likely to purchase SHC when they believe it is socially approved or when important people in their lives purchase it, in line with prior research (Koay, Cheah and Lom, 2022), while other studies show opposite results (Seo and Kim, 2019; Borusiak et al., 2020). Moral norms also positively influence purchase intention. Consumers with personal values that align with SHC are more likely to engage in SHC purchases, which is consistent with the study by Borusiak et al. (2020) and contradicts the study by Hoang et al. (2022). Perceived behavioral control is also relevant, indicating that consumers are more willing to purchase SHC when they believe they are in control and capable of doing so, which supports the findings of Borusiak et al. (2020) and contradicts the findings of Sweety (2022). Similarly, past behavior positively influences the purchase intention, suggesting that consumers are more likely to purchase SHC if they have done so in the past, which is supported by previous literature (Xu et al., 2014; Sweety, 2022). Furthermore, emotional, social and environmental values are significant in influencing attitudes towards SHC. Consumers are more likely to have positive attitudes towards SHC when they experience positive emotions and stress relief, receive social acceptance and image enhancement, and perceive positive environmental outcomes from purchasing SHC. Koay, Cheah and Lom (2022) confirm the significance of emotional, environmental, but not social value. While Kim, Jung and Lee (2021) found evidence to support the influence of all four values, this paper does not confirm that of the epistemic value, indicating that Romanian consumers' desire for unique and rare items does not influence their engagement in SHC purchases.

In terms of theoretical implications, this paper contributed to the body of existing literature by adding two additional predictors, i.e., moral norms and past behavior, to the original TPB framework and extending it with the inclusion of the four values from the TCV framework.

Based on the findings, practical implications are also worth mentioning. To motivate consumers to purchase SHC, retailers could raise awareness about the negative impacts of fast fashion and build a positive image of SHC by highlighting its positive social and environmental outcomes in campaigns (Hur, 2020; Koay, Cheah and Lom, 2022). Additionally, selling SHC at charity events and providing affordable prices is also crucial, especially for low-income consumers. However, as SHC is commonly associated with hygiene and quality risks, the potential negative attitudes towards it could be changed by promoting its cleanliness, minimal health risks (Silva et al., 2021), and emotional, social and environmental benefits. This can be further supported by collaboration with policymakers to align with sustainable development goals (Koay, Cheah and Lom, 2022).

Limitations include the use of data collected solely in Romania, although future research could consider samples from developed and developing countries. Another caveat is the predominance of young respondents, with specific educational and employment status or income, and thus not representative of the entire Romanian population. Additionally, it is crucial to

investigate the gap between intention and actual behavior in sustainable practices, and this paper also encourages future scholars to revisit the model and consider including other additional predictors, as well as exploring different theoretical frameworks that might fit the context of SHC purchase intention.

The fashion industry is changing as consumers seek more environmentally friendly options, such as second-hand clothing, which is worth exploring further. The present paper examined the determinants of consumers' intention to purchase second-hand clothing and found that attitudes, subjective norms and perceived behavioral control, as well as moral norms and past behavior, positively influenced consumers' intention to engage in SHC purchases. Moreover, emotional, social, and environmental values were found to positively influence attitudes towards SHC, while the significance of epistemic value was inconclusive. By incorporating the TPB and TCV frameworks, this paper made an important contribution to the body of literature. Finally, this paper provided implications for theory development and practical strategies, as well as future research directions.

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Is The National Institute of Administration a model agency? The agencification process in Romania and a case study

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Abstract*: Agencification is a strategy of vertical specialization of government institutions by delegating some attributions to specialized agencies. The study aims at two interconnected objectives. First, it provides an overview of the concept of agencification. Second, and more specifically, it identifies a set of idealized features of agencies according to the literature on agencification and explores to what extent one specific agency in Romania (the National Institute of Administration) exhibits said features. While agencification is supposed to guarantee a clearer separation between policy formulation and implementation, in practice this may not work if features such as the agency's autonomy is too limited or if, despite its organizational separation from the line ministry, the agency is in practice overseen too strictly by the latter. Case studies such as the one provided here are useful in revealing to what extent the process of agencification in Romania has followed the general template outlined in the literature or, on the contrary, at least in some specific cases has developed based on other routines or constraints.*

Key words*:* agencification, New Public Management, Romania, autonomy, control
JEL: D73, H83, L32, L38, P35, P37, P48

1. Introduction

This paper investigates the extent to which one of the important national agencies in Romania, the National Institute of Administration (henceforth INA, or 'the Institute'), satisfies an idealized checklist of agency features as proposed by the literature on agencification. So far, the literature in question has been very limited with respect to this country. I have identified only two general studies examining a cross-section of the national system of agencies (Hinţea, Hudrea and Balica, 2011; Nakrosis et al., 2013), but they have low response rates and cover many organizational types that are very different from each other. While such questionnaire-based research is very useful to glimpse the broad features of agencification in this country, it remains inherently limited in light of the diversity of organizational missions, organizational structures, as well as the structure of the policy subsystem.

The National Institute of Administration has had a tumultuous past, being established, abolished, and re-established because it represented an ex-ante conditionality of the European Commission. Under Government Ordinance no. 23/2016, the Institute was re-established after a hiatus "by taking over the activities in the field of professional training in public administration and the professional development of public officials from the National Agency of Civil Servants and the regional centers for continuous training for local public administration". After the completion of the Institute's reorganization in 2018, it was gradually recognized by public institutions as a stable partner for professional training in public administration.

2. Theoretical framework

Agencification was a fundamental process across several European countries in the 1980s and 1990s. It was at the core of New Public Management reforms, which substantially changed the way governments are organized by, among others, increasing the number of agencies and by expanding their autonomy (Sześciło, 2020). According to this template, the creation of a new agency is carried out following a major change in public policy, through legislative changes or through a newly adopted statute. This may require the creation of new organizational structures or the restructuring of present ones, more precisely, the establishment of new units, intended to put into practice the new objectives provided by the statute, in the composition of an existing public organization (Yesilkagit, 2004).

The idea of a separation between politics and administration is among the traditional perspectives on the role of the bureaucracy. It was subsequently promoted within New Public Management, based on principal-agent theories, where the clear division of roles and responsibilities represented an essential element. This division stimulated the trend of agencification in countries where state agencies were established or restructured according to the principles of New Public Management thinking (Bach, Niklasson and Painter, 2012). So new independent public agencies were created, separated from direct political influence, in the hope of improving managerial efficiency by adopting private practices.

Agencies are typically government-funded entities which are distinct from a legal perspective and operate autonomously from ministries, even if frequently they are formally subordinate

to ministries. They deal with the implementation of the basic functions of the state, for example, regulation or the enforcement of laws, and sometimes with the provision of services (Beblavy, Sicakova-Beblava and Ondrusova, 2012).

Agencification, as advocated by its proponents, does not provide a clear template for agency (re)structuring beyond the general idea that "agencies should have some autonomy" (Moynihan, 2006). As a result, the meaning of the term can be adapted by actors with different goals in countries with varied contexts (economic, political, cultural, social). There are significant variations between states that can steer agencification in all sorts of directions (Koprić, Kovač and Musa, 2012).

Autonomy is the degree of freedom under which an organization can act without needing prior approval from the ministry it is related or subordinated to or from political leaders. Autonomy is therefore clearly connected to the ability of an organization to function without external influences (Nakrosis et al., 2013). For this reason, however, there have been disputes regarding the appropriate degree of agency autonomy: because they are organizations within the public apparatus subordinate to the Government, they are subject to the provisions of the law on public service; therefore, the agencies are not completely autonomous organizations (Gellén, 2012).

Agencification existed before New Public Management, but this process pushed governments to assign more and more responsibilities to agencies. Agencies were present before the collapse of communism in the countries of Central and Eastern Europe, although the probability that the intensification of agency-creation is directly related to their communist heritage is low. Rather, agencification was a key component in two important (and related) reforms in the post-communist era: on the one hand, the transition to a modern democracy and, on the other hand, the accession to the European Union (Thiel, 2011).

3. Research methodology

In their pioneering efforts to describe agencification, particularly in terms of agency autonomy, in Romania, Hințea et al. (2011) explore the levels of ministerial control (structural, financial, personnel and with respect to processes) over executive agencies in this country based on data collected in 2010 using the COBRA survey. The latter targeted 125 executive agencies and had a response rate of 36.85%. Their study aims to understand control models and highlights the fact that Romanian ministries still prefer ex ante over ex post control mechanisms, despite progressive changes towards the latter. Their research also suggests that the relationship between executive agencies and their line ministries is complex and involves factors such as autonomy, trust, rewards, sanctions, and performance measurement.

The findings in this study are based on the same control models and on the variables borrowed from Hințea et al. (2011). I have applied them in more depth to one agency, the National Institute of Administration (INA). Methodologically, I analyze the information available in the relevant legislation, in formal regulations, in INA reports. To better understand the actual practices rather than just the formal structure of the agency, I interviewed two members of the Institute: the director of a key department in the organization and one of the main advisers to the INA president.

In their study, Hințea et al. (2011) use four dimensions of ministerial control, which I have adopted for this case study. First, structural control can be considered the opposite of structural autonomy, being driven by the existence of an intermediate council located between the agency and the ministry to which it belongs. The Council will generally function as an intermediary and should increase the agency's autonomy. In other words, the agency is subject to strong control when there is no board and the person in charge is appointed and answers directly to the ministry (Hinţea, Hudrea and Balica, 2011).

Secondly, financial control refers to the extent to which agencies rely on transfers or allocations from other government entities in order to carry out their work. The degree of dependence that rests on such resources dictates how much financial control is exercised over the agency. Thus, if control is high the ministry can steer the agency in whatever direction it wants, also reducing its real autonomy (Hinţea, Hudrea and Balica, 2011).

Thirdly, personnel control refers to how the agency's activity is influenced in its management of the number and roles of employees. If the agency wishes to expand its staff in order to better achieve its objectives, and this depends on the consent of the ministry or on other outside constraints, then the control exercised is considerable (Hinţea, Hudrea and Balica, 2011).

Finally, process control refers to the line ministry's influence on how agencies must proceed to achieve their objectives. Ministry involvement can vary from none at all (agencies decide completely independently) to total (ministry decides exclusively), in the latter case correspondingly diminishing agency control over processes (Hinţea, Hudrea and Balica, 2011).

The following section discusses these four dimensions of agency autonomy in the case of INA based on my qualitative analysis consisting primarily in document analysis and interviews.

4. Results

4.1. Structural control

The National Institute of Administration has legal personality and is subordinate to the Ministry of Development, Public Works and Administration (HG 645 07/08/2020). As for its relationship with the ministry, according to the interviews, it is formally defined as one of collaboration and support. There is an additional agreement with the National Agency of Civil Servants (ANFP, or 'the Agency') and a mutual openness for collaboration; according to my interviews, the relationship is not competitive.

On the other hand, the structure of the relations between the Ministry, the Agency and the Institute regarding the quality of personnel training policies in public administration is not the right one according to one of the interviewees, but neither are the line ministry, INA, and ANFP the only responsible actors. According to the same interviewee, under a better scenario the Agency and the Institute should not be subordinated to the line ministry, but placed under the General Secretariat of the Government or directly the Government. This would simplify the external approvals INA needs to organize some kinds of key programs. Additionally, since there are several categories of stakeholders, there are also separate training perspectives which may or

may not favor certain actors. Being directly accountable to the General Secretariat would simplify the task of organizing a variety of targeted programs, according to the interviewees.

Regarding involvement in the development of general vocational training policies, the Institute is frequently consulted in the development of strategies by various public organizations, especially those that include training components. Its members participate in working groups on specific areas and show openness to collaborate and be involved. In certain situations, the Institute can even be the initiator of such strategies. However, the interviewees consider that it should have a much more important role in the future in the development of training policies and in ensuring unitary quality standards for public administration, in order to guarantee a real impact for training.

In addition to the National Institute of Administration, there is a Coordination Council, established under the Prime Minister's decision (OG 23 24/08/2016). Regarding the involvement of the external members of the Council in establishing the strategic decisions of the Institute, based on the interviews, these members are consulted by the management of the Institute when necessary and perform their duties within the limits of the powers conferred on the Coordinating Council by the relevant laws and regulations.

Another dimension of structural control is external evaluation. The evaluation of the Institute's performance consists of two aspects. The first is related to the fulfillment of the objectives set by the Institute itself at the level of its structures, through the annual operational plan and its monitoring. The second aspect refers to the training programs, where participants complete a feedback questionnaire at the end, evaluating aspects such as the trainer, the materials, the training platform and the activity of the training manager.

As for external evaluation proper (i.e., beyond that by INA's individual clients), the procedures are not very clear because, except for the internal processes above carried out by the audit department of the Institute, the rules for external evaluation are not explicit. The responses of the interviewees do not shed light on this dimension, mentioning either the regular internal audit (present in every institution) and a potential assessment of the ministry at the end of the year (based on the annual report and data).

The National Institute of Administration is headed by a president with the rank of secretary of state, appointed by the prime minister (who can also dismiss the former) upon the proposal of the line ministry (OG 23 24/08/2016). As for the evaluation of the president's performance, there is no clarity in this case either, and the answers from the interviews are contradictory: she is either not evaluated (since she is a political appointee), or, alternatively, the minister does it (at least formally). Additionally, it seems there were no situations in which the president's job performance were not considered adequate, during the period of activity of the interviewees.

4.2. Financial control

The resources available to the Institute consist of INA's own revenues and the budget assigned by the government through the line ministry. As for the Institute's own revenues, it consists of "income from training program participation fees; sponsorships; donations of natural

and legal persons from the country and abroad; non-refundable external funds; other sources" (OG 23 24/08/2016). The interviews suggest that sponsorships and donations have not really been available.

According to the interviewees, currently resources – government funding and own revenues – are sufficient for the basic activities carried out by the National Institute of Administration. But additional resources are needed to expand the Institute's activities. On the other hand, there were legislative provisions in 2023 under which the budgets of public organizations were reduced, so expenses were cut in all areas of activity, including for professional training. The consistent systemic slashing of budgets means that the allocated funding is not sufficient for desired programs.

As for the need for more financial autonomy, for example, the interviewees mentioned the possibility of direct allocations from the state budget for certain categories of public positions with priorities and targets set annually. By ensuring free access to these types of programs (specialized and advanced training) for strategic target groups, one might increase the participation in these courses and implicitly improve the skills of, for example, leading or senior civil servants. The latter might then determine the implementation of changes at the level of their organizations.

Another perspective regarding the need for autonomy – although the interviewees did not explicitly claim more autonomy was currently needed – concerns the bureaucratic process, specifically a legal framework under which, with their own revenues, agencies have the freedom to make decisions they consider appropriate within the limit of the law. For example, if a purchase needs to be made from the revenues generated by the members of the organization, no other approval should be necessary, except for the usual coordination and subordination processes. This form of autonomy would require a change in the legislative framework.

4.3. Personnel control

Regarding the internal staff of the Institute, the interviewees highlight issues related to the sufficiency of personnel for carrying out regular activities. There are gaps, particularly in the specialized departments, which include the two training departments and the department of communication, projects, research, and international relations, in terms of filling the positions available within these structures. For example, the support department, as in other public organizations, has always suffered from a shortage of personnel, particularly in financial-accounting.

Therefore, some directions do not encounter difficulties, while others do, and it is not through the pursuit of a budget maximization perspective, because more people are always needed. The departments that are not necessarily good, such as support, the projects department (which is large), and the communication department, external relations and research. In addition, one interview points out that people with researcher status should be recruited to allow the Institute to carry out research, because otherwise it cannot perform this type of activity.

The staff-related barriers that the National Institute of Administration is facing at the moment are legal in nature, as an Ordinance passed recently (no. 115/2023) bans new hiring except for some positions declared vacant in 2024. As a result, the reorganization involves cutting some positions while keeping the total number of positions fixed. Additionally, the maximum

number of posts for the Institute's internal structure is capped at 100 by government order (HG 645 07/08/2020).

Moreover, another statement from the interviewees considers the problem to be systemic, because in all areas (legal, procurement, IT, financial-accounting) the Institute cannot offer adequate financial motivation, i.e., the salary to attract people. For these reasons, many turn to other types of organizations which offer better salaries. Financial compensation is regulated under general legislation applicable to public employees (HG 645 07/08/2020). The interviews clarified that, in addition to the salary, the Institute has also included staff in projects to top up wages, so until last year, when these projects were completed, this provided an additional motivation. For those involved in projects and getting these increases, the income is adequate, but not more than that.

While the Institute may need more autonomy in hiring or in financially rewarding staff, being a public organization is inherently limiting. As far as employment is concerned, it cannot derogate from the provisions of the Administrative Code, which are applicable to all public organizations.

4.4. Process control

Establishing the categories of training and improvement programs is formally part of the mandate of the National Agency of Civil Servants, which defines which civil servants should be trained during a particular year. This can be achieved through the Institute as well as other training organizations, whether public or private. Although the Institute is the main public training provider, it is not the only one.

In developing its offer, the Institute takes into account the report of the National Agency of Civil Servants. These priority areas of training in public administration are developed based on the centralization of the plans submitted by public organizations and authorities following the evaluation of the professional performances of civil servants. However, the Institute also carries out annually an analysis of its own on training needs to determine which topics and what skills are of current interest to its direct beneficiaries, i.e., participants in the training programs, whether civil servants, political appointees, or other types of staff under contract. In this way, according to the interviewees, the National Institute of Administration has sufficient autonomy in designing the scheme of training and improvement programs.

As for the choice of target groups, they are defined according to the thematic specifics of each individual program and at the moment when the offer is outlined. However, certain target groups are expressly mentioned in various legislative provisions in relation to which programs are developed. The Institute determines internally, depending on its priorities, strategic targets which would be the groups for the shorter courses. A further claim made by the interviewees is that all but very large government courses should be open to all citizens irrespective of their employment.

5. Conclusions

This research effort aimed at gauging the extent to which the National Institute of Administration meets several idealized criteria for an agency as developed as part of the theory of agencification. In particular, it focused on gaining a broader understanding of agency autonomy in terms of four types of external control exercised over INA, Romania's key agency in the field of professional training for civil servants. I have not identified other case studies focusing on a single agency in an attempt to better understand the agencification process in this country.

According to what I observed in this respect, the Institute, which is specialized in the provision of services, is structurally disaggregated from the ministry, and possesses a certain managerial autonomy. Regarding structural control, it is characterized rather by collaborative relations with the line ministry and the National Agency of Public Servants, by an active involvement in policy making and frequent consultations. The Council which in theory serves as a coordinating board has a rather consultative function in practice. It generally responds to INA's requests for assistance and does not seem to be the prime strategic decision-maker.

It follows that INA enjoys relatively substantial structural autonomy. That said, there are suggestions for simplifying the decision-making structure and for strengthening the Institute's role in formulating and implementing vocational training policies.

The extent of external evaluation does not emerge clearly from the interviews I conducted, as on this dimension the answers were contradictory with respect to the evaluation of the president. The formal regulations are not very clear either, while INA reports are not explicit on this point, as they only talk about internal organization and assessment.

With regard to financial control, I refer to the study carried out by Hințea et al. (2011), which mentions four categories of sources of income for agencies by which it establishes the level of control over them. INA falls into the second category (mixed funding with predominant government financing), but because it is close to the first category, it is subject to substantial financial control, or at least, limitations under the current general laws.

Personnel control is significant. According to the interviews, there are impediments in several areas which cannot be overcome because, on the one hand, INA cannot provide sufficient financial motivation to attract very skilled staff, and, on the other hand, generally applicable legislative constraints are inherently limiting.

Process control exists to the extent that decisions on the types of training and improvement programs must take into account the report of the National Agency of Civil Servants, while certain target groups are determined by legislation. However, the interviewees consider the Institute's autonomy in designing the scheme of training and improvement programs to be fit-for-purpose.

In conclusion, this study of a single case only covers a very particular and specific part of the process of agencification. The materials used were generally available reports while interviews were limited to two persons in key positions but with very different lengths of service at the Institute (relatively short and, respectively, quite long). The research is therefore inherently limited, but it may be expanded later with additional respondents, by studying other units involved in the same policy subsystem (e.g., the National Agency of Public Servants, service providers, academic bodies training civil servants), and with further themes or dimensions central to theories of agencification, such as politicization.

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Student collective action in support of Palestine: a case study at the University of Bucharest

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Abstract: *This paper highlights how Romanian students mobilized to present claims related to the consequences of the conflict between Israel and Palestine. Using the interview and other qualitative research methods, I analyze how the group which organized an encampment at the University of Bucharest perceives the national environment of student organizations, as well as the way in which they are connected internationally*

At the same time, I discuss the organizational particularities of a student encampment, focusing on the administrative-logistical aspects, including how to attract the participants, without ignoring the difficulties they have as students in passing on their information to the press and to other interested actors. For these purposes, I use a theoretical perspective that contrasts modes of student organization of the corporatist and the social movement types.

Apart from the interviews with representatives of this solidarity movement, an important data source was represented by the conversations on the (open) Telegram channel between the organizers and the participants in the encampment. Using this information, I explore reasons for choosing the current form of protest, for the formulation of certain types of claims, and why the University is seen as the primary target of such claims.

Last but not least, the study analyzes if such collective action influences the perception of groups in the university community regarding students rallying for ideologies and international movements in support of the rights of other communities in conflict zones, or marginalized or otherwise oppressed.

Key words: students, movements, Palestine, encampment, university, protests, collective action

JEL: D71; D73; D74, D85, I21, I23. Click her for JEL classification

1. Introduction

With the outbreak of the new armed conflict between Israel and Palestine, global attention has moved to the victims of this war. Throughout 2024, in several universities in the United States and in Europe various social groups have engaged in collective action aimed at the cause of the Palestinians victims. One of the segments of civil society that stood out in organizing support movements for this community were the students.

As Altbach (2006, p. 330) says, the university is a particularly favorable environment for the development of organizations and movements among students. Several groups have decided, in various European and American universities, to show their support for the Palestinian cause frequently through occupy actions – in these cases, occupying an area of the university campus to draw attention to a set of demands.

This type of movement also took shape in Romania, where, starting on May 20, 2024, a group of students set up their tents on the campus of the University of Bucharest (UB) and began to formulate demands regarding the conflict between Israel and Palestine. The protest continued for five weeks, during which there were a few rounds of negotiations with university representatives, which did not, however, meet the expectations of the protesters. The number of participants varied throughout this period, from a few people to more than 50 during the organization of specific events within the campus.

The context for the emergence of this protest, in tandem with a second one in another major academic center, Cluj, is worth highlighting briefly. Over the last few years, student protests have been virtually absent in Romania, despite a strong tradition of protesting in the 1990s. But in the meantime student representative organizations have opted for other means of influencing the media agenda or the decision-makers, very much in agreement with Altbach's (2006, p. 336) statement that student movements are almost always sporadic—they seldom last for a long period of time. Another particularity of these events is that the participating students are not part of the formal framework of student representative organizations, nor members or leaders of student organizations. This too makes the UB encampment worth exploring.

2. Literature review

Luescher-Mamashela (2015, p. 37) claimed that "the term student politics is perhaps best used as an umbrella concept to refer to all kinds of political activities of students, whether formal or informal, ordinary or extraordinary, or oriented towards society or academia". Klemencic (2018, p. 2-3) proposes a difference between student representation and activism. Representation assumes the existence of formal (or institutionalized) channels through which students try to influence decisions, while "activism engages in claim-makings outside of formal decision structures" and "has been associated with contentious politics and non-institutionalized forms of claim-making, such as protests, boycotts, campaigns".

Theocharis (2011, p. 206) suggests that, while traditional political participation is in decline, there has been an increase in extra-institutional forms of participation. This applies to the type of student political participation explored in this article. Luescher (2018, p. 308) says that "student

organizations and student movements are the typical platforms from which student activism is collectively organized", even though there are protests and collective actions that are not conducted by formal representative organizations, as is the case here. Pakulski (1991, xiv) defines social movements as "recurrent patterns of collective activities which are partially institutionalized, value oriented and anti-systemic in their form and symbolism". In the case examined here, the institutional dimension is nearly absent or it is created through the community meetings of the students group. The participants at the encampment are outside the institutionalized system of student representation. As Rucht (2016, p. 26) states, groups such as the one under study may develop and use specific protest techniques, slogans, and habits that distinguish it from other protesters.

Buheji & Hasan (2024, p. 59) also reinforce the point that university campuses are often spaces of political activism and places for debating ideas, providing an environment where students are exposed to new perspectives. This context can challenge previously held beliefs and encourage participation in movements, such as those supporting Palestinian rights. The same authors stated that, for students, encampments represent a liberated zone from Zionist influence or genocide. This type of encampment involves setting up tents or temporary structures on university grounds. Their role as a central hub for the protest is to provide a space for students to meet, discuss, and share information about the Palestinian cause with other students and other interested people. Additionally, the choice of an encampment is symbolic, mirroring the conditions of displacement faced by many Palestinians (Buheji & Hasan, 2024, p. 61).

Castells (2012) identified a couple of common characteristics of contemporary social movements (apud Culum and Doolan, 2015). The collective actions „are at the same time local and global, networked in multiple forms, leaderless and non-violent". Social media „helps maintain the potential for protest even at a time when social mobilization is generally weak" (F. Lee et al., 2020).

Habermas (1989, p.14) mentioned that students can definitely understand themselves as the future elite of the nation, responsible for a large-scale modernization process, which is the case of students that participated in the action examined here. They believe that is their role to expand the perspective about Palestinian victims and to change beliefs in their society.

3. Research methodology

In order to obtain information about the organization of University of Bucharest encampment in support of the Palestinian cause, I used qualitative content analysis of the messages published on different social media networks where the protesting students have communicated (Telegram, Instagram) and I conducted a structured interview.

Taking into account that Altbach (2006, p. 332) mentioned that student public communications are among the most visible elements of student organizational culture, I also analyzed messages sent by students protesters using two social media networks (Telegram and Instagram) from May 13 to June 28, 2024. I decided to start one week before the first day of the encampment and to stop at the announcement of its suspension.

The structured interview was conducted on the basis of an interview guide, organized on five main themes - the organization of collective action, the demands, the relationship with the international student movement, the relationship with student organizations in Romania, and the ideology of the protest.

The research objectives of this article are: to identify the organizational particularities of a student encampment (O1); to highlight how the demands of a new, contextually emerged collective movement are established (O2); and to describe how student organizations and representative students interacted with the protest participants (O3).

4. Results and discussions

Regarding the organization of the protest, the students did not all know each other when the protest started. Coupled with a considerable level of distrust regarding the university and even in themselves, this made them unable to establish a clear list of demands from the beginning. As Klemencic (2015, p.17) mentioned, students often engage in activities without having in mind definite desired outcomes or without being able to fully foresee all of the possible consequences of their action.

According to della Porta (2005) and Klemencic (2014), students have multiple networks they belong to and different identities in relation to these social groups. In our case, they created specific codes and gestures to show their agreement or disagreement with the ideas and issues before them. For example, decisions were made by majority vote in regular meetings and there was no leader, so reaction times were longer and the influence of democratic decision-making was very visible. In the encampment, students assumed clearly defined roles, like being part of teams responsible for communication on social media or information in the legislative field.

The choice of the place of protest – a small lawn with a few trees in one of the UB campuses – was not accidental. During the interview, it was reported that being in the courtyard of the University's main administrative building and the rector's office (the main actor targeted by the protest) made students feel safer. Apart from one politician who wanted to capitalize electorally on the encampment, there were no incidents in the first 3 weeks of the mobilization.

The demands of the movement were a topic of constant discussion both in various social circles and among the participants in the protest. Firstly, they had a series of demands including the University's breaking off any partnerships with Israel, transparency concerning the University's links to Israeli entities, and UB taking a public institutional position on the Israel-Palestine conflict. Later, the claims went through a process of adjustment, according to the organizers, to render them clearer and more concise. This lack of clarity may also be due to the fact that many of the participants did not seem to understand well the decision-making mechanisms in a university.

A clear difference may be observed between the two sets of demands. The revised version included several requests regarding the rights of students in protest contexts, including their access to drinking water and electricity during the protest, highlighting a dimension that Altbach (2006) and Luescher Mamashela (2015) considered important: the ways in which higher education in general provides enabling conditions for student activism. Some demands were also

related to the procedure of the negotiations - protesters wanted all demands to be discussed in one meeting and voted on individually, not as an entire set.

Predictably, this mobilization had a visible international component. Most of the slogans used were adapted or taken from similar actions in the United States or Western Europe. There is a permanent communication between students all over the world (not necessarily centralized or coordinated) regarding the Palestinian cause. Buheji & Hasan, (2024, p. 71) also pointed out that the slogans are created to express solidarity and to communicate key messages to the world about students' demands.

Students at the encampment did not feel represented by student organizations from the UB or nationally. This type of collective action provides a good context to highlight specific social and political views or perspectives, especially of the progressive type, reinforcing Altbach's (2006, p.335) contention that most contemporary student movements are on the left in terms of ideology and politics. Even if more established student organizations in Romania did not show solidarity with the cause of the protesters, activists believed that they had an important role in the landscape of university representation and must be as present as possible in student life. As Klemencic (2007) and Popovic (2015) mention, the trust between students and their representatives has been decreasing and the challenges are today more diverse and complex.

In terms of student engagement, there are a few observations worth discussing. Although established student organizations have not taken a position on the issue, there are members of the latter who support the cause personally and are actively involved without a public commitment. This highlights Altbach's (2006, p. 332) point that student organizations have a major influence on campus culture and ethos.

At the same time, there was some participation of foreign students, the majority of them coming through formal academic exchanges. This reinforces the importance of the almost universal use of the English language. However, as protesters revealed in the interview, some students from the Arab world or from the Palestinian territories fear that they could suffer repercussions if they participate in the protests.

As Gozman-Concha (2017) observes, in the case of occupy movements, the organizers must provide participants with a series of activities and meetings that have a dual purpose: to attract more participants and to provide those who participate with ways of occupying "free" time. As in the international encampments, Romanian students organized panel discussions and other events that shed light on the historical and current context of the Gaza conflict. As mentioned in Telegram, they had one or two workshops or activities every day and they made new banners with participants' help. Students also knew that social media campaigns can go viral, so they posted daily on Instagram and on the dedicated Telegram channel. One of the Telegram messages stated that „we made it into the news BIG TIME! No one can ignore our action! We are seen and we are heard"

The passage of time is considered disadvantageous to movements, given that protest participants in time grow tired. In Bucharest, the temperatures rose noticeably over the period of the encampment, and the number of students visiting the campus decreased due to the approaching final examinations and of the university holidays.

In contrast to the US case, where many students faced disciplinary actions, including warnings, probation, suspension, or even expulsion for their involvement in the protests (Buheji & Hasan, 2024, p. 68), Romanian students did not receive any sanctions from the University.

5. Conclusions

This article highlights the particularities of organizing a student encampment without the support of previously established organizations or groups, highlighting protesters' relationship with the local, national or international student movement.

This event may illuminate how the University of Bucharest is willing or prepared to respond to such requests not only in this case, but also more generally. It may also shed light on how this and similar events influence the discussion about student rights in a global and local context under difficult circumstances.

Last but not least, these events question the role of the university as a social actor that can have public positions on issues outside the academic environment. At the same time, the perspective of the collective mobilization of students outside the formal framework of representation could be explored for further findings.

This short study can be expanded by identifying the factors that contribute to student solidarity with causes they are not directly and immediately affected by, or by discussing the similarities and differences between similar protest movements for the Palestinian cause in Cluj-Napoca or around the world.

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Radicalization Dynamics In Refugee Camps: Analyzing The Situation In Greece And Research Directions For Romania

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Abstract: *This research paper explores the potential of radicalization among Muslims living in refugee camps. Using qualitative analysis based on informal discussions with staff from the Schisto and Malakasa camps in Greece, this study provides insights into the factors that may contribute to radicalization in these environments.*

The aforementioned field research, conducted during an international study program at the National and Kapodistrian University of Athens, highlights the complex interaction of a multitude of psychological, economic, and social factors faced by refugees. These factors may create conditions conducive to radicalization as individuals grapple with uncertainty, identity crises, and various obstacles—such as physical and mental health challenges, human trafficking, and more—encountered during their journey to destinations offering better living conditions.

Additionally, this study aims to compare the structure of the refugee reception systems in Greece—a country with a long tradition in this regard—and Romania, which could become a preferred destination in the future.

By examining these dynamics in Greek refugee camps, this paper aims to provide a framework for understanding similar risks that may emerge in Romanian camps, thereby contributing to a better understanding of refugee management and the counter-radicalization strategies developed by public administration.

Keywords*:* radicalization, Muslims, refugees, crises, public administration, authorities.

JEL: M100

1. Introduction

This paper aims to contribute to the understanding of the complexity and dynamics of the relationship between refugees and radicalization, offering a comparative perspective on two distinct country contexts: Greece and Romania. The opportunity for the fieldwork was provided by a course at the National and Kapodistrian University in Athens, where I studied the subject of refugees, especially those arriving in Greece.

My research question for this paper is: "What causes refugees to become radicalized?" This question is central to understanding the mechanisms and factors that contribute to radicalization, a phenomenon with major implications for social security and stability.

2. Literature review

Refugee crises are driven by a combination of political, social, economic, and environmental factors. According to UNHCR (n.d. (a)), the main reason armed conflicts and wars, which cause millions of people to leave their homes in search of safety. Syria, Afghanistan, South Sudan, and Yemen have caused massive displacement of populations.

Another major cause of refugee crises is political instability and oppression, where authoritarian regimes repress dissent and violate human rights, causing a mass exodus such as the Arab Spring. The latter began on December 17, 2010 in Tunisia, when Mohamed Bouazizi, a fruit seller, committed suicide in protest after the police confiscated his goods and the government authorities rejected his complaint. This tragic gesture was the spark that started the popular revolt, caused primarily by the lack of decent living conditions, the high rate of unemployment, and the suppression of individual freedoms. As Elfatih Abdelasam (2015) and Cioculescu (2017) pointed out, these factors subsequently led to illegal migration.

Last but not least, systemic inequalities and injustices, including ethnic tensions, discrimination and marginalization, contribute to the displacement of vulnerable populations. Minorities, indigenous peoples, and marginalized groups often bear the consequences of violence.

In the table below, the International Organization for Migrants provides worldwide comparative figures in 2000 and 2022 for migrants as well as refugees and internally displaced persons, offering a glimpse of the changes over this period:

	2000	2022
Estimated number of international migrants	173 million	281 million
Estimated proportion of world population who are migrants	2.8%	3.6%
Estimated proportion of female international migrants	49.4%	48.0%
Estimated proportion of international migrants who are children	16.0%	14.6%
Region with the highest proportion of international migrants	Oceania	Oceania
Country with the highest proportion of international migrants	United Arab Emirates	United Arab Emirates
Number of migrant workers	–	169 million
Global international remittances (USD)	128 billion	702 billion
Number of refugees	14 million	26.4 million
Number of internally displaced persons	21 million	55 million

Source: International Organization for Migration (IOM), 2022.

The numerical data highlight that while some trends (the percentage of female international migrants and the overall percentage of the world's population who were migrants) have remained fairly constant, others (such as international remittances, which consist in a sum of money usually being sent by migrants to their family back home) have undergone dramatic changes. For example, international remittances increased from about $128 billion to $702 billion, underscoring the importance of international migration as a driver of development.

Also, according to the International Institute for Migration (2022), global international migration has increased by around 87%, the number of refugees by around 89%, and that of internally displaced persons by around 160%

Trauma experienced by refugees - potential factors of radicalization?

Refugees are considered to hold an intangible baggage consisting of their past experiences, grievances, social networks, and possibilities for mobilization. Eleftheriadou (2019), in her study on the potential for radicalization among refugees in Greece, states that some of these experiences are formed since leaving the country of origin, they interconnect with new ones, throughout the process of displacement and accompany them even to the destination, a place where one would assume they have to reshape their destiny.

Although an accumulation of psychological, economic, social and other factors can determine, in certain contexts, the radicalization of some individuals, the literature claims that this is not always the case. Other factors are important. According to Sude et al. (2015), in all the cases they analyzed where radical groups emerged among the refugees, the host states were inconsistent in terms of administering coherent policies for the treatment of refugees

Radicalization, associated with political violence, does not have a universally accepted definition, but is recognized as a process that occurs "before the bomb explodes." Although often attributed to personal traits and processes such as self-radicalization via the Internet, research shows that there is no distinct terrorist personality, suggesting that the motives lie at individual, group and societal levels, as stated by Vidino Lorenzo (2010).

Discussions of refugees contrast with those of radicalization in their emphasis on structural factors. According to Eleftheriadou (2018), refugees are seen both as victims of war requiring humanitarian aid and as active participants in conflicts. Negative coping mechanisms are common and the opportunity costs of joining rebel groups are lower. Pressures on public administration and infrastructure in host countries increase local grievances and exacerbate intercommunal tensions, often leading to increased violence and conflict inside camps.

The involvement of refugees in military conflicts in their country of origin affects 15% of crises generated by the phenomenon of radicalization, according to Eleftheriadou (2020), and can amplify violence in host countries, influenced by demographic changes and limited resources. However, refugee-related violence is concentrated in a minority of host states.

Refugee radicalization factors include socioeconomic issues and the roles of external actors. These factors have been examined at the individual, group, and societal levels.

At the micro level, radicalization unfolds around the individual, being influenced by personal experiences and feelings of injustice and discrimination. According to McCauley & Moskalenko (2008), the belief in personal victimization can turn into a desire for revenge manifested through violent actions.

At the meso level, radicalization is supported by a radical environment that can act as a conveyor belt. While self-radicalization is rare, association with a radical organization or group of "followers" is common. Neumann (2016) notes that, in some contexts, Salafist subculture, for example, plays an important role in contemporary radicalization, although not all members of this culture become militants.

At the macro level, radicalization has a structural character, influenced by systemic and environmental factors. This process is reciprocal, affecting both radicalizations and the host society, which adopts more extreme attitudes. According to Sageman (2017), radicalization is linked to "lack of opportunity for political participation" and "general disillusionment with peaceful means of political protest," making violence a choice of "last resort."

The procedure regarding the reception and assistance of asylum seekers in Romania and Greece.

According to the Geneva Convention (1951), "As a result of events occurring before 1 January 1951 and owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it."

In order to be legally recognized as refugees, according to the European Commission (2024), individuals must apply for asylum in the state where they arrived, benefiting from the protection provided by the Geneva Convention. An important recent event in this context took place on 10 April 2024, when the European Parliament voted on the new migration rules, formally adopted by the EU Council on 14 May 2024. These rules allow the EU to tackle complex migration issues by securing external borders, guaranteeing human rights and a fair distribution of migration pressure between member states.

The Migration and Asylum Pact, part of these new rules, aims to manage migration and establish a common asylum system at EU level, delivering results and being based on European values. The European Union believes that the pact will strengthen and integrate key EU policies on migration, asylum, border management and integration.

The refugee system in Romania

In Romania, the asylum request can be addressed to the Border Police or the General Inspectorate for Immigration (IGI). Asylum applications are evaluated and resolved by the IGI and according to UNHCR (n.d. (b)), from the moment of application, people are considered asylum seekers and cannot be deported.

According to IGI (2022), the application process includes completing questionnaires and two interviews. The first interview details the reasons for leaving the country of origin and the journey to Romania, and in the second the applicant provides detailed information about fears, traumas and reasons for leaving, supported by relevant documents.

In addition to asylum status, Romania grants temporary protection, a rapid response to the

massive flow of displaced persons, ensuring immediate access to assistance. A subsidiary protection is also granted for those who do not meet the criteria for refugee status but are at risk of serious harm in their country of origin, such as torture or inhumane treatment.

Tolerable status is granted, according to the USA Embassy in Romania (2022), to those who do not meet the conditions for refugee status or subsidiary protection, but cannot be repatriated for various reasons. People with this status can work, but do not benefit from other provisions regarding social protection or inclusion.

` At the level of the Romanian state, Law (122/2006) establishes the legal regime for foreigners seeking protection in Romania, the procedures for granting, terminating and canceling protection, as well as the procedure for determining the member state responsible for analyzing the asylum application.

Art.2. of this legislative act states that the assistance offered to applicants for international protection, which includes accommodation, food, hygiene and maintenance materials, clothing and footwear, as well as transport, can be provided in the form of goods, financial allowances or vouchers, or through a combination of these methods, according to the conditions established by a decision of the Government.

It should also be mentioned that in the following situations their abovementioned rights may be limited or withdrawn:

a) if the applicant for international protection leaves the residence without prior notification to the regional center for procedures and accommodation for asylum seekers;

b) if the applicant for international protection does not comply with the obligation to appear at the request of the General Inspectorate for Immigration to provide information or does not appear at appointments related to the asylum procedure, about which he was informed;

c) if the applicant for international protection repeatedly violates the internal rules of the regional center for procedures and accommodation for asylum seekers.

The refugee system in Greece

According to Refugee Info Greece (n.d.) and to the Ministry of Migration and Asylum (n.d.), in Greece, asylum seekers must submit their application to the Greek Asylum Service. In addition to refugee status, subsidiary protection is also available. The check-in process varies depending on the place of arrival:

A. Arrival on the islands

- Applications for international protection are submitted at reception and identification centers or closed controlled access centers on the islands of Lesvos, Chios, Samos, Leros and Kos.
- Refugees go through reception and identification procedures, including nationality checks, medical tests and fingerprinting.
- The border procedure (a swift evaluation at the EU's external frontiers of whether applications are baseless or unacceptable) applies for a maximum duration of 25 days and includes applicants from the islands, except for the vulnerable, who may be exempted.

B. Arrival on the mainland

- Persons arriving on the mainland are transferred to the Reception and Identification Center in Filakio to submit their asylum application and undergo reception procedures.
- Those who have not registered their applications at a specific center can make an appointment for registration through the Ministry of Migration and Asylum, being later informed that they must live at the registration unit until the process is completed.

The procedure for obtaining asylum seeker status is as follows. After registering their asylum application, applicants are scheduled for an interview with the Asylum Service, which may include an 'admissibility interview' and subsequently an 'eligibility interview'. Asylum decisions are communicated either in person, by post, or by e-mail. In case of a positive result, applicants receive a residence permit and can apply for family reunification. In case of a negative result, applicants can appeal the decision within 30 days. If the decision remains negative, they can be detained and deported if they do not leave Greece voluntarily.

3. Comparison of refugee regimes in Romania and Greece

Regarding the research method used in this study, I used informal discussions with the staff of the refugee camps located near Athens, Schisto and Malakasa, which I had the opportunity to visit in April of this year.

The Facility for Temporary Accommodation of Asylum Seekers in Schisto

Schisto is one of the 54 accommodation centers for asylum seekers in Greece, with a capacity of approximately 2000 people. Most of the inhabitants are Syrians, Afghans, Iranians and Cameroonians. The center is located far from urban agglomerations and has limited access to public transport, which makes it difficult for refugees to travel to procure daily necessities and access medical services.

Given that refugees receive insufficient financial support, according to UNHCR (n.d. (c)) - 76 euros per month if they are accommodated in a camp where food is provided and 150 euros per month if food is not provided in the camp to cover transport costs -, and in light of the negative stereotypes in society, the use of public transport is complicated. Tenants have to walk long distances to reach cities.

The camp is home to vulnerable groups, including children and women, but security is limited due to low police numbers. Refugees are accommodated in containers and sanitary standards are respected. Facilities include a first aid center, a cultural center for women and an educational container for children, assisted by UNICEF and UNHCR.

Conflicts between residents, especially between members of the same nationality, are not uncommon (but I received no additional details on their actual frequency) due to limited resources and to differences in beliefs or ideologies. In the camp there is a mosque for Muslim refugees, who can express their faith within the established limits.

In the past, there have been cases of radicalization within the camp, but a team of specialists has been formed to counter this phenomenon. Since I was not given additional details, this aspect

will constitute a new direction of research for my doctoral work. I am to gather new data and study whether and when refugees can become a category of minorities at risk of radicalization.

The Reception Facility for Asylum Seekers in Malakasa

The Malakasa temporary reception facility, located 40 km from Athens near a military camp, had an occupancy of approximately 1,200 people out of a total capacity of 1,700 in April 2024. The majority of residents are Afghans, Nepalese, and Iranians.

The camp was built on the land of a former military camp and has a closed regime. It is divided into two parts: one (Malakasa 1) for the accommodation of asylum seekers for 25 days, until the necessary documents are drawn up, and another (Malakasa 2) for those who meet the preliminary conditions for obtaining asylum status.

Being a closed regime refugee camp (a type of detention facility where refugees are confined with restricted movement and limited freedom to leave the camp), from the outside, the feeling is similar to a prison: barbed wire, fingerprint access, etc. Upon entering the camp, we were told that it is strictly forbidden to initiate any form of interaction with the people accommodated there.

Discussions with UNICEF staff regarding the educational situation of the children revealed that, due to the linguistic and cultural differences between them, they often turn to the Turkish language as a means of communication, since, as Johanson (2001)claims, it is spoken in the countries bordering Turkey: Syria, Iraq, Iran. It is also known to be related to Azeri, Turkmen, Qashqai, Gagauz, and Balkan Gagauz Turkish, so among these languages there is a level of mutual intelligibility.

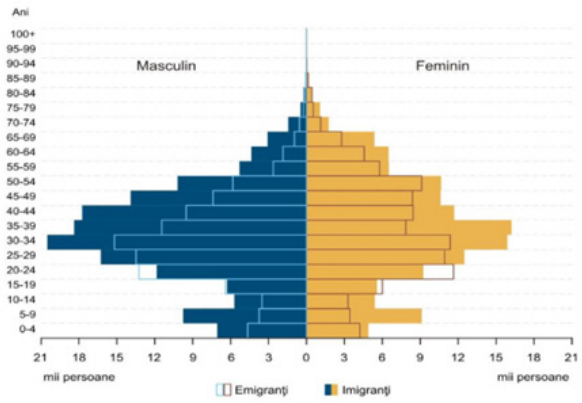
Conflicts in the camp are mentioned with caution, indicating the possible presence of dangerous people. The bus tour of the interior of Malakasa 2 camp reinforces this impression. The facilities include containers, a place for the manifestation of Islamic culture and a local market. Although staff are reluctant to provide detailed information, the possibility of radical beliefs among residents cannot be ruled out.

The situation of refugees in Romania

Romania has not been a preferred destination for refugees until recently, but this situation has changed in light of the war in Ukraine and other developments. Romania is a relatively new hotspot on the Balkan migration route, considered the "poor people's route". Lack of resources leads refugees to seek asylum here. Ammar El Benni (2021) recalls the case of two Afghan migrants who unintentionally crossed the Serbian border with Romania and requested readmission.

People who seek asylum in Romania due to lack of resources are vulnerable to terrorist radicalization. Research shows a link between poverty and radicalization. The study of the International Center for the Study of Radicalization and Political Violence, cited by Avraham Jager (2018), shows that young Somalis joined a terrorist organization for money, not for religious or personal reasons. Dizdarević and Brkić (2020) argue that the key factors of radicalization are global ideology, religion as a means of manipulation, money, and a deviant social environment.

According to the National Institute of Statistics (2022), immigration contributed to Romania's demographic growth, with a positive migratory balance of over 85 thousand people in 2022. Most immigrants and emigrants are men.



Source: National Institute of Statistics (2022)

In addition to poor refugees, Romania also hosts people who tried to enter the state illegally. The report of the General Inspectorate for Immigration (2023) showed that, in 2022, approximately 5,200 people were identified in illegal situations and 4,300 return requests were issued. The report of the Romanian Border Police (2023) revealed that in the first quarter of 2023, 1,296 foreign citizens tried to enter Romania illegally, most of them at the border with Hungary.

In addition, 6,950 foreign citizens tried to leave Romania illegally in the first quarter of 2023, most of them at the border with Hungary. Many of them acted in groups organized with the support of traffickers, including Romanian citizens.

Romania has the following Regional Centers for Procedures and Accommodation of Asylum Seekers: Bucharest, Giurgiu, Galați, Timișoara, and Rădăuți. Although I have not conducted field research in these centers, I intend to investigate the risk of radicalization among residents of refugee camps in Romania.

4. Conclusions

The literature has revealed that there are multiple causes of migration, but there is no clear consensus regarding the radicalization of refugees. Factors contributing to migration include armed conflict, political persecution, poverty, climate change, and the search for better economic opportunities. The radicalization of refugees is a complex phenomenon and cannot be attributed to a single cause, being influenced by social, economic, psychological, and ideological factors.

The comparative analysis of the way refugees are managed in Greece and Romania revealed both similarities and significant differences. Greece, with longer experience in managing large flows of refugees, offers a well-established framework for receiving and accommodating them. However, Greece faces significant challenges, including limited resources, internal tensions, and an overstretched asylum infrastructure. Refugee centers in Greece, such as Schisto and Malakasa, illustrate these difficulties, with large capacities but also issues related to security and social integration.

The research highlights the need for coherent and well-implemented policies to manage refugees. These policies must include effective security measures, social integration programs and economic support, as well as monitoring and preventing radicalization.

Research into these issues may be extended with field investigations in refugee centers in Romania, to better understand the risks and formulate opinions regarding the possibility of preventing radicalization. It is essential to continue studying the phenomenon of radicalization, both to protect national security and to ensure successful integration of refugees into society. This research will contribute to the development of effective migration management strategies and to the promotion of social cohesion in a constantly changing global context.

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