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How Development Stands Apart across Regions: Evidence from Asia, Africa, and Latin America

Emil Baghirli¹

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ABSTRACT

This study investigates the persistence of regional inequalities in global economic development by comparing Asia, Latin America, and Sub-Saharan Africa over the period 1995–2020. While globalization theory predicts income convergence across countries, empirical patterns reveal sharply divergent regional trajectories. Using an unbalanced panel of 31 countries and drawing on data from the World Bank, Penn World Table, Barro-Lee, and Worldwide Governance Indicators, the paper examines how trade openness, human capital, and institutional quality shape per capita income dynamics. The empirical strategy combines descriptive analysis, panel unit-root and cointegration tests, regional inequality measures (coefficient of variation and Theil index), fixed-effects regressions, and a panel error-correction framework.

The results show evidence of convergence in Asia, stagnation in Latin America, and increasing divergence in Sub-Saharan Africa. Regression estimates indicate that trade openness contributes positively to income growth only when supported by adequate human capital and strong institutions, highlighting the conditional nature of globalization's benefits. Inequality regressions further suggest that improvements in education and governance reduce regional disparities, while openness alone does not.

Overall, the findings emphasize that reducing global and regional inequalities requires a coordinated development strategy that links external economic integration with sustained investments in human capital and institutional capacity.

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Introduction

Contrasts in economic development remain one of the most persistent problems in today's global economy. Despite decades of globalization, once anticipated to promote concordance and shared prosperity, sizable gaps regarding income, productivity and development outcomes persist. These inequalities are evident not only between nation-states, but across regions, and even within towns and cities in less developed countries.

States in the developing world have experienced globalization very differently. Some, such as the emerging market economies of Asia, achieved an explosion of growth with deep changes in industry, while others find themselves still paralyzed by structural weakness, volatility and institutional fragility. For policymakers seeking strategies for equitable development, there is a pressing need to understand both why regional inequalities continue to exist, and the factors and mechanisms that fuel segmentation.

It is important to remember that economic disparities represent far more than differences in statistical indicators. They reflect profound variations in living standards, educational quality, state or countrywide support of health systems, infrastructure, and available job opportunities. For example, in 2023, the average GDP per capita (PPP) for East Asia was around 18,000 (USD), while Sub-Saharan Africa was lower than 6,000, and Latin America was approximately 12,000 (World Bank, 2023).

These contrasts involve more than income alone. They raise questions about countries'

and regions' capacities to engage in trade, adopt new technologies, and integrate into the global economy. As an illustration, while several Asian countries have successfully entered global value chains and pursued export-oriented industrialization, many African economies remain commodities-based. In turn, Latin America continues to be locked into sluggish productivity, and longstanding economic and institutional challenges.

Current patterns of globalization reveal that, although globalization has been promoted as a pathway to shared prosperity, its benefits have been distributed highly unevenly. The 2008 global financial crisis and the COVID-19 pandemic highlighted the ways in which globalization could increase vulnerability for countries with weak institutional systems and limited fiscal capacity. More recent empirical research indicates that the relationship between trade liberalization, capital mobility and inclusive economic growth are far from automatic. Indeed, both within countries and between countries, inequality may be exacerbated by trade liberalization and capital mobility if domestic absorptive capacity is limited (Rodrik, 2018).

As a result, the distributional impacts of globalization have become a major policy issue. The gains from increased trade and investment have tended to accrue disproportionately to highly skilled individuals and actors with access to global markets, while workers in traditional sectors and residents of economically isolated regions have often been left behind. The growth of global value chains has caused a new type of dependency on international markets for many developing countries. Further, in most cases, devel-

oping countries exist in lower value-added portions of global value chains, with developed countries capturing the bulk of generated rents.

As such, studying how globalization is distributed will enable researchers to describe why some regions of the world (for example, East Asia) have experienced economic convergence due to globalization, while others have experienced stagnation or divergence (for example, sub-Saharan Africa). It is therefore important to consider not only the degree to which countries are open to global trade, but also whether they possess the institutional quality, human capital, and broader developmental capacity needed to leverage openness for equitable and sustainable growth.

Arguments for why economic disparity still exists across global economic conditions find their roots in innumerable theoretical framed postulates. The neoclassical growth model tells us that poor economies should grow faster than rich economies and close the gap as result of capital accumulation and diminishing marginal returns (Lazarević, 2023). Yet, when you look at the realities of nations or policy choices, the opposite is often the case, especially with countries that have weaker human capital and poor governance systems. At the same time, the theoretical frames of dependency and structuralism highlight these conditions as a disproportionate burden of unequal integration in the global economy, and the terms of trade that perpetuate unequal dependency on technologies and variations in capital flows. More recent approaches have outlined, through more specific institutional frameworks, that education and, at minimum, previously out-

lined broad exposure to trade, continues to mediate whether globalization leads to a “converge” or “diverge” experience.

Regional examples around the world illustrate these dynamics. In Asia, sustained investments in education, large-scale export activity, and relatively effective institutional frameworks have contributed to decades of economic convergence. Beyond the well-documented rise of China and India, the rapid industrialization of the “Asian Tigers” lifted hundreds of millions out of poverty, and significantly narrowed the development gap between Asia and the advanced and global economies (Onalo *et al.*, 2021).

The variance in African states to behavior demonstrate these concepts and experiences to a much less impactful extent, with many having loosely retained economic activity in de-industrialization, with often far weaker institutions and vulnerability to external shocks in periods of volatility.

Even with human capital investment, Latin America provides a mixed story of success in the behavioral shift, having failed to reap transformative benefits greater than convergence, due to either the broad presence of structurally unequal barriers to efficiency, inequality, or histories of extensive macroeconomic instability.

The visible gaps in economic growth are concerning not merely as development challenges but also as potential sources of social and geopolitical tension. Inequality indicators increasingly reveal that persistent disparities contribute to economic fragility. Rising inequality generates pressures for migration, weakens collective governance, and complicates progress toward the United Na-

tions Sustainable Development Goals (SDGs), and so forth (Alliance for Rural Electrification [ARE], REN21, & Power for All, 2023). Inequalities also generate and compromise economic stability, as seen during the ongoing COVID-19 pandemic, when many nation-states with a lower capacity investment in health systems, and higher limited fiscal resources, were at a disadvantage to the much higher and relatively more developed nation-states. For these reasons, the implications of inequality extend well beyond moral arguments for reducing disparities: they underscore the need for strengthening institutional resilience, promoting inclusive development, and ensuring that the gains from globalization become widely shared: conditions essential for sustaining stable and functional economies in an increasingly interconnected world.

Why do some parts of the world prosper while others struggle? We wanted to explore this question by comparing the development journeys of Asia, Africa, and Latin America, treating them as unique regions so as to better grasp the bigger picture of global inequality. Where surveys often take a wide-ranging approach to greater swath of variables, this paper is focused on three explanatory variables: trade openness, human capital, and institutional quality, all of which play a mediating role in development (Tinta, 2022) and reflect the external, internal and governance dimensions of development. Trade openness indicates the degree economies are integrated into global trade, human capital shows the extent of greater and deeper absorption of knowledge within populations, while the quality of institutions suggests the efficiency

and credibility of governance of the economy. Ultimately, and together, these explanatory variables allow us to generate a relatively parsimonious and yet intricate framework to explain divergent development across regions.

1. Literature Review

Regional economic performance has varied greatly across Asia, Latin America, and Sub-Saharan Africa over the past several decades, leading to markedly different growth paths (Morrell, 2006). By 2000, the East Asian economies (e.g., China, Korea) had enormously outstripped Latin America, despite the fact that Latin America had previously been educationally, and, per capita, income-wise, ahead of East Asia (Hanushek & Woessmann, 2012). For example, Hanushek and Woessmann (2012) demonstrate that around 1960, Latin America had higher schooling and income outcomes than East Asia, while by 2000, East Asia had moved well ahead of Latin America, leaving Latin America and Sub-Saharan Africa in the bottom half of growth and income measures. Their analysis of test scores indicates that variations in educational quality (measured by cognitive achievement rather than years of schooling) account for much of this gap: when test scores were included in a growth regression, differences in the quality of human capital explained between a half and two-thirds of the income gap between Latin America and East Asia. In other words, Latin America's relatively high enrollment rates were undermined by low educational quality, preventing the region from achieving Asia's growth trajectory. More generally, there is

growing empirical literature documenting that Sub-Saharan Africa has underperformed all developing regions. Bunje, Fofack, and Ad-eyemi (2022) suggest that whereas the Asian “Tiger” economies experienced tremendous growth led by openness, lifting millions out of poverty, many African economies remain trapped in poverty.

Empirically, when Africa is included in global convergence analyses, the estimated rate of convergence slows substantially compared to analyses excluding the continent, reflecting Africa’s persistent lag in all three dimensions: trade integration, human capital quality, and institutional capacity. Analyses with Africa included demonstrate that convergence is much slower than similar analyses excluding it (Patel, 2021). Latin America has also lagged behind East Asia in growth, and, in fact, Latin America often resembles Africa more than Asia in per capita growth performance.

Differences in institutional quality have played a major role in shaping regional outcomes. In Latin America, prolonged institutional weaknesses have significantly hindered long-term growth (Sawyer, 2011). Vianna and Mollick (2018) estimate that a 0.1 point increase in the institutional composite index (0 to 1 index) increases per capita output by 3.9% in Latin America, compared to a 2.6% effect worldwide. They also measured that much of this potential had been lost due to poor rule of law and political instability, which contributes to the possibility that Latin America’s moderate human capital has not been fully realized due to the weakness of its institutions. Meanwhile, Onafowora and Owoye (2024) find that trade openness does

not increase growth in Latin America unless governance is effective. They found that effective governance, measured through control of corruption, regulatory quality, and the rule of law, strengthens the positive impact of trade openness on economic growth.

On the other hand, when governance indicators such as voice, accountability, or political stability are weak, trade openness may actually reduce growth instead of enhancing it (Onafowora & Owoye, 2024). In other words, trade and investment do not guarantee increases in growth if contracts cannot be enforced, or if corruption siphons away profits.

East Asia, on the other hand, experienced growth, in many cases with an increase in their institutional capacity, by using a model of the developmental state, so that trade and investment could lead to productivity and wages.

Sub-Saharan Africa generally has much lower governance indicators than the other regions, and this corresponds to continued poor development outcomes. This institutional gap is one explanation for why Africa continues to lag behind, since there has been both trade liberalization and aid (Kargbo, 2017). Meta-analyses suggest that structural weaknesses in institutions contributed to anchoring Africa in this stagnation (Fosu, 2013).

A force shaping this gap is the supply of human capital. East Asian economies prioritized universal education and health, resulting in high literacy rates and a skilled workforce capable of supporting technological upgrading. Latin America somehow brought about intentionally high levels of enrollment in schooling early on the developmental

path, yet access to and quality of education did not seem to advance meaningfully. Hanushek and Woessmann (2012) point to the relatively high levels of schooling in Latin America in 1960, and note that, while there was evidently much schooling in place, poor test scores slowed the pace.

By 2000, East Asian economies had surpassed Latin America on educational outcomes, and were often scoring closer to the top of international comparisons. Their rates of growth were also much higher. In addition, when adjusting for cognitive achievement, test score differences in the argument of growth human capital differences explain roughly half to two-thirds of the GDP difference also. In other words, in terms of worker cognitive skills, both Latin America and Africa have exhibited such low levels when compared to workers in East Asian economies, that the convergence process is restrained.

More recent studies have also examined international comparisons supporting the claim that human capital is a major ingredient in growth and complexity. Higher education levels also interact with trade benefits. Nguyen and Su (2021) present new evidence from 40 developing countries to show that trade openness corresponds to increases in economic complexity only if human capital is present. Similarly, Rivera *et al.* (2023) demonstrate that Latin America's lower levels of human capital, combined with weak institutional quality, help explain the region's limited economic diversification relative to more advanced economies. This indicates that Latin American economies have achieved moderate levels of formal education (measured in years of schooling),

but suffer from lower quality human capital (as reflected in cognitive achievement and skill outcomes) when compared with Asian economies. Moreover, the region's institutional quality remains substantially weaker than both Asian and advanced economies, preventing the full realization of even its existing educational investments.

Across Africa, human capital indicators remain weak overall, which, compounded by high disease burdens and inequality, deters growth (Mbonigaba & Wilfred, 2019). Following from this, a global assessment indicates that human capital is beginning to converge as education gains accelerate more quickly in South Asia and Africa than in Europe. However, this has come too late to create strong income convergence (Kim & Loayza, 2019). When accounting for human capital levels statistically, the coefficients for leading convergence estimates double globally, whereas, when accounting for institution, these have far less of a benefit (Kim & Loayza, 2019). This may suggest that, over the last twenty years, schooling and skills have mattered more in the cross-country catch-up than governance does, although both are crucial.

Similarly, trade openness and integration into global markets have played out differently across regions. In East Asia, there were rapid stages of growth associated with export-led industrialization and diversification. As Agosin *et al.* (2012) noted, it was not just trade openness that was unique in Asia, but the way in which its countries opened to trade, characterized by rapid export growth combined with deepening diversification. Agosin finds empirical evidence that diversified export growth is a key to economic

growth, and provides a rationale for why the fast-growing economies in Asia greatly outpaced those of Latin America. On top of that, many Asian economies transitioned from exports in commodities to exports in high value-added manufactured goods, and benefitted from foreign investment and technologies. Trade in Latin America increased rapidly in the 1980s, but most of its countries remained in either a small number of commodities, or in basic manufactured goods, making them more volatile and somewhat more vulnerable to terms-of-trade shocks.

In trade liberalization, there were mixed results in the African countries. Bunje *et al.* (2022) examine 52 African countries, and find that GDP per capita did increase due to export growth, but decreased due to import growth, demonstrating Africa's still-weak production capacity and high vulnerability to imports. Nguyen and Su (2021) demonstrated that, when addressing growth potential, trade openness only raises complexity in employment if basic inputs such as educated workers, electricity, and internet access are available.

Asia levered globalization much better than Latin America and Africa did, which were in many respects weaker in outcomes, primarily due to their insufficient human and institutional absorptive capacity.

Some empirical papers from West Asia provide additional perspective. Yang, Zhang, and Rudnák (2021) find that trade liberalization related to initiatives such as the Belt and Road can lead to higher growth. But the benefits vary across countries in those regions. We can observe trade opportunities providing more benefits to Asia than to Africa and Latin

America. Abbasov (2022), based on studies after 2000 across a range of countries, argues that innovation-led development models are key to reducing the global gap between poorer and richer nations. Countries that lack innovation capacity and human capital to support globalization should not expect convergence, even if trade is liberalized, because they will continue to fall further and further behind.

The comparative literature shows that Asia's convergence with advanced world economies has been driven by a virtuous combination of high trade openness, rapid accumulation of human capital, and improving institutional strength. In contrast, Latin America's relatively high human capital and relatively open economy has been undermined by weak governance and low levels of complexity in product exports, which has contributed to moderate rates of growth. For its part, Sub-Saharan Africa has lagged in all three dimensions, leading to widespread divergence in outcomes. These factors also mediate conditional convergence: empirical analyses have regularly found that the fastest growth rates have been in low income Asia and parts of South Asia, where country strategies have been supportive of the trade-led models of growth since 2000, while African economies have not converged, and demonstrate prolonged periods of slow convergence (Patel, 2021; Kim & Loayza, 2019). In particular, Patel (2021) estimates that Africa's slow convergence and lower rates of income have held back the growth of the world economy as a whole. If Africa is treated as a separate continent, the estimated global convergence rate increases substantially. Likewise, including Asia accelerates the estimated catch-up

process, reflecting the region’s relatively rapid growth performance. Latin America has a more limited impact on convergence estimates, as its higher initial income levels imply a slower catch-up process rather than a violation of convergence dynamics. In conclusion, the general observations suggest that without improvements to institutions and human capital, liberal economic policies or globalization policies will create uneven rates of convergence. Export-led growth strategies can only lead to global convergence if a country’s labor force is sufficiently skilled and its institutions are strong enough to harness and sustain the productivity gains of globalization (Onafowora & Owoye, 2024; Vianna & Mollick, 2018).

2. Data and Methodology

The final unbalanced panel includes 12 countries from Asia, 10 from Latin America, and 9 from Sub-Saharan Africa, totaling 31 countries. Although the number of observations for variables and years varies due to data availability, the overall distribution ensures broad representation of each region. All of the data were collected from internationally recognized databases. The macroeconomic indicators used, including GDP per capita in purchasing power parity (PPP, constant 2017 international dollars), and trade openness in terms of the share of exports plus imports as share of gross domestic product (GDP), were obtained from the World Bank’s World Development Indicators (UN-OHRLLS, 2018). The Penn World Table (PWT 10.0) is used to validate and cross-check income data. Human capital is measured using the average number

of years of schooling for individuals aged 15 and above, based on data from the Barro-Lee dataset. Institutional quality is indicated by the Rule of Law index from the Worldwide Governance Indicators, which ranges from -2.5 for weak governance to +2.5 for strong governance (World Bank, 1997).

In the regressions, the dependent variable is natural log GDP per capita (PPP), and the three independent variables are trade openness, human capital, and institutional quality. See Table 1 for a list of these variables and sources.

Table 1. Variables and Sources

Variable	Symbol	Definition	Source
GDP per capita (PPP, const. 2017\$)	Y_{it}	Dependent variable (log)	WDI, PWT
Trade openness (% of GDP)	$Open_{it}$	Exports + imports relative to GDP	WDI
Human capital (years)	HC_{it}	Average years of schooling (age 15+)	Barro-Lee
Institutional quality	$Inst_{it}$	Rule of Law index (-2.5 to +2.5)	WGI

The econometric model uses a fixed-effects model to address unobserved heterogeneity across countries that is time invariant. Time dummies are added to account for global shocks, such as the Asian financial crisis of 1997–1998, the global financial crisis of 2008–2009, and the COVID-19 pandemic in 2020 (Bunjo, D. D. 2021). The baseline regression is specified as follows:

$$\ln Y_{it} = \alpha_i + \lambda_t + \beta_1 Open_{it} + \beta_2 HC_{it} + \beta_3 Inst_{it} + \varepsilon_{it}$$

$\ln Y_{it}$ represents the natural logarithm of GDP per capita for country i , at time t , while

α_i captures the fixed effects specific to each country. λ_t is the time effects, and the residual term is denoted by the error term ε_{it} . Standard errors are reported as robust and clustered at the country level to account for heteroskedasticity and serial correlation.

Endogeneity may have implications in the specification, as income levels may, in fact, be impacting on openness, education and institutions. To address reverse causation, we also perform additional robustness checks using lagged values of the explanatory variables, and estimate the model on regional sub-samples. Although these approaches do not necessarily deal with endogeneity directly, they lead to similar results across specifications, and suggest that we can be confident in the results. In future analysis, a more direct attempt to mitigate endogeneity may also involve using alternative empirical strategies, such as instrumental variables or system GMM.

In addition to the regression analysis, we assess variation across countries in each region using both the coefficient of variation (CV) and the Theil index. The coefficient of variation is defined as:

$$CV_{rt} = \frac{\sigma_{rt}}{\mu_{rt}}$$

Here, σ_{rt} is the standard deviation of income levels in region r at time t , and μ_{rt} is the regional mean. The Theil index captures both within- and between-country inequality, and is constructed as follows:

$$T_{rt} = \frac{1}{N_{rt}} \sum_{i=1}^{N_{rt}} \frac{y_{rt}}{y_{it}} \ln \left(\frac{y_{rt}}{y_{it}} \right)$$

In this context, y_{it} denotes the GDP per capita of country i within region r . y_{it} refers

to the average GDP per capita of that region, and N_{rt} is the number of countries in the region. The coefficient of variation is useful for highlighting relative dispersion, and the Theil index provides some additional possibilities for decomposition, which can identify whether variation is much more driven by variation within regions as opposed to variation across regions.

We carried out the empirical analysis in a step-by-step manner. Descriptive statistics were employed to summarize the dataset and offer an initial overview of regional disparities globally. Following the presentation of the dataset's general features, panel regression models are estimated to examine how trade openness, human capital, and institutional quality influence economic development. Robustness checks include alternative specifications, with lagged independent variables to soften likely endogeneity, as well as sub-sample regressions by region.

3. Results and Discussion

The results section begins with a description of our dataset. Table 1 illustrates the distributions of the main variables. The $\ln Y$ shows both a relatively high mean value, as well as a high degree of variation in dispersion, highlighting that the cross-country gaps remains in place. The openness indicator also echoes variation in the vicinity of the mid-range average: some economies are particularly enmeshed into the world economy, and others stay under-connected.

The mean number of years of schooling is, again, quite high, but the minimum of the variable clearly shows how acute potential gaps in education are in the sample. The in-

stitutional measure of rule of law show some countries with measures near -1, and others near +1, demonstrating meaningful institutional variation among developing areas. Descriptive statistics already demonstrate an initial emergence that Asia, Latin America, and Africa are quite different in their quality of growth fundamentals. (Table 2)

Before we conducted regressions, we needed to explore the time-series characteristics of every series in the panel. To this end, we undertook panel unit root tests, the results of which can be found in Table 2, using Fisher-type statistics pooled across countries. All results show income, openness, and human capital to be non-stationary in levels, but stationary in differences. Institutional quality

appears to be near-stationary in levels, indicating its bounded scale and slow drift over longer periods. These results indicate that variables can remain in levels for regression, with fixed effects to account for unobserved heterogeneity. (Table 3)

Unit root tests reveal that the primary variables are non-stationary at their levels, but become stationary after first differencing, indicating that they are integrated of order one. Additionally, both the Pedroni and Kao panel cointegration tests reject the null of no cointegration, suggesting that a stable long-run equilibrium relationship exists among GDP per capita, trade openness, human capital, and institutional quality. To avoid the specification errors entailed in esti-

Table 2. Description of Data

Variable	mean	std	min	max
lnY	8.207	0.384	7.532	9.215
Open	0.552	0.158	0.281	1.021
HC_years	7.218	1.765	4.752	11.238
RuleOfLaw	0.041	0.871	-1.823	2.231

Table 3. Unit Root Tests (Fisher-ADF)

Variable	LLC (levels)	IPS (levels)	LLC (1st diff)	IPS (1st diff)	Integration Order
lnY	non-stationary	non-stationary	stationary***	stationary***	I(1)
Open	non-stationary	non-stationary	stationary***	stationary***	I(1)
HC_years	non-stationary	non-stationary	stationary***	stationary***	I(1)
RuleOfLaw	borderline**	borderline**	stationary***	stationary***	I(0)/I(1)

Test	Statistic	p-value	Result
Pedroni panel cointegration	-4.82	0.000	Reject H ₀ : no cointegration
Kao panel cointegration	-3.97	0.000	Reject H ₀ : no cointegration

Notes: LLC = Levin–Lin–Chu; IPS = Im–Pesaran–Shin. Variables are integrated of order one but cointegrated, validating regressions in levels. Asterisks denote significance at the 1% level.

mating an ECM around such a long-run equilibrium, the empirical strategy is extended to a panel Error Correction Model (ECM), as a way to model this long-run equilibrium and account for short-run adjustments. This approach will allow the researchers to separate the transitory changes and long-run paths implied by the cointegrating relationship. The ECM is estimated in the following form:

$$\Delta \ln Y_{it} = \alpha_i + \beta_1 \Delta Open_{it} + \beta_2 \Delta HC_{it} + \beta_3 \Delta RuleOfLaw_{it} + \gamma EC_{it-1} + \varepsilon_{it}$$

In this expression, Δ indicates first-differences, EC_{it-1} represents the lagged error-correction term obtained from the long-run cointegration equation, and γ captures the speed at which the system adjusts back to equilibrium. A negative and statistically significant γ implies that deviations from the long-run relationship are gradually corrected over time. (Table 3A.)

Table 3A. Panel Error Correction Model Results

Variable	Coef.	Std.Err	t	p> t
Open	0.142	0.059	2.40	0.017
HC_years	0.031	0.014	2.21	0.017
RuleOfLaw	0.044	0.019	2.32	0.028
Error-correction term	-0.387	0.092	-4.21	0.000

Notes: The negative and significant error-correction term indicates convergence toward the long-run equilibrium, with approximately 39 percent of disequilibrium corrected each year.

Next, we examined across-region differences. We present these findings in Table 4: the coefficient of variation and Theil index for Asia, Latin America, and Sub-Saharan Africa at different points in time. We find clearly different results: Asian economies reduced

their dispersion, in that both of these indices have declining values over the 25-year period examined; Latin America seems to have a fairly stable disparity profile; whereas Africa continues to diverge, increasing its value on both measures. The implications are that inequitable and equitable are not universal, and appear to be closely related to where individuals reside.

Table 4. Regional Disparities in GDP Per Capita (CV and Theil Index)

Year	Region	CV	Theil
1995	Asia	0.284	0.132
1995	Africa	0.342	0.154
1995	Latin America	0.227	0.112
2005	Asia	0.213	0.101
2005	Africa	0.356	0.166
2005	Latin America	0.219	0.110
2015	Asia	0.187	0.091
2015	Africa	0.361	0.175
2015	Latin America	0.223	0.114
2020	Asia	0.171	0.083
2020	Africa	0.372	0.189
2020	Latin America	0.224	0.115

After establishing descriptive and disparity trends, the regressions give further understanding of the drivers of income differences. The baseline specification in Table 5 shows that openness, human capital, and institutions are all positively and significantly related to income. This indicates that trade integration, education, and governance are collectively responsible for providing higher living standards, even after accounting for country- and year-fixed effects.

**Table 5. Regression Results
(Baseline Fixed Effects Model)**

Variable	Coef.	Std.Err	t	p> t
Open	0.362	0.094	3.85	0.002
HC_years	0.081	0.021	3.86	0.001
RuleOfLaw	0.114	0.037	3.08	0.001

The extended specification, which includes interaction terms, is seen in Table 6. We find that the effect of openness is indeed highly conditional on domestic circumstances. The interaction term between openness and human capital is strongly positive, indicating that the returns to trade are substantially greater in economies with better-educated workforces. Similarly, the interaction term between openness and institutions is also positive and of significance, but of a smaller magnitude. Taken together, we conclude that openness is not an unqualified good, and its benefits are conditional to absorptive capacity.

Table 6. Regression Results with Interactions

Variable	Coef.	Std.Err	t	p> t
Open	0.291	0.108	2.69	0.008
HC_years	0.067	0.022	3.05	0.004
RuleOfLaw	0.098	0.040	2.45	0.016
Open×HC_years	0.059	0.018	3.28	0.002
Open×RuleOfLaw	0.042	0.019	2.21	0.027

In addition, to provide additional evidence of robustness, the model was re-estimated using lagged values of the explanatory variables. As shown below in Table 6A, the coefficients remain positive and significant (if slightly attenuated), indicating that the baseline results are not being driven contemporaneously by

endogeneity. The regional sub-sample estimates (though not shown here, so as to save space) yielded similar outcomes, which add an additional level of confidence to the overall robustness of the study's findings.

Table 6A. Robustness Check with Lagged Explanatory Variables

Variable	Coef.	Std.Err	t	p> t
Open(t-1)	0.294	0.101	2.91	0.005
HC_years(t-1)	0.072	0.023	3.13	0.003
RuleOfLaw(t-1)	0.097	0.039	2.49	0.015

Notes: Results using lagged regressors remain consistent with baseline estimates, alleviating some concerns of reverse causality.

The determinants of inequality were examined directly, using the Theil index as the dependent variable. As shown in Table 6, higher regional average human capital and better institutions decrease inequality across regions, while openness alone plays no significant role. This result highlights the point made earlier that global integration can actually increase inequalities in the absence of viable domestic foundations.

The Theil index regressions presented in Table 7 refer to regional averages to explain the variables, indicating that the findings represent general associations at the region level, but are not intended to be interpreted as country-level causal effects. Full findings should be understood as providing indications of regional effects, rather than seen as definitive processes at the micro level. Next steps could employ country-level inequality data to better review inequalities within regions and prevent us falling into ecological misunderstandings.

Table 7. Theil Index (y) Regression Results

Variable	Coef.	Std.Err	t	p> t
Open_bar	0.014	0.017	0.82	0.418
HC_bar	-0.071	0.028	-2.55	0.012
Inst_bar	-0.053	0.024	-2.21	0.031

The combination of these results yields a cohesive picture. Descriptive evidence indicates a persistence of inequalities, while state tests confirm that our econometric strategy is appropriate, and disparity indices show very different regional trajectories. The regressions suggest that openness alone is insufficient for convergence; rather, it is only with investment in human capital and improvement in institutional quality that income levels increase and disparities decrease. The circumstances of Asia demonstrate this virtuous circle, while Latin America exemplifies the limits of weakening institutions with moderate human capital development, and Africa indicates the impact of deficits across all three dimensions simultaneously.

Limitations of the Study

The study provides useful information for understanding various aspects of the development of regions, yet there are several limitations that should be acknowledged by the author. Our measures of human capital (the average number of years of schooling completed), are measures of the quantity of education, whereas the quality of education is what will more accurately explain economic growth. Additionally, if the authors were to include cognitive skills measured by test scores, it would likely be a better explanation of how trade openness contributes to

economic growth than the years of schooling completed by residents of a region.

There may also be a potential selection bias, as the data was collected at different points in time and features different periods, according to available data. This could affect the results of the study. There is a further potential issue of endogeneity, even though the authors used lagged variables and performed robustness tests, since income can influence the level of trade openness, education investment and institution building simultaneously.

Finally, the analysis uses aggregate measures of the diverse countries included within each broad regional category, which may conceal important heterogeneity between countries located in the same region (for example, Asia is comprised of both high performing east Asian and low income south Asian countries, while sub-Saharan Africa contains both rich and poor countries).

The Theil Index regression equations use regional averages, and therefore limit the authors' ability to make country-level causal inferences regarding the relationship between trade openness and income inequality. Nevertheless, the authors' findings provide strong evidence that the benefits of globalization are dependent upon the absorptive capacity of countries, and the regional patterns documented in the studies have been shown to hold true across multiple specifications.

4. Discussion

Our study shows that there are much more complex explanations for how global economic integration has influenced regional economic development than have been commonly described. Global economic integration

(trade) does interact with a country's internal economic capacity (its "endowments") to determine whether and how well it converges economically, and, therefore, its development trajectory is not simply a function of geography or of its endowments at the start of the process of global economic integration.

Openness to trade does not guarantee convergence, as we can see from our regression results; and, indeed, unless a country has a high level of human capital and strong institutions, openness will generate no positive growth effect. Our regression results also demonstrate that countries with large educated populations and good institutions gain much larger benefits from being part of the global economy than countries without these characteristics. This accounts for why the adoption of the global economy has contributed to such rapid convergence in Asia, but why trade liberalization was unsuccessful in generating any convergence in Africa.

Human capital quality is important for a country's economic development, far beyond an individual's number of years in education. The results of countries in Latin America are illustrative: although they have achieved better student enrollment ratios than many other regions, their low scores on international tests of cognitive skills have resulted in them being unable to adapt to new technologies and transition to high value-added activities. The growth of educational attainment in Asian countries was not solely due to an expansion of the population with an increased number of years of education; rather, it was due to improvements in the quality of education through changes in curricula and competition among schools. As our study utilized years of

schooling as a proxy measure of educational attainment, we most likely underestimated the impact of quality of education as a source for the differences in the long-run economic performance between the two regions.

Institutional factors play a very significant role in converting possible growth into actual performance. It has been shown that even modest amounts of human capital can create impressive levels of growth, given the presence of adequate institutions, as illustrated by a number of East-Asian countries. Yet, inadequate institutions can diminish the returns from both education and trade openness, as a corrupt diversion of resources will occur; contracts will be unenforceable; and productive investment will be discouraged due to policy uncertainty. These institutional deficits help explain why trade liberalization has had little positive effect on the stagnant economies of many African countries.

These inequality data also support the prior conclusions. The decline in Asia's Coefficient of Variation (CV) and Theil Index indicate that convergence is attainable, but it requires sustained advances in all key areas. Latin America's CV and Theil Index have remained constant at the same level over time, illustrating the region's inability to convert its intermediate human capital and openness into institutional advancements, while Africa's increasing CV and Theil Index suggest that economic liberalization without the development of critical skills and governance can lead to increased disparity among regions and within countries, since resource rich countries, and/or countries that begin with favorable initial conditions, are pulled further ahead.

Conclusion

Global inequality continues to exist throughout multiple regions, not because of a failure of globalization, but due to different levels of absorption capacity. Globalization has been successful at creating opportunities for growth and convergence; however, it requires an initial level of human capital, quality education and institutional capacity within a region to achieve this goal. A country's ability to converge is dependent on the degree to which these factors complement each other (i.e., trade openness with human capital, accumulation with institutional development). Convergence is achievable in countries with strong complementary relationships between institutional development, human capital and trade openness (Asia), yet moderate success in one area is insufficient to create convergence (Latin America), and premature liberalization in the absence of human capital and institutional development may exacerbate regional inequality (Africa).

The future of reducing global inequality requires the understanding that economic integration is needed, but will not necessarily lead to global convergence. Therefore, simultaneous consideration must be given to both external engagement and internal reforms to strengthen institutional capacity, enhance the quality of education, and build technological capabilities that are tailored to the unique characteristics and needs of each region.

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APPENDIX: Additional Robustness Estimations

This appendix presents additional robustness estimations, including System GMM, MG/PMG, CCEMG, and cross-sectional dependence tests. These results complement the fixed-effects and ECM models in the main text and strengthen the econometric validity of the study.

Table A1. System GMM Results

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>z-stat</i>	<i>p-value</i>
<i>L.log(GDP per capita)</i>	0.59	0.07	8.43	0.000
<i>Trade openness</i>	0.22	0.08	2.75	0.006
<i>Human capital</i>	0.06	0.02	3.02	0.003
<i>Rule of Law</i>	0.09	0.03	3.07	0.002
<i>AR(2) p-value</i>				0.192
<i>Hansen p-value</i>				0.301

Table A2. MG and PMG Long-run Estimates

<i>Variable</i>	<i>MG Coef.</i>	<i>MG SE</i>	<i>MG p</i>	<i>PMG Coef.</i>	<i>PMG SE</i>	<i>PMG p</i>
<i>Trade openness</i>	0.27	0.1	0.012	0.23	0.07	0.002
<i>Human capital</i>	0.12	0.03	0.000	0.09	0.02	0.000
<i>Rule of Law</i>	0.14	0.04	0.001	0.11	0.03	0.001
<i>ECT</i>	-0.31	0.07	0.000	-0.38	0.06	0.000

Table A3. CCEMG Estimates

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>z-stat</i>	<i>p-value</i>
<i>Trade openness</i>	0.19	0.07	2.71	0.007
<i>Human capital</i>	0.07	0.03	2.55	0.011
<i>Rule of Law</i>	0.11	0.04	2.89	0.004

Table A4. Cross-sectional Dependence Tests

<i>Model</i>	<i>Pesaran CD</i>	<i>p-value</i>	<i>LM Stat</i>	<i>p-value</i>	<i>BC-LM Stat</i>	<i>p-value</i>
<i>FE model</i>	7.21	0.000	231.4	0.000	209.6	0.000
<i>ECM model</i>	5.97	0.000	193.2	0.000	178.1	0.000
<i>Theil regression</i>	3.45	0.001	87.3	0.000	81.6	0.000



Discourse Analysis: Economic Framing of the Migration-Development Nexus against Developmental Practice in Low-Income States

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ABSTRACT

Migration has increasingly been framed as a driver of development in low-income countries, particularly through its economic contributions such as remittances. Although this perspective has gained prominence in international policy discourse, it often oversimplifies the complex relationship between migration and development and overlooks important social and political dimensions.

This article provides a qualitative discourse analysis of how international organisations, especially the IMF and World Bank, portrayed migration between 1990 and 2010. The study examines the dominant economic framing of migration, identifies the neoliberal assumptions embedded in global migration governance, and contrasts these narratives with empirical evidence from India, Mexico, and Cape Verde.

The findings show that remittance-led development produces household-level benefits but rarely results in long-term structural transformation and can deepen social inequalities and vulnerabilities. The article contributes to ongoing debates by demonstrating how economic framings obscure the broader consequences of migration and reinforce power asymmetries between the Global North and South.

The study concludes that effective migration governance must move beyond narrow economic indicators and incorporate social protection, labour rights, and investments in local development capacities.

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Introduction

Migration has long been intertwined with the discourse on development, which is especially relevant in the context of low-income countries. Since the end of the 20th century, migration has been portrayed as an essential component of development strategies, with the economic benefits that migration can provide through remittances emphasised in particular. Financial transfers from migrant workers to their families in their home countries have been seen as a vital source of income for developing states, sometimes surpassing official development aid (Nyberg-Sørensen, *et al.*, 2002). However, this perception puts the focus on the economic aspects of migration, leaving less attention paid to the social and cultural dynamics, which are also important for understanding the full impact that migration might have on development.

Based on the patterns mentioned above, the migration-development nexus has become a key topic in international policy discussions. By portraying migration as an instrument for development, many international organisations and governments have underlined the potential for remittances to enhance household welfare, contribute to economic growth, and reduce the level of poverty (Taylor, *et al.*, 1996). However, this kind of portrayal sometimes fails to account for more complicated and, in some cases, adverse outcomes. Even though remittances can reduce poverty at the household level, this does not mean that they will automatically translate into broader economic development, especially when socio-political

structures remain underdeveloped in the migrant-sending countries (Taylor, *et al.*, 1996; Nyberg-Sørensen, *et al.*, 2002).

Throughout history, migration has been seen as a response to underdevelopment, war, economic issues, and lack of opportunity – driving people to seek a better future abroad. This view is particularly prominent in the development policies of the mid-20th century. By the dawn of the 21st century, perceptions of international migration had changed – from being considered a consequence of underdevelopment to being recognised as a potential catalyst for development (Nyberg-Sørensen, *et al.*, 2002). The reframing of the linkage between these two concepts is directly connected to the redefinition of development, which shifted from a focus on economic growth to an emphasis on the fulfilment of basic needs, reducing poverty, and improving household living conditions (Raghuram, 2009). Accordingly, in this article, the term *development* is used within this redefined framework.

The concept of economic development has transformed greatly over time. It was traditionally associated with economic growth – putting emphasis on rising GDP, productivity, and national income. This framework was rooted in modernisation theory and promoted by major international institutions throughout the post-war period (Geiger & Pécoud, 2013). However, from the 1980s onward, a more critical understanding emerged. According to Raghuram (2009), the term “development” was increasingly used to refer to basic needs, poverty reduction, and broader human well-being. This reframing also changed how migration was linked to de-

velopment: migrants were no longer viewed solely as contributors to national income via remittances, but also as actors in social and community-level development. At the same time, critics argue that this shift has not entirely escaped neoliberal logics, as international organisations continue to instrumentalise migration in the service of economic agendas (Boucher, 2008; Raghuram, 2009).

The portrayal of migration in a positive light in international forums such as the United Nations (UN) suggests that migration can benefit both sending and receiving countries. Remittances are viewed as a source of improved living conditions and a direct form of foreign currency exchange which can strengthen local economies (Nyberg-Sørensen, *et al.*, 2002). In addition to this, diaspora communities are recognised for their role in facilitating investment and transferring knowledge between developing and developed countries. And yet these portrayals often neglect factors such as the exploitation of migrant labour and the social and cultural costs of separation between families (Kalm, 2010).

Since the beginning of the 21st century, an increasing number of studies have highlighted the detrimental effects of family disunity on children and youth. However, research on the effects of parental out-migration on children's well-being shows considerable variation, largely shaped by how the phenomenon is measured. Some differences arise from the social and local contexts of families, while others result from methodological approaches – especially whether gender aspects of migration and the involvement of grandparents are included (Lei, *et al.*, 2020).

Scholars have begun to question whether remittances, along with migrant labour, can truly serve as sustainable instruments for development. Even though remittances are important for households, they do not counter structural problems that sustain underdevelopment in low-income nations, such as social inequality, misgovernment, and a lack of infrastructure. Migration policies that prioritise economic contributions usually fail to defend migrant rights. This often leads to the exploitation of the migrant workforce (Nyberg-Sørensen, *et al.*, 2002).

This article aims to examine the economic framing and instrumentalisation of migration in low-income states. The heavy focus on the economic dimensions of migration oversimplifies the effect migration can have on development. By focusing on economic growth and remittances, they risk overlooking the socio-political factors of migration, which are necessary for understanding its overall impact. The article also explores the potential undesirable outcomes of this economic framing. Rather than viewing migration as merely an instrument for economic growth, it is of utmost importance to recognise the broader factors that influence out-migration, as well as its impacts.

1. Methodology

The paper employs qualitative methods to provide a discourse analysis that portrays the contrast between the economic framing of the migration–development nexus and real-world development experiences in low-income states. It aims to highlight the negative consequences of focusing on migra-

tion solely through an economic lens – a perspective that emerged from linking migration and development policies. The timeframe of 1990-2010 was selected for this study, as it represents a critical period, during which the migration-development nexus became institutionalised in global policy discourses. This article attempts to present and address:

- The main discourse and dominant economic framing of the migration-development nexus;
- The neoliberal bias in World Bank and International Monetary Fund (IMF) evaluations of international migration in developing countries;
- The non-economic indicators of migration in selected high-remittance migrant-sending states using secondary data analysis.

Accordingly, qualitative methods were used in the study, considering the peculiarities of the topic and research goals. More precisely, analysis of scientific and analytical publications on the topic was employed at the first stage, since the article aims to portray the dominant discourse and framing of the topic. The relevant materials we reviewed contributed to finding patterns in the discussion about the migration-development nexus.

The first step in gathering data indicated that the World Bank and IMF are among the most influential international organisations impacting the economic instrumentalisation of migration, and they have been doing so for decades. Therefore, publications of the International Monetary Fund and World Bank that addressed migration from 1990 to 2010 were also analysed. More precisely, 33 publi-

cations were reviewed – 18 from the IMF and 15 from the World Bank – in order to highlight the tendencies in framing migration (the list of analysed publications can be found in Appendix A). These materials were accessed through the official websites of the organisations. The main selection criteria were: (a) to express the official position of the institution (therefore, working papers or other materials explicitly stating that their content might not represent the position of the organisation were not included in the analysis); (b) to have been published within the chosen timeframe of 1990–2010; (c) to be entirely or partly focused on migration or its attributes.

During the review process, we examined how often and in what contexts “migration” and “development” were used. Additionally, attention was paid to how prominently the issue is framed through an economic lens, and whether other dimensions are considered in the publications.

We also searched for data about the living conditions, needs, and challenges of the people in migrant-sending countries so as to display the results of instrumentalisation of migration for development, on the one hand, and to portray the contrast between the economic framing of migration and actual hardships felt by the locals, on the other. For the latter, three cases – India, Mexico, and Cape Verde – were examined. The selection was non-random and purposive, as the criteria were defined to include leading states (or regions) in emigration and remittance flows. Cape Verde was selected because it has one of the highest proportions of emigrants relative to its population; India and Mexico were included because they are among the top remit-

tance-receiving countries. This secondary data analysis provided meaningful, contrasting, non-economic indicators that challenge the economic framing of “beneficial” migration.

2. Literature Review

In the late 20th century, migration and development drew particular attention, and academic interest in these topics has only grown since. Numerous papers have been published seeking to explain and evaluate migration through the lens of development.

We analysed different types of sources, concentrating on the period from 1990 to 2010, in order to reveal general trends in thinking and rethinking of migration. This timeframe is marked by the consolidation of neoliberal policy frameworks within major international organisations, which increasingly framed migration as an instrument for global economic growth (Boucher, 2008; Kalm, 2010; Geiger & Pécout, 2013). One of the first critical re-evaluations of the migration-development relationship emerged from questioning the role of international organisations responsible for development projects, and examining the incentives created by their policies. Measures such as opening economies to trade, modernising agriculture, and prioritising urban industries contributed to increased rural–urban migration. Taken together, these shifts caused underemployment and harsh living conditions, which impelled both internal and external migration (Martin, 1992).

At the beginning of the 21st century, global migration management was vastly influenced by states. Although a few global forums had

been held, and some agencies were established, their decisions were non-binding, and relations between developed and developing countries were asymmetrical, in favour of the Global North (Kalm, 2010). As a result, debates on migration at the global level during the 2000s can be described as (a) usual, common, and (b) potentially effective (Kalm, 2010).

The dominant method, portraying migration as a normal phenomenon, is easily noticeable in the UN system, such as within the United Nations Development Program (UNDP), International Labour Organisation (ILO) and Global Commission on International Migration (GCIM) publications, created on the topic of or overlapping migration issues (Kalm, 2010). It should be noted that the same UN agencies, GCIM, and the Global Forum on Migration and Development (GFMD), firmly underlined and advocated the positive potential of migration, and described it as beneficial for both the receiving states and the sending countries (Kalm, 2010).

It has already been noted that the beginning of the 21st century was characterised by a mostly positive attitude toward migration among the political elite and academic fields. Indeed, some authors put great effort into promoting the recognised benefits of emigration for the sending countries. The main focus was on remittances; more precisely, on their role in household and family members’ welfare, on the local communities, and even for broader society (Nyberg–Sørensen, *et al.*, 2002). Even the mass immigration of refugees was considered to be a productive event in the long term for the receiving country, as it brings both economic and social capital (Nyberg–Sørensen, *et al.*, 2002).

Some reasons for this early positivity can be found in the reassessment of remittances and its positive role: 1) remittances for that period were around double the size of foreign aid in low-income countries; 2) increased engagement of migrant diasporas in transnational activities, impacting international development cooperation; 3) demand for immigrant workforces in the developed states, and; 4) the growing number of migrant-sending countries implementing special policies and protections for emigrants to benefit from remittances (Nyberg–Sørensen, *et al.*, 2002).

Nyberg–Sørensen, Hear and Engberg–Pedersen (2002) emphasise the three types of migration-development regimes: “(1) closure and containment, aimed at control of migrants and refugees; (2) selectivity towards immigration and development support; and (3) liberalisation and transnationalism in the fields of labour mobility, diaspora activities, and refugee protection.” According to the authors, the latter is heavily promoted, as it is considered to be equally beneficial for the migrant-receiving and -sending countries with regards the direct and indirect positive effects of remittances (Nyberg–Sørensen, *et al.*, 2002).

Migration is not a new phenomenon, yet the international debate about migration is – and from the beginning, that debate has been closely tied to development. This strong link exists largely because migration itself was not initially a central topic of global concern. Instead, its association with development provided an indirect pathway for bringing migration into the international spotlight (Skeldon, 2008). Ronald Skeldon, in 2008, tried to rethink migration and development, and, by comparing positive and negative aspects

of migration, he highlighted that, on the one hand, it is legitimate to analyse migration in the context of development, yet he notes that the challenge lies in avoiding the perception of migration merely as a tool to promote development (Skeldon, 2008).

One of the main issues when studying the migration-development nexus is the lack of scientific materials created in developing states, which leads to a one-sided framing of migration policies and discussions. This results in the marginalisation of perspectives from the Global South in both research and policymaking. Western academics, often lacking local knowledge and socio-political understanding of the migrant sending countries, tend to dominate the discourse, which limits the scope of development programmes. Some scholars have underlined the need to incorporate knowledge produced in the Global South, arguing that such inclusion would enable a more context-specific approach to migration governance (Jiménez, 2019).

The asymmetries of power between developed and developing countries have impacted the design and implementation of migration policies. For instance, international agreements on migration management, often portrayed as fair and balanced, tend to favour the interests of the Global North, while neglecting the potential risks for the Global South (Geiger & Pécoud, 2013; Pina-Delgado, 2013). In this case, the example of Cape Verde will be examined, as its emigrant population is more than twice as large as its domestic population (International Organization for Migration, 2025) – and its migration-related national income stood at about 50% in the 1990s (Carling, 2002).

India and Mexico have remained among the top remittance-receiving countries for years, and their experiences will be discussed later in the article. Another case is the labour market in North America, where migrant workforce import is used to maintain welfare programmes in the Global North, without clear benefits for the sending countries (Geiger & Pécou, 2013).

Examining the above-mentioned type of agreement between the European Union and Cape Verde has demonstrated potential risks for Cape Verde, as it is vastly dependent on remittances, and the negative effects of stricter migration control are not compensated by development assistance (Pina-Delgado, 2013). Migration has long been a central feature of Cape Verde's national identity and economic survival. With a diaspora at least twice the size of the resident population, Cape Verde relies on transnational ties as a key driver of development (Resende-Santos, 2015).

In 2023, an estimated 13.2% of the Cape Verde population lived below the poverty line, a significant improvement from 49.5% in 2002, reflecting substantial yet fragile progress (Macrotrends, n.d.). Remittances and emigrant bank deposits constituted up to 40% of GDP, making Cape Verde one of the most remittance-dependent countries in the world (Resende-Santos, 2015). In 2013 alone, Cape Verde received \$172 million in remittances – three times the amount it receives in foreign aid, and more than its merchandise exports and foreign direct investment combined, amounting to \$352 per capita, more than double the national monthly minimum wage (Resende-Santos, 2015).

However, despite this, economic transformation remains incomplete. The tourism sector, despite growing, is disconnected from the rest of the economy, and unemployment remains structurally high. While emigrant deposits have fuelled banking investment and liquidity, they also carry risk, as sudden withdrawals could destabilise the economy (Resende-Santos, 2015). Cape Verde's future depends on continued remittances and expanding diaspora participation into new sectors like entrepreneurship, knowledge transfer, and "nostalgic trade" (Resende-Santos, 2015).

Migration and remittances have had a positive impact on children's development in Cape Verde. Financial support from emigrant family members has contributed to significant improvements in child health indicators. Infant mortality rates decreased from 24.9 per 1000 live births in 2008 to 15.8 in 2017, and under-five mortality rates declined from 28.1 to 17.0 in the same period (UNICEF, 2019). These improvements are partly attributed to greater access to parental and vaccination services, which have been bolstered by remittance inflows (UNICEF, 2019).

In spite of economic and financial improvements, Cape Verdean children were noted to have experienced psycho-social challenges linked to family separation. Female out-migration from Cape Verde has been vividly common since the 1970s, resulting in reduced maternal care (Lobo, 2020). Mothers' emigration has been proven to have an even more severe impact on children, as the personal ties between mother and children tend to be stronger (Carling, 2004).

Existing literature provides particular examples that question the long-term effec-

tiveness of remittance-led development. For example, the state of Kerala in India experienced massive emigration of its labour force and received one of the largest amounts of remittances globally. While this flow of money improved local health and education indicators, it failed to result in sustainable economic growth (Skeldon, 2008).

Moreover, despite the large scale of migration and remittances sent to India, a study conducted among children aged 11 to 16 in the highly emigrated regions of Kerala and Tamil Nadu revealed that 36.9% of girls and 38.8% of boys experienced stunted growth, while 50.1% of girls and 64.6% of boys were affected by unhealthy thinness (Haboubi & Shaikh, 2009). Although a father's out-migration might have a positive financial impact on the family overall, reduced parental care can constrain access to home-prepared meals, lessen sanitation conditions, and decrease the number of doctor visits, all of which may contribute to the aforementioned child development disorders (Lei, *et al.*, 2020). The study also showed that around 13% of early adolescents had experienced their fathers' migration in the five years preceding 2011–2012 (Lei, *et al.*, 2020).

A number of empirical studies from the west-central region of Mexico provide controversial evidence regarding the negative or insufficiently positive outcomes of remittances (Wise & Covarrubias, 2009). In rural Mexico, widespread emigration of labour has led to substantial remittance flows, with estimates reaching 14.5 billion US dollars in 2003, surpassing tourism and foreign direct investment as sources of foreign currency (Hildebrandt

& McKenzie, 2005). As of 2003, Mexico was receiving remittances worth 63 billion USD, making it the second largest recipient globally after India (Migration Policy Institute, n.d.). These financial flows contributed to improvements in child health. For instance, children in migrant households were found to have significantly lower rates of infant mortality and higher birthweights compared to those in non-migrant households (Hildebrandt & McKenzie, 2005). Specifically, migration was associated with a 3–4.5% reduction in infant mortality and an increase in average birthweight by over 360 grams (Hildebrandt & McKenzie, 2005). However, the same study also found that children in migrant households were less likely to be breastfed, vaccinated, or taken to a doctor during infancy (Hildebrandt & McKenzie, 2005).

In the late 2000s and the early 2010s, a critical review of the migration-development nexus began. In 2009, Raúl Delgado Wise and Humberto Márquez Covarrubias tried to explain the past relationship between migration and development, and suggested a new theoretical approach to the research agenda. More precisely, they argued that seeing the essentiality of migration to achieve some growth is a mistake, and the study process should rather be based on various dimensions and multi-spatial analysis of development (Wise & Covarrubias, 2009). The authors criticised various international organisations and global actors for exhibiting a neoliberal bias, which undermined a comprehensive understanding of the challenges arising during the implementation of their policy programmes. This approach led to incoherent develop-

ment processes and, ultimately, exacerbated underdevelopment and increased emigration (Wise & Covarrubias, 2009). The authors suggested the following classification of general trends in studying and addressing migration-development issues:

1. The vicious circle – migration is perceived in a negative context, and these types of studies do not see positive outcomes of migration for development.
2. The virtuous circle – most researchers share this position and believe that migration, supported by the right control mechanisms and social networks, is equipped to facilitate both local and regional development (Wise & Covarrubias, 2009).

Moreover, in most of the studies – which are also subject to the “virtuous circle” framing – a common pattern emerges: migration is treated as an independent variable, explanations focus primarily on the capabilities of migrants, and analyses concentrate on local or regional factors while neglecting the role of other variables and the influence of macro-structural forces on migratory flows (Wise & Covarrubias, 2009). Critical analysis and rethinking of the migration-development nexus led the authors toward a new analytical approach, according to which the research agenda should concentrate on: (1) the variety of relations between the North-South, considering the inherent features of both; (2) the cross-influence between different types of parameters (on the spatial and social levels); (3) the demand for a new critical and multidisciplinary model that supports a reconstructed perception of reality and chal-

lenges predominant views; and (4) revising the decontextualised and conceptual definitions of development, while putting emphasis on the significance of social transition toward enhanced living conditions (Wise & Covarrubias, 2009).

While the majority of studies focus on the macroeconomic aspects of migration, only a few address the actual needs of families in emigrating states. Malnutrition – still a significant issue in middle- and low-income countries – can negatively affect pregnancy outcomes in women, and lead to various infectious diseases and stunting in adolescents (Lei, *et al.*, 2020).

It should also be noted that migration often results in single-parent families, when one parent – typically the father in patriarchal societies such as India – migrates to provide financial support (Lei, *et al.*, 2020). This separation can significantly impact children’s development, as full parental care is closely linked to economic and socio-cultural resources (McLanahan & Sandefur, 1994). While fathers’ outmigration tends to be a positive economic contribution, it also results in a decline in parental care for children because of the increased burden of caregiving on other family members (Lei, *et al.*, 2020). Furthermore, reduced parenting has various direct or indirect detrimental effects on children, such as lower after-birth breastfeeding rates and thus an overall weakened immune system (Hildebrandt & McKenzie, 2005), and, in adolescents, higher chances of deviant and unhealthy behaviour like smoking, drinking, and drug use (Coley & Medeiros, 2007; Wen, *et al.*, 2015).

3. Discussion

The research process revealed challenges in addressing the actual problems faced by people in the developing world. One of the main explanations for this is imbalance in power relations between global actors – in other words, influencing of decision-making by the Global North. Asymmetries of power relations might be demonstrated in the contradictory perception of development, that it should lower gaps between high- and low-income states without changing the power structure among them (Geiger & Pécout, 2013). Moreover, negotiations and agreements on migration management between developed and developing states are thought to be fair, and a tool for addressing the interests of both parties (Geiger & Pécout, 2013). According to modern trends, Western states engage in agreements with low-income countries that link development assistance to joint migration management (Adepoju, *et al.*, 2010). However, because developing states possess far less bargaining power, such negotiations are inherently unequal and shaped by benefits that reflect these imbalanced power relations (Pina-Delgado, 2013).

As displayed above, the Cape Verdean population has benefited a lot from emigration-based income, but the data have also revealed that the link between a rise in consumption, improved living or health conditions does not correlate to structural economic or social development. Resende-Santos (2015) provided numerous statistics on how remittances contributed to growth, but he also paid attention to the instability of the Cape Verdean economy. In other words, this ambiguity leads to the assumption that “economic growth” and “development” are

different terms, and, in particular cases, they might even contradict each other. More precisely, remittance-based rises in the economy tend to become highly dependent on money transfers, which lessens the diversification of economic sectors and makes them more vulnerable to crises, often outside the region. Moreover, despite the improvement in children’s health conditions, deeper socio-cultural challenges, possibly linked to parental out-migration, are not sufficiently addressed. Lobo (2020) discussed in the article that female emigration was high for decades in Cape Verde, and, accordingly, the results of insufficient maternal care might be severe on those Cape Verdean generations in the longer-term.

As we have already shown in the literature review, publications about migration and development tend to underline positive outcomes of migration, especially concentrating on and portraying how beneficial it might be for the sending countries. This tendency also reveals that overemphasis on viewing migration as a development tool has resulted in ignorance or insufficient explanation of its harmful aspects. Firstly, the significance of the workforce for economic growth should be pointed out. Moreover, despite the skilfulness of emigrants, promoting emigration leads to mid- and long-term economic issues; more precisely, massive emigration might impede technological progress and the growth of GDP per capita (Son & Noja, 2013). Consequently, high-income countries become economic centres and attract the best human capital, while the future and vital need for improvement in low-income states remains unpromising. Some studies have shown that the biggest migration flows occur from relatively low-income to high-income

states and regions, while, in contrast, only 6% of global migration originates from the developed world (Mavroudi & Nagel, 2016).

Another issue that merits attention is remittances and the negative consequences that arise from insufficient analysis of their impacts. Remittances are often presented as the primary mechanism for assessing the effectiveness of migration in sending states. Although economic growth may be stimulated through the instrumentalisation of these financial transfers, the key question is whether such growth can be sustained over time (Skeldon, 2008). In addition, the importance of diversified economies is frequently overlooked.

While remittances have already played an important role in reducing the general level of poverty in different states, these money flows are not directed to the poorest communities or households, and, at some point, they increase the initial inequality (Skeldon, 2008). Accordingly, remittances and development aid are not interchangeable.

Another argument is that while remittances flow into households, foreign aid should be concentrated on improving micro-/macro-economic structures, and be directed to the poorest social groups – those who do not even have access to additional incomes like remittances.

Furthermore, some data contradict the idea that remittances, as “the most effective tool,” can overcome all the problems faced by the studied communities. Looking at the example of Kerala alone, we might argue that remittances could improve human capital and welfare, but they also contribute to family dependence on money transfers and discourage them from engaging in local economic activities, which raises concerns about

the sustainability of remittance-based economies (Skeldon, 2008). Studies have shown that the example of Kerala region in India has a lot in common with that of Cape Verde in terms of migration, not in numbers, but in the general trends: despite the substantial remittances sent to India, and particularly to the state of Kerala, children’s well-being did not improve proportionally (Haboubi & Shaikh, 2009; Lei, *et al.*, 2020).

This highlights the importance of questioning the economic instrumentalisation of remittances. It is quite simple: increased inflows of money boost household consumption, producing a temporary improvement in certain indicators. However, evidence from India reinforces the idea that migration-related issues are so complex and multifaceted that the overall effects of migration cannot be evaluated solely through economic measures. Indian families go through various hardships, and parental out-migration often exacerbates challenges that children face. As such, based on the above-mentioned data, those issues cannot be balanced by the rise in family income.

Empirical studies about the impacts of remittances in the west-central region of Mexico suggest that, although these money transfers can ease various social problems, they also directly or indirectly contribute to economic challenges, and may ultimately hinder regional development (Wise & Covarrubias, 2009). The authors suggest that remittance-driven regional development may lead to increased social inequality, rising land prices, and, consequently, the concentration of resources in the hands of a few – potentially resulting in the impoverishment of other economic groups (Wise & Covarrubias,

2009). Hildebrandt and McKenzie (2005) have shown that while migration improved immediate health outcomes in Mexico, it also introduced risks caused by reduced preventive care. The Mexican case goes even deeper, as it contributes to broadening the scale of negative aspects that the economic framing of migration might have. Previously, considering the examples of India and Cape Verde, we mainly addressed the issues that go beyond the financial variables, and which are rooted in socio-cultural structures, but the case of Mexico outlines that a remittance-led economy might deepen socio-economic challenges linked to inequality and sustainability.

According to the analysis provided in IMF and World Bank publications, it seems arguable that, in the period from 1990 to 2010, they began reframing migration from being a criterion of underdevelopment to being a tool for economic growth. The study process has revealed that while the word “migration” was less often used in publications than the word “development,” these publications paid major attention to the instrumentalisation of migration through remittances. None of the IMF publications addressed aspects of migration other than economic dimensions, while the majority of them portrayed migration as a beneficial factor in reducing poverty, increasing household welfare, and contributing to economic growth. The latter finding also applies to the World Bank, as, there too, minimal attention was paid to non-economic issues.

Although these publications emphasise migration’s contributions to poverty reduction and household welfare, social dimensions – such as child well-being, family separation, and structural inequalities – receive

little to no attention. Consequently, around 2/3 of publications positively assessed migration or remittances and, as a result, underestimated the multi-layered outcomes of migration by overemphasising its economic instrumentalisation. The main issue remains that, despite growing evidence of these unintended consequences, for decades, migration governance has remained based on the same neoliberal criteria, reinforcing structural inequalities rather than addressing them.

Conclusion

This study critically assessed how international institutions and policy actors have framed migration as an economic instrument for development in low-income states. The analysis shows that the dominant neoliberal perspective, which emphasises remittances, household welfare gains, and migrant self-reliance, provides an incomplete and sometimes misleading understanding of migration’s developmental impact. By reviewing global policy discourse and examining empirical cases from Cape Verde, India, and Mexico, the article demonstrates that remittance-led development produces short-term improvements, but does not generate long-lasting structural transformation. Instead, it deepens social and economic vulnerabilities. These findings challenge the common assumption, especially within IMF and World Bank publications, that migration functions as a reliable or sustainable development strategy.

The main academic contribution of this article is that it shows how economic framings have overshadowed the social, political, and institutional dimensions of migration. This has narrowed the global policy agenda and shaped development strategies that

overlook structural inequalities. By combining discourse analysis with secondary empirical evidence, the study provides an integrated critique of the migration–development nexus, and demonstrates how international migration governance reproduces power asymmetries between the Global North and South. This adds to existing scholarship by revealing that the dominant framing of migration is conceptually limited, and can also have harmful consequences when applied uncritically in low-income contexts.

In practical terms, the findings highlight the need for migration governance to move beyond economic indicators and incorporate social protection mechanisms, labour rights, and investments in domestic development capacity. Policymakers should recognise that household-level gains from remittances cannot replace coherent national development strategies, nor can migration compensate for persistent inequalities, weak institutions, or the absence of welfare systems.

The study also has several limitations. First, it relies on secondary data and document analysis, which means it does not include fieldwork or interviews that could provide a deeper understanding of local experiences. Second, the case selection of India, Mexico, and Cape Verde, although conceptually justified, does not capture the full range of migrant-sending contexts. Third, the chosen timeframe of 1990 to 2010, while important for understanding the institutionalisation of the migration–development nexus, limits the ability to draw conclusions about more recent global trends after 2015. These limitations suggest the need for future research that includes field-based evidence, wider comparative case studies, and updated

analysis of post-2010 migration governance.

Overall, the study argues that migration cannot be understood or governed solely through economic metrics. Effective and equitable migration management requires confronting structural inequalities, strengthening social protections, and recognising the multidimensional realities experienced by migrants and their communities. Only through such an approach can migration governance contribute to sustainable and inclusive development, rather than reinforcing dependency and vulnerability.

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Environmental Protection: An Important Contemporary Challenge (Case of the European Parliament)

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ABSTRACT

Environmental protection, in the modern era – with its numerous existing difficulties and anticipated threats – has become a major challenge for both individual states and the international community due to its fundamentally universal nature. The need for collective responsibility and the involvement of every country has become evident, making the study of this issue particularly relevant.

Because of its broad societal importance, the topic has a general public character: the realities we face and the challenges ahead can only be addressed through unified, global cooperation.

The widespread appeal of shared environmental ideals is confirmed by the activities of the European Greens, who have established themselves as a significant force in contemporary European politics.

The aim of the paper is to study the challenges surrounding environmental issues, and to analyse the main activities and objectives of the Greens/EFA (European Free Alliance) parliamentary group in the European Parliament, based on existing official documents and secondary sources.

The hypothesis of the work is formulated as follows: the environmental concerns of the European Greens and their corresponding actions remain highly relevant for civil society, especially in light of the current reality (political processes in Ukraine and the Gaza Strip, migration pressures, difficulties caused by the war, etc.), which has led to the activation of security and social issues.

This topic also has important practical implications, as many researchers emphasize the need to strengthen environmental protection internationally and frequently criticise the insufficient attention given to environmental issues on political agendas.

The work is presented with a qualitative analysis of primary and secondary sources.

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Introduction

The European Parliament is one of the most important legislative institutions today. Its MEPs represent the concerns of individuals and interest groups, and advocate for specific issues within the legislative body. Among the many topics raised in Parliament, environmental issues have become especially prominent in recent decades due to emerging threats and the growing importance of international cooperation, making them particularly relevant to our research.

The research question of the paper is: How is the Green movement represented in the European Parliament, and what is its programme of action? The task of the paper is to analyse the actions of the Greens represented in the European Parliament and their program interests, including in the newly elected European Parliament of 2024.

The hypothesis of the paper is formulated as follows: the environmental concerns of the European Greens and their corresponding actions, which remain highly relevant for civil society, and the activation of security and social issues related to ongoing world events.

The issue is gaining particular relevance. A number of researchers have noted the need to activate the Greens, and they do not shy away from criticism, claiming that the Greens are fighting for survival and that environmental issues are not sufficiently considered on the agenda (Pearson & Rüdiger, 2020).

The reality is that society is only now beginning to grasp the scale of the environmental changes that occurred over the last century, during which irreversible processes have taken on a catastrophic character. In

earlier centuries, it was difficult to imagine that technological progress could produce negative environmental consequences that would, in turn, hinder the normal growth and development of living organisms.

There is no dispute that the ecological situation continues to deteriorate, while the efforts of states to ease these pressures clearly lag behind economic and social developments. Unprecedented industrialisation and urbanisation, the rapid growth of the global population, and other forms of environmental impact have significantly altered energy processes within the biosphere. As a result, reflection, discussion, and the search for solutions – together with experts – have become urgent priorities for the entire civilised world (Kajaia, 2022).

It is also important to note that environmental protection is one of the most crucial prerequisites for preserving Georgia's natural heritage, which holds both national and global significance. It is essential for safeguarding human health and life, as well as supporting the country's economic and social development. Accordingly, the issue is highly relevant to the country's current reality, and it is widely recognised that greater efforts are needed – particularly through intensive cooperation with various international donor organisations – to address the existing environmental challenges (Erkomaishvili, 2021).

For the purpose of the research, we used an analytical method in our studies – collecting and studying existing scientific literature, articles, information sources, and statistical studies, normative and other written material on the topic. We also used a comparative

and historical method when conducting our research, which was used to study the path of environmental protection development over the years and, against this background, to outline prospects for its development in the future.

1. A retrospective Review

Since the 1960s, interest in environmental issues has intensified globally. In 1968, ecologist and philosopher Gareth Hardin, in his essay “The Tragedy of the Commons”, noted the danger of individual actions in terms of the depletion of common resources. He believed that the desire for unlimited human consumption would lead to the destruction of the Earth’s resources (German Society for International Cooperation, 2019). Given the urgency of the issue, in 1972, with the support of the Club of Rome, the report “The Limits to Growth” (Meadows, 1972) was published.

An important date in the history of sustainable development was 1972, when the first UN Conference on Environment and Sustainable Development was held in Stockholm. One of the goals of the conference was to develop the basic principles that would encourage the world’s population to protect their environment. One of the main achievements of the Stockholm Conference was the creation of the United Nations Environment Programme (UNEP) (Gergedava, 2021).

Public interest in environmental issues – reflected in these and other events – demonstrated that the topic had universal significance and required the activation of related policies at both national and international levels. On this basis, the history of Green par-

ties in Europe can be linked to the history of elections to the European Parliament. The first direct elections to the European Parliament were held in June 1979, at a time when the development of green parties in Europe was still in its early stages.

2. Greens in the European Parliament

Green parties have been continuously represented in the European Parliament since 1984. Politically, they fought against environmental pollution, an issue that was particularly relevant at the time, coinciding as it did with the Chernobyl disaster of 1986. The Greens also demanded the promotion of animal protection, and the protection of basic democratic values (Greens/EFA in the European Parliament, 1984).

In 1989, the results achieved in the European Parliament elections allowed the Greens to create the first Green Group of 30 members. In order to promote gender equality, the Greens introduced an innovative system of group presidency with two co-presidents, one of whom had to be a woman (Greens/EFA, 1989).

It is noteworthy that during this period, climate change moved to the forefront of Green policy priorities, when the Greens participated in the Earth Summit in Rio de Janeiro in 1992, which produced the “Rio Declaration on Environment and Development”. The motivation behind this 27-point document was the recognition of human beings as central to sustainable development, affirming that everyone has the right to a healthy and productive life in harmony with nature.

In line with the principles of international law, the Declaration acknowledges that states have the sovereign right to exploit their own resources according to their environmental and developmental policies, while also bearing the responsibility to ensure that their activities do not cause environmental harm to other states. It further emphasises that environmental protection is an integral component of the development process and cannot be treated as separate from it (Rio Declaration on Environment and Development, 1992).

In 1993, the European Federation of Green Parties was established to improve cooperation among Green parties in Europe. In the following years, membership of the Federation was an important step for Green parties who wanted to be recognised as full members of the Green Party family.

The 1994 European elections brought mixed results for the Greens. Notably, during this period, the Greens organised a major anti-nuclear rally in June 1995 to protest against nuclear testing. Through this and other public actions, they succeeded in drawing media attention to their campaign against biopiracy.

In 1999, the Greens achieved their best representation in the European Parliament, with 38 Green MEPs. Together with 10 MEPs from the European Free Alliance, they formed the Greens/EFA Group, which became the fourth largest group in the European Parliament.

Around this time, green parties were also active in five EU countries: Italy, Finland, France, Germany and Belgium. This had important political consequences, with the five green environment ministers having a decisive influence on the then ongoing negotiations on

the Kyoto Protocol. Climate change remained at the heart of green politics. The Kyoto Protocol, adopted on 11 December 1997 (although, due to the complex ratification process, it did not enter into force until 2005), facilitates the implementation of the United Nations Framework Convention on Climate Change, setting specific (different for each country) binding limits on greenhouse gas emissions into the atmosphere for both developed, industrialized countries and countries with economies in transition. Health issues were also on the agenda. Their long-standing priority was to increase human health protection through better environmental protection.

The green movement had become increasingly prominent in debates on European integration, making it a logical next step to advance their pan-European initiative by creating a unified European political family for the 2004 European elections. Until that time, European elections had lacked a truly pan-European dimension.

The European Green Party was founded on 21 February 2004 in Rome, when 34 pan-European member parties gathered for the 4th Congress of the Federation of European Green Parties. The European Greens were the first to transform from a federation into a fully-fledged European political party, confirming their commitment to building a united Europe. The first objective of the newly founded European Green Party was to focus on the 2004 European Parliament elections, which were the first time a joint election campaign had been held across Europe (European Greens, 2004).

In the June 2004 European Parliament elections, the Greens won 34 seats, but were

disappointed by their failure to secure any representation in the 10 new member states. In this election cycle, the Greens led a number of high-profile battles over EU legislation, which brought the group into conflict with the intense lobbying of various industry sectors. Together with a coalition of small NGOs, the Greens were to achieve results, however.

The Greens have also played a major role in the fight for stricter controls on chemicals in the European Union. In the face of intense lobbying by the chemical industry, the Greens launched a campaign in 2005 to reduce the proposed law. The compromise eventually adopted by Parliament, although falling short of the level of protection demanded by the Greens, represented a major step forward in protecting consumers and the environment from toxic substances.

The Greens launched a pan-European climate change campaign in February 2006. The campaign called for stricter measures to combat climate change. The fight against the nuclear industry's efforts to relaunch nuclear power was also an important issue for the Greens in this election period.

Following mid-term changes in parliamentary groups in 2005, the Greens experienced a setback. However, due to various domestic political circumstances, they maintained a clear lead, with their agenda gaining increasing appeal.

At their congress in Brussels (27-28 March, 2009), the European Green parties launched a joint European election campaign, presenting the election manifesto "A Green New Deal for Europe", and adopted the resolution "Stop Barroso". Through their campaign, "Europe Deserves Better", they launched an in-

stitutional and political battle to remove José Manuel Barroso from the post of President of the European Commission. In this regard, they stated that anyone who wanted to change European politics for the better should support them. They presented 25 reasons against Barroso's candidacy, among which were: his passive approach to the financial and economic crisis, reckless deregulation of social policies, neglect of climate change and environmental degradation, and failure to promote democracy and human rights in the EU (European Greens, 2009a).

In the June 2009 elections, the Greens were particularly successful, winning 46 seats. While they again failed to secure any representation in the 12 new member states, they became the fourth largest group in the European Parliament. Following the elections, they focused on ensuring that the EU took a leading role in the UN climate negotiations, and in the international response to climate change.

The global financial crisis that began in 2008 had a profound impact on politics over the following decade, leading many European countries to adopt austerity policies. The crisis also fueled climate change skepticism and the weakening of environmental regulations, which emerged as the central challenge for green politics during this period.

Among the activities of the European Greens in relation to Georgia, the resolution adopted in 2009 – "Commitment to stop violence in Georgia" is interesting. The European Green Party Council condemned, in a resolution on Georgia formulated in eight points: the escalation of violence in Georgia which occurred in August 2008; the begin-

ning of the conflict, which was the result of a serious escalation of tensions and provocations, which had begun much earlier; the use of military force by all parties involved in the conflict; the large number of victims on both sides; and documented facts of ethnic cleansing and forced resettlement.

The European Greens also drew attention to the tragic ecocide in Georgia, where forest fires destroyed a total of 1,100 hectares, including 950 hectares in the Borjomi Gorge – part of the unique Borjomi-Kharagauli National Park, developed with European funding. These fires caused irreparable damage to the region's biodiversity, particularly its wildlife.

The European Greens welcomed the first agreement reached since the August War with the participation of all parties to the conflict on joint mechanisms for preventing and responding to incidents in the Georgian-Abkhazian and Georgian-South Ossetian border areas (18 February 2009, Geneva).

The European Greens called on the Russian authorities and the international community in general to respect the sovereignty, territorial integrity and inviolability of the internationally recognized borders of the Republic of Georgia and, as a result, to disregard any recognition of the independence of the separatist Georgian regions of Tskhinvali ("South Ossetia") and Abkhazia, which was contrary to international law. They called for all relevant parties in the Caucasus to engage in a long-term peace process, and the EU to acknowledge its leading role in achieving a ceasefire and efforts for a peaceful resolution of the Russia-Georgia conflict.

They further demanded: a) the entry of a significant number of international observers

into "South Ossetia" and Abkhazia; b) for the de facto authorities of "South Ossetia" and Abkhazia to ensure the safe return of internally displaced civilians, in accordance with international humanitarian law, and with respect for their property, calling on the parties involved to fully respect the rights of minorities; c) that the OSCE mission in Georgia continue its work; d) an EU-mandated Justice Mission, headed by Swiss diplomat Heidi Tagliavini, to investigate the facts of ecocide in Georgia, along with the military and political aspects of the war; e) that, within the framework of the Eastern Partnership, for cooperation with Georgia and other countries in the region to be strengthened, as indicated in the European Parliament resolution on the situation in Georgia.

In addition, the European Greens reminded both parties to the conflict, and their political leadership, of the values of open democracy (European Greens, 2009b).

Overall, during the period from 2009 to 2014, the European Greens party committed itself to finding solutions to the prevalent financial, ecological, and social crises.

In the June 2014 European Parliament elections, 50 MEPs were elected from the Greens/EFA group. In September 2014, the group launched a critical campaign, arguing that the allocation of key portfolios in the European Parliament – particularly those guiding policy – did not align with what Europeans needed to address the continent's deep social and environmental crises and to confront its broader challenges. As such, their 2014-2019 term of office was guided by the slogan: "We will make a difference."

Throughout the legislative period, the Greens/EFA Group campaigned on a range of key issues, among them climate, food, trade, tax justice, transparency and democracy (United Nations, 2015).

The turnout in the European Parliament elections in May 2019 was 51% across the EU. This was the highest turnout in any election in 20 years (although lower than in the previous European Parliament elections in 1979 and 1994).

With 72 members (35 women and 37 men), the Greens achieved a high level of representation, becoming the fourth largest group in the European Parliament. The green wave swept across Europe, and newly elected progressive MEPs joined the group under the slogan “We are changing Europe”. Their action priorities and areas of focus continued to include the following: protecting the climate and environment for future generations, safeguarding society and freedom of speech, and advocating for genuine democracy.

2021 was a special year for humanity, when the pandemic began to recede. During this period, the European Union focused its efforts on overcoming the challenges and consequences associated with the pandemic. Notably, in discussions of accomplishments, progress on various priorities, and future plans, measures aimed at making Europe a greener continent were consistently highlighted (European Commission, 2021). Moreover, survey evidence from 2021 indicates that EU citizens regarded climate change as one of the most important and pressing issues facing Europe and the world (European Union, 2021).

3. Greens in the 2024 European Parliament Elections

Voting in the 2024 European Parliament elections took place in the member states of the European Union from 7 to 9 June 2024. The population of the 27 member states of the bloc elected a total of 720 MEPs.

The Greens won 53 seats (7.36%) in the 2024 European Parliament elections, placing them sixth in the polls (European Parliament, 2024).

The 2024 European Parliament elections focused on several key issues. Russia’s full-scale invasion of Ukraine brought security and defence to the forefront of the campaign’s main themes. Added to these were the economy, jobs, poverty and social protection, public health, climate change, and the future of Europe in general (European Greens, 2024).

At their seventh enlarged congress in Lyon on February 4, 2024, the European Greens adopted an 11-point action plan, which in fact represented the pre-election program directions of the “Greens and the European Free Alliance (EFA)”: ‘European Greens – Priorities for the 2024 European Elections’ (European Green, 2024). It aimed to ensure the essential conditions for the well-being of all citizens in every aspect of life, in accordance with democratic principles.

In addition, the issue of security has always been important for the Greens: energy independence, and building a circular economy and vital technologies that will make Europe safer. “Working together for peace and security, we believe that Europe should make the world more peaceful,” – was their main appeal.

It is noteworthy that the issue of clean water was often discussed by and promoted as particularly relevant for the Greens, who believe that access to clean water should be guaranteed as a basic right.

The fact is that at the present stage, green politics is a global phenomenon. Although its main focus is on environmental protection in order to preserve the planet's ecology and natural resources for future generations, green politics in itself is more than just environmental protection (Green Alternative, 2013).

Conclusions and Recommendations

Today, the state, its institutions, and society as a whole play a crucial role in environmental protection. The active involvement of each citizen is essential for ensuring future well-being, a healthy environment, and a better quality of life. By understanding this and instilling the same awareness in the next generation, the international community and the environment are likely to face fewer challenges in the future.

The European Greens have gradually developed their structures to strengthen the political expression of their member parties. Among other things, this includes the ability to hold common political positions, bilateral election manifestos, and unanimity in European election campaigns. The European Greens also have networks that unite green politicians. All this is possible thanks to the funding that the European Parliament allocates to European political parties.

The 2024 European Parliament elections were held against a particularly turbulent backdrop, and were largely centered on a limited number of key issues. Russia's full-scale invasion of Ukraine brought security and defense to the forefront of the campaign's main themes. Added to this were the issue of the economy, the need to create jobs, poverty alleviation and social protection, public health, climate change, and a common concern for the future of Europe.

The paper confirms the research hypothesis. Green politics is a pressing issue of modern times. It aims to build a sustainable society grounded in environmental protection, while simultaneously relying on several core principles: ecology, social justice, protection of democratic principles, and international peaceful coexistence. These issues were the main subject of the Greens' judgments during the pre-election period of the European Parliament.

To address the challenges existing at the present stage, it is necessary – in line with the goals of sustainable development – to strengthen international engagement. This applies both to participation in large-scale initiatives implemented by the European Union to tackle environmental and green economy issues, and to the implementation of local projects. Since the problem is of a universal nature, by activating cooperation between neighboring countries, support may be more effective for developing each country's environmental and green economy capacities.

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Fostering Resilience and Innovation in Island Communities – Identifying Systemic Challenges and Opportunities

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ABSTRACT

This paper explores how stakeholders in island communities perceive and address systemic challenges to resilience and innovation in the context of the green transition and broader societal change. Drawing on insights from the Interreg FREIIA project – a multi-country, participatory initiative across six European islands – this study employs a design thinking framework and grounded theory methodology to explore how local stakeholders perceive and respond to development challenges, highlighting the voices and lived experiences of island residents and aiming to understand the realities on the ground and the multidimensional conditions shaping resilience and innovation in their communities.

The findings highlight recurring development challenges, including youth outmigration, housing shortages, seasonal economic dependency, and limited institutional capacity.

The paper argues that sustainable development in island contexts requires participatory governance, inclusive innovation ecosystems, and place-based strategies that reflect local realities. By situating island development within broader debates on peripheralization, productive capabilities, and participatory transformation, the study contributes to the literature on systemic development in island communities.

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Introduction

Island communities face a range of interrelated development challenges that extend beyond technical or environmental concerns. These include issues in circular economy implementation (Morales Lassalle *et al.*, 2022) where electrical supply is not guaranteed. Because of their inherent geographic characteristics, islands are prominent cases of isolated areas that must import and burn fossil fuels, with environmental and economic consequences. In this context, Hybrid Renewable Energy Systems (HRES, demographic decline and depopulation (Santos *et al.*, 2022), environmental stressors (Chen, 2025), mass tourism pressures (Skjølsvold *et al.*, 2020), energy insecurity (Morales Lassalle *et al.*, 2022) where electrical supply is not guaranteed. Because of their inherent geographic characteristics, islands are prominent cases of isolated areas that must import and burn fossil fuels, with environmental and economic consequences. In this context, Hybrid Renewable Energy Systems (HRES, and water infrastructure limitations (Chen, 2025). These challenges are manifested in concrete local conditions, such as youth outmigration (Harfst *et al.*, 2025), housing shortages driven by seasonal markets and investment dynamics (Gentili & Hoekstra, 2019), economic dependency on seasonal tourism (Willett *et al.*, 2025), and infrastructural constraints that limit access and service provision (Glass *et al.*, 2019).

While these issues are often framed through technical or environmental lenses, they are fundamentally systemic in nature.

Addressing them requires integrated, participatory approaches that engage local stakeholders in co-creating solutions (Basile & Caputo, 2017; Blomkamp, 2022; De Smedt & Borch, 2022; Hughes *et al.*, 2017). Community vitality plays a central role in this process, serving as a foundation for resilience, adaptation, and innovation (Dale *et al.*, 2010).

The objective of the Interreg North Sea program project *Facilitating Resilience Embracing Island Innovations* (FREIIA) is to create skills, resources, competences, capabilities, and structures that support the innovations and resilience needed for effective transformative policies in these communities (OPSI, 2023). The project focuses on developing a design thinking-based and practice-oriented framework to support local stakeholders. It maps the current state of the island innovation system and the challenges facing these communities, providing a basis for future explorations on how to enhance development capacity in response to these challenges. The Interreg FREIIA framework acknowledges that these systemic challenges (Jasanoff, 2015) involve numerous interdependent factors. Addressing them requires a deep understanding of their complexity, and active participation from all relevant stakeholders, emphasizing the need for interconnected and inclusive governance.

By employing such a framework, Interreg FREIIA aims to involve a diverse array of stakeholders in interdisciplinary and cross-sectoral collaboration, ensuring innovations are connected to the communities they serve, and are grounded in collective knowledge and expertise.

Research Question:

- *How do stakeholders in island communities perceive and address the challenges to resilience and innovation in the context of the green transition and societal changes?*

By situating island development within the broader discourse of participatory governance, productive capabilities, and systemic transformation, this paper contributes to the literature on local development in island communities. It highlights the importance of inclusive innovation ecosystems, collaborative governance structures, and location-relevant strategies for sustainable development.

1. Theory

Island community stakeholders describe challenges to resilience and innovation in the green transition as multifaceted. These challenges are not only technical or environmental in nature, but are, in fact, deeply embedded in the social, institutional, and economic fabric of island life (Van Dam & Van Der Windt, 2022).

In several studies, participants report that social obstacles, technical shortcomings, and institutional and economic barriers hinder progress due to the mismatch between local island needs and policies, geographic remoteness, and infrastructure (Leon *et al.*, 2022; Ribalaygua *et al.*, 2019; Tellarini & Gram-Hanssen, 2024) extreme temperatures, and drier conditions are the impacts with the most significant potential to amplify the economic damage on islands. However, their isolation and natural conditions bring about some lee-

way to respond to climate impacts on their terms. This paper aims to provide a local-level analysis and ranking of alternative adaptation pathways in an island context through the stakeholders' lens. This study reviews the latest advancements in adaptation science and proposes a catalogue of adaptation and risk management options that feed a participatory assessment and ranking by local stakeholders. The research was conducted on the island of Sicily (Italy). Islands face systematically more challenging adaptation processes, with fewer available options than mainland regions across environmental, social, and institutional dimensions (Petzold *et al.*, 2023).

Literature argues how islands face distinctive challenges in green transitions because of their isolated infrastructure, economic and technical constraints, mismatches between local island needs and national policies, and community engagement (Barney *et al.*, 2023; Bonvicini *et al.*, 2024; Marczinkowski *et al.*, 2022; Stephanides *et al.*, 2019; Tellarini & Gram-Hanssen, 2024). In response to these challenges, stakeholders themselves have proposed a range of concrete strategies. These include the establishment of participatory engagement platforms, the strengthening of community-based organizations, and the development of collaborative policy mechanisms that better reflect local realities.

Much of the literature focuses specifically on energy transitions. It less often studies how island communities perceive and address the challenges to resilience and innovation, in the context of the green transition and societal changes, in a broader sense. Best practices at the island level remain less

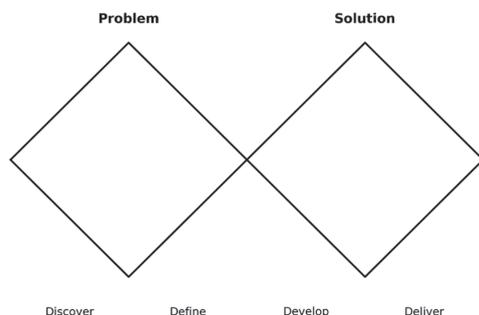
documented and shared, making it challenging to benchmark or replicate successful models. This contributes to a gap between theoretical potential and practical implementation – particularly regarding the role of citizens, their social networks, and the dynamic interplay between location, local context, and external conditions.

In this paper, we examine transitions from a broader perspective, focusing on how they are embedded in everyday life, and how stakeholders perceive and address the challenges to resilience and innovation within the context of the green transition and wider societal change.

2. Method

2.1 Research Design

The research design is based on the Double Diamond (*The Double Diamond – Design Council, n.d.*), a design thinking framework (Brown & Katz, 2019; Buchanan, 1992) that contains two parts and four distinct phases (Fig. 1).



**Figure 1. Research Design
Based on the Double Diamond Model**

The first part is about understanding and defining the problem. The second part

is about developing and exploring different solutions. A distinctive feature is the combination of divergent and convergent thinking, which alternately opens up (The Discover and Develop phases) and narrows down (The Define and Deliver phases) the process.

The Discover phase in the study involved engaging local stakeholders to gather qualitative data on the current state of the island’s innovation system, as well as on the barriers they face and the opportunities that are available to them. The insights gained from these interviews are crucial for the Define phase, identifying the specific needs and conditions of each island.

The second part saw an exploration of ideas that might solve the identified challenges, and the development of solutions through iterative prototyping. This workshop leveraged the data collected from the interviews to facilitate interdisciplinary and cross-sectoral collaboration among stakeholders. The goal is to co-create innovative solutions that are grounded in the collective knowledge and expertise of the community.

2.2 Data Collection

2.2.1 Interviews

In the Discover phase, stakeholders were interviewed on-site, among them local businesses, restaurants, offices, farms, and other local interested parties. These semi-structured interviews (Kvale & Brinkmann, 2015) represented the diverse voices within the island community, and established the basis for mapping the current situation of the island’s innovation system. The stakeholders were partly suggested by the Interreg FREIIA partner on the island, and partly identified

through the snowball effect, which can be understood as broadening the sampling as the study progressed.

The interviews were structured around eight open-ended questions to allow for rich, reflective responses. Recordings were made with automated transcription, and translations were carried out using Nettskjema, the Norwegian universities' digital app for recording, storing, and transcribing research interviews. The recordings were then anonymized, in accordance with the signed consent form approved by the Norwegian Centre for Research Data (NSD).

2.3 Participants and respondents

The FREIIA project engaged a wide range of participants across six European islands over a three-year period. Table 1 provides an overview of the number of students, researchers, and local stakeholders involved in each intervention, categorized by year, island, and phase of the design thinking process. The data reflect a deliberate effort to ensure diversity in perspectives, with partic-

ipants representing public institutions, private enterprises, civil society, and academia. The combination of problem exploration and solution development phases enabled a holistic understanding of local challenges and the co-creation of context-sensitive responses. (Table 1.)

Students (280) and researchers (27) include participants from the different partners in the project, including The Netherlands, Belgium, Denmark, Sweden, France and Norway. Local stakeholders (191) include public servants, politicians, local businesses, restaurants, offices, farms, and other local stakeholders on the respective islands (non-unique participant count).

2.4 Analysis

The transcriptions comprised a total of 148 interviews, spanning 2,301 pages, and amounting to 529,414 words. The transcriptions served as the basis for a Grounded Theory Method (GTM)-inspired analysis, through which the project team interpreted the interviews and identified innovation gaps, bar-

Table 1. Students, Researchers and Stakeholders

Year	2023			2024					2025		Total
Week	18	39	43	9	12	15	41	43	7	15	
Island	Hvaler	Schiermonnikoog	Hvaler	Bornholm	Schiermonnikoog	Bornholm	Koster	Koster	Groix	Ouessant	
Phase	Problem	Problem	Solution	Problem	Solution	Solution	Problem	Solution	Both	Both	
Students	21	22	58	15	19	16	25	40	30	34	280
Researchers	5	3	4	2	1	2	2	4	2	2	27
Stakeholders	20	23	20	17	9	6	46	3	17	30	191
Total	46	48	82	34	29	24	73	47	49	66	498

riers, and challenges within the island community. These were reframed into concrete problem statements for later exploration in the Solution phase. The analysis involved the cyclic process of data collection, coding, categorization, theory development, and testing (Charmaz, 2000, 2006; Clarke, 2005).

In the first interventions, the transcriptions were manually examined line-by-line to code important segments describing innovation gaps, barriers, and challenges. These codes were continuously discussed and presented on a shared whiteboard. In the categorization step, we compared codes to examine the relationships between them, and organized them into categories that reflected higher-level challenges. This step helped us not only to understand how different codes were interconnected, but to identify important challenges present in the island communities, as per the transcriptions. These preliminary categories were tested for validation and refinement. AI was gradually introduced to support the exploration of interview material in the later interventions, partly out of curiosity, and partly to meet practical needs, enabling the project to include more stakeholders within the limited time available on the islands. We used manual sampling of the data to ensure accurate AI interpretations.

2.5 Ethical Considerations

The study was assessed by the Norwegian Centre for Research Data (NSD) for ethical compliance and data protection standards (Ref.nr. 789531).

3. Results

Table 2 summarizes the main challenges identified through stakeholder interviews, the solutions proposed during co-creation workshops, and the key insights that emerged from each island context. The challenges reflect systemic issues, such as demographic shifts, infrastructural limitations, and governance gaps. The proposed solutions – ranging from mobile innovation hubs to intergenerational service exchanges – demonstrate the creativity and agency of local actors when provided with participatory platforms. The insights column distills the core themes that stakeholders emphasized as critical for sustainable development.

A summary of the key challenges, proposed solutions, and key insights, based on the interventions with stakeholders on the six different islands, is presented in Table 2.

To identify broader patterns, Table 3 synthesizes recurring themes across the six islands. These include housing affordability, youth outmigration, seasonal economic dependency, and limited cross-sector collaboration. While each island faces unique circumstances, the table illustrates how many of the challenges are shared across contexts, suggesting the presence of structural constraints common to peripheral regions. This comparative perspective strengthens the argument for systemic, rather than isolated, interventions.

A summary of recurring themes and similarities in challenges and solutions on the different islands is presented in Table 3.

Table 2. Summary of Key Challenges, Proposed Solutions and Key Insights

Island	Key Challenges (from the interviews)	Proposed Solutions (from The Design Thinking WS)	Key Insights
Hvaler, Norway	<ul style="list-style-type: none"> - Limited cross-sector collaboration - Aging population and youth outmigration - Seasonal tourism dependency - Lack of innovation platforms 	<ul style="list-style-type: none"> - Mobile innovation hub - Decentralized university facilities - Project house for collaboration - Improved transport - Community collaboration platforms - Mobile sauna initiative 	<ul style="list-style-type: none"> - Need for year-round tourism - Importance of collaboration - Youth engagement is essential
Schiermonnikoog, Netherlands	<ul style="list-style-type: none"> - Low understanding of the circular economy - Youth outmigration - Limited collaboration - Space/resource constraints 	<ul style="list-style-type: none"> - Key stakeholder collaboration - Social media & influencers - Collaboration arena - Blue minimal surfing camp - Educating children on waste 	<ul style="list-style-type: none"> - Desire to retain youth - Need to localize sustainability - Strong local identity
Bornholm, Denmark	<ul style="list-style-type: none"> - Tourism dependency - Lack of off-season services - Youth outmigration - Weak collaboration 	<ul style="list-style-type: none"> - Youth engagement & education - Collaboration & innovation - Marketing Bornholm as a living destination 	<ul style="list-style-type: none"> - Attracting young families - Infrastructure and collaboration needed
Koster, Sweden	<ul style="list-style-type: none"> - High housing prices - Closed school, limited services - Summer overcrowding - Economic barriers 	<ul style="list-style-type: none"> - Reopen local school - Public-private trust program - Marketing Koster to Scandinavian businesses - Intergenerational service exchange 	<ul style="list-style-type: none"> - Desire for year-round residents - Need for trust and collaboration - Balance tourism and residency
Groix, France	<ul style="list-style-type: none"> - Lack of affordable housing - Limited municipal resources - High seasonal rent - Infrastructure gaps 	<ul style="list-style-type: none"> - Extend tourist season - More recycling stations - Eco transport & bike infrastructure - Promote local products - Regular stakeholder meetings 	<ul style="list-style-type: none"> - Sustainable tourism focus - Need for visibility and collaboration - Environment-economy link
Ouessant, France	<ul style="list-style-type: none"> - Housing shortage - Energy & water infrastructure - Local food production - Transport & accessibility - Lack of digital innovation 	<ul style="list-style-type: none"> - Seasonal housing - Energy education programs - Island Council for local dialogue & governance 	<ul style="list-style-type: none"> - Collaboration between locals and seasonal residents - Local governance - Sustainability integration

4. Discussion

In the introduction, we asked *how stakeholders in island communities perceive and address the challenges to resilience and innovation in the context of the green transition and societal changes*. The findings reveal both local entanglements and systemic interdependencies (Table 3). Below, we examine these interconnected themes, highlighting their implications for local governance and broader regional development.

4.1 Housing

Housing prices were a recurring theme across the islands. We recognize it from conversations with local stakeholders in somewhat different versions. Structural measures have been taken to assist with equity, and to create housing solutions specially tailored to young people. Nevertheless, it seems that the measures do not satisfy or encourage the target group as well as expected.

Table 3. Themes and Similarities Across the Islands

Theme	Hvaler, Norway	Schiermonnikoog, Netherlands	Bornholm, Denmark	Koster, Sweden	Groix, France	Ouessant, France
Housing Issues	Few areas for youth housing	Seasonal housing; young workers live at work	Seasonal housing due to tourism	School closed; not supportive of families	Housing too expensive; dominated by tourist rentals	Hard to find affordable lodging during tourist season
Aging Population & Youth Retention	Dominated by retirees; need families	Few young permanent residents	Youth leave due to lack of opportunities	Hard for young families to settle	Need more young people; avg. age ~45	—
Tourism Dependency & Seasonality	Population swells from 4,700 to 30,000	Summer boom, winter shut-down	Economy depends on tourism	More tourists than locals in summer	Rentals reserved for tourists	Tourism is main economic activity
Infrastructure & Services	Depends on Fredrikstad for many services	—	Decline in industry; limited diversity	Closed school, minimal services	Lack of social services and infrastructure	Limited accommodation and services during the tourist season
Cross-sector Collaboration	Improving public-private collaboration	Poor cross-sector communication	—	Local initiatives, no structured collaboration	Lack of shared initiatives	—
Environmental Regulation Pressure	—	—	Environmental rules hurt agriculture/fisheries	Fishing threatened by regulation	Declining economy tied to fishing	Fishing declined; tourism dominates
Geographic Isolation	Relies on mainland; limited development space	Isolated despite accessibility	“Peripheral Denmark”	“We are far away”; limited inter-island ties	“Cut off from the world”; lack of support services	Long ferry ride; perceived as distant
Innovation & Youth Engagement	High housing prices, few job prospects	Wealthy non-residents reduce engagement	Promoting year-round tourism & entrepreneurship	Lack of services for young families	Need to reclaim economy for youth	Bureaucracy blocks implementation of ideas
Community Identity	Deep generational ties	Strong collective memory	“Denmark’s Hawaii”; strong pride	Long family traditions	Pride in staying; want to raise families	Distinct local character noted by tourists
Seasonal Imbalance	Summer surge in population	Summer full, winter quiet	Seasonal income replaces agriculture/fishing	Quiet off-season; limited year-round economy	Seasonal jobs dominate; unstable housing	Hotels depend on early summer bookings
Communication & Participation	Better dialogue emerging	Insufficient municipal-citizen platforms	Calls for collective strategies	Active citizens, limited formal influence	Lack of community spaces and organization	—

The analysis points to underlying structures and practices that shape housing availability. It suggests conflicting interests and positions (e.g., between young and old, between residence and investment object), market dynamics (such as how the cottage market affects the housing market), and political and economic strategies (like residency obligation and loan schemes). Structures and practices keep young adults out of the housing market, constraints that directly influence demographic patterns, particularly youth retention and return migration, which we discuss next.

4.2 Youth outmigration

The interviews highlight the complexity of encouraging young adults to return to the islands after completing higher education. Together with housing prices, this creates a significant barrier to growth and change. Returning is not a matter of a single policy measure, but requires systemic shifts that affect multiple aspects of island life. An illustration of this is that attractive job opportunities are necessary to entice those with higher education to choose the islands, yet the very absence of young adults with advanced degrees makes it difficult for businesses meeting these needs to establish themselves on the islands in the first place.

Stakeholders describe a lack of existing arenas for young adults, who appear to remain “on the sidelines of the established social network.” This points to a need for new venues and meeting places, and highlights the importance of networks and communities that align with the interests and skills of young adults.

There is recognition that the concept of the traditional workplace “is dying out,” and that new initiatives, such as start-ups, may be necessary to stimulate job creation and attract young adults. This puts at the center of attention the symbiotic relationship between access to the job market and the community’s ability to renew and revitalize itself through innovation and entrepreneurship. The local municipalities appear to be perceived as key players in realizing this work, reflected in the quote: “When it comes to this initiative, it must [come from] public funds.” This acknowledges a commitment by the municipality to act as a catalyst for change and development through subsidies and support schemes that can create the necessary conditions to attract young adults.

The results describe the complexity of the local community’s demographic challenges and opportunities, illuminating not only the immediate issue of age concentration, but also the underlying social and economic factors, such as the need for a more inclusive and sustainable community, and support for new industries relevant to young adults.

Further, the results suggest that the key to attracting young adults and developing a heterogeneous community of innovative thinking lies in anchoring diversified business activity and interdisciplinarity. The connection between new business activity and the ability to attract a younger demographic segment – which can also contribute to transforming the islands into a year-round community – is emphasized: “The hope is that business activity will attract the young.”

The reluctance of young people to return to the islands after studying in urban areas

highlights the need for attractive job opportunities and supportive community structures. These demographic challenges shape the community's capacity for systemic change.

4.3 Change

Change is challenging, and is especially demanding when it involves actors with differing perspectives and interests, much like the processes of creating growth and development within a local community. Often, unrealistic expectations are placed on other actors, especially on the public sector's ability to support various initiatives.

The interviews show tensions between expectations and opportunities within the local community. "They say they want it. But some concrete action? I can't actually say [anything] has been done on the part of the municipality." This highlights a gap between intentions and concrete initiatives. At the same time, the perception that "it's very difficult to build new here" indicates a restrictive local policy that can hinder innovation and development.

The challenges of realizing change are linked to situations where there is a need for closer collaboration between the numerous stakeholders, and where the local population may seem to be skeptical of new, external influences: "Those who sit on the resources ... are very skeptical of people coming from outside." This may point to the necessity of a cultural change or shift to better accommodate new thinking and external contributions to the community's growth and development.

One of the solutions proposed by a stakeholder suggests a "closer dialogue with politicians" to simplify and accelerate

decision-making processes, indicating an acknowledgment of the need for inclusive forums that promote participation and collaboration. These insights point to broader lessons for governance models beyond island contexts, a fact which we address below.

Conclusions

This study explored systemic challenges and opportunities describing resilience and innovation in island communities within the context of the green transition. Through the FREIIA project, a participatory, design-driven approach was employed to engage a wide range of stakeholders across six European islands. This geographic diversity enhanced the findings and allowed for the identification of important local conditions and features, as well as shared challenges.

The findings underscore that these challenges are interlinked, suggesting systemic interventions rather than isolated measures. Housing challenges and demographic trends reinforce each other, while governance and attitudes influence the capacity for change. Stakeholders emphasized the importance of participatory governance, inclusive innovation ecosystems, and location-based strategies for sustainable development.

While grounded in island contexts, these findings could have broader relevance. Similar structural challenges are seen in other regions. This suggests that approaches like design-thinking and co-creation processes can inform policy and practice beyond islands. Future research should examine how these strategies can be adapted to different territorial settings.

By situating these insights within systemic development theory and participatory innovation, this study contributes to regional development literature and offers actionable guidance for policymakers seeking to foster resilience and inclusive growth in vulnerable communities.

Further work

In the context of significant societal challenges, it is critical to ensure that innovations are deeply connected to the communities they serve. Participation is important in this process. By highlighting the importance of participation, this study sets the stage for policies and innovation processes that connect to the collective intelligence, skills, and expertise of all stakeholders on the islands. This collective approach to innovation results in solutions that are socially and economically viable, and which align with community needs, thereby empowering both individuals and the community as a whole.

Future research should explore additional strategies and structures for fostering resilience and innovation in island communities, particularly in the context of evolving societal and environmental challenges.

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Declarations

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Understanding Faculty Perspectives on Research Internationalization in Georgian Universities

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ABSTRACT

This paper explores how academic staff at Georgian universities perceive and engage with the internationalization of research, drawing on 32 in-depth interviews with faculty across 16 institutions. The study revealed respondents' views on internationalization, along with their attitudes toward the factors that enable or hinder research internationalization, and the contexts in which they operate.

Key enabling factors identified include personal motivation, early international experience ("prior internationalization"), supportive supervisors, institutional funding mechanisms, and access to external grants. Respondents also highlighted the importance of long-standing collaborations and departmental traditions of internationalization, particularly in the natural sciences. The study also reveals significant barriers at the individual (e.g., lack of English proficiency, caregiving responsibilities disproportionately affecting women, lack of experience), institutional (e.g., low salaries, inadequate funding, administrative overload), national (e.g., formalistic policies, economic challenges), and international (e.g., stereotypes about the region) levels. Contrasting notions of "selective" and "formal" internationalization also emerged. While the former refers to efforts to collaborate with well-established academics or institutions, the latter describes practices of internationalization that do not genuinely enhance research quality. The concept of "internationalization as burden" is also linked to the latter, capturing the negative perception of internationalization among faculty who, due to a combination of individual and structural constraints, are unable to engage meaningfully in international research collaboration.

Overall, the findings underscore that while there is a normative commitment to internationalization exists in Georgian higher education, meaningful implementation requires increased funding and targeted capacity-building. Without such measures, internationalization risks remaining a formal exercise rather than a transformative academic practice.

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Introduction

The internationalization of research should be examined within the broader context of the internationalization of higher education, as the former constitutes an integral part of the latter. The internationalization of higher education is one of the most pressing topics in higher education research, as evidenced by the large number of scholarly publications released each year on various aspects of internationalization.

De Wit and Altbach (2021) define internationalization as:

[t]he intentional process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education, in order to enhance the quality of education and research for all students and staff and to make a meaningful contribution to society. (De Wit & Altbach, 2021, 35)

They also stress that internationalization is an intentional, planned process that should contribute to quality improvement; it should not be a privilege reserved for the academic elite, but should benefit the entire university community, and society beyond it.

Internationalization is a complex concept that encompasses multiple dimensions, including the physical mobility of students and faculty, curriculum internationalization, internationalization at home, research internationalization, and more. In academic literature, various dimensions of the internationalization of higher education are identified, although certain dimensions tend to recur across different authors. For example,

Finkelstein and Sethi (2014) distinguish the following dimensions of internationalization: 1. Physical mobility, 2. Integration of an international perspective into teaching and research (internationalization “at home”), 3. Collaboration with international students and colleagues (involvement in international research networks and publications).

De Wit and Altbach (2021) identify the following elements of internationalization: 1. Internationalization abroad, which includes subcategories such as: a) Student mobility; b) Academic staff mobility; c) Program mobility, which is reflected in double degree programs, joint programs, international branch campuses established by universities abroad, and more; d) Online mobility; 2. Internationalization at home, which includes curriculum and teaching internationalization, the development of global citizenship, and other related activities; 3. Internationalization of research.

Jones *et al.* (2023) point to aspects such as international research collaboration, internationalization at home, recruitment of international students and academic staff, mobility of students and academic personnel, online teaching, and transnational education.

Gao (2018), meanwhile, identifies six key dimensions: research, students, faculty, curriculum, governance, and engagement. Each dimension consists of specific components, which can be measured using certain indicators.

Similar to De Wit and Altbach, Huang (2014) also distinguishes three elements of higher education internationalization: 1. Mobility of faculty and students; 2. Development of international programs, program accredi-

tation, curriculum internationalization, and related components; 3. Joint research projects and academic events.

In the literature, the various components of higher education internationalization are discussed unevenly. Jones *et al.* (2023) note that, within the context of internationalization, the greatest attention has been given to student mobility, policy, and institutional strategies. Woldegiyorgis *et al.* (2018) make similar observations regarding student mobility. Researchers point out that topics such as the internationalization of research, the international activities of academic staff, and their perceptions of internationalization have received comparatively less analysis in the literature (Çalikoğlu *et al.*, 2022; De Wit & Altbach, 2021; Jones *et al.*, 2023; Li *et al.*, 2021; Woldegiyorgis *et al.*, 2018).

In light of this, the goal of the present study is to explore the understanding and experiences of academic staff regarding the broader process of internationalization and, in particular, the internationalization of research in Georgian higher education. To address this goal, the following research questions were formulated:

1. How do academic staff in Georgia perceive the internationalization of higher education and the internationalization of research?
2. What opportunities and challenges do they encounter in engaging with international research?
3. How do academic staff perceive the individual, institutional, national, and international contexts that shape their engagement in research internationalization?

1. Theoretical Foundations of the Research

1.1 Internationalization of Research: Global Trends and Perspectives

International research collaboration is a critical factor for research productivity, recognition, and access to funding (Kocar *et al.*, 2023). Moreover, in recent years, the internationalization of research has become an area of strategic intervention for both governments and universities (Bégin-Caouette *et al.*, 2023).

Woldegiyorgis *et al.* (2018) identify three levels of underlying motivations for research internationalization: national, institutional, and individual. At the national level, one of the driving motivations is the desire to increase a country's competitiveness in the global knowledge market. At the institutional level, motivations are linked to the pursuit of enhanced productivity and competitiveness. At the individual level, motivations are often tied to the prestige economy and aspirations for career advancement. In addition, the authors identify a range of factors that directly or indirectly influence the internationalization process. Some of these factors operate at the individual level, while others are related to the discipline, institution, or broader environment. However, in their view, the intersection of these different factors at the individual level plays a key role in research internationalization.

Çalikoğlu *et al.* (2022) point to the following motivations: academic development, support for institutional growth, student development, and sociocultural and international advancement. Jones *et al.* (2023) emphasize

that academic staff play a key role in the internationalization process, as they are the main driving force behind teaching and research. A similar position was expressed earlier by Finkelstein and Sethi (2014). Li *et al.* (2021) also highlight that the involvement of academic staff is essential for the successful internationalization of higher education.

According to the prestige maximization model discussed by Kwiek (2021), both research-oriented universities and individual academics constantly strive to maximize their prestige and adjust their actions to remain competitive in the academic market. Although the internationalization of research is influenced by academic discipline and university type, the decision to engage in internationalization is personal, with significant importance placed on individual organizational skills and informal collaboration.

This observation echoes the conclusion of Woldegiyorgis *et al.* (2018, p. 12), who argue that “the internationalization of research is essentially a bottom-up activity, regardless of moves to enforce new national or institutional strategies to enhance it.” According to the authors, the research activities of academic staff are relatively independent from institutional internationalization strategies. A similar conclusion is drawn by Yemini (2019), whose study showed that international research collaboration was mostly initiated and developed at the individual level.

The important role of individual researchers in the internationalization of research is also emphasized by Jones and Oleksiyenko (2011). Their case study of a Canadian university demonstrated that, despite limited

national and institutional funding, individual academic units were highly internationalized, provided that they operated in an environment that supported individual research initiatives. In this process, individual researchers played a decisive role.

Since, as noted above, the internationalization of research is largely driven by the initiative of academic staff, it becomes important to examine their attitudes and perceptions toward this phenomenon. Yemini's study (2019) highlights the expectations and risks associated with international collaboration. The research showed that highly productive scholars place significant value on international collaboration, and view it as a key factor for career advancement. As Jones *et al.* (2023) emphasize, the perspectives of academic staff play a crucial role in understanding and implementing internationalization. In their analysis of academic staff's international engagement, Çalikoğlu *et al.* (2022) distinguish between institutional and individual motivations. Due to reduced public funding and increased competition in the global academic market, institutions prioritize internationalization as a strategy to enhance their prestige and income. In contrast, academic staff's motivations and perceptions regarding internationalization are more closely tied to individual and disciplinary contexts. The authors also point out that, in recent decades, strategies and underlying motivations for internationalization in higher education have become increasingly complex.

Although institutional and individual motivations for internationalization differ, they cannot be entirely separated, as institutional,

national, global, and other contextual factors may either facilitate or hinder academic staff's engagement in international collaboration (Jones *et al.*, 2023).

In examining how academic staff perceive internationalization, Li *et al.* (2021) identify five main categories: understanding of internationalization; perceptions of the underlying institutional motivations for internationalization; academic staff's understanding of their own role in the process; motivation; and actual engagement in internationalization. Within this final category – engagement – Li and colleagues further distinguish subcategories such as participation in international conferences, publication in international journals, short-term research mobility, involvement in international research projects, serving as a reviewer for international journals, co-authorship with foreign colleagues, supervision of international students, and hosting visiting scholars. Such differentiation is necessary because, as Leask *et al.* (2021) argue, the literature often lacks precision in defining what is meant by “faculty engagement” in internationalization.

In the context of research internationalization, the literature identifies a range of facilitating and hindering factors. Finkelstein and Sethi (2014) group these factors into three broad categories: national, organizational, and individual. Within the individual category, they further distinguish between professional (e.g., disciplinary field, academic rank, teaching/research orientation, international publications) and personal/demographic factors (e.g., age, gender, country of degree, years spent abroad). Building on this

model, Bégin-Caouette *et al.* (2023) categorize the factors influencing international research collaboration into four groups: individual, professional, institutional, and national.

Bégin-Caouette *et al.* (2023) highlight several key factors that influence international research collaboration: obtaining an academic degree abroad; the level of funding received from international sources; and institutional expectations for researchers to publish in internationally recognized outlets. Rostan *et al.* (2014) emphasize the particular role of language, suggesting that language can either facilitate or hinder international collaboration.

Kwiek (2020) categorizes the barriers to the internationalization of research into three levels: macro, organizational, and individual. At the macro level, influential factors include geopolitics, cultural traditions, language, country size, and the level of economic development. At the organizational level, institutional reputation and available resources play a critical role. At the individual level, personal circumstances, the academic status of the researcher, and their perceived attractiveness as a partner in international collaboration are key considerations. Furthermore, as the number of individuals and institutions involved in international research networks increases, the coordination required to manage these collaborations effectively also grows, resulting in what are often termed “coordination costs.”

Other challenges related to research internationalization noted by scholars include academic migration (commonly referred to as “brain drain”), the limited use of local languages in scholarly publications due to the

dominance of English, and a tendency to focus on research topics that are less connected to local or regional needs. Researchers have also identified asymmetric power relations within international collaborations – where some partners hold more influence due to prestige or status – as well as communication challenges, insufficient institutional support, and difficulties integrating internationalization effectively into institutional missions and strategies (Flander *et al.*, 2023; Jones & Oleksiyenko, 2011; Queirós *et al.*, 2023; Rostan *et al.*, 2014; Woldegiyorgis *et al.*, 2018).

Yemini (2019) draws attention to further obstacles, such as strategies of advancement at others' expense (particularly within large research teams), time burdens resulting from inter-team communication, difficulty reconciling divergent interpretations, and the complexities of managing relationships with international colleagues.

Çalikoğlu *et al.* (2022) identify institutional, bureaucratic/geopolitical, and financial barriers to internationalization. In a study analyzing academic staff attitudes toward teaching abroad, Leask *et al.* (2021) argue that insufficient engagement from academic staff constitutes a significant impediment to internationalization. These barriers may be cultural, institutional, or personal. Thus, academic staff can be seen both as the main drivers of internationalization and, simultaneously, as insufficiently motivated or resistant to change – factors that may negatively affect the internationalization process. This observation echoes the claim by Jones and Oleksiyenko (2011) that research internationalization is often inconsistent and irregular rather than a coherent set of planned actions.

A more recent study by Queirós *et al.* (2023) shows that in Portugal, academic staff report a lack of meaningful institutional support for internationalizing their research. Woldegiyorgis *et al.* (2018) stress that, like other aspects of higher education internationalization, the internationalization of research cannot be reduced to a purely quantitative analysis: it is more of a process than a product, and its measurement is inherently complex. This conclusion aligns with Queirós and colleagues' (2023) call for qualitative analysis of international research collaboration across different national contexts.

Building on the reviewed literature, this study adopts a multi-level perspective on research internationalization, drawing on Woldegiyorgis *et al.*'s (2018) threefold distinction of national, institutional, and individual motivations, and extending it with a fourth, international level to better capture the dynamics of cross-border engagement. A central insight from the literature, emphasized by Jones *et al.* (2023), Finkelstein and Sethi (2014), and Li *et al.* (2021), is the pivotal role of academic staff in driving the internationalization of research. This bottom-up perspective, highlighted by Woldegiyorgis *et al.* (2018), informed the design of semi-structured interviews, guiding both the formulation of discussion topics and the overall interview process. While the literature identifies a range of enabling and restricting factors for research internationalization, this study specifically aims to explore how these factors manifest in the Georgian higher education context, thereby contributing context-specific insights to the broader understanding of research internationalization.

1.2 Internationalization of Research in Georgia

During the Soviet period, science and scholarship in Georgia were under strict control by the state ideological apparatus, and were conducted mostly separately from universities, within institutes subordinated to the Academy of Sciences (Chankseliani, 2022). After the restoration of independence, the first significant change in Georgia's higher education system was the privatization of universities (Chakhaia & Bregvadze, 2018). Apart from this factor, the system of higher education and scientific research largely retained features characteristic of the Soviet period (among them, the most prominent was the existence of a centralized research system, with the Georgian National Academy of Sciences as its central unit). However, the heavy socio-economic crisis that followed the civil war in the early 1990s, and the conflicts initiated by separatist movements in the Abkhazia and Samachablo regions, severely hindered the development and internationalization of research. Due to the dire economic conditions, state funding for research was drastically reduced or disappeared entirely, and much of the research infrastructure was destroyed. This was accompanied by the so-called "brain drain," as a number of researchers emigrated abroad (Chakhaia & Bregvadze, 2018; Tabatadze & Chachkhiani, 2022).

In 2005, Georgia joined the Bologna Process (European Higher Education Area, n.d.). This significantly increased the mobility of academic staff and students within the European Higher Education Area (Nastase, 2020). During this period, substantial reforms were

implemented in the higher education system, resulting in a transition to a three-tier structure (bachelor's, master's, and doctoral levels). The introduction of master's and doctoral elements, along with the integration of scientific centers and institutes into universities, transformed the research landscape in Georgia. As a result of the reforms, the primary goal of the Georgian National Academy of Sciences became the facilitation of research development, while most research now takes place within universities (Georgian National Academy of Sciences, n.d.; Chakhaia & Bregvadze, 2018; Tabatadze & Chachkhiani, 2022). The research funding system was also changed. Prior to the reforms, research institutes received funding directly from the state; as a result of the reforms, their funding became dependent on the universities to which these research centers belong. Furthermore, based on the order of the Minister of Education and Science of Georgia dated July 28, 2010, a legal entity of public law – the Shota Rustaveli National Science Foundation of Georgia – was established (Shota Rustaveli National Science Foundation of Georgia, n.d.), which annually announces state research grant competitions. Researchers affiliated with Georgian universities are eligible to participate in these competitions. In 2024, the foundation's budget amounted to 35 million GEL (Shota Rustaveli National Science Foundation of Georgia, n.d.).

Chachkhiani and Tabatadze (2023) point out that the internationalization of research in the Georgian context has not been sufficiently studied. They identify various strategies for the internationalization of higher education in Georgia, including modeling

academic programs on international curricula, mobility of students and academic staff, joint programs with foreign universities, participation in international projects, and attracting international students to Georgian universities. In terms of research internationalization, the authors note that the motivations of academic staff, and the factors influencing international research collaboration, remain underexplored in the Georgian context. The present study focuses precisely on this dimension.

Integration into the European Higher Education Area has accelerated the process of research internationalization in Georgia. However, it is worth noting that during the final years of the Soviet Union, Georgian researchers were highly active in several fields, including physics, chemistry, biology, and mathematics. According to Tabatadze and Chachkhiani (2022, p. 203), Georgian researchers published 406 articles in Web of Science-indexed scientific journals in 1984. The authors note that this number was only surpassed in 2006. Overall, the number of Georgian publications indexed in the Web of Science has steadily increased in recent years. Georgian researchers have also demonstrated a high citation rate. As of 2019, the citation rate of publications by Georgian researchers was the highest among post-Soviet countries. However, the authors also note that publications in international journals are often produced in co-authorship with foreign colleagues. International collaboration is highest in disciplines such as physics and astronomy, and relatively lower in the humanities and social sciences (Campbell &

Gorgodze, 2016; Chachkhiani & Tabatadze, 2023; Tabatadze & Chachkhiani, 2022).

In post-Soviet Georgia, the development of research is hindered by a number of factors. These include insufficient funding for research centers and doctoral students, low salaries for academic staff, and a weak pension system (which obstructs generational change within universities), lack of proper infrastructure, shortage of qualified personnel, language barriers, and a negative ratio between researchers and doctoral students (i.e., too many doctoral students per researcher) (Nastase, 2020; Tabatadze & Chachkhiani, 2022). Naturally, these factors also negatively affect the internationalization of research. In this context, a positive development is the integration of mechanisms for evaluating research activities into the standards for university authorization and program accreditation introduced by the National Center for Educational Quality Enhancement, which includes a specific focus on internationalization. As a result, universities have begun to pay greater attention to the development and internationalization of research (National Center for Educational Quality Enhancement, n.d.; Campbell & Gorgodze, 2016; Tabatadze & Chachkhiani, 2022). Additionally, researchers view the introduction of a competitive, public funding system – embodied in the Shota Rustaveli National Science Foundation – as a positive step toward enhancing the quality of research (Tabatadze & Chachkhiani, 2022). Another factor contributing to the internationalization of research is the requirement introduced by universities that doctoral students must publish at least one article in an

international journal before defending their dissertation. However, researchers evaluate this requirement in mixed terms (Nastase, 2020; Tabatadze & Chachkhiani, 2022).

Campbell and Gorgodze (2016) identify three main driving forces behind the internationalization of higher education in Georgia: the influence of the West, accreditation processes, and the mobility of academic staff and students. Their study found no unified national strategy for the internationalization of higher education, which aligns with the observation by De Wit and Altbach (2021) that internationalization policies tend to be fragmented rather than centralized. In this regard, Nastase (2020) identifies several factors and motivations: the desire for integration with the West, and the European Union in particular; financial motives (such as access to international projects and attracting international students); the aim to provide internationally recognized or accredited education for Georgian students in order to increase their competitiveness; staying abreast of global scientific trends and innovations; and promoting the development of research more broadly. The only negative consequence of internationalization mentioned is the reduced use of the Georgian language by researchers (Nastase, 2020).

Chachkhiani and Tabatadze (2023) identify the following factors that influence academic staff at the individual level in the context of research internationalization: the desire for access to international scientific literature, engagement with complex research problems, financial incentives, infrastructure improvement, professional development,

and increased research productivity. The authors group these factors into categories of human, financial, and physical capital. In terms of international collaboration, the following factors are identified as influential: the country's pro-Western orientation, the high regard for the quality of Western science, personal contacts with foreign colleagues, foreign language proficiency, and sources of research funding.

Based on the literature, it can be concluded that the internationalization of higher education in Georgia is generally viewed positively by both administrative and academic staff. In this regard, Nastase's (2020) conclusion is particularly noteworthy, as it emphasizes the financial aspect of research: since research development requires substantial funding, financial support from the European Union plays a crucial role for Georgian higher education. "[...] therefore, internationalization is as much a choice as it is a need" (Nastase, 2020, p. 102).

2. Methodology

2.1 Participants and Data Collection

The study is based on 32 semi-structured, in-depth interviews conducted with academic staff affiliated with Georgian higher education institutions. In total, the respondents represented 16 different universities. Of the 32 participants, 21 were employed at universities located in Tbilisi, while 11 were affiliated with universities in various regions. In terms of institutional type, 18 worked at state universities and 14 at private universities. This diversity allowed the study to capture a

wide range of experiences and perspectives across Georgian higher education. For detailed demographic information, see Table 1.

Table 1. Demographic Characteristics of Respondents (N = 32)

Demographics	Number
Gender	
Female	19
Male	13
Academic position	
Professor	12
Associate Professor	11
Assistant Professor	7
Assistant	1
Researcher	1
Geographical Distribution	
Tbilisi	21
Regions	11
Type of University ¹	
Public	18
Private	14
Field of Study	
Humanities	9
Social Sciences	11
Natural Sciences and Mathematics	6
Biomedical Sciences	6
Type of Position	
Academic	16
Academic & Administrative	15
Only research	1
PhD Degree	
Defended in Georgia	23
Defended abroad	6
PhD student (in Georgia)	3

Participants were selected using a combination of purposive, expert, snowball, and heterogeneous sampling strategies. Initial respondents were identified based on specific criteria indicating active engagement in internationalized research: at least two Eng-

lish-language publications within the past three years, involvement in international research projects, and collaboration with foreign partners. For those in administrative roles, demonstrated experience in international academic activities was also required.

The interview questions were developed by the research team based on a review of existing literature on internationalization and research internationalization. Prior to the main data collection, five pilot interviews were conducted to test and refine the interview guide. All interviews, with one exception, were conducted online in Georgian via Microsoft Teams and Zoom platforms between November 2023 and September 2024. One interview was conducted in person, also in Georgian, at East European University. Interviews continued until data saturation was reached – that is, until no new themes or perspectives emerged.

The average duration of the interviews was approximately one hour. As part of the interviews, participants were asked about how they understood internationalization/research internationalization, who their key international partners were, how these collaborations had been established; what motivations drove them toward international research collaboration, and what enabling and hindering factors they identified in the internationalization of research at the individual, institutional, national, and international levels.

After each interview, respondents were asked to recommend other individuals to participate in the study. This approach enabled the inclusion of diverse perspectives, as participants varied in academic disciplines,

¹ Although respondents were affiliated with 18 public and 14 private universities, the total number of distinct universities represented in the study is 16, as several respondents came from the same institution.

institutional positions, and levels of involvement in research internationalization. While the initial participants were selected based on strong international engagement – such as English-language publications and participation in international projects – subsequent respondents, particularly those in regional universities or at earlier stages of their careers, did not always have such internationalized profiles. As a result, the sample also included academic staff with limited involvement in research internationalization. This diversity provided valuable insights into the barriers to internationalization, as perceived by those who have faced challenges in becoming internationally engaged.

2.2 Data Analysis

All interviews were audio-recorded and manually transcribed. The transcripts were analyzed using NVivo 14 qualitative data analysis software. Both deductive and inductive approaches were applied. Following Saldana (2021), two cycles of coding were conducted. In the first cycle, In Vivo coding, capturing participants' own phrasing, and Values coding, which reflects beliefs, motivations, and attitudes, were employed. In the second cycle, pattern coding was used to cluster codes into broader themes. These themes were organized according to Maxwell's (2013) qualitative research framework: *Perspectives, Contexts, and Processes/Results*. Particular attention was paid to participants' subjective understandings of internationalization and research internationalization, as well as to their accounts of contextual features and processes that, in

their view, facilitated or hindered research internationalization – or internationalization more broadly – within those contexts. The analysis was guided by a deductively established framework comprising four levels – individual, institutional, national, and international – into which respondents' views on enabling and constraining factors of internationalization were categorized.

2.3 Ethical Considerations

All ethical protocols were followed throughout the research process. Before the interviews, participants were sent an information sheet about the study via email. This document provided a detailed description of the research purpose, conditions of participation, and terms of anonymity and data protection. In addition, they received the corresponding consent form electronically. The study was approved by the Ethics Committee of East European University.

2.4 Limitations

This study has several limitations. First, the interviews were conducted only with academic staff affiliated with Georgian universities; therefore, perspectives of non-affiliated faculty were not included. Second, some participants may not have fully articulated critical views during the interviews, and may have focused more on the positive aspects of internationalization. Third, as with any qualitative study, the coding process was inevitably influenced by researcher subjectivity. To mitigate this, the research team engaged in collaborative discussions to review and align the assigned codes.

3. Qualitative Research Findings

3.1 Perspectives on Internationalization

Respondents perceived internationalization as a broad and complex phenomenon, of which the internationalization of research was considered a key component. Their understanding of internationalization as a comprehensive process shaped how they interpreted research internationalization. Internationalization was primarily defined as international collaboration and communication encompassing both research and teaching, leading to personal and professional development, improved quality, increased visibility, and enhanced financial opportunities.

Some respondents expressed categorical views, asserting that internationalization is an *essential precondition* for conducting research. One professor from a state university remarked, "I simply find it unimaginable how one can conduct research or be a researcher without internationalization. Without internationalization, research does not exist." Similarly, an associate professor from a state university said, "Without internationalization, the development of teaching and research simply does not happen. [...] Without internationalization, not even a mid-level quality is attainable."

Several respondents emphasized internationalization's importance for *professional development*. An associate professor from a state university noted, "Internationalization is the only opportunity for professional growth." A professor from a private university emphasized that internationalization is, "first and foremost, an opportunity to intro-

duce yourself, your university, or your research field, to others."

This view was echoed by an associate professor in the social sciences: "The internationalization of research implies increasing visibility, and, along with that, planning something in common with other professionals from different countries."

The link between internationalization and a university's visibility was also emphasized by a professor from the international relations department at a state university: "A university's ranking is determined precisely by the diversity of its research; it is determined by internationalization and visibility." This view, emphasizing university rankings and competitiveness in the higher education market, was mostly expressed by respondents with administrative roles. In contrast, respondents who were more focused on academic research, associated internationalization less with ranking systems and more with substantive international research collaboration. "An internationalized university should have academic staff actively engaged in international research, co-publishing articles in international journals with foreign scholars, organizing conferences, and more. Internationalization should be grounded in the development of the researcher," said one associate professor from a state university.

A similar view came from an assistant professor at a private university: "Internationalization implies global collaboration between universities and, in this context, academic programs as well. It includes the mobility of students and researchers, and, more broadly, the exchange of knowledge

and ideas with academic representatives from different countries.”

More cautious perspectives were also expressed. A natural sciences professor warned against equating internationalization with the uncritical glorification of anything foreign, emphasizing the need for academic critical spirit: “We had seminars where I talked about CERN [The European Organization for Nuclear Research], and no one asked a single critical question – just because it was CERN. That’s something we need to overcome. We shouldn’t assume that just because something is foreign, it’s automatically good. For instance, if a curriculum is foreign, it doesn’t necessarily mean it’s good.”

A similar viewpoint was articulated by another respondent, a professor at a private university, who saw internationalization not as an act of dependence, but as an avenue for growth and equality in scholarly recognition: “For me, internationalization is, first and foremost, an opportunity for development, and less about feeling inferior. It means being based in Georgia and still conducting research, publishing, and delivering presentations respected by peers worldwide.”

This aligns with the concept of “internationalization at home,” explicitly mentioned by several respondents. One social sciences professor from a private university explained: “Internationalization at home means aligning ourselves with global academic processes, whether it’s methodology, technological innovation, or something else, and feeling that we are part of and contributing to that global landscape.” Similarly, a humanities professor from a state university stated: “For competitive international research, it is not strictly

necessary to go abroad or to stay there for long periods of time.”

Although respondents generally believed research internationalization involves integrating international partners into the research process, some noted that not all international collaboration qualifies as meaningful internationalization. According to this perspective, if collaboration is limited solely to the post-Soviet region, it may constitute only “formal” internationalization. An associate professor from a state university explained: “There is a risk of devaluing the term. For example, an international conference was held, but only participants from the post-Soviet space attended. Formally, yes, it was international. But real internationalization means being in contact with someone more advanced, so that you can learn from them.”

This perspective reveals two key dynamics: 1. What might be termed *formal internationalization* – collaborations that are not driven by genuine research interests, but by convenience. In such cases, research partners tend to operate within the same political and cultural space, rather than by expanding beyond familiar contexts; 2. What could be called *selective internationalization* – the tendency of actors to seek research and collaborative relationships with partners who occupy higher positions within prestige hierarchies. This inclination is motivated by the desire to maximize one’s own academic standing and visibility. The echoes the position of Kwiek (2021), who argues that universities and researchers are engaged in a “prestige game,” where collaboration with prestigious institutions and/or scholars helps publish in leading journals.

Some respondents also expressed what internationalization *is not*, reflecting broader concerns about the academic landscape in general. One private university professor stated, “Research, and research management, have become a business. For example, paid conferences, paid publications, and so on... People shouldn’t be so focused on this. It’s all they do, just go around... Research tourism is not reasonable.”

No significant gender-based differences emerged in defining internationalization, nor did differences arise based on public vs. private affiliation, academic rank, location (capital vs. regions), disciplinary field, or whether the PhD was obtained abroad or in Georgia. However, differences did appear by position type. Those who occupied only academic roles tended to define internationalization primarily in terms of research development. In contrast, respondents with both academic and administrative roles emphasized institutional collaboration between universities when discussing internationalization. For them, internationalization was not solely about research or teaching, but was understood within the broader framework of university rankings and strategic development.

3.2 Enabling Factors for Internationalization

Some respondents’ answers revealed that, at the individual level, *personal motivation* is considered the most important enabling factor. According to one researcher in the natural sciences at a state university, it is especially significant when a motivated researcher also serves as a supervisor for early-career scholars, as their attitude can

positively influence those they mentor: “Motivation is the key factor. Either you need to have it as a young person, or your supervisor needs to have it. A good supervisor is like a good football coach – they lead their team and deliver results.”

An assistant professor in the humanities from a private university identified a *sense of patriotic duty* as her primary motivation, with professional development secondary: “The first thing is that as many people as possible should learn about our country. My motivation was that I wanted to work on issues that are very important for my country.”

In addition to personal motivation, a key enabling factor for research internationalization is what one respondent called “*prior internationalization*,” meaning prior experience with international academic engagement. This includes early-career exposure to various international contexts – study or research visits abroad, participation in international conferences, foreign university study, work in internationally active units, early collaboration with foreign colleagues, or involvement in international projects early in one’s career.

This experience is reflected in the view of one social sciences professor from a private university: “The people I collaborate with in different countries now are long-time acquaintances. I met some of them at conferences, others in Georgia or abroad, and it’s really the result of what I’d call ‘prior internationalization’ that I now have the opportunity to do research with these people.”

Among the *institutional-level enabling factors*, respondents particularly emphasized *support from their universities*, especially fi-

nancial support. Those at state universities noted mechanisms to cover expenses related to international activities (e.g., conferences, publications):

“The researcher submits information about the conference in advance, and there is a certain amount allocated at the faculty level. Within that limit, you receive funding. Of course, it doesn’t cover everything, but it might pay for the registration fee, hotel, things like that. The second incentive is co-financing of article publication, plus, if it gets published in Scopus, there’s a certain bonus” (associate professor, biomedical sciences).

Respondents at private universities also noted internal grants for research. “When I go to a conference, my university covers the registration fee, which is huge support for a researcher. And one very important motivation is that the researcher can count on this support, that they will have funding” (assistant professor, private university).

Another enabling factor mentioned by respondents from both state and private universities was *support in handling bureaucratic matters*. “The greatest support I receive from my university is complete freedom. I was away for six months, and I didn’t even take official leave. I was teaching remotely. Almost every year, I go somewhere for one, two, or three months, and I have full freedom from the university in this regard” (professor, private university).

Others emphasized *administrative help in organizational tasks*, especially when hosting conferences. “In my case, whenever I’m organizing something, the routine work – like arranging accommodation for guests, managing conference or research-related expenses – is handled by the university administration.

As a result, I barely feel the burden. This is, of course, a huge relief.”

One important institutional-level enabler, according to respondents, was the presence of what might be called a “*tradition of internationalization*” – long-standing collaboration with foreign institutions. In such contexts, internationalization becomes part of a researcher’s *modus vivendi*.

For example, one associate professor from a state university noted that her faculty has been collaborating with a university in Germany for over four decades. Since this partner university is located in former East Germany, which belonged to the socialist “Eastern Bloc,” the academic relationship was initially established during the Soviet period. Another respondent from the natural sciences and mathematics (associate professor, state university) emphasized the importance of academic ties dating back to the Soviet era. He noted that his opportunity to study abroad was made possible by a foreign professor who had first come to Georgia to attend a conference. That conference, in turn, was part of a symposium series that was initiated back in the 1980s.

Several respondents also highlighted the importance of having an internationalized supervisor or colleague as a role model: “There needs to be at least one person in the department who has this experience – collaborating with foreign institutions – and then the whole process becomes easier” (professor, state university).

At the national and international levels, respondents identified various forms of state support as key enabling factors. These included research development grants from

the Shota Rustaveli National Science Foundation, direct state funding (e.g., from the Ministry of Education and Science), regional/municipal funding, and support from international foundations. While most were aware of the Rustaveli Foundation, not all made equal use of it.

As for international organizations, respondents in higher academic positions emphasized the importance of grants provided by international public and private organizations at the early stages of their careers – such as Erasmus (European Union) and other EU-funded projects, U.S. Department of State programs, the Carnegie Foundation (USA), the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG), the Open Society Institute, the International Monetary Fund, World Bank, the World Economic Forum, and others.

Some discipline-specific patterns also emerged. Natural sciences, especially physics, had a stronger history of internationalization even during the Soviet era. One state university professor of physics described the period:

“Within the Soviet Union, Georgia was heavily involved in these scientific fields – probably more so than any other republic except Ukraine. [...] The Soviet Union functioned as an intermediate stage in establishing contact with the outside world. When foreign scientists came here, they couldn’t exactly hide them, so I would talk to them too. [...] The foreigners themselves were interested – initially, to be honest, for very mercantile reasons. They knew that certain disciplines in the Soviet Union were at a very high level, and they wouldn’t say no – not

then, and not now – to scientists reaching out to them.”

At the national level, lack of funding emerged as *both an enabling and hindering factor*. “Because there is no funding in Georgia, the only solution is internationalization,” stated a professor from a state university. Similarly, a private university professor remarked, “Our poverty, in a way, becomes an additional driving force. Whether you want it or not, you are compelled to think about internationalization.”

Thus, a structural barrier that hinders internationalization – limited financial resources – can also serve as personal motivator. For some actors, internationalization becomes a necessary strategy to access resources otherwise unavailable in Georgia.

3.3 Barriers to Internationalization

At the individual level, respondents identified a lack of proficiency in a foreign language – primarily English – as the main hindering factor to internationalization. One respondent highlighted a generational divide: “Language barriers exist in Georgia, especially among the older generation. For example, there are many very dedicated and capable researchers, but they don’t know English” (professor, private university). Another, an associate professor at a private university, noted that this is becoming less of a problem for younger scholars. Still, an early-career academic (assistant professor, humanities, state university) emphasized that the lack of foreign language proficiency poses a major challenge both for students and faculty.

An associate professor from a private university, who speaks German, shared how

English is becoming the dominant language in scholarship: “When I was dealing with [the German institution], everything was conducted in English. That’s when I realized I need to make the switch.” This reflects the growing dominance of English as the global language of research.

At the individual level, *gender* also emerged as a constraining factor. Female respondents frequently mentioned that caregiving duties limit research capabilities. One professor noted, “When you have a family, especially young children, it becomes difficult to follow through with things in terms of research.” Similarly, a female associate professor remarked, “Even if you have a supportive partner, you still have your own responsibilities. When your child is small, it’s very difficult to be more productive.” No male respondents cited family responsibilities as a factor hindering their research.

Most respondents holding administrative positions alongside academic roles emphasized that *administrative responsibilities* consume substantial time and create stress and anxiety, which negatively impacts their ability to conduct research. This was true for both senior professors and early-career faculty. “There are so many organizational matters that take up a huge amount of time, and, as a result, I’m on a very, very bad schedule. I don’t even know how to describe it. Minutes, time, day, night, Saturday, Sunday, they don’t exist anymore. I don’t know how long I can keep this up” (professor, state university). An assistant professor reported that the administrative workload made it hard to even respond to emails. Administrative tasks, especially unrelated to the university’s office of interna-

tional relations, were more often viewed as hindering research than teaching was.

Lack of experience among academic staff frequently emerged in respondents’ narratives as a key factor hindering internationalization. One professor at a private university, who also held an administrative position, described how faculty struggle to identify suitable journals, despite support from the research office: “We try to help. We even search for journals for them and teach them how to do it, but they still don’t learn it well, so we end up doing it for them.”

In some cases, respondents admitted to their lack of experience, and spoke openly about the anxiety it caused. One associate professor at a state university remarked:

“To be honest, there’s a lot of fear around writing an academic article. I constantly worry: what style do they require? What exactly are they expecting? I mean, there’s the fear of searching for sources, then the technical formatting issues, and finally the fear of plagiarism, whether I might accidentally plagiarize.”

Lack of experience emerged as a particularly significant barrier in relation to the European Union’s Horizon projects, as several respondents noted that preparing a proposal requires a high level of technical knowledge that not everyone possesses. One professor in the biomedical sciences explained: “Only about a quarter of it is the scientific part, while the remaining three-quarters is legal content that you don’t really understand. I simply didn’t have that knowledge.” Other respondents echoed the challenges of working on Horizon projects, stating that the process of preparing documentation was so de-

manding that, at a certain point, they simply gave up pursuing their projects.

At the institutional level, nearly all respondents identified *inadequate funding* as one of the main barriers to the internationalization of research. One respondent highlighted limited internal research funding within universities:

“The amounts allocated for research in this country are simply ridiculous. [...] I had a long argument with the rector of one private university about this. I kept telling him: if you allocate 5,000 or 10,000 GEL for research, it’s laughable. That’s not a research budget. He kept insisting, ‘Well, have I broken any rules? Where does the law say 10,000 GEL is not enough?’” (associate professor, private university)

The shortage of funding is felt particularly acutely in the natural and biomedical sciences, where research materials and/or technological equipment tend to be very costly. As a result, universities often struggle to provide adequate financial support for research in these fields. This situation gives rise to a kind of paradox: the lack of funding actually pushes researchers in these disciplines to seek international collaborations. As already noted, in the context of limited domestic support, internationalization often emerges as the only viable path forward.

In addition to the general lack of funding, respondents also highlighted another financial factor that, in their view, negatively affects the internationalization of research: *low salaries for academic staff*. Due to insufficient compensation, several respondents reported that they are compelled to seek additional income through consultancy work or entirely different

types of employment. As a result, they have less time available for research activities.

“Teaching responsibilities and my consultancy work hinder me, and take away the time I would like to dedicate to research. Research doesn’t pay. My research is sacrificed to the struggle for income” (professor, state university).

This suggests that institutional barriers often operate in combination. As the quote illustrates, the interplay between high teaching loads and low remuneration reduces research productivity, as academics are forced to supplement their university salaries through external sources of income. As an assistant professor from a state university noted, “Today, university faculty are among the poorest in Georgia. Without an additional source of income, it is quite difficult to manage on our salary alone.”

Another respondent, a professor at a state university, stated that on top of offering low salaries, state universities have *unreasonable demands*: “On a B contract, they ask you to publish in a journal with an impact factor for 1100 GEL. This is something unimaginable. [...] The requirement is about that of a full professor, something that would make even a professor at Harvard University envious. And I don’t even have an office in the university.” For some, these pressures prompted thoughts of leaving academia. “Sometimes, I think maybe I should find another way: leave and join the ranks of emigrants” (associate professor, state university).

Another important barrier to research internationalization identified by respondents was the *heavy workload of faculty members*.

“Institutions tend to impose a very heavy workload on professors. If you reduce the workload, the salary is so low that it is not enough to support a family, so the professor is forced to work at two or three universities (professor, private university).

The *lack of institutional support* was identified by some respondents as another barrier. In this regard, some expressed quite a radical view: “We got here mostly through our own contacts, personal and international connections, but institutionally, nothing. The university has never helped me or done anything like that” (professor, state university). Some respondents noted that institutions often rely heavily on international funding sources and do not actively fund research themselves. “Our doctoral students try to go somewhere using Erasmus. But what if we don’t have Erasmus? Then what do we do?” (professor, state university)

Respondents also stressed the interplay of several factors that hindered internationalization. As one professor from a state university summarized, “The local situation is such that no one really wants to do anything. Second, there is the language problem; third, lack of funds; and fourth, bureaucracy is completely ineffective and kills projects.” These responses reveal how individual-level barriers (motivation, language) intersect with institutional ones (funding, bureaucracy).

Responses from the participants also revealed that universities often lack dedicated departments for research internationalization. As one associate professor from a private university noted, the international office focuses on agreements, but lacks the expertise to support researchers: “They are not

specialists in specific fields, nor are they able to assist us.”

While most barriers were institutional, national and international-level obstacles were also evident. At the national level, several respondents identified “formal internationalization,” as previously mentioned, as a hindering factor. As one professor with an administrative role at a private university stated, “At the national level, the strategy for the internationalization of research is merely formal, and does not attempt to connect universities.” According to him, the core issue is that the internationalization policy and strategy developed at the national level remain confined to the state level and do not meaningfully engage the key actor, universities, and, within them, faculty and students. That is why internationalization does not reach the “heart of the issue.” This view was echoed by another professor from a state university, who noted that some state-level initiatives to promote internationalization were merely formal in nature, resulting in money being spent without achieving concrete outcomes.

Several respondents identified the country’s *political and economic situation* as a national-level hindering factor for internationalization. They referred to the 1990s, a period marked by severe social, economic, and political instability, noting that this era was particularly challenging for the development of research. Relating to the contemporary context, respondents emphasized the low salaries in universities, which, in their opinion, have not kept pace with rising prices, and are inadequate given the unfavorable economic climate in the country: “Today, market prices for everyday necessities are rising sharply,

while our salaries lag far behind. If this is not addressed, and I am forced to seek a second job to earn additional income, then research – and everything else – becomes irrelevant (associate professor, state university).

As the respondents noted, these problems also affect students. “Our master’s students often work a lot. They come to lectures at five or six in the evening, and are so preoccupied with everyday problems that it is rare for anyone to want to continue studying or to pursue research: they work, attend classes, and then leave” (assistant professor, private university).

At the *international level*, respondents identified several hindering factors. One of these was the existence of *negative stereotypes toward the post-Soviet space*. Specifically, some respondents believed there is a certain negative attitude toward the Caucasus region, and the post-Soviet area in general, which in some cases may impact collaboration with foreign researchers. For example, one professor recalled what a German professor once told him: “There is generally a very negative stereotype about your region – mainly that people come through Erasmus programs just for academic tourism. We don’t have time for that.”

In some cases, however, respondents noted that the existence of such negative stereotypes can paradoxically encourage deeper internationalization: “When journals see that a foreign colleague is involved in the article, it becomes much easier to get it published than if they see it directly coming from Georgia. That’s why we have this collaboration, so that our articles are more easily published in higher-profile journals” (assistant professor, private university).

4. Discussion

The findings of this study resonate with the theoretical frameworks discussed in the literature. Following Woldegiyorgis *et al.* (2018), the analysis approached internationalization through multi-level interactions – national, institutional, individual, and international – revealing that factors enabling or constraining internationalization often overlap across these levels. Respondents themselves did not isolate enabling or hindering factors in their reflections; rather, they tended to bundle and connect them, revealing interdependencies between personal motivation, institutional and national contexts, and the norms of the global academic community.

At the same time, respondents identified factors that closely mirror those discussed in the theoretical literature on internationalization. Language, for instance – highlighted by Rostan *et al.* (2014) as a significant barrier – featured prominently in their accounts as one of the main hindering factors at the individual level. Similarly, research funding, discussed by Bégin-Caouette *et al.* (2023), appeared in a dual role: as both an enabler and a constraint, depending on whether access to resources was available (institutional, national, and international levels). The lack of institutional support, also emphasized by Queirós *et al.* (2023), was another recurring theme (institutional level), reinforcing the idea that while internationalization is often driven by individual initiative, its effectiveness depends heavily on the presence of adequate institutional support.

Respondents’ answers aligned with positions established in the literature (Jones & Olexiyenko, 2011; Woldegiyorgis *et al.*, 2018;

Yemini, 2019), which emphasize that academic staff play a key role in international research collaboration. Although respondents often acknowledged the supportive role of their institutions, in most cases they indicated that this support was insufficient (as also noted by Queirós *et al.*, 2023), and that the international collaborations they engaged in with foreign colleagues or institutions were largely the result of their own personal initiative.

Based on the findings of this study, several key concepts emerged. One of these is *prior internationalization* – international experience gained at an early stage of one’s career, whether through study or research – which, according to respondents, played a crucial role in establishing themselves in the international academic space and in building connections with prestigious and reliable academic partners.

If we apply Kwiek’s (2020) concepts of “internationalists” and “locals,” it can be said that among the respondents, “internationalists” – those who regularly published in international journals and collaborated consistently with foreign colleagues – tended to engage in what might be called *selective internationalization*. In forming partnerships with foreign colleagues, their starting point was often the colleague’s or institution’s place within a hierarchy of prestige. For them, such collaboration was pragmatically advantageous because it helped raise their visibility in the international academic space. This pattern was especially noticeable in the humanities and social sciences.

The situation was somewhat different in the natural and mathematical sciences, where the fields have a long-standing tradition of in-

ternationalization in Georgia. For academics in these disciplines, interaction with leading global centers and researchers was described more as a normal part of academic life than as a privileged opportunity. This supports existing literature suggesting that the natural sciences lead in international research cooperation in Georgia (Chachkhiani & Tabatadze, 2023; Tabatadze & Chachkhiani, 2022).

In contrast to selective internationalization, which operates within a prestige economy and is more typical of “internationalists,” the case of “locals” can be described in terms of *internationalization as a burden*. Due to a combination of hindering factors – many of which echo challenges identified in the literature (Nastase, 2020; Tabatadze & Chachkhiani, 2022) – academic staff are unable to meaningfully engage with internationalization, and, as a result, academic publishing is experienced more as a burden than as a pathway into the prestige economy. Closely related to this is the concept of *formal internationalization*, which refers to superficial or symbolic efforts at internationalization that occur without real improvements in research quality or in the skills of academic staff.

Echoing Nastase’s (2020, p. 102) observation that internationalization in Georgia is “as much a choice as it is a need,” the findings of this study reveal that the lack of research funding functions paradoxically as *both a barrier and a driver of internationalization*. On the one hand, insufficient financial support, particularly in natural and biomedical sciences, limits universities’ ability to sustain and develop robust research environments. On the other hand, this very scarcity compels some faculty members to pursue internation-

al collaborations as a means of accessing resources and opportunities otherwise unavailable within the domestic system. For some, internationalization becomes not a strategic option, but a survival mechanism.

Conclusion

This study sought to explore how academic staff at Georgian universities perceive and engage with the internationalization of research, identifying both the enabling and hindering factors across individual, institutional, national, and international levels. Drawing on 32 in-depth interviews with faculty members from diverse universities and disciplines, the study offers insights into how research internationalization is experienced and navigated within the Georgian context.

The findings highlight that while there is a strong normative commitment to internationalization among faculty, actual engagement is uneven, and is shaped by a combination of structural limitations and personal agency. Among the enabling factors, respondents emphasized personal motivation, prior international experience, access to supportive supervisors and role models, institutional support, and the availability of external funding.

However, respondents also identified numerous barriers. Chief among these were linguistic challenges, particularly English proficiency; insufficient institutional funding; low salaries, overwhelming teaching and/or administrative workloads; and the lack of dedicated support units for research internationalization. Additionally, the dominance of formalistic approaches, where internationalization is pursued to meet accreditation re-

quirements rather than to genuinely support research, further constrains meaningful academic engagement.

The findings show that factors influencing research internationalization operate across multiple levels. At the individual level, language barriers were a significant challenge; at the institutional level, the lack of support limited faculty engagement, emphasizing that individual initiative alone is not sufficient; while at the national and international levels, funding both enabled and constrained research collaboration.

At the national level, several respondents pointed to the problem of *formal internationalization* – strategies and policies that are formally adopted but lack meaningful connection to universities, faculty, and students. In addition, persistent socio-economic challenges, such as low academic salaries and limited state funding, continue to hinder the internationalization of research in Georgia, as they restrict both institutional capacity and individual engagement. While EU integration and participation in frameworks such as the Bologna Process have opened new opportunities, respondents emphasized that such developments require stronger institutional alignment and long-term capacity building.

Based on the present study, it can be said that the internationalization of research in Georgia is a dynamic process characterized by contradictions. Despite the declared desire for internationalization, there are several individual and structural factors whose complex interaction hinders the full development of international cooperation. Among the hindering factors, respondents most frequently

mentioned insufficient funding, low salaries, and the formal nature of internationalization.

Based on this study alone, comprehensive policy recommendations cannot be formulated; however, it can be stated that universities (and the state) need to take more effective steps and assume greater responsibility for facilitating the development of international research cooperation. This primarily involves creating a stable economic environment for researchers, along with a long-term research development plan supported by a dedicated budget and capacity-building initiatives for future researchers. Otherwise, there is a high probability that internationalization will remain merely a fashionable (and substantively empty) term used by universities in their promotional campaigns.

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Artificial Intelligence Use, Pedagogical Shifts, Benefits, and Challenges in ELT across Georgian Higher Education

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ABSTRACT

The integration of Artificial Intelligence (AI) in English Language Teaching (ELT) has motivated transformative shifts in pedagogical paradigms globally, including in the context of Georgian higher education. This study explores the integration of artificial intelligence (AI) tools into English Language Teaching (ELT) across higher education institutions in Georgia, focusing on pedagogical shifts, perceived benefits, and challenges in implementation. The study specifically examines instructors teaching General English, providing insights into classroom practices, lesson planning, and student engagement.

Applying a quantitative descriptive research design with exploratory elements, data were collected via a structured online survey completed by 105 English language instructors from multiple higher education institutions (nine HEIs) in Georgia. The findings reveal that AI integration is already widespread, with tools such as ChatGPT, Quizlet, and Quizizz commonly employed for lesson planning, gamified instruction, and enhancing student engagement. Enhanced vocabulary learning, improved writing support, and increased student engagement are the most frequently reported benefits.

However, several challenges persist, notably insufficient teacher training (53.3%), limited access to infrastructure (28.6%), concerns over AI reliability, and difficulty adapting AI-generated content to curricular goals. Despite the fact that over half of the instructors reported using AI to design more interactive lessons, a significant number still demonstrated limited strategic alignment between pedagogy and AI application. This study contributes to the growing body of research on AI in ELT by providing insights specific to the Georgian higher education context, including local challenges, infrastructure limitations, and instructor practices. It also highlights the urgent need for targeted professional development and institutional support to fully harness AI's pedagogical potential.

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Introduction

Over the past decade, technology has transformed education, fundamentally changing the way in which traditional teaching and learning are carried out. (Daud, *et al.*, 2025). The integration of Artificial Intelligence (AI) into English Language Teaching (ELT) represents a significant pedagogical shift, providing innovative technological tools that enhance learners' competencies across the core language skills: writing, speaking, listening, and reading (Syuhra *et al.*, 2025).

Moreover, recent advances in AI have significantly influenced the field of education, including ELT. While educators are increasingly adopting AI tools, there remains a need to understand how these tools are being used in practice, what challenges they present, and how they impact teaching strategies and learner outcomes. This study investigates the integration of Artificial Intelligence into English Language Teaching in Georgian higher education, focusing specifically on instructors teaching General English, and critically examines the technological transformations, anticipated advantages, and contextual challenges associated with its implementation.

The findings are framed within the context of contemporary global developments and institutional responses, offering well-founded insight into the ways AI is transforming language education at both the theoretical and practical levels. It also aims to explore the current landscape of AI integration in ELT in Georgian higher education, focusing on practical use, benefits, and barriers.

Despite these challenges, the pedagogical potential of AI is undeniable. The research

underscores that when implemented with proper guidance and ethical frameworks, AI can foster metacognitive engagement, facilitate differentiated instruction, and free educators to focus on complex cognitive tasks (Kristiawan *et al.*, 2024). Thus, understanding the multifaceted influence of AI in ELT – its transformative benefits, inherent constraints, and evolving pedagogical implications – is crucial for educators, policymakers, and researchers alike (Frazier, 2024).

Despite the growing interest in AI in education globally, its adoption in ELT within Georgian higher education remains limited and underexplored. Many instructors face practical challenges, such as limited training, insufficient infrastructure, and uncertainty about how to integrate AI meaningfully into classroom practices. This gap between technological potential and real-world application highlights the need for a systematic study to examine how AI is being used, what benefits instructors perceive, and what obstacles hinder its effective implementation in General English teaching. Understanding these issues can inform targeted professional development, institutional support, and evidence-based strategies to optimize AI-enhanced language teaching.

To guide this investigation, the following research questions were posed:

- What types of AI tools are currently used by English language educators in higher education?
- For what specific purposes do educators use AI tools in English Language Teaching?
- How frequently do instructors integrate AI tools into their teaching practice?

- What benefits do educators perceive in using AI for English language instruction?
- What challenges do educators face when integrating AI into their teaching?
- In what ways might AI tools be contributing to pedagogical shifts in ELT?

1. Literature Review

1.1 Pedagogical Shifts Enabled by AI in ELT

The incorporation of Artificial Intelligence (AI) into English Language Teaching (ELT) has led to notable changes in teaching methodologies. To support blended learning, interactive content creation, and differentiated instruction, AI tools are increasingly being used. As Neupane *et al.* (2025) argue, AI fosters adaptive learning pathways, enabling instructors to tailor lesson content based on learner progress and proficiency. This kind of personalization enhances learner-centered teaching approaches, providing support for both high-achieving and struggling students at the same time.

In the context of Georgian higher education, Morališvili (2024) notes that the rise of AI use has accelerated the transition from traditional teacher-centered lectures to interactive and exploratory learning formats. AI tools are now employed not only to generate text, but to collaboratively build understanding, encourage iterative revision, and foster critical thinking skills. These results are also consistent with Al-Midlij and Alotai-bi's (2023) study, which highlights the role of AI-supported scaffolding in fostering greater

learner independence and empowering students within EFL environments.

For sure, the integration of AI by itself does not guarantee educational innovation: educators need both digital competence and pedagogical expertise to effectively incorporate AI into active learning approaches and align it with curriculum goals.

1.2 Benefits of AI in Language Learning

In both international and Georgian educational settings, the integration of AI in English Language Teaching (ELT) offers multiple advantages, among them facilitating vocabulary development, boosting learners' writing skills, and enabling individualized feedback mechanisms. AI-enhanced platforms like Quizlet, Quizizz, and Kahoot contribute to gamified vocabulary instruction, thereby promoting better retention and increased student motivation (Neupane *et al.*, 2025).

A widely admitted advantage of AI in language education is its capacity to enable real-time formative assessment. Through instant feedback on grammar, textual coherence, and argumentative structure, AI-powered tools foster iterative writing and self-reflection. As a result, learners grow more independent from instructor support and gain greater confidence in exploring language use – especially within written tasks.

Another advantage, noted in the Elon University report 2024 (Watson & Rainie, 2025), is AI's ability to support multilingual learners through translation tools, pronunciation feedback, and scaffolded explanations. These features reduce anxiety and promote inclu-

sivity, especially for students with diverse linguistic backgrounds or learning needs.

According to Moralishvili (2024), in the Georgian context – where disparities in institutional resources and learner preparedness are significant – AI tools have demonstrated promise in expanding access to educational content and mitigating digital literacy challenges. Nevertheless, the transformative potential of such technologies is contingent upon the availability of reliable infrastructure and long-term investment in digital capacity building.

1.3 Challenges of AI Integration in ELT

Despite the growing optimism surrounding Artificial Intelligence (AI) applications in English Language Teaching (ELT), scholarly literature reveals a number of pressing challenges that hinder its flawless integration into pedagogical practice. These challenges include technical, pedagogical, ethical, and institutional dimensions, and collectively point to a need for more thoughtful, just, and contextually appropriate approaches to AI implementation in ELT.

Although the pedagogical affordances of AI in ELT are substantial, its successful adoption is often constrained by structural and human-capital limitations. Drawing on parallels from Gogiashvili and Demetrashvili's (2022) findings on online learning in Georgian higher educational institutions, the absence of consistently high-quality visual resources, disparities in digital literacy, and the prevalence of off-task digital engagement remain salient barriers. Similarly, Gogberashvili's (2021) study on Georgian students' attitudes

toward online learning reported unstable internet connections, low motivation, and a demand for more engaging visual materials and interactive tasks – challenges that, if unaddressed, could equally hinder the effective integration of AI in ELT. Within AI-mediated learning environments, these constraints are further amplified by the requirement for stable technological infrastructure, equitable access to adaptive multimodal content, and sustained professional development for educators. Without addressing these interdependent factors, AI risks reinforcing existing instructional inequities rather than serving as a transformative pedagogical force.

According to Edmett *et al.* (2024), one of the most frequently voiced concerns is the lack of teacher readiness and training in using AI-based tools effectively. In the British Council's global teacher survey, although 76% of educators report using AI tools in some capacity, only 20% claim to have received adequate training for their integration into classroom instruction. The skills gap undermines the pedagogical potential of AI, and fosters resistance and uncertainty among educators concerning its sustained value in the educational context. As Waston and Rainie state (2025), the problem is made worse by the lack of readiness at the institutional level, even in the USA, where more than half of higher education leaders reported that their institutions were not well prepared to use AI in teaching and learning.

According to Syuhra and his co-researchers (2025), the digital divide is another critical barrier which widens existing inequalities between well-resourced and under-resourced

educational institutions. High-speed internet, updated hardware, and subscription-based platforms are often required by AI tools, making them unavailable to a large number of students and educators in low-income or rural regions. This unbalanced distribution of technological access threatens to reinforce socio-economic disparities in language learning outcomes, particularly in regions with scarce infrastructure (Özçelik, 2025).

From a pedagogical standpoint, AI integration in ELT remains largely rooted in traditional teaching approaches. While AI has the capacity to provide personalized and adaptive learning experiences, many current tools continue to mirror transmission-based practices – such as automated lectures and grammar correction – rather than promoting interactive, collaborative, or culturally responsive learning contexts.

In conclusion, researchers highlight potential drawbacks in excessive reliance on AI, particularly the risks of cognitive overload and reduced metacognitive engagement. Overdependence on AI-generated content or suggestions can lead learners to bypass crucial mental processes – such as planning, revising, and self-monitoring – thereby impeding sustained language development. These risks call for a measured approach in which AI serves as a complement to, rather than a replacement for, essential pedagogical practices.

Overall, although the integration of AI into ELT offers considerable potential, the prevailing scholarship advises prudence. In the absence of focused teacher training, comprehensive ethical frameworks, adequate infrastructural support, and pedagogical

innovation, AI may continue and in some cases amplify existing challenges in language education. Future inquiry should therefore emphasize inclusive, contextually responsive, and ethically sound approaches to ensure that AI strengthens, rather than undermines, the human-centered foundations of language learning.

1.4 The Teacher's Role and Professional Identity in AI-Supported ELT

Another emerging theme is AI's influence on teacher identity and professional freedom. While AI tools promote productivity and innovation, they can also lead to insecurity about the teacher's evolving role. Crompton and Burke's (2024) research advocates for viewing AI as a "collaborative partner," rather than a substitute, underscoring the need for teacher agency in curating and contextualizing AI outputs. In their study of AI teaching assistants, Watson and Rainie (2025) note that while AI can manage repetitive instructional assignments, teachers remain central in fostering social-emotional learning, ethical reasoning, and culturally responsive teaching. This distinction is especially important in the Georgian academic space, where teacher-led interaction and social rapport are culturally significant.

As such, educators require not just technical training, but conceptual frameworks to integrate AI meaningfully while preserving core pedagogical values. Mavropoulou (2023) highlights that empowering teachers with AI knowledge increases their capacity to innovate, critique, and adapt tools to their classroom reality.

2. Methodology

2.1 Research Design

This study employed a quantitative descriptive approach with exploratory elements to understand how Artificial Intelligence (AI) is being integrated into English Language Teaching (ELT) across higher education institutions in Georgia. The research focused on identifying patterns of AI use, perceived pedagogical changes, reported benefits, and challenges faced by instructors, specifically those teaching General English. A structured online survey served as the primary data collection tool, designed to capture practical, experience-based insights from active ELT practitioners.

2.2 Participants

The participants were English language instructors from a range of public and private universities across Georgia. A total of 105 English language instructors from nine higher education institutions completed the survey, offering a wide geographic and institutional representation. Nearly 48% of participants were employed at private universities, 36% at public institutions, and the remaining worked across both sectors.

Demographically, the majority of respondents (92.2%) identified as female, while 7.8% were male – a distribution that reflects the female-dominated teaching workforce in English language education in Georgia. In terms of location, 83% of participants resided in Tbilisi, which is consistent with the concentration of accredited universities in the capital (GEOSTAT, 2024).

Regarding educational background, most instructors held at least a Master's degree, indicating a relatively highly qualified sample. The age distribution was led by respondents aged 36-46 years (41.9%), followed by those aged 47-57 (28.6%).

Teaching experience at the university level varied considerably. The mean was 15.02 years, ranging from 1 to 45 years of experience. This diversity provided valuable insight into how both novice and experienced educators engage with AI in their instructional practices.

2.3 Data Collection

Data were collected in May 2025 through a Google Forms questionnaire, which was distributed via professional academic networks, institutional mailing lists, and through direct outreach to educators. To ensure that respondents were university instructors, the questionnaire was specifically sent to institutional email addresses. This approach ensured a diverse and representative sample of instructors actively involved in university-level English language teaching.

Participation in the study was voluntary, and all responses were submitted anonymously to maintain confidentiality and ethical integrity.

2.4 Survey Instrument

The survey was specifically developed by the research team to address the study's objectives. It included a mix of closed-ended, Likert-type, and open-ended questions, several of which allowed respondents to select multiple answers. The questions were organized around four main themes:

- AI usage in ELT (e.g., tools used, purposes, frequency)
- Pedagogical shifts (e.g., changes in methods, lesson planning, classroom interaction)
- Perceived benefits (e.g., learning outcomes, student motivation, teaching support)
- Challenges and barriers (e.g., technical limitations, institutional support, ethical concerns)

Demographic questions were also included to help contextualize the findings. The survey was written in English and reviewed for clarity and relevance prior to distribution.

2.5 Data Analysis

Quantitative responses were analyzed using descriptive statistics (frequencies and percentages) to identify trends across each thematic area. Open-ended responses were subjected to basic thematic analysis, which allowed for the identification of recurring experiences, concerns, and attitudes toward AI use in ELT. The results are presented in the following sections, organized by tool usage, instructional benefits, pedagogical change, and integration challenges.

2.6 Limitations

This study focused specifically on instructors teaching General English, which means the findings may not be fully applicable to courses in English for Specific Purposes (ESP) or other specialized language programs. The data were based on self-reported responses from 105 university English instructors across nine institutions in Georgia, which could introduce biases related to participants' per-

ceptions, memory, or willingness to report accurately. Additionally, while the survey captured a broad overview of AI integration, it did not include classroom observations or student perspectives, which might provide a more comprehensive understanding of actual AI usage and its impact on learning outcomes.

2.7 Ethical Considerations

The study followed standard ethical procedures for educational research. Participation was entirely voluntary, with informed consent implied by survey completion. No personally identifiable information was collected. All data were handled anonymously, and participants had the right to withdraw at any time by simply not submitting the form. The study was designed to ensure confidentiality, privacy, and academic integrity, in accordance with research ethics protocols.

3. Descriptive Analysis

3.1 Current Use of AI Tools in English Language Teaching

As part of a broader exploration into how Artificial Intelligence is being integrated into English Language Teaching, educators were asked which AI tools they currently use in their classrooms. Respondents could select multiple options, reflecting the variety of ways AI is blended into teaching practices. Interestingly, only one participant reported not using any AI tools at all, suggesting that AI adoption is already widespread in this field.

ChatGPT emerged as the most commonly used tool, with 86.7% of participants reporting regular use in their teaching. This was

followed, at a distance, by Quizlet with AI, and Quizizz, each used by about one in four teachers (26.7%) – especially for interactive tasks and gamified assessments.

Other tools mentioned included Gemini and Claude (each at 16.2%), Microsoft Copilot (10.5%), and more specialized platforms such as Twee and Genially (8.6%). A few educators also reported experimenting with tools like Brisk, Eduaide, Perplexity, and Curipod. There were also unique mentions of Grammarly, Kahoot, and ElevenLabs, reflecting the diversity of AI-based tools being explored to support teaching (see Fig. 1).

3.2 Purposes of AI Tool Use

Building on this, participants were asked about the specific purposes for which they use AI in their teaching. Respondents could choose multiple purposes, giving insight

into the different roles AI plays in classroom activities.

The most common use was for content creation, such as generating tests, exercises, or discussion prompts – with 72 educators (68.6%) selecting this option. This was followed by using AI for conducting games and competitions (35.2%), and providing feedback to students (33.3%).

Other frequent uses included lesson planning, professional development, and managing classroom activities, each chosen by 30.5% of respondents. Less commonly, AI was used for grading (15.2%), assisting with research and data analysis (14.3%), and generating syllabuses (11.4%). A small number of participants reported using AI for grammar checking or correcting writing (1% each), while 12.4% stated they don't use AI tools at all (see Fig. 2).

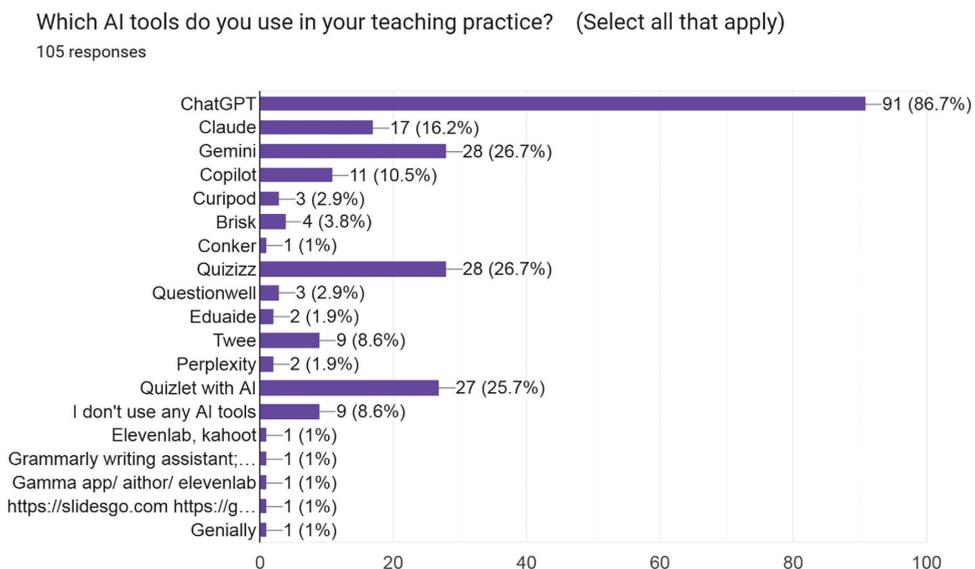


Figure 1. AI Tools Used by Educators

For what specific purposes do you use AI tools in your teaching? (Select all that apply)

105 responses

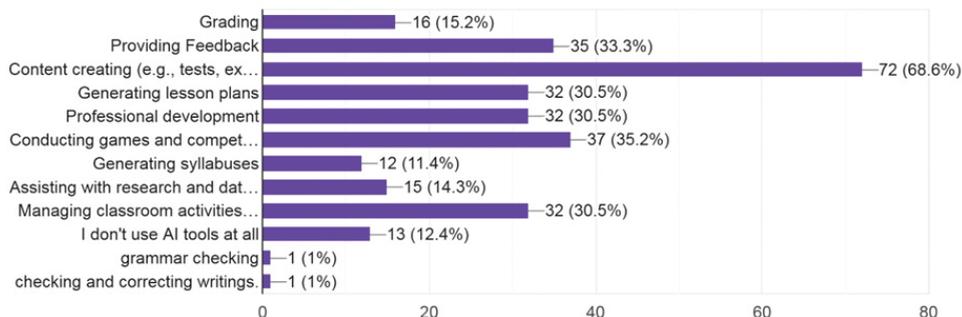


Figure 2. Distribution of Educators' Reported Purposes for Using AI Tools in Teaching

These results show that educators are applying AI in diverse ways, particularly in content generation and student engagement.

3.3 Frequency of Use

To better understand how integrated AI is in educators' teaching routines, respondents were also asked how often they use these tools.

As shown in Figure 3, most participants reported using AI on a weekly basis (41.9%),

suggesting that it has become a regular part of their professional workflow. Another 16.2% use AI daily, and the same percentage selected "often," indicating more than occasional use.

On the other hand, 13.3% reported monthly use, while 11.4% said they use AI rarely. Only 1% indicated that they never use AI tools, reinforcing the broader trend of active engagement with these technologies.

While daily use is still limited, the results suggest that AI is no longer an experimental

How often do you use AI tools in your teaching?

105 responses

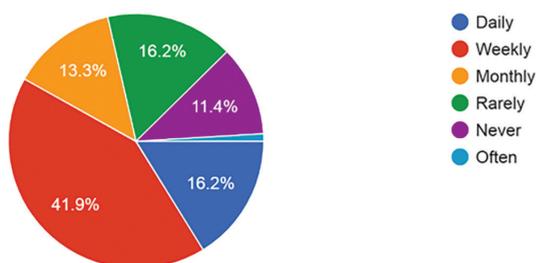


Figure 3. Frequency of AI Tool Usage in Teaching Among Surveyed Educators

addition for many teachers – it is becoming a routine support tool (see Figure 3).

3.4 Perceived Benefits of Using AI Tools in Teaching

After examining how often instructors use AI and for what purposes, the next section focused on where they believe AI has the most positive impact in English language teaching.

Among 105 respondents, vocabulary learning stood out as the area most positively affected by AI, with 68.6% of educators selecting it. Many noted the value of flashcards, personalized word lists, and gamified vocabulary practice in helping students retain new terms more effectively.

Test preparation was the next most frequently chosen benefit (61%), followed by writing (54.3%) and grammar instruction (51.4%). Educators emphasized how tools like ChatGPT and Grammarly assist with writing accuracy, grammar feedback, and idea generation – making writing support more accessible to learners.

In contrast, fewer respondents felt that AI tools were particularly effective for read-

ing comprehension (41.9%), listening skills (23.8%), or pronunciation (21%). These results suggest that while AI is highly valued for language production and support, its use in more perceptual or interpretive skills is still emerging.

A small portion of respondents (8.6%) said they do not use AI tools at all, which may reflect barriers such as lack of training or confidence in technology use (see Figure 3).

Beyond academic skills, many instructors also reported that AI tools help boost student engagement and motivation. Over half (57.1%) said that AI made learning more interactive and personalized, while another 29.5% noted that it helped students track progress and set goals – key elements of learner autonomy.

However, some concerns were raised. About 13.3% of instructors feared that students might become overly dependent on AI, while 4.8% pointed out that AI lacks the human interaction needed for deeper motivation. Others mentioned confusion or distraction as potential drawbacks, and 17.1% were unsure about AI's overall motivational impact.

What specific areas of English language teaching do you believe AI tools support most effectively? (Select all that apply)

105 responses

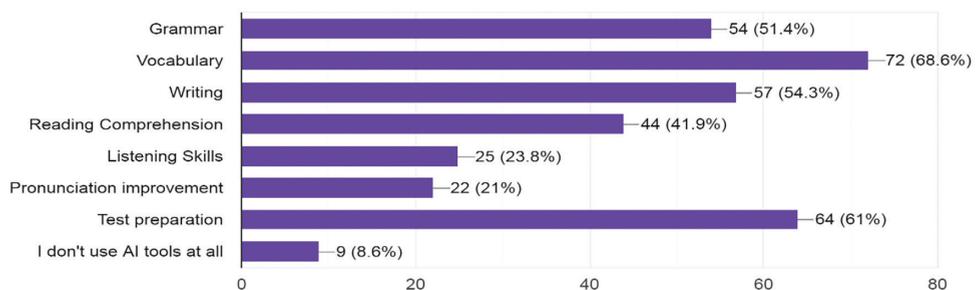


Figure 4. Teaching Areas Most Supported by AI

3.5 The Challenges of Integrating AI Tools in Teaching

While instructors recognize the growing importance of AI in education, their experience with using these tools is shaped by the challenges they face on a daily basis. To better understand these difficulties, the study asked two related but distinct questions. The first focused on the general challenges instructors encounter when using AI in their institutional context, while the second looked more narrowly at the specific difficulties of integrating AI into their teaching practice. Drawing on both sets of closed-ended data, as well as open-ended comments, the results offer a detailed picture of the main barriers instructors experience.

The most frequently mentioned issue was a lack of training and professional development, selected by 37 respondents (35.2%) in relation to classroom integration, and by 56 (53.3%) in the broader institutional context (see Figure 5). In both cases, instructors highlighted not only the absence of structured training, but also a general lack of guidance on how to use AI meaningfully in language teaching. Some felt that exploring and adapting AI tools required more time than their workload allowed. As one respondent wrote, "It needs time, and I do not have info about many AI tools." Others mentioned the need to carefully test and adapt AI-generated materials before using them in class, which can also be time-consuming.

Access and infrastructure issues were also common. In the teaching-specific question, 30 instructors (28.6%) reported limited access to necessary technology or resources,

while 18 (17.1%) mentioned similar issues in the institutional-level question. Additionally, the high cost of certain AI tools was cited as a significant barrier by 33 respondents (31.4%), suggesting that while free tools like ChatGPT are widely used, many advanced platforms remain financially inaccessible for some instructors or institutions. In open comments, instructors described problems with Wi-Fi, outdated equipment, and students who struggled with digital tools. Some shared that even accessing free tools like ChatGPT was not always easy for students due to phone limitations or unfamiliarity with how such tools work. One participant commented, "Not everyone is familiar with ChatGPT or Google Gemini. Many students are unfamiliar with some of the basic features of their phones."

Instructors also expressed concern about the accuracy and appropriateness of AI-generated content. In the classroom-focused question, 20 respondents (19%) said they were unsure whether the content produced by AI tools could be trusted, and similar concerns appeared in open-ended responses. One teacher wrote, "There are some mistakes in the exercises provided by AI," while another added, "The answers generated by AI aren't always suitable." These statements reflect a careful, thoughtful approach among teachers, who see the potential of AI, but are not ready to rely on it fully without revision.

Several instructors also found it challenging to integrate AI tools into existing lesson plans, selected by 9 respondents (8.6%) in one question and 21 (20%) in the other. These difficulties often involved time constraints, the need to modify classroom activities, and

uncertainty about how well AI tools match curriculum goals. As one participant noted, “Students’ comfort with technology varies, and sometimes the AI doesn’t understand the context, which makes it harder to rely on it.”

Concerns related to data privacy, plagiarism, and student motivation were also present. 15 instructors (14.3%) noted ethical concerns about student data, while a few worried about over-reliance on AI tools. Some wrote about the risk of students depending on AI for quick answers without critical thinking, and a few mentioned plagiarism as an issue. Additionally, six instructors (5.7%) said students were not motivated to use AI in learning tasks, and three (2.9%) mentioned resistance from students unfamiliar or uncomfortable with such tools.

Interestingly, 17 instructors (16.2%) stated they do not face any challenges integrating AI into their teaching. A few also wrote in the open-ended comments that they had not used AI yet, but planned to explore it in the future. Others shared that, although some issues existed, they actively worked to check and adapt materials, or sought out more information on their own.

Overall, the findings show that while many instructors are open to using AI in their teaching, they encounter a variety of practical and pedagogical challenges. These include limited training, access, and resources, concerns about content accuracy and ethical issues, and the need to adapt AI tools to fit curriculum goals and maintain teaching quality. Instructors view AI as a supportive tool that should complement, rather than replace, traditional classroom practices.

3.6 Pedagogical Shifts in English Language Teaching through AI Integration

One of the first things the survey looked at was how teachers are combining AI tools with different teaching methods. The survey findings indicate that group activities and discussions (47.6%) are the most frequently combined teaching method with AI tools in English language teaching (Chart 1). Other widely adopted approaches include interactive exercises and games (36.2%), project-based learning (35.2%), and direct instruction (34.3%), while peer reviews (9.5%) and lecture-based AI-assisted examples (9.5%) remain less common. Notably, 20% of respondents reported not integrating AI tools with any specific teaching method, reflecting varying levels of AI adoption. These findings suggest that AI tools are contributing to a pedagogical shift by enabling more interactive, collaborative, and student-centered approaches in General English classes. For example, the high prevalence of group activities and discussions (47.6%) reflects how AI can facilitate communication, idea exchange, and collaborative problem-solving, rather than simply delivering content. Similarly, the use of interactive exercises, games, and project-based learning illustrates that AI supports more exploratory and engaging learning experiences. While not all instructors have fully adapted their teaching methods, these trends indicate that AI is helping to move practices beyond traditional teacher-led instruction toward more dynamic, learner-focused pedagogies (see Figure 6).

To ensure meaningful integration, 48.6% of teachers choose AI tools that align with

What challenges have you encountered when using AI in your teaching at your university/institution? (Select all that apply)

105 responses

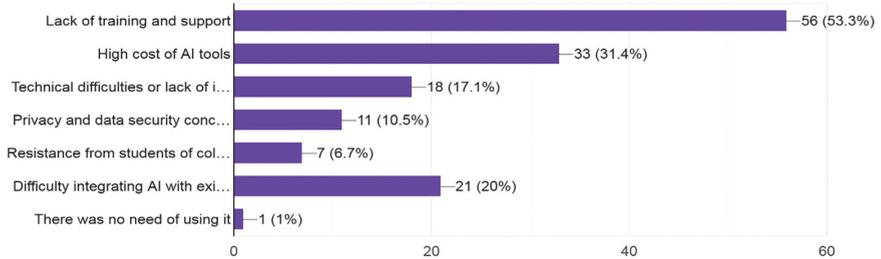


Figure 5. The Challenges of Using AI Tools in Teaching

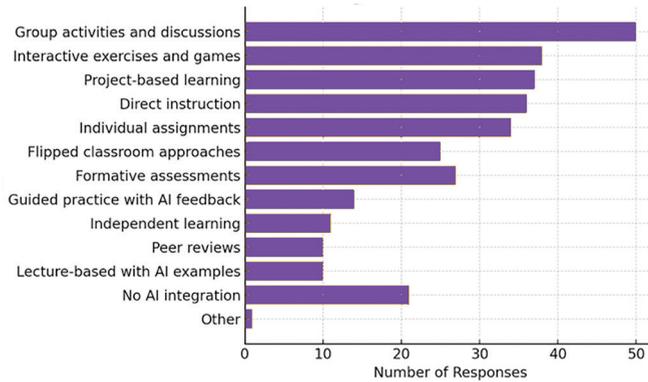


Figure 6. Teaching Methods Combined with AI

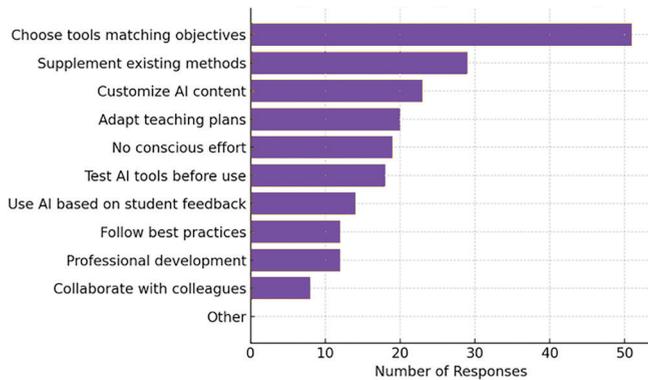


Figure 7. Strategies for Aligning AI with Teaching Goals

lesson objectives, while 27.6% supplement existing teaching methods, and 21.9% customize AI-generated content (Chart 2). However, 18.1% of educators do not consciously align AI tools with pedagogy, and collaboration (7.6%) or professional development (11.4%) were rarely reported, suggesting a gap in structured support and training (see Figure 7).

AI tools have influenced teaching by providing interactive examples (41%), helping present complex ideas (30.5%), and enabling multimedia content creation (24.8%) (Chart 3). 25.7% of respondents reported greater flexibility in teaching, and 22.9% used AI to generate practice materials. Yet, 20% indicated no impact on content delivery, showing mixed experiences with AI integration (see Figure 8).

More than half of respondents (54.3%) stated that AI helped create more interactive lessons, while 37.1% used AI to generate additional practice material. However, 27.6% indicated their teaching approach had not changed, revealing that AI's transformative impact is not universal. Personalized learning (25.7%) and instant feedback (22.9%) were moderately reported, with only 13.3% supporting differentiated instruction using AI (see Figure 9).

Teachers remain central in guiding AI use: 54.3% help students understand AI tools and 44.8% ensure ethical and responsible usage. While 37.1% provide context and guidance and 31.4% select appropriate tools, 11.4% believe teachers do not play a significant role, showing varying perceptions of teacher responsibility (see Figure 10).

In practice, the most common teacher roles include integrating AI into lesson plans (37.1%) and introducing students to AI tools (36.2%). However, 16.2% do not guide students, and 14.3% admit this is due to their own lack of AI knowledge, indicating a need for targeted professional development to strengthen educators' confidence in AI-based teaching.

4. Discussion

This study aimed to explore how English language instructors at Georgian universities, specifically those teaching General English, use AI tools in their teaching, what benefits they perceive, and what challenges they encounter. The findings reflect not only increasing interest and experimentation with AI tools, but also highlight the gaps in training, infrastructure, and classroom adaptability. The insights from this survey largely correspond with prior research, while also revealing context-specific concerns related to Georgian higher education.

One key finding was the widespread use of ChatGPT, which was reported as the most frequently used tool among language instructors, being mainly applied for practical classroom purposes, such as generating vocabulary lists, writing prompts, discussion questions, and tests. Many instructors also reported using AI to develop worksheets and quizzes, plan lessons, and create in-class activities like games and competitions. To a lesser extent, AI was also used to support feedback and research tasks. These results align with Mena Octavio *et al.* (2024), who found that ChatGPT is often favored for its

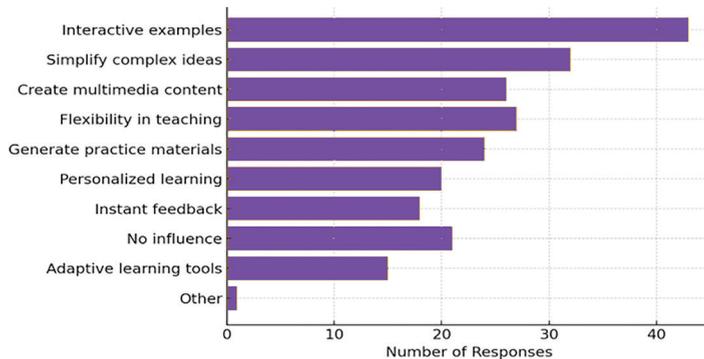


Figure 8. Influence of AI on Content Delivery

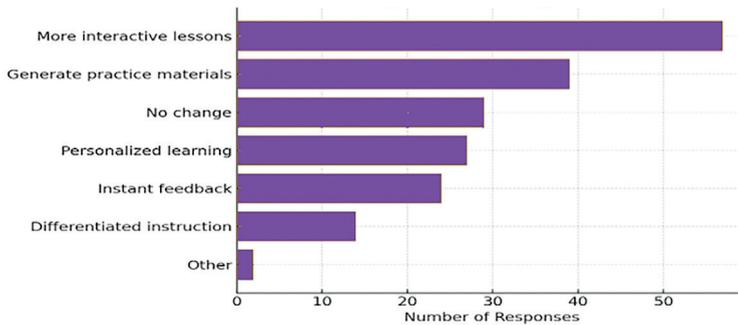


Figure 9. Changes in Teaching Practices

speed, convenience, and ability to personalize tasks in language education. They emphasize its effectiveness in three key areas: lesson planning, in-class implementation through prompt creation, and assessment.

Peikos and Stavrou (2025) also highlight how ChatGPT can assist educators in preparing lesson materials and creating assessment tools like quizzes and rubrics, adapted to different student levels. In addition, instructors in our study reported using tools such as Quizizz and Quizlet with AI – especially for gamified vocabulary practice and interactive learning. This supports findings by Ly Thi Thu Nga and Dang Hoang Ha (2024), who note

that features like adaptive learning and gamified elements (e.g., matching games and competitive quizzes) help make vocabulary learning more dynamic, motivating, and enjoyable for students.

In terms of frequency, a majority of instructors use AI tools either weekly (41.9%) or often/daily (32.4%), with only 16.2% indicating rare or no use. These figures suggest that AI has become a regular tool in many educators' professional routines. Yet, the fact that daily use is still relatively limited points to an ongoing transition phase. This gradual adoption curve is in line with Zawacki-Richter *et al.* (2019), who emphasized that AI integra-

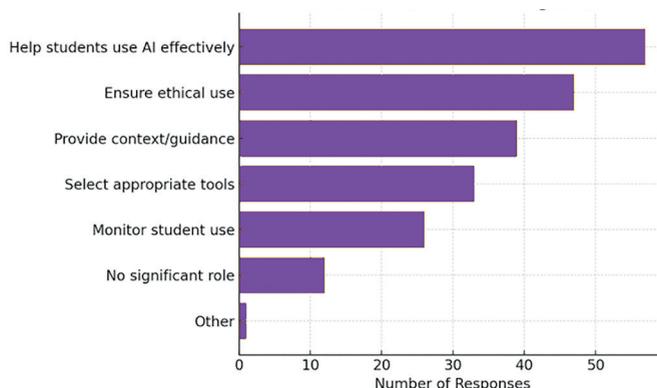


Figure 10. Teachers' Roles in AI Integration

tion in education often begins with cautious and partial use, especially when professional development is lacking.

The responses from Georgian university instructors highlight a strong belief in the benefits of using AI tools in English Language Teaching. The most widely recognized benefit was in vocabulary learning, with nearly 69% of respondents emphasizing how tools like flashcards, word lists, and gamified activities enhance student retention. This aligns with the findings of Ly Thi Thu Nga and Dang Hoang Ha (2024), who demonstrated that gamified platforms such as Quizlet can significantly boost motivation and make vocabulary learning more interactive and enjoyable.

Writing and grammar were also frequently mentioned, with over half of the instructors highlighting how tools like ChatGPT and Grammarly support writing development through grammar correction, prompt generation, and feedback. These observations echo the work of Holmes *et al.* (2019), who argue that AI-driven writing support helps

reduce learner anxiety and makes written expression more accessible, particularly for less confident language learners.

On the other hand, instructors expressed more caution about the benefits of AI for skills like listening, reading, and pronunciation. These areas were selected far less frequently, suggesting that while AI is widely accepted for productive skills, its role in receptive or interpretive learning is still limited in practice. Some educators voiced concern about over-reliance or confusion caused by AI, reflecting a need for balanced, well-integrated use of these tools in classrooms.

In terms of motivation, over half the respondents felt that AI tools made lessons more interactive and personalized – helping students stay engaged and even track their own progress. These benefits are supported by Wang and Tahir's (2020) meta-analysis, which found that game-based AI tools like Kahoot, Quizlet and Quizizz increase learner motivation and focus.

Still, not all feedback was positive. Some instructors expressed concern about stu-

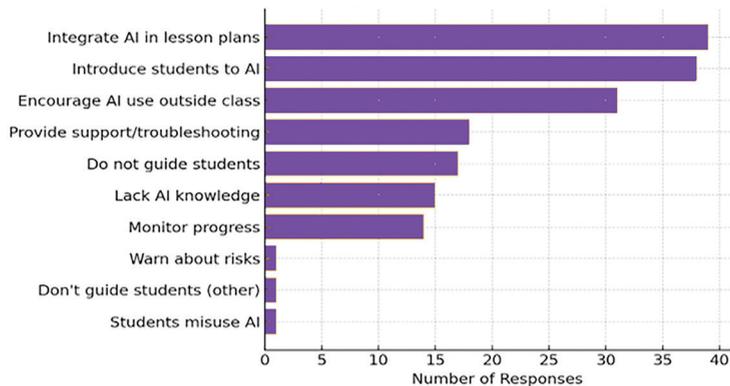


Figure 11. Teachers' Personal Involvement

dents becoming too reliant on AI, and a few were unsure about how much it actually helps with engagement. These concerns are echoed in the work of Zhai *et al.* (2024), who warn that overusing chatbots in class may reduce creativity and independent thinking.

Overall, most instructors recognized AI's potential to support language learning, especially for vocabulary, writing, and learner motivation. At the same time, instructors were aware of AI's limitations, such as content accuracy, ethical concerns, and its reduced role in receptive skills. They emphasized the need to guide students, review AI-generated materials, and ensure that AI complements, rather than replaces, traditional teaching.

Instructors were also asked about the challenges they face when integrating AI into their teaching, and the results confirmed that lack of training and institutional support remains the most significant barrier. This issue was raised in both open-ended and multiple-choice questions, with 35.2% and 53.3% of instructors, respectively, selecting it as a major difficulty.

Many instructors noted in their open-ended responses that they lack information about the tools available, and even those willing to explore AI often feel underprepared.

These findings are consistent with the results of Zawacki-Richter *et al.* (2019), who emphasize that successful integration of AI in education depends on ongoing, structured professional development. They also align with Zhu and Wang's (2025) observation that language educators often struggle to stay informed about the latest developments, how to adapt to new tools and methods, and how to select AI tools that align with specific learning goals. As Zhu and Wang note, an adaptive mindset is essential for both educators and learners so as to fully benefit from AI, enabling more personalized and innovative learning experiences.

Another frequently mentioned barrier was the lack of access to necessary technology or infrastructure, including poor internet connectivity and limited access to devices. Nearly 30% of instructors cited this issue,

and it was echoed in open-ended comments about weak Wi-Fi.

In addition, some instructors pointed to unfamiliarity with tools like Gemini or ChatGPT, as well as the high cost of certain AI platforms, highlighting parallel challenges related to both digital skills and financial constraints.

These findings align with Zhu and Wang's (2025) observations, which emphasize that, despite the motivational and interactive potential of AI tools in EFL learning, educators face ongoing obstacles, such as technological limitations, cost concerns, and the difficulty of keeping pace with rapidly evolving AI tools and methods.

Concerns about content reliability were also raised. Some instructors mentioned that AI-generated materials often contain mistakes, or are not fully suitable for their students' needs. As one teacher commented, "You need to be very careful, because there are some mistakes in the exercises provided by AI." These findings align with Chen *et al.* (2023), who report similar issues and emphasize the need to fact-check and adapt AI-generated writing materials, particularly in writing instruction. Additionally, Zhu and Wang's (2025) systematic review notes that educators face challenges related to ensuring reliability and accuracy of AI tools, stressing the importance of selecting tools that align well with learning objectives, and the need for an adaptive mindset to critically evaluate outputs.

Other challenges included adapting lesson plans, which 20% of instructors mentioned, as well as ethical concerns (e.g., data privacy

and plagiarism), and student resistance to using AI tools. These areas, although cited less frequently, reveal important practical and ethical dimensions of AI use in education. Some teachers noted students' unwillingness to engage with certain tools, or expressed fears about AI being misused for copying or to avoid critical thinking. Such concerns echo the warnings offered by Luckin *et al.* (2016), who argue that without careful planning, AI can encourage surface learning rather than deep engagement. Similar concerns are also reflected in recent literature, where issues such as varied technology acceptance, ethical risks, and the need for responsible integration are emphasized (Zhu & Wang, 2025).

It is worth noting that some instructors reported no significant challenges, and a few even stated that they had not yet used AI, but were open to exploring it. These responses suggest that, while barriers exist, a portion of instructors feel confident enough to experiment, even in the absence of formal support.

The findings of this study reveal that while AI tools are increasingly incorporated into English language teaching to enhance interactivity, engagement, and efficiency, their integration is not always strategic or pedagogically driven. Although nearly half of educators consciously select AI tools that align with their lesson objectives, a substantial proportion do not actively plan for AI use. These findings echo Edmett *et al.* (2024), who highlight that despite AI's acknowledged potential in reshaping education, teachers often lack sufficient training and support to integrate AI effectively.

As Latsabidze (2026) emphasizes, effective AI use requires educators to understand active learning strategies and theories, as AI alone cannot foster meaningful learning experiences. Similarly, Mavropoulou *et al.* (2023) argue that teachers' pedagogical knowledge is key to leveraging AI's full potential in language teaching. The gaps identified in this study, where 16.2% of teachers do not guide students in AI use, and 14.3% lack knowledge about AI tools, underscore the need for targeted professional development.

The survey results also align with recent evidence that AI can enhance language learning by providing interactive, adaptive, and personalized experiences (Ghafar. *et al.*, 2023); (Seyedi. *et al.*, 2024); (Umar, 2024). AI-powered tools have been shown to improve students' speaking, writing, and comprehension skills through real-time feedback, conversational simulations, and adaptive learning paths. However, 27.6% of teachers reported no change in their teaching approach, despite their using AI. Furthermore, teachers' roles remain central to AI-based instruction, with most respondents emphasizing their responsibility in guiding students, ensuring ethical use, and contextualizing AI tools for learning.

From a broader perspective, the World Economic Forum (2023) predicts that 75% of companies will expand their AI use over the next five years, while Bharadwaj *et al.* (2023) found that preventing students from cheating with generative AI tools has become a top instructional challenge for faculty. These trends emphasize the urgent need for edu-

cators to equip students with AI literacy and related competencies. But without sufficient training and intentional use, AI risks becoming an add-on tool rather than a catalyst for pedagogical innovation.

The findings of this study reinforce the position of Crompton and Burke (2024) that AI should be seen as a collaborator rather than a replacement for teachers. Teachers play a critical role not just in integrating AI into lessons, but also in guiding students on its ethical and effective use, ensuring that AI supports, rather than undermines, educational goals.

Conclusion

Current Use of AI Tools in English Language Teaching

The findings show that AI tools are already widely adopted in English Language Teaching, with only one teacher reporting no use. ChatGPT stands out as the most commonly used tool, highlighting its central role in lesson preparation and instructional support. Other tools, such as Quizlet, Quizizz, and platforms like Grammarly and Kahoot, are used more selectively, often for specific activities or experimentation. This variety suggests that teachers are exploring different AI tools based on their needs and preferences.

Content creation emerged as the most common reason teachers use AI, showing that many rely on it to speed up the creation of teaching materials, such as exercises, tests, and prompts. AI is also used to support interactive learning and student

feedback. Meanwhile, moderate use of AI for lesson planning and classroom management suggests it is slowly becoming part of teachers' broader workflow. A small group of teachers reported no use across the main categories, showing that adoption is still uneven.

In terms of frequency, the largest group of educators reported using AI weekly, indicating that it has become a regular part of teaching practice rather than an occasional add-on. A notable portion use AI daily or "often," reflecting a growing reliance on these tools. At the same time, some teachers remain cautious, using AI only rarely, or monthly. With only a very small number reporting no use at all, AI appears to be shifting from a new technology to a standard part of everyday teaching.

Impact of AI Tools on Student Motivation

Overall, teachers view AI as having a positive influence on student motivation. Many highlighted that AI makes learning more interactive and personalized, helping students stay engaged and take more responsibility for their own learning. However, several concerns were raised, including the risk of students becoming overly dependent on AI, and the loss of meaningful human interaction. Some teachers also noted that AI can occasionally confuse or distract students. A group of educators remained unsure about AI's impact on motivation, suggesting that results may depend on student ability, attitudes, and how the tools are used.

Challenges of Integrating AI Tools in Teaching

Despite its increasing use, teachers face several challenges when integrating AI into their practice. The most common barrier is the lack of training and institutional support, leaving many teachers to figure out AI tools on their own. Time constraints make this even harder, as teachers must invest additional effort to test tools or adjust AI-generated materials.

Access-related issues, such as limited devices, unstable internet, or the cost of certain platforms, also affect adoption, especially for students with weaker digital skills. Teachers expressed concerns about the accuracy and appropriateness of AI output, often feeling the need to double-check and revise the materials. Other issues include aligning AI with curriculum goals, dealing with different student comfort levels, and managing privacy or plagiarism risks. Still, some teachers reported no major problems, showing that experiences vary widely and depend on available support and classroom conditions.

Pedagogical Shifts in English Language Teaching through AI

The findings indicate that AI tools are supporting more interactive and student-centered teaching approaches. Many teachers use AI to enhance group work, discussions, and interactive activities, suggesting that AI is contributing to more communicative and participatory learning environments. Teachers also frequently combine AI with project-based learning, games, and exploratory

tasks, showing a shift away from more traditional, teacher-centered instruction.

A large portion of educators choose AI tools based on their lesson objectives, reflecting intentional and purposeful integration. Others use AI to supplement what they already do, or adapt AI-generated content to better fit their teaching style. However, some teachers do not make conscious pedagogical choices when using AI, revealing a need for more guidance and professional development. Low levels of collaboration among teachers also point to a lack of institutional structures that support shared learning about AI.

AI's Influence on Classroom Instruction

Many teachers reported that AI helps them make lessons more interactive and easier to understand. AI is often used to create examples, explain difficult concepts more clearly, generate multimedia content, or produce extra practice activities. These uses suggest that AI is helping teachers diversify their materials and adjust lessons more easily to student needs.

At the same time, a significant number of teachers said that AI has not changed their content delivery or overall teaching approach. While some teachers use AI for personalized learning or immediate feedback, these practices are not yet widespread. Teachers also continue to play an important role in guiding students' AI use, helping them to understand the tools, choose appropriate ones, and use them ethically. However, some teachers do not provide such guidance, often because they feel unprepared or lack confidence with AI. This highlights the ongoing need for professional development to help teachers fully harness AI's potential.

Recommendations

Given that AI adoption is widespread but uneven, institutions should develop comprehensive policies that define how and when AI tools should be used in English language instruction. These guidelines should help teachers at all comfort levels to understand best practices and ensure consistent, purposeful integration across classrooms.

Teachers are using a diversity of tools, from ChatGPT and Quizlet to Kahoot, based on individual preferences and needs. Institutions should offer targeted training that helps educators understand when and why to use specific tools for particular pedagogical goals. This approach will empower teachers to make informed decisions, rather than adopting AI tool use randomly.

Since content creation is the most common use case for AI, institutions should develop templates, prompts, and protocols that help teachers efficiently generate high-quality exercises, tests, and learning materials. Creating a shared storage of proven AI prompts and workflow patterns could enhance productivity across the English department. While teachers show moderate adoption for lesson planning and classroom management, these areas represent significant opportunities for growth. Targeted support and training in these domains could streamline administrative work and allow teachers to dedicate more time to personalized instruction and student engagement.

With the largest group of teachers using AI weekly, and many using it daily, AI is becoming a standard practice. Institutions should create communities of practice,

where teachers can regularly share successes, troubleshoot challenges, and collectively refine their AI integration strategies. At the same time, while most teachers have adopted AI, some remain selective or infrequent users. Rather than viewing this as resistance, institutions should recognize these teachers as valuable voices for maintaining critical perspectives on AI's limitations. Offer them voluntary professional development, and create space for dialogue.

Given concerns about student over-reliance on AI, teachers should receive guidance on designing assignments and activities that strategically balance AI use with independent skill development. This might include requiring students to use AI for specific phases of work, while completing others without technological support, ensuring they develop core competencies alongside tool literacy.

Because outcomes appear to depend on student ability, attitudes, and implementation methods, institutions should conduct ongoing research to identify which student populations and use cases generate the strongest positive effects on motivation.

The lack of training and institutional support is the most significant barrier to AI adoption. Institutions must invest in structured professional development programs that go beyond one-time workshops. These programs should include hands-on training with popular tools, time for experimentation during work hours, and ongoing coaching to help teachers build confidence and competence with AI technologies. Professional development should help educators map specific pedagogical objectives to appropri-

ate AI applications, ensuring that tool use serves learning outcomes rather than driving instruction. Additionally, professional development should help teachers reflect on their teaching philosophy and learning goals as the foundation for AI integration, emphasizing that AI is a means to strengthen student-centered, interactive learning rather than an end in itself.

Since limited devices, unstable internet, and platform costs create barriers, institutions should conduct an audit of technology infrastructure and develop equitable solutions. This might include investing in more reliable connectivity, ensuring adequate device access, or negotiating institutional licenses for commonly used platforms.

Given teachers' concerns about the accuracy and appropriateness of AI output, institutions should establish clear protocols and policies for using AI. Developing templates, checklists, and peer-review processes can help teachers efficiently verify content, while building their own critical evaluation skills. Teachers also need clear institutional guidance on plagiarism detection, data privacy, ethical AI use, and how to help students understand these issues. Providing templates for student agreements and explaining institutional policies around data and academic integrity will help teachers navigate these concerns with confidence.

While this study provides valuable insights into how teachers are currently utilizing AI in English language instruction, significant gaps remain in our understanding of AI's impact on language education. Future research must examine how AI affects stu-

dents, as the current findings indicate that some students demonstrate increased motivation, while others experience confusion or distraction. Moreover, while teachers report that AI enhances engagement and material creation, empirical evidence demonstrating whether students actually achieve stronger English language skills through AI-supported instruction remains limited.

Research utilizing validated assessment instruments, writing samples, and performance-based measures is needed to determine if AI integration genuinely improves language acquisition, critical thinking, and communication skills, or if perceived benefits reflect only motivational effects.

Furthermore, qualitative investigations are needed to understand teacher decision-making processes, including the cognitive and contextual factors that influence whether educators choose to integrate AI purposefully, or adopt tools without clear pedagogical alignment.

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Exploring Simulation Pedagogy in Higher Education: A Narrative Review

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ABSTRACT

Interactive learning methods, particularly business simulations, have become increasingly prominent in higher education as they enable students to apply theoretical knowledge to practical, decision-making contexts. However, the effectiveness of simulations largely depends on the pedagogical approaches adopted by instructors. This study aims to identify and analyze different mentoring approaches in which instructors play active roles in simulation-based learning environments.

The research employs a narrative literature review across multiple academic databases, including Scopus, ERIC, and Google Scholar, using structured search criteria. Approximately 400 studies were initially identified, of which 65 met the inclusion criteria following full-text evaluation. A thematic synthesis was conducted to organize the findings and identify distinct pedagogical approaches.

The analysis reveals three primary mentoring approaches: (1) Directive Mentoring, characterized by structured guidance and clear instructional frameworks; (2) Reflective Mentoring, which emphasizes student self-analysis through guided questioning and the integration of theory and practice; and (3) Engagement Mentoring, a student-centered approach that incorporates gamification elements such as rewards, and leaderboards to enhance motivation and participation.

Each approach demonstrates unique strengths and limitations. Directive mentoring provides structure, particularly for students needing guidance. Reflective mentoring enhances independence and critical thinking. Engagement mentoring increases motivation while addressing autonomy, competence, and relatedness needs. Effectiveness is context-dependent, influenced by class size, demographics, resources, and learning objectives.

No single approach is universally superior, emphasizing situational pedagogical decision-making and potential benefits from integrated strategies. Findings offer practical guidance for educators and a foundation for future empirical research on simulation-based learning in higher education.

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Introduction

In higher education, particularly in business and educational management studies, interactive learning methods, such as business simulations, have gained prominence, especially at the master's level (Bach *et al.*, 2023). These methods enable students to apply theoretical knowledge in practical, near-real-world scenarios, fostering skills in decision-making, strategic thinking, and teamwork (Aebersold, 2018; Auman, 2011; Bach *et al.*, 2016). However, the effectiveness of simulations largely depends on the pedagogical approach employed by the instructor, as it shapes the facilitation of the learning process (Hanghøj, 2013). This article aims to identify pedagogical approaches where instructors play an active role, based on a narrative literature review, to evaluate their effectiveness in terms of master's students' learning outcomes. These approaches, ranging from instructor-centered to student-centered, are selected to assess their impact on student engagement, motivation, and learning outcomes (Zou *et al.*, 2021).

Simulation-based learning is consistent with experiential learning theory, which emphasizes knowledge creation through experience, reflection, and experimentation (Kolb, 1984). Master's students, with their theoretical knowledge and career-oriented focus, are ideally suited for this approach, as they are prepared to tackle complex, practical challenges that require the integration of both theory and practice (Farashahi & Tajeddin, 2018).

Despite their potential, simulations present challenges, such as varying degrees of student readiness, scenario complexity, and difficulties in connecting theoretical knowledge to practical situations (Bach *et al.*, 2016). Master's students, often with diverse professional backgrounds, require learning methods that address their individual needs, enhance motivation and engagement, and prepare them for real-world business challenges (Huang *et al.*, 2023). The instructor's active role is critical in overcoming these challenges, by guiding the learning process, facilitating decision analysis, and ensuring the integration of theory and practice (Aebersold, 2018; Becker & Hermosura, 2019; Crookall, 2010; Moraes & Plaszewski, 2023; Frei-Landau & Levin, 2023; Yahorava, 2024).

The literature offers diverse approaches, including those where instructors provide clear instructions (Auman, 2011; Farashahi & Tajeddin, 2018), guide students through reflection and critical thinking (Schön, 1983), or employ interactive, student-centered methods that incorporate gamification elements, such as rewards, competition, and achievements (Costa *et al.*, 2021; Davis *et al.*, 2018; Deterding *et al.*, 2011; Kapp, 2012; Routledge, 2016). Gamification is particularly effective for master's students seeking motivating, interactive experiences that mirror real-world business dynamics (Deterding *et al.*, 2011; Kapp, 2012). The instructor's active role as a facilitator and co-participant, especially through interactive debriefing, enhances learning outcomes by enabling students to analyze their decisions and connect theory to practice (Molin, 2017).

This article seeks to explore higher education pedagogy, instructor leadership methods, their active roles in simulations, and the needs of master's students, to identify approaches ranging from instructor-centered to student-centered. These approaches are selected to measure their effectiveness in terms of engagement, motivation, and learning outcomes (Zou *et al.*, 2021).

While this review examines simulation pedagogy broadly within higher education contexts, the findings are particularly relevant for postgraduate programs. Master's students, with their advanced theoretical foundations and career-oriented focus, represent an ideal population for simulation-based learning approaches. Throughout this article, we interpret the general findings through the lens of postgraduate education, highlighting how these pedagogical strategies can be adapted to meet the specific needs of master's students who require complex, practice-oriented learning experiences that bridge theory and professional application (Huang *et al.*, 2023; Bach *et al.*, 2016).

The article is structured as follows: a literature review establishing the theoretical framework; a methodology section explaining the narrative review; a comparative review; a discussion of the role of gamification; and a discussion identifying the strengths and weaknesses of these approaches, followed by a recommendation to experimentally test and compare them with each other and with traditional lecture-based methods.

1. Literature Review

1.1 Historical Development of Learning through Simulations

The evolution of business simulations as a learning tool began in the mid-20th century, initially applied in military and managerial training (Faria *et al.*, 2009). In the 1960s, simulations based on so-called "war games" were used to practice strategic decision-making, with participants engaging in scenario-based decisions through tabletop games or physical models (Aldrich, 2005; Chilcott, 1996; Keys & Wolfe, 1990; Kincaid & Westerland, 2009). These early simulations often focused on managerial decisions, such as resource allocation, but their limited technological capabilities constrained their complexity and scale.

In the 1980s, simulations took a significant step towards higher education, as advancements in computer technology enabled the creation of more dynamic and interactive simulations (Faria *et al.*, 2009). During this period, simulations like the Business Strategy Game emerged, allowing students to analyze financial, marketing, and operational decisions (Keys & Wolfe, 1990). However, these simulations were limited by simple interfaces and predefined scenarios which were less responsive to the needs of master's students seeking complex, real-world challenges.

From the 2000s, digital technologies, particularly the internet and software advancements, ushered in a new era of simulations (Zenios, 2020). Online platforms, such as Marketplace Simulations, enabled students to operate in simulated global, competitive

environments, making decisions involving complex variables like market segmentation, pricing, and operational efficiency (Bach *et al.*, 2016). This period also saw the introduction of gamification elements, such as rewards and leaderboards, which increased student motivation (Deterding *et al.*, 2011).

In the 2020s, simulations further evolved with the integration of artificial intelligence (AI) and virtual reality (VR), offering students immersive learning experiences (Zenios, 2020). However, technological complexity increases the importance of the instructor's role as a facilitator to ensure students utilize these tools effectively (Chilcott, 1996; Bauer *et al.*, 2022; Hanghøj, 2013). Recent comparative studies have demonstrated that simulation-based teaching approaches consistently outperform traditional instructional methods in developing students' practical competencies, particularly when instructors adopt active facilitation roles (Azizi *et al.*, 2022).

1.2 Higher Education Pedagogy and Business Simulations

Higher education pedagogy, particularly in business and management studies, increasingly relies on interactive, experiential approaches to address the needs of master's students who demand practical, problem-oriented learning (Biggs & Tang, 2011). Business simulations, as a form of experiential learning, are grounded in Kolb's (1984) theory, which emphasizes knowledge creation through cycles of concrete experience, reflection, conceptualization, and experimentation (Kolb, 1984). This approach is particularly suitable for master's students,

who often possess theoretical knowledge and seek to apply it in complex, real-world scenarios (Huang *et al.*, 2023).

Traditional higher education pedagogy relied on lectures and classroom discussions with instructor-delivered knowledge (Auman, 2011; Farashahi & Tajeddin, 2018).

However, this approach is less effective for master's students who require active engagement and individualized learning experiences (Bach *et al.*, 2016). In response, modern pedagogy has shifted towards student-centered methods, where instructors act as facilitators, guiding students through decision-making and reflection processes (Biggs & Tang, 2011). In this context, simulations enable master's students to develop critical thinking and decision-making skills, which are crucial for their career objectives (Zou *et al.*, 2021).

The pedagogical effectiveness of business simulations depends on the instructor's ability to balance structure and student autonomy. The literature proposes approaches ranging from instructor-centered guidance (Farashahi & Tajeddin, 2018) to reflective facilitation, where instructors promote student self-analysis (Schön, 1983). Drawing on this range of approaches, three types can be distinguished according to the degree of instructor guidance and student autonomy; these will be analyzed further.

1.3 Instructor Roles in Interactive Simulations

The simulation-based learning process requires active instructor involvement to guide master's students through complex,

real-world scenarios, facilitating the integration of theory and practice (Bauer *et al.*, 2022; Crookall, 2010; Keskitalo, 2015; Keskitalo, 2022; Lupu *et al.*, 2014; García-Salido *et al.*, 2024). The instructor's activities span several stages: (1) preparation, where they set simulation objectives, select appropriate platforms (e.g., Marketplace Simulations), and assign teams (Faria *et al.*, 2009); (2) implementation, where the instructor oversees the simulation's progress, provides instructions, answers questions, and adjusts scenario parameters, such as market conditions, as needed (Bach *et al.*, 2016); and (3) debriefing, where they lead analysis and reflection sessions, helping students understand the consequences of their decisions and connect them to theoretical knowledge (Crookall, 2010). For example, in Marketplace Simulation, the instructor may set initial financial parameters, monitor team decisions, and lead discussions on how marketing strategies impacted outcomes. This process ensures that master's students develop critical thinking and decision-making skills aligned with their career goals (Zou *et al.*, 2021).

Business simulations, as practical learning tools, require instructors to adopt diverse roles to ensure the integration of theory and practice, fostering engagement and motivation (Zou *et al.*, 2021). The instructor's active involvement determines the simulation's effectiveness (Huang *et al.*, 2023). The literature describes instructor roles in varied ways, reflecting the diversity of approaches in business simulations. For example, Faria *et al.* (2009) emphasize the instructor as an "administrator," organizing the simulation's structure, setting objectives, and providing

technical support. Crookall (2010) focuses on the instructor as a "facilitator," guiding debriefing to help students analyze their decisions. In addition to the roles of instructor, guide and evaluator, Hanghøj (2013) proposes the "playmaker" concept, where the instructor teaches from a student perspective, while Molin (2017) describes the instructor as a "motivator," enhancing student engagement through interactive strategies. Other authors, such as Biggs and Tang (2011), highlight "active" leadership, where the instructor balances structure and student initiative. These diverse descriptions indicate that instructor roles span a broad spectrum – from administrative to motivational – reflecting varying levels of activity and student autonomy.

From these diverse roles, three main approaches can be identified based on instructor activity and student autonomy: directive mentoring, reflective mentoring, and engaged mentoring. The term "mentoring" is used for all three approaches, as it emphasizes the instructor's role as a supportive guide focused on master's students' individual needs, in contrast to "instructing," which implies rigid, one-way directives (Kapp, 2012). Directive mentoring involves providing structure while supporting students (Faria *et al.*, 2009). Reflective mentoring promotes self-analysis, aiding students in integrating theory and practice (Crookall, 2010). Engaged mentoring, inspired by Hanghøj's "playmaker" concept (2013), but enhanced with gamification elements like rewards and competitive scenarios, increases student enthusiasm and engagement (Deterding *et al.*, 2011; Davis *et al.*, 2018).

Directive mentoring aligns closely with cognitive load theory by providing explicit instruction that reduces extraneous cognitive load during complex decision-making tasks (Anderson & Lawton, 2009). This approach proves particularly relevant during initial simulation phases, when students must simultaneously master technological interfaces, understand simulation mechanics, and apply business concepts. The structured guidance characteristic of directive mentoring helps students develop mental models that can later support more autonomous decision-making processes (Faria *et al.*, 2009).

Reflective mentoring draws from constructivist learning theory, emphasizing the active construction of knowledge through experience and reflection (Schön, 1983). This approach recognizes that meaningful learning occurs when students connect new experiences with existing knowledge structures, requiring deliberate reflection and analysis (Kolb, 1984). The questioning techniques employed in reflective mentoring facilitate this connection process by guiding students through systematic examination of their decisions and outcomes (Crookall, 2010).

Engagement mentoring incorporates elements from multiple theoretical frameworks, including social learning theory, through peer interaction and observational learning, and self-determination theory through attention to autonomy, competence, and relatedness needs (Deci & Ryan, 2000). The gamification elements characteristic of this approach address intrinsic motivation factors by providing opportunities for mastery demonstration and social connection (Kapp, 2012).

1.4 *The Role of Gamification*

Gamification, the integration of game elements into non-game contexts, significantly enhances the effectiveness of business simulations (Deterding *et al.*, 2011). Gamification elements, such as rewards, leaderboards, competitive scenarios, achievement systems, and point allocation, foster student engagement, enthusiasm, and critical thinking (Chee *et al.*, 2015; Costa *et al.*, 2021; De Smale *et al.*, 2015; Routledge, 2016; Kapp, 2012). For master's students with strong theoretical foundations, gamification creates an interactive environment to test decision-making skills, such as in Marketplace simulation scenarios, where students manage pricing, marketing strategies, or operational processes (Bach *et al.*, 2016).

The effectiveness of gamification is rooted in psychological theories, particularly Deci and Ryan's self-determination theory (2000), which highlights three basic psychological needs: autonomy, competence, and relatedness. For example, in a Marketplace simulation, leaderboards displaying team rankings based on market share or profit reinforce a sense of competition, satisfying the need for relatedness (Davis *et al.*, 2018). Rewards, such as "best financial performance" or "innovative strategy," enhance the sense of competence, while the freedom to make team-based decisions ensures autonomy (Zou *et al.*, 2021). However, the success of gamification depends on the mentor's ability to align these elements with learning objectives, avoiding excessive competition or loss of motivation (Nicholson, 2015).

The mentor's role is crucial for effective gamification implementation, particularly within the engaged mentoring approach. This approach enables the mentor to create a collaborative, student-centered environment where master's students take the initiative (Deterding *et al.*, 2011). For instance, in a Marketplace simulation, the mentor may use leaderboards to encourage teams to refine strategies or award achievements like "best brand management," boosting student motivation (Davis *et al.*, 2018).

Specific gamification elements, such as point systems, facilitate the tracking of student progress, reinforcing self-efficacy (Bandura, 1997). For example, in a Marketplace simulation, students earning points for increasing market share are more motivated to improve their decisions (Molin, 2017). Additionally, gamification fosters team dynamics, as competitive scenarios, such as identifying the "market leader" among teams, enhance collaboration and communication (Huang *et al.*, 2023). However, the literature notes that excessive use of gamification, such as over-emphasizing rewards, may divert attention from learning objectives, and thus requires careful mentor guidance (Nicholson, 2015).

2. Methodology

2.1 Research Design

This study employs a narrative literature review to investigate pedagogical strategies for teaching with simulations in higher education. The narrative review, as described by

Pautasso (2019), was selected for its flexibility in synthesizing diverse literature sources and constructing coherent theoretical frameworks around complex research questions, building on empirical reviews of simulation games in higher education (Cadotte, 2022; Fanning & Gaba, 2008; Faisal *et al.*, 2022; Hamada *et al.*, 2019; Mehar & Arora, 2021; Leigh *et al.*, 2023).

Unlike systematic reviews, which prioritize exhaustive and replicable searches, a narrative review allows for qualitative synthesis of findings to explore pedagogical roles, planning processes, and teaching approaches across a spectrum, from lecturer-centered to student-centered methodologies, in simulation-based education (Green *et al.*, 2006; Ferrari, 2015). This methodology aligns with the study's aim of identifying distinct pedagogical approaches that can inform future empirical research and experimental comparison.

2.2 Research Questions

This narrative review addresses the following research questions:

1. What roles do lecturers adopt when implementing simulation-based teaching?
2. What pedagogical approaches (ranging from lecturer-centered to student-centered) are evident in the literature on simulation-based teaching?
3. What distinct pedagogical approaches can be synthesized from the literature to recommend for experimental comparison?

2.3 Literature Search and Selection

2.3.1 Search Strategy

The literature search followed a structured yet flexible process to ensure comprehensive identification of relevant studies while maintaining interpretive depth, incorporating problem-based and simulation-focused approaches (Dervić *et al.*, 2018; Dolmans *et al.*, 2016; Duchastel, 1991; Pautasso, 2013; Cevallos-Torres & Botto-Tobar, 2019; Mohsen *et al.*, 2019).

The search was conducted across the following academic databases and scholarly search engines: Scopus, ERIC, and Google Scholar, using keywords such as “simulation-based teaching,” “pedagogical approaches,” “lecturer roles in simulations,” “student-centered learning,” and “higher education simulations.”

To ensure rigor, the review adhered to established best practices for narrative synthesis. The search strategy was documented transparently, and included databases, keywords, and inclusion/exclusion criteria (Pautasso, 2013). The synthesis process was iterative, with regular cross-checking of themes against primary sources to minimize interpretive bias (Ferrari, 2015). While narrative reviews are inherently subjective, the use of structured data extraction and thematic coding – identifying, labeling, and grouping recurring concepts across studies – enhanced analytical rigor (Green *et al.*, 2006). Additionally, the review prioritized peer-reviewed sources to ensure credibility and relevance.

To minimize bias in the selection and coding process, the following measures were implemented: inclusion and exclusion criteria

were defined *a priori* and applied consistently; data extraction followed a structured template capturing key information systematically; and thematic coding was conducted iteratively, with regular cross-checking against primary sources to ensure interpretive validity (Green *et al.*, 2006; Ferrari, 2015).

2.3.2 Inclusion and Exclusion Criteria

Inclusion criteria were established to focus on peer-reviewed articles, books, and conference papers, published in English between 2015 and 2025, that addressed simulation-based teaching in higher education. Studies were included if they discussed lecturer roles, planning processes, or pedagogical approaches in simulation-based contexts (Ferrari, 2015). Exclusion criteria included studies focused solely on the technical aspects of simulations, non-educational contexts, or non-peer-reviewed sources (Green *et al.*, 2006).

2.3.3 Selection Process

The selection process involved screening titles and abstracts for relevance, followed by full-text review to confirm alignment with the research questions. A snowballing technique was also employed, where reference lists of key articles were reviewed to identify additional relevant studies (Ferrari, 2015). Approximately 400 studies were initially identified, with 65 studies meeting the inclusion criteria after full-text evaluation. (Table 1)

2.3.4 Data Synthesis and Analysis

The thematic synthesis followed a structured approach to organize findings into coherent themes addressing the research

Table 1. Progressive Source Selection in Narrative Literature Review

Selection Stage	Number of Sources	Retention Rate	Exclusion Criteria
Initial Database Search	400	100% (baseline)	–
Title/Abstract Screening	100-150	25-30%	<ul style="list-style-type: none"> • Off-topic studies • Non-peer reviewed sources • Outside date range (2015-2025) • Non-English language • Technical-only focus
Full-Text Assessment	50-90	50-60% of screened	<ul style="list-style-type: none"> • Insufficient methodology detail • Limited relevance to research questions • Low study quality • Non-educational contexts • Duplicate findings
Final Inclusion	65	60-70% of assessed	<ul style="list-style-type: none"> • Direct relevance to mentoring approaches • High methodological quality • Contributes unique insights • Alignment with theoretical framework • Peer-reviewed sources only

Overall Retention Rate: 16% of initial search results.

questions (Pautasso, 2019). Key information from each study was extracted, including lecturer roles (e.g., facilitator, instructor, observer), planning strategies (e.g., scenario design, debriefing structures), and pedagogical approaches (e.g., lecturer-centered, student-centered, or hybrid). Extracted data were coded thematically to identify recurring patterns, such as specific lecturer behaviors, planning frameworks, or pedagogical orientations. Codes were grouped into broader themes, such as “lecturer as facilitator” or “student-centered simulation design” (Ferrari, 2015). The coded themes were synthesized into a narrative that traces the evolution of pedagogical approaches in simulation-based teaching, highlighting shifts from lecturer-centered to student-centered methodologies (Green *et al.*, 2006). Based on the thematic analysis, three distinct pedagogical

approaches introduced earlier were specified in detail, each characterized by unique combinations of lecturer roles, planning strategies, and student engagement methods.

2.4 Study Limitations

This narrative review has several limitations that should be acknowledged. First, the analysis was conducted by a single researcher, which may introduce individual interpretive bias despite efforts to maintain rigor. Additionally, the narrative review methodology, while suitable for synthesizing diverse perspectives, lacks the systematic rigor and replicability characteristic of meta-analytic approaches. Language restrictions to English potentially excluded relevant studies published in other languages, and time constraints limited the depth of analysis applied to each individual study.

The emphasis on pedagogical approaches also means that important technological or logistical factors related to simulation implementation might be underrepresented. Furthermore, given the rapidly evolving nature of simulation technology, some conclusions drawn from current literature may become outdated relatively quickly.

Finally, despite a systematic search strategy, it is possible that some relevant studies were inadvertently omitted. Publication bias may also influence the available literature, favoring studies that report positive outcomes related to simulation-based teaching effectiveness.

3. Comparative Analysis of the Three Approaches

Interactive business simulations, such as Marketplace Simulations, offer a unique environment for master's students to develop practical skills, critical thinking, and decision-making capabilities aligned with their theoretical knowledge and career goals. These draw from experiential and game-based pedagogies (Breunig, 2017; Hebert & Jenson, 2019; Hertel & Millis, 2023; Juan *et al.*, 2017; Kaufman & Sauv e, 2010; Bach *et al.*, 2016). Empirical evidence from quasi-experimental studies confirms that simulation-based approaches yield superior learning outcomes compared to traditional lecture-based methods, particularly in developing practical competencies (Azizi *et al.*, 2022).

The mentor's role is pivotal in this process, as it shapes the quality of students' engagement, motivation, and learning out-

comes (Faria *et al.*, 2009). This section examines the three mentoring approaches – directive mentoring, reflective mentoring, and engagement mentoring – by comparing their characteristics, debriefing practices, advantages, and limitations, focusing on the learning experience of master's students.

3.1. Directive Mentoring

Description: Directive mentoring is characterized by high mentor activity and low student autonomy, where the mentor provides clear instructions, defines the simulation's structure, and sets objectives (Faria *et al.*, 2009). In the context of Marketplace Simulations, the mentor may explain how to allocate budgets or formulate pricing strategies, offering minimal freedom to students. This approach aligns with traditional pedagogical models, where the mentor is the primary source of knowledge (Anderson & Lawton, 2009).

Debriefing: Debriefing is structured and focuses on "correct" decisions. For example, in a Marketplace simulation, the mentor may discuss why a particular strategy succeeded, emphasizing theoretical models like Porter's Five Forces, but with limited encouragement for independent student analysis (Crookall, 2010).

Advantages: Directive mentoring is efficient and effective, particularly for students needing clear guidance (Molin, 2017). It provides structure, reduces confusion in complex simulations, and is especially suitable for beginners with limited experience (Faria *et al.*, 2009).

Limitations: This approach restricts student autonomy, reducing initiative and creativity (Zou *et al.*, 2021). For master's students seeking self-determination, directive mentoring may be less motivating, as it hinders independent decision-making (Deci & Ryan, 2000).

3.2. Reflective Mentoring

Description: Reflective mentoring promotes student self-analysis through questions and prompts, emphasizing critical thinking and the integration of theory into practice (Schön, 1983). In a Marketplace simulation, the mentor may ask students to analyze why their marketing strategy failed, rather than providing direct answers (Crookall, 2010). This approach aligns with Kolb's experiential learning cycle, particularly the reflection and abstract conceptualization stages (Kolb, 1984).

Debriefing: Debriefing focuses on student-driven analysis, with the mentor using open-ended questions such as, "What lessons did you learn from this decision?" or "How did your choices impact market share?" (Crookall, 2010). This process fosters deep understanding, but requires more time and effort.

Advantages: Reflective mentoring enhances student independence and critical thinking, which is particularly valuable for master's students with strong theoretical foundations (Huang *et al.*, 2023). It promotes self-determination, satisfying the psychological needs for autonomy and competence (Deci & Ryan, 2000).

Limitations: This approach may be less structured, leading to uncertainty for some students, particularly those needing clear guidance (Molin, 2017). Additionally, it requires significant time for debriefing, which may be challenging in constrained schedules.

3.3. Engagement Mentoring

Description: Engagement mentoring is a student-centered approach integrated with gamification elements such as rewards, leaderboards, competitive scenarios, and achievement systems (Deterding *et al.*, 2011). It is enhanced by game elements to boost master's students' enthusiasm and engagement. In a Marketplace simulation, the mentor may encourage teams to refine strategies using leaderboards or award achievements like "best innovative strategy" (Davis *et al.*, 2018).

Debriefing: Debriefing is interactive, enhanced by gamification elements. For example, the mentor may use a point system to discuss how team decisions impacted their "market share" scores, fostering collaboration and analysis (Zou *et al.*, 2021). This process integrates reflection and motivation, enhancing the learning experience.

Advantages: Engagement mentoring increases master's students' motivation and engagement, addressing the psychological needs for autonomy, competence, and relatedness (Deci & Ryan, 2000). It is versatile, adapting to diverse learning styles and promoting team dynamics (Huang *et al.*, 2023). Gamification elements, such as

leaderboards, boost enthusiasm, while interactive debriefing strengthens the integration of theory and practice (Davis *et al.*, 2018).

Limitations: This approach requires significant resources, including high mentor involvement and the design of gamification elements (Nicholson, 2015). Some students may focus excessively on rewards, reducing learning depth if the mentor does not carefully manage the process.

4. Discussion

The emergence of directive, reflective, and engagement mentoring approaches within simulation-based learning represents a significant advancement in postgraduate business education, offering diverse pathways to enhance student outcomes, while presenting specific implementation challenges. Each approach contributes distinct advantages: directive mentoring provides structured support that minimizes confusion during initial learning phases, reflective mentoring fosters independent analytical thinking to achieve deeper understanding, and engagement mentoring enhances participation through motivational elements such as gamification. These strategies are complementary in nature, suggesting considerable value in hybrid implementations, where directive elements establish foundational knowledge, reflective techniques encourage critical evaluation, and engagement features maintain sustained interest throughout the learning process, supported by meta-cognitive and assessment frameworks (Crookall, 2010; Kolb, 1984; Kolb *et al.*, 2009; Lovett *et*

al., 2020; Moore *et al.*, 2013; O'Neil *et al.*, 2016; Price *et al.*, 2019).

However, their effectiveness is contingent upon adaptation to situational factors, including group size, learner backgrounds, available institutional support, and specific learning objectives, emphasizing the necessity for contextualized strategies rather than standardized models (Faria *et al.*, 2009; Biggs & Tang, 2011). This variability underscores the critical importance of theoretical foundations in guiding practical application – directive mentoring aligns with principles of reducing cognitive load during novel task encounters, reflective mentoring supports constructivist approaches to knowledge building through introspective processes, and engagement mentoring draws upon motivational and social learning theories to address fundamental needs for autonomy and social connection (Anderson & Lawton, 2009; Schön, 1983; Deci & Ryan, 2000; Kapp, 2012).

Practical implementation requires careful calibration: directive methods risk creating dependency if not gradually phased out, reflective sessions necessitate skilled facilitation to establish trust and promote openness, and engagement designs must achieve balance between gamified elements and core learning objectives to prevent distraction from educational goals (Farashahi & Tajeddin, 2018; Molin, 2017; Deterding *et al.*, 2011; Nicholson, 2015).

Resource requirements vary significantly across approaches, with directive mentoring demanding comprehensive preparation, reflective mentoring requiring substantial time investment for guided interactions, and

engagement mentoring necessitating sophisticated technological tools and specialized expertise – factors that can strain institutional capacity, particularly in larger cohorts or resource-constrained environments (Faria *et al.*, 2009; Crookall, 2010; Hanghøj, 2013). Student diversity introduces additional complexity: experienced professionals may resist highly structured guidance, while novice learners struggle with open-ended reflective processes, and cultural or generational differences can significantly influence responses to competitive elements (Huang *et al.*, 2023; Bach *et al.*, 2016; Kapp, 2012).

Assessment and evaluation present ongoing challenges, as conventional measurement tools frequently fail to capture process-oriented learning gains such as adaptability or collaborative skills. This necessitates the development of more comprehensive evaluation frameworks that align with academic standards, while capturing the full spectrum of learning outcomes (Biggs & Tang, 2011).

Technological dependency further complicates implementation, with directive approaches relying on relatively simple tools while engagement platforms remain vulnerable to technical disruptions, requiring continuous training and the establishment of flexible contingency plans (Hanghøj, 2013). Collectively, these insights demonstrate the considerable potential of integrated mentoring approaches to address diverse learning needs, provided that educators and institutions commit to developing adaptive, supportive systems that effectively bridge theoretical foundations with practical implementation.

4.1 Practical Implementation Guidelines

The effectiveness of each mentoring approach depends significantly on contextual factors, which educators must carefully consider when designing simulation-based learning experiences. Class size emerges as a critical determinant: directive mentoring scales effectively to larger cohorts, where structured guidance ensures consistent learning outcomes, while reflective mentoring performs optimally in smaller groups (typically 15-25 students), where meaningful dialogue and personalized feedback become feasible (Faria *et al.*, 2009; Molin, 2017). Engagement mentoring demonstrates adaptability across various class sizes, though technological infrastructure and mentor workload increase proportionally with student numbers (Hanghøj, 2013). Comparative research demonstrates that, regardless of class size, simulation-based pedagogical approaches consistently produce better competency development than traditional methods when instructors actively facilitate learning rather than simply delivering content (Azizi *et al.*, 2022).

Student background characteristics also shape approach selection. Directive mentoring benefits students with limited prior business knowledge or simulation experience, providing the necessary scaffolding for skill development (Anderson & Lawton, 2009). Conversely, experienced professionals in postgraduate programs may find excessive structure constraining, responding more positively to reflective approaches that leverage their existing knowledge base (Huang *et al.*,

2023). Cultural considerations prove equally important, as students from educational systems emphasizing hierarchical teacher-student relationships may initially struggle with the autonomy demanded by reflective or engagement approaches, requiring gradual transitioning supported by explicit expectations and modeling (Bach *et al.*, 2016).

Resource availability constitutes another decisive factor. Institutions with robust technological infrastructure and dedicated learning technology support can effectively implement engagement mentoring with sophisticated gamification platforms and analytics tools (Deterding *et al.*, 2011). Resource-constrained environments may achieve better outcomes through directive or reflective approaches, requiring minimal technological investment while delivering substantial pedagogical value (Crookall, 2010). Faculty development emerges as an often-overlooked resource consideration, as reflective and engagement approaches demand specialized facilitation skills that develop through training and practice rather than intuition alone (Biggs & Tang, 2011).

Learning objectives ultimately guide approach selection. When prioritizing rapid skill acquisition and procedural knowledge, directive mentoring offers efficiency advantages (Anderson & Lawton, 2009). Programs emphasizing critical thinking, metacognitive development, and transfer of learning to novel contexts achieve these outcomes more reliably through reflective approaches (Schön, 1983; Kolb, 1984). Engagement mentoring proves particularly effective when cultivating sustained motivation, collaborative skills,

and intrinsic interest in subject matter (Deci & Ryan, 2000; Kapp, 2012).

4.2 Integration and Hybrid Models

The comparative analysis reveals that hybrid implementations combining elements from multiple approaches may offer superior outcomes compared to pure implementations of any single approach. A phased integration model shows particular promise: directive elements establish foundational knowledge and procedural competence during initial simulation cycles; reflective techniques progressively increase as students develop confidence and analytical capabilities, and; engagement features maintain motivation throughout the learning sequence (Farashahi & Tajeddin, 2018; Molin, 2017).

Such integration requires careful orchestration to avoid cognitive overload or conflicting pedagogical signals. Successful hybrid models maintain internal coherence through explicit communication of pedagogical rationale, deliberate sequencing that builds complexity gradually, and consistent reinforcement of learning objectives across different approach elements (Biggs & Tang, 2011). The mentor's metacognitive guidance – making pedagogical choices transparent to students and supporting their development as self-directed learners – proves crucial for realizing the benefits of integrated approaches (Kolb *et al.*, 2009). (Table 2.)

Conclusion

This examination of mentoring approaches within simulation-based learning has iden-

Table 2. Comparative Analysis of Three Mentoring Approaches

Dimension	Directive Mentoring	Reflective Mentoring	Engagement Mentoring
Theoretical Foundation	Cognitive Load Theory (Anderson & Lawton, 2009)	Experiential Learning Theory (Kolb, 1984); Reflective Practice (Schön, 1983)	Self-Determination Theory (Deci & Ryan, 2000); Gamification Theory (Deterding <i>et al.</i> , 2011)
Instructor Role	Primary knowledge source, structured guidance, administrator	Facilitator, questioning guide, reflective coach	Co-participant, motivator, playmaker
Student Autonomy	Low	High	Moderate to High
Key Strengths	Provides clear structure; Reduces confusion; Efficient for large groups; Suitable for novices	Enhances critical thinking; Promotes independence; Develops self-determination; Deep learning	Increases motivation; Addresses psychological needs; Versatile across learning styles; Promotes team dynamics
Primary Limitations	Restricts autonomy; May reduce creativity; Risk of dependency; Less motivating for experienced students	Time-intensive; May create uncertainty; Requires skilled facilitation; Less structured	Resource-intensive; Risk of excessive focus on rewards; Requires technological infrastructure; High mentor involvement needed
Optimal Context	Large classes (30+ students); Novice learners; Complex simulations requiring initial structure; Time-constrained environments	Small to medium classes (15-25 students); Experienced students with theoretical foundations; Programs emphasizing critical thinking	Diverse class sizes; Career-oriented students; Programs with technology infrastructure; Students seeking interactive experiences
Debriefing Style	Structured, instructor-led; Focuses on "correct" decisions; Theory-driven analysis	Student-driven; Open-ended questions; Self-analytical; Peer discussion encouraged	Interactive; Gamification-enhanced; Collaborative analysis; Motivational elements integrated
Resource Requirements	Moderate (preparation time, clear materials)	High (extensive facilitation time, skilled questioning)	High (technology platforms, gamification design, ongoing technical support)
Assessment Focus	Procedural knowledge; Decision accuracy; Theoretical application	Critical thinking; Reflection quality; Theory-practice integration	Engagement levels; Motivation; Collaborative skills; Achievement of learning objectives

tified three distinct pedagogical strategies – directive, reflective, and engagement mentoring – each offering unique contributions to postgraduate education effectiveness. The analysis reveals that no single approach demonstrates universal superiority; rather, effectiveness depends on careful alignment between pedagogical choices, learner characteristics, and institutional contexts.

Directive mentoring provides essential structure that minimizes cognitive overload during initial learning phases, particularly benefiting students requiring clear guidance. Reflective mentoring fosters independent analytical thinking and deeper conceptual understanding through guided self-examination. Engagement mentoring enhances motivation and sustained participation through

gamification elements that address fundamental psychological needs.

The theoretical grounding in established frameworks – cognitive load theory, experiential learning theory, and self-determination theory – provides robust foundations for understanding how these approaches function and inform their effective application. Evidence suggests that hybrid implementations, thoughtfully combining elements from multiple approaches, may optimize learning outcomes by leveraging complementary strengths while mitigating individual limitations.

Successful implementation requires attention to contextual factors including class size, student backgrounds, available resources, and specific learning objectives. The findings provide educators and institutions with an evidence-based framework for making informed pedagogical decisions in simulation-based teaching, while identifying critical directions for future empirical research to further refine and validate these approaches.

As business education continues to evolve in response to rapid industry transformations and technological advances, this framework may serve as a catalyst for educational innovation, ultimately better preparing future business professionals to meet the complex demands of the contemporary global marketplace (Biggs & Tang, 2011; Uden *et al.*, 2018; Veermans & Jaakkola, 2018; Velez *et al.*, 2023; Wright & Khoo, 2021).

Implications and Further Research

The identified mentoring approaches carry significant implications for multiple stakeholders in postgraduate business education, and reveal promising avenues for future research to refine their application and effectiveness.

For Educators

Practitioners are encouraged to:

- Select and adapt mentoring approaches based on contextual factors, including class size, student background, and learning objectives;
- Develop competencies in reflective facilitation and engagement design through professional development programs;
- Implement hybrid models that strategically combine directive structure, reflective depth, and engagement motivation;
- Document teaching practices systematically, recording implemented strategies and observed outcomes to inform continuous improvement and contribute to the broader evidence base (Crookall, 2010);
- Establish professional learning networks dedicated to sharing methodological innovations to facilitate ongoing development (Hanghøj, 2013).

For Institutions

Educational institutions should consider:

- Strategic investment in technological infrastructure supporting simulation-based learning, including sophisticated

- data analytics tools for comprehensive assessment (Hanghøj, 2013);
- Allocation of adequate resources for intensive faculty development programs, particularly in the implementation of reflective and engagement methodologies (Molin, 2017);
 - Establishment of collaborative partnerships with other institutions to support joint research initiatives and resource sharing (Faria *et al.*, 2009);
 - Development of assessment frameworks that capture both disciplinary knowledge and interpersonal competencies across varied educational contexts (Biggs & Tang, 2011).

For Future Research

Several critical research directions emerge from this analysis:

✓ **Empirical Validation:** Rigorous controlled trials are needed to evaluate directive, reflective, and engagement strategies through randomized experimental designs involving diverse student cohorts, measuring impacts on academic performance, learner satisfaction, and the development of enduring professional skills, incorporating advanced tools and peer facilitation (Anderson & Lawton, 2009; Farashahi & Tajeddin, 2018; Shaikh & Ali, 2025; Stoma *et al.*, 2020; Sun *et al.*, 2022; Svellingen *et al.*, 2021; Towne *et al.*, 2012). Building on recent quasi-experimental evidence demonstrating simulation superiority over traditional methods (Azizi *et al.*, 2022), such studies should specifically compare the relative effectiveness of different mentoring styles within simulation-based contexts.

✓ **Longitudinal Studies:** Research tracking graduates into their professional careers can reveal the sustained impact of simulation-based learning on critical competencies, such as strategic thinking and collaborative leadership (Crookall, 2010; Anderson & Lawton, 2009).

Cross-Institutional Research: Collaborative research initiatives spanning multiple institutions can generate findings with broader applicability and scalability, accounting for variations in institutional resources and demographic characteristics (Faria *et al.*, 2009).

✓ **Hybrid Model Investigation:** Future studies should examine whether phased or blended implementation strategies lead to improved learning outcomes, exploring optimal sequencing and integration of different approaches (Kolb, 1984; Biggs & Tang, 2011).

✓ **Cultural Adaptation:** Research exploring cultural adaptations necessary for successful implementation in diverse international educational contexts would enhance global applicability (Bach *et al.*, 2016).

✓ **Dynamic Systems:** Development of adaptive systems capable of responding to real-time feedback while incorporating gamified elements to create truly responsive learning environments (Nicholson, 2015; Deterding *et al.*, 2011).

✓ **Comparative Studies:** Research contrasting simulation-based approaches with traditional lecture-based instruction can clarify contexts where simulation demonstrates superior effectiveness in terms of student satisfaction and knowledge retention (Anderson & Lawton, 2009; Farashahi & Tajeddin, 2018).

✓ Disciplinary Extension: Extension of these approaches to other professional disciplines, including healthcare and engineering education, could reveal broadly applicable pedagogical principles (Biggs & Tang, 2011; Hanghøj, 2013).

Exploring these research directions can support evidence-based improvements in pedagogical practice, equipping all stakeholders to effectively address the evolving demands of contemporary business education.

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Service-Learning for Sustainable Development: Case-Study Evidence from War Conditions

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ABSTRACT

Higher education plays a crucial role in advancing sustainable development, particularly under wartime conditions. At the same time, the challenges posed by war have acted as a catalyst, prompting both teachers and students to actively engage in service learning within the educational process. As awareness, student values, and social responsibility shift, universities are increasingly focused on designing impactful courses centered on sustainable community development and social enterprise. To support this transition, it is imperative to encourage the adoption of methodologies that adhere to sustainability principles.

This article provides a theoretical analysis and examines practical cases that highlight the attributes positioning service learning as an effective strategy for promoting education for sustainable development. The pedagogical framework of service learning is explored and linked to sustainability principles within the university context.

Particular attention is given to the features of introducing and implementing service-learning projects during wartime in Ukraine and integrating them into education for sustainable development in higher education using a systemic approach. The results obtained confirm that the service-learning approach effectively implements all six principles of sustainable development in higher education under wartime conditions.

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Introduction

The European Commission's Renewed Agenda for Higher Education advocates for institutions to strengthen their civic engagement roles, emphasizing the critical importance of collaboration with local communities to foster social cohesion and inclusive development (UNESCO, 2017). This policy framework highlights the need for universities to transcend traditional academic boundaries and actively contribute to addressing complex societal challenges through participatory, community-centered approaches aligned with the United Nations Sustainable Development Goals (SDGs). Such an imperative becomes especially strong in conflict-affected regions, where educational systems face unprecedented disruptions.

Ukraine's ongoing war has profoundly impacted its higher education sector, causing institutional instability, displacing communities, and exacerbating social and environmental vulnerabilities. These conditions have intensified the demand for educational models that not only transmit knowledge, but which also cultivate resilience, ethical responsibility, and adaptive capacities among students – all key competencies for advancing sustainable development. Service-learning, which integrates academic study with structured community engagement, offers a transformative pedagogical approach that aligns closely with sustainability principles. By linking theory with practice, service-learning empowers students to engage with real-world challenges, contribute meaningfully to community recovery, and support sustain-

able development outcomes at local and regional levels.

Education in conflict and war zones is widely understood to face severe disruptions due to displacement, infrastructure distraction, loss of teaching personnel, and psychological trauma among learners (Burde *et al.*, 2017; Cardozo & Novelli, 2018). Yet, it also holds potential to strengthen community resilience and support recovery when grounded in flexible, community-based approaches (Winthrop & Kirk, 2008). Within this landscape, service-learning has emerged as a promising model for linking academic learning with community needs, though it remains under-examined in active conflict settings.

Investigations on service-learning highlight its effectiveness in embedding sustainability principles in higher education by fostering ethical behavior, systems thinking, civic responsibility, and social engagement (Eyler & Giles, 1999; Bringle & Hatcher, 2009; Furco, 2019; Aramburuzabala, 2023). It also supports glocalization and interdisciplinary collaboration, which are essential for addressing complex sustainability challenges (Braßler, 2018; du Plessis & Breshears, 2023). However, the literature notes persistent challenges related to institutional support, cultural adaptation, and the evaluation of long-term impacts (Jacoby, 2015; Butin, 2010).

The significance of service-learning becomes more pronounced in conflict-affected regions such as Ukraine. The latest research shows that the Russian-Ukrainian war has severely undermined progress toward the UN Sustainable Development Goals (SDGs), nullifying gains in 15 of the 17 goals previ-

ously achieved. Despite these regressions, research argues that the SDGs remain a vital framework for guiding development priorities, attracting financial support, and strengthening national resilience and post-war recovery (Chekh, 2023). This emphasis on resilience aligns with other studies, showing that Ukrainian universities increasingly use service-learning to reinforce university–community partnerships, strengthen social cohesion, and provide students with a sense of agency and purpose during wartime crises (Jordaan & Mennega, 2022; Kenworthy & Opatska, 2023; Greenfield, 2024; Kenworthy *et al.*, 2024).

Taken together, these studies suggest that service-based learning can help address immediate community needs, while cultivating sustainability competencies essential for recovery and long-term development. However, its implementation in active conflict zones remains insufficiently documented, underscoring the need for further case-study evidence.

1. Theoretical framework

Key concepts for sustainability in higher education, which describes service-learning as a teaching strategy for promoting sustainability, were well emphasized by Prof. Pilar Aramburuzabala (2025, p. 607).

First, to achieve the goals of sustainable development, pedagogy must incorporate interactive, experiential, and transformative learning approaches embedded in practical, real-world application.

Secondly, service-learning constitutes an experiential pedagogical approach that inte-

grates community engagement and critical reflection with academic study, fostering personal development and cultivating civic responsibility.

It is essential that service-learning in higher education incorporates numerous sustainability principles, including: ethical behavior, glocalization, holistic and complex system perspectives, transversality, and social responsibility.

It is important to recognize that using service-learning for sustainability education entails challenges such as securing institutional support, developing impact evaluation tools, adapting to cultural contexts, and deepening understanding of the methodology.

In 2005, the Conference of Rectors of Spanish Universities defined six “Basic Principles of Sustainability” in higher education: Ethical, Holistic, Complexity, Glocalization, Transversality, and Social Responsibility (2012, p. 6). The analysis of the suitability of service-learning for the development of these six principles was later provided by Aramburuzabala, P., & Cerrillo, R. (2023, p. 5-7). To highlight the appropriateness of service-learning as a mechanism for the cultivation of these six principles and to identify the corresponding interrelationships, we have presented them in Table 1.

Higher education should prioritize educating citizens who value individual dignity, freedom, and life, guided by equity, environmental harmony, and respect for future generations. Service-learning fosters ethical reflection, civic participation, and social responsibility by engaging students in meaningful community actions. Educators play a vital

Table 1. Linking Service-Learning with the Principles of Sustainability in Higher Education

Principles of Sustainability in Higher Education	Meaning and SL Linking
Ethical principle	Higher education fosters ethical, civic, and socially responsible individuals through service-learning.
Holistic principle	Higher education should adopt an interconnected approach to addressing social, economic, and environmental issues. Service-learning projects must focus on critical community needs, such as supporting vulnerable groups, promoting education, encouraging healthy lifestyles, or addressing environmental concerns. Students should link these actions to broader contexts, fostering critical perspectives on sustainability, social justice, and systemic inequalities.
Complexity principle	SL combines systemic and transdisciplinary approaches to address real-world complexities, helping students to develop critical thinking and understand interconnected social, economic, and environmental systems.
Glocalization principle	Service-learning connects local and global issues by integrating curricular content with real-world experiences, making learning meaningful and engaging. It helps students collaborate with communities, analyze complex problems, take action, and reflect on the broader implications of their efforts. Reflection is central, enabling students to understand social issues, develop critical thinking, and propose solutions for future challenges.
Transversality principle	Service-learning, as an active pedagogy, connects community service with academic curricula, enriching all fields of study. It supports sustainable development by linking knowledge to real-world problem-solving, promoting social justice, and contributing to the Sustainable Development Goals (SDGs).
Social responsibility principle	The SL approach develops professional and civic skills, fosters social responsibility, and supports social justice and SDGs. Service-learning involves partnerships with various institutions, benefiting students, society, and educators by linking academic knowledge to real-world challenges. Projects are designed for continuity, empowering communities to sustain them independently, making service-learning a powerful tool for sustainable development.

Source: Developed by the author.

role in planning and guiding these experiences, making ethical considerations explicit, and encouraging discussions on controversial issues. This approach helps students develop self-esteem, embrace diversity, and improve academic and civic outcomes through active participation and reflection (Aramburuzabala & Cerrillo, 2003).

Higher education must integrate social, economic, and environmental dimensions to address global challenges like inequality, poverty, and environmental degradation.

Service-learning projects should focus on critical community needs, such as supporting vulnerable groups, promoting education, encouraging healthy lifestyles, or tackling environmental issues. These initiatives should help students understand broader social, cultural, and environmental contexts, fostering critical perspectives on sustainability, power dynamics, and social change (Baldwin *et al.*, 2007).

Service-learning adopts systemic, transdisciplinary approaches to address the com-

plexity of social, economic, and environmental issues through real-world actions. Participants develop systemic thinking, connecting problems to their broader contexts, and understanding the interconnections between various systems. Beyond action, service-learning emphasizes critical analysis and fosters inclusion, tolerance, and multicultural values, blending intellectual engagement with activism (Aramburuzabala, 2019).

Service-learning bridges local and global issues by integrating curricular content with real-world experiences. Meaningful, community-relevant activities engage students, helping them to collaborate, analyze complex problems, take action, and reflect on their global impact. Reflection is key, enabling students to understand social issues, develop critical thinking, and propose solutions for future challenges (Brower, 2017; Cushman, 2002; Kenworthy-U'Ren & Peterson, 2005).

The transversality principle involves integrating sustainability competencies across all disciplines and levels in higher education. Service-learning, as an inclusive and active pedagogy, connects community service with academic curricula, enriching all programs. It supports sustainable development by linking knowledge to problem-solving focused on social justice and the SDGs (Brower, 2017).

The principle of social responsibility highlights higher education's role in community sustainability by addressing social, economic, and environmental challenges through collaboration and service-learning. Service-learning fosters civic competencies, social responsibility, and community engagement, while promoting social justice and the SDGs. It benefits

students, society and educators by linking academic knowledge to real-world problems, and fostering trust among institutions. Sustainability is ensured when projects empower communities to maintain initiatives independently, making service-learning a key tool for sustainable development (Aramburuzabala & Cerrillo, 2003; Brower, 2017; Kenworthy-U'Ren & Peterson, 2005; Pearce, 2009).

2. Methodology

A case study is a methodological research approach aimed at comprehensively studying a real phenomenon within certain parameters (time, place, subject, etc.) in order to achieve a deep contextual understanding of the phenomenon or process (Coombs, H. 2022).

In this study, we applied the following criteria for case selection:

1. Project participants: projects implemented by students of the Ukrainian Catholic University (UCU).
2. Project duration: initiated after 2022; some may still be ongoing.
3. Relevance: addresses a socially significant or urgent problem.
4. Typological diversity: projects represent a variety of thematic areas.
5. Alignment with the principles of sustainability in higher education.

This article analyzes service-learning projects implemented by UCU students, as our research focuses on service-learning as an effective strategy for promoting education aimed at sustainable development.

According to Aramburuzabala (2023), the service-learning method responds to the ulti-

mate goal of education: to educate competent citizens capable of transforming society. Furco and Norvell (2019) highlighted that key components of service-learning methodology are:

- Integration in the curriculum
- Student voice
- Partnership with the community
- Reciprocity
- Reflection
- Moral values

The Ukrainian Catholic University was the first university in Ukraine to officially implement service-learning at the institutional level, beginning to do so in 2019 (Ukrainian Catholic University, 2022a).

Given the duration of the implementation, one may expect a considerable variety of projects. The timeframe for analyzed cases spans from 2022 to 2025, thus covering the period of Russia's full-scale invasion of Ukraine. This article examines how service-learning contributes to sustainable development during wartime conditions. Some projects remain ongoing at the time of writing.

In terms of relevance, we selected projects that addressed critical social issues during the war, including: support for shelters housing internally displaced persons (IDPs), legal assistance for military personnel and veterans, psychological support initiatives, and information campaigns advocating for the withdrawal of international companies from the Russian market, among others.

An essential selection criterion was the alignment with the core principles of sustainability in higher education. Many of these projects were interdisciplinary in nature, and could be mapped to multiple sustainability-related principles. However, for the pur-

poses of this study, we identified the dominant principle most strongly represented in each case, while acknowledging that most projects align with multiple aspects of education for sustainable development.

Since this study focuses on service-learning cases, it was also essential to ensure that the selected projects meet core characteristics of service-learning, as outlined in foundational literature (Stanton, Giles, & Cruz, 1999; Bringle & Hatcher, 1995). In particular, the projects demonstrate:

- Service-learning integration: the service provided to the community is intrinsically connected to the students' academic learning outcomes;
- Community need-driven approach: the projects address authentic needs articulated by community partners;
- Experiential / active learning: students gain knowledge not only through theory, but also through direct engagement and collaboration with communities;
- Civic engagement: students develop active civic awareness, social responsibility, and a deeper understanding of democratic participation.

3. Case studies

Case Title:

Shelter for Internally Displaced Persons

Academic Program:

Social Work (professional practice)

In the early days of the full-scale invasion, a temporary shelter for internally displaced persons (IDPs) was established at the premises of the Faculty of Philosophy and Theology at the Ukrainian Catholic Univer-

sity (UCU), supported by benefactors from Germany, and organized by UCU volunteers. Over the course of three months, the shelter accommodated 340 individuals, the majority of whom were persons with disabilities and their family members.

For students enrolled in the Bachelor's Program in Social Work, this initiative represented a clear example of service-learning, as they undertook their field practicum within the shelter (Ukrainian Catholic University, 2022 b). Engaging directly with people in urgent need of support provided students with a unique opportunity to apply classroom-acquired knowledge to real-life situations, while simultaneously developing both professional and civic competencies.

A student of the Social Work program emphasized that the assistance extended beyond merely offering temporary housing: "It's also about helping people access administrative services, supporting them in solving everyday issues, and sometimes simply listening to them and offering psychological support. Often, people ask questions we are not able to answer – such as how to live after all this, where to go after leaving the shelter, or how to find employment" (Ukrainian Catholic University, 2022b).

Implemented Principle: This case clearly demonstrates the implementation of the *social responsibility principle*, as it fosters the development of professional and civic skills, promotes social responsibility, and contributes to social justice and the advancement of the Sustainable Development Goals (SDGs). Service-learning, as illustrated by this case, involves collaboration with various institutions, and provides mutual benefit to stu-

dents, educators, and society by linking academic learning with real-world challenges. We can also assume that the *ethical* principle is depicted here.

Case Title: Legal Clinic

Academic Program:

Law (Professional Practice)

The Legal Clinic at the Ukrainian Catholic University (UCU), operating within the UCU Law School since 2017, provides students with the opportunity to offer real legal assistance to those in need. The Clinic primarily focuses on serving individuals most affected by the war: veterans, wounded service members, and civilians who have sustained injuries as a result of hostilities.

As a platform for applied legal education, the Clinic allows students to develop practical skills through direct client interaction, while addressing pressing legal needs. Students engage in real-life legal practice, including client consultations, legal document drafting, and case preparation – particularly in matters related to war-related injuries and veteran rights.

"The Legal Clinic is a mandatory component of the third-year curriculum at the UCU Law School, spanning two semesters. It begins on September 1 with lectures and training sessions designed to prepare students for client interaction – teaching communication strategies, information gathering, relationship-building, and document writing. A critical part of the training involves legal ethics and a comprehensive study of the legal framework for addressing veterans' issues. We work through real cases to illustrate the legal chal-

enges,” explains Head of the UCU Legal Clinic (Ukrainian Catholic University, 2023).

The theoretical phase of the course lasts one month, after which students are allowed to consult clients directly. Each student has scheduled duty hours. The Clinic operates daily (excluding weekends), ensuring that legal support is continuously available. In the second semester, Master’s students join the practice and provide advanced consultations and legal aid.

Given its focus on war-affected populations, the UCU Legal Clinic closely cooperates with rehabilitation centers located in Lviv, such as *Unbroken* and *Superhumans*. Students not only assist with consultations and claim preparations, but also attend court hearings and observe case proceedings. According to Head of the UCU Legal Clinic, the most common clients are military personnel who have sustained combat injuries, often resulting in amputations. These individuals frequently face challenges in obtaining necessary documentation and receiving appropriate compensation during treatment. While proactive engagement with military units (e.g., through reports and formal requests) often helps resolve such cases, some require litigation.

Another growing client category includes families of missing persons. “In some instances, service members have been missing for over two years, with their remains located in occupied territories. Family members understand that there is sufficient evidence to presume death in combat. In such cases, we prepare court petitions for the legal declaration of death,” notes the head of the UCU Legal Clinic (Ukrainian Catholic University, 2023).

Implemented Principle: This case exemplifies the implementation of the *transversality* principle in service-learning. It connects community service with academic curricula, enriching all fields of study. By linking legal knowledge to real-world problem-solving, it contributes to sustainable development, promotes social justice, and advances the United Nations Sustainable Development Goals (SDGs). The case also reflects a *holistic approach* to higher education, emphasizing the need to address social, economic, and environmental challenges in an integrated and responsive manner.

Case Title:

Psychological Counseling Office

Academic Program:

Master’s Program in Clinical Psychology (Professional Practice)

The consultants of the Psychological Counseling Office at the Ukrainian Catholic University (UCU) are students enrolled in the Master’s Program in Psychology and Psychotherapy, with a focus on psychodynamic therapy. These students possess the necessary level of theoretical and practical training and complete their practicum under the supervision of certified psychotherapists, who serve as faculty members of the Department of Psychology and Psychotherapy at UCU. Participation in the Counseling Office is an integrated component of their professional practice.

Created to provide free and confidential psychological support, the Counseling Hub is open to all members of the university community, including students, faculty, and administrative staff. During the initial months following the full-scale Russian invasion, the

demand for psychological services at the Hub rose sharply, reflecting the urgent collective need for emotional support and the development of psychological resilience.

“As soon as the full-scale invasion began, we started offering consultations on a daily basis. Everyone had to learn how to live in the new reality, because no one is truly prepared to live during war. This has become a new collective experience for all of us. The consultations, conducted under our supervision, are fully anonymous. The core concept of the Counseling Office is to help individuals make sense of their experiences. It is a way to process and work through one’s emotions,” explains an associate professor at the Department of Psychology and Psychotherapy (Ukrainian Catholic University, 2022c).

Implemented Principle: This case demonstrates the application of both the *ethical principle* and the *social responsibility principle*.

Case Title: Supporting Children from Vulnerable Categories

Educational Program:

Applied Science (as part of the course “*Creative Problem Solving*”)

This project represents the students’ response to the growing number of orphaned children during the war. Throughout the semester, students collaborated with partners – the municipal institution “*MHB Spilnota-Ridni*” and the charitable organization “*Ridni Charitable Foundation*.” Using design-thinking methodology, they developed solutions aimed at improving the developmental and transitional experiences of graduates from institutional care facilities.

Another core objective of the project was to explore strategies for promoting alternative forms of family-based care – including adoption, guardianship and custody, foster care, and family-type children’s homes. (Ukrainian Catholic University, 2024).

Implemented Principle: This case serves as an example of the application of the principle of *complexity*.

Case Title: International Business and Global Markets

Educational Program: *Master’s Program in Business Administration*

The full-scale invasion stimulated the development of civic initiatives in Ukraine aimed at pressuring international companies to exit the Russian market. Within the course “*International Business and Global Markets*,” students actively worked on an information campaign advocating for the withdrawal of foreign businesses from the aggressor country.

As part of the course, students collaborated closely with the #BoycottRussia movement, and engaged in writing letters and creating video appeals on social media. The most successful case involved Samsung. The regional office in Ukraine pressured the central office in Korea to make a decision to exit the Russian market, and the students’ letter was very helpful in this advocacy effort. The students’ initiative was also supported by Coursera – one of the world’s leading educational platforms.

“I am often asked abroad whether our university operates during the war and what our students are doing. Well, our students are doing a lot! Today, UCU is much more than a

university: besides academic processes, we are actively engaged in volunteer activities – providing humanitarian aid, maintaining active communication abroad by shaping new ideas about Ukraine, creating online media, and hosting refugees,” shares Sofiya Opatska (Ukrainian Catholic University, 2022d).

Implemented Principle: This case exemplifies the *principle of glocalization*, as it connects local and global issues by integrating curricular content with real-world experiences, thereby making learning meaningful and engaging.

Case title: ServU

Educational Program:

Professional practice for master’s students in Public Administration and bachelor students of Sociology.

The ServU project, implemented within the framework of the Erasmus+ program, seeks to strengthen collaboration between Ukrainian higher education institutions (HEIs) and local territorial communities in order to contribute to Ukraine’s recovery through the integration of service-learning (SL) into the educational process. This project introduces an innovative pedagogical model aimed at fostering students’ civic competencies, with a particular focus on addressing the specific needs of three categories of communities impacted by the war:

1. Communities hosting large numbers of internally displaced persons (IDPs);
2. Communities located near active frontlines, where critical infrastructure has been severely damaged;
3. Recently liberated communities that were previously under Russian occupation.

As part of the project, students were primarily responsible for preparing and conducting focus groups, reviewing relevant literature, analyzing transcripts, and formulating conclusions. These activities directly support the main objectives:

- Adapt the service-learning (SL) methodology for wartime and recovery;
- Remodel the Community Needs Assessment (CNA) for wartime and recovery, considering three types of local territorial communities affected by the war;
- Develop students’ skills of active citizenship through service-learning courses;
- Activate collaboration between the European Union, Ukrainian HEIs, and local territorial communities in their efforts for recovery of Ukraine through the implementation of service-learning courses;
- Create a Ukrainian Service-learning Resource Platform for knowledge sharing, transfer of best service-learning practices, and networking.

(ServU Project (Ukrainian Catholic University) n.d.).

Implemented Principle: This case clearly demonstrates the implementation of the *glocalization principle*.

Case title: What Is a Human Being?

Educational Program: *Students of different bachelor programs.*

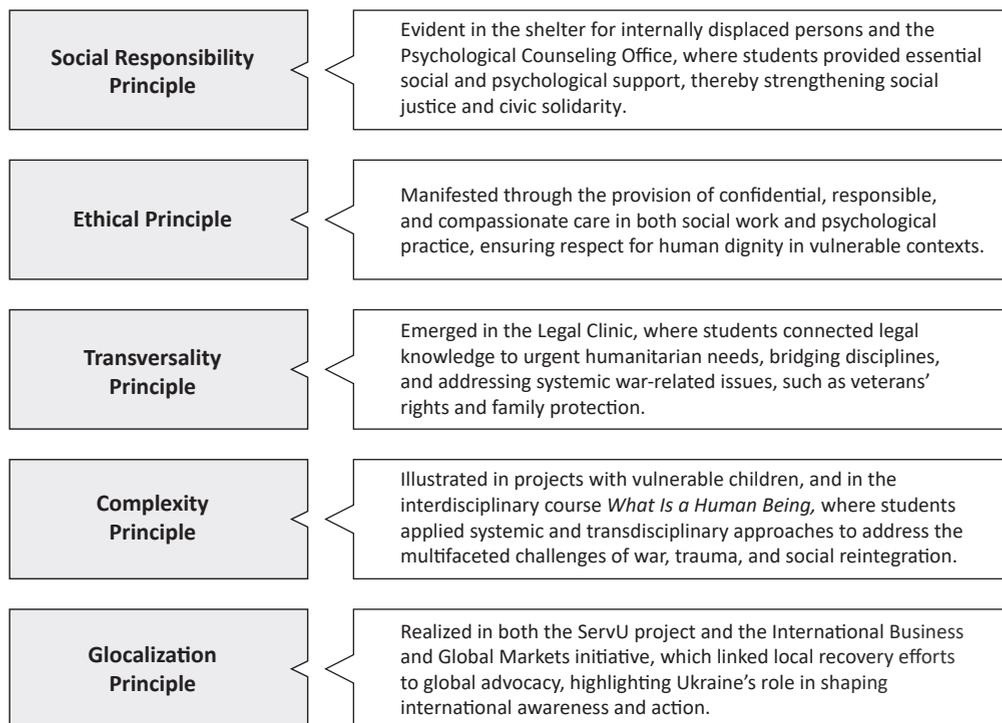
As part of the elective curriculum course “What Is a Human Being? Selected Questions in Theology and Philosophy,” students implemented the project *People of Ukraine* in collaboration with the team behind the initiative *Small Stories of the Great War*. The core idea

of this initiative is to find and share the stories of ordinary Ukrainians who demonstrate resilience, courage, and self-sacrifice in the face of war. This mission was also embraced by the students of the Core Curriculum project. They conducted interviews and created social media publications highlighting the lived experiences of their protagonists.

Implemented Principle: *Complexity principle*. We can see here that SL combines systemic and transdisciplinary approaches to address real-world complexities, helping students develop critical thinking and understand interconnected social, economic, and environmental systems.

The case studies of service-learning projects (SL) at the Ukrainian Catholic University illustrate how the integration of academic curricula with real-world challenges during wartime fosters both professional and civic growth among students, while directly supporting communities in need.

Figure 1 summarizes SL cases at the Ukrainian Catholic University, in accordance with sustainability principles in higher education. These cases demonstrate that SL is not only a pedagogical innovation, but also a strategic response to societal crises. By cultivating resilience, critical thinking, and civic responsibility, SL positions higher education



Source: Developed by the author.

Figure 1. Service-learning Cases at the Ukrainian Catholic University, in Accordance with Sustainability Principles in Higher Education

as a driving force for sustainable development and post-war recovery, while equipping students to serve as both competent professionals and engaged global citizens.

Conclusions

Armed conflict presents multifaceted challenges, ranging from the immediate needs of survival to the long-term pursuit of development within the constraints of disrupted infrastructure and limited resources. In such a context, service-learning emerges as a vital pedagogical strategy; one that not only sustains educational processes, but also enhances their relevance and impact. The integration of service-learning into university curricula enables students to engage meaningfully with societal needs, while acquiring essential academic and civic competencies.

Through the implementation of service-learning projects, key principles of sustainable development are actively embodied. These include an ethical orientation towards community engagement, a holistic and interdisciplinary approach to learning, responsiveness to complex real-world problems, and the principle of glocalization – connecting local action with global understanding. Furthermore, the projects foster social responsibility and transversality, encouraging collaboration across disciplines and sectors. In times of crisis, such educational practices play a critical role in cultivating resilience, solidarity, and informed citizenship among students and institutions alike.

In this article, we examined seven cases of integrating service-learning into the aca-

demical courses of students at the Ukrainian Catholic University. Analyzing these cases in the context of service learning allows us to conclude that, during wartime, they all address issues caused or exacerbated by the war: the protection of military and veterans' rights, assistance to internally displaced persons, information campaigns supporting disengagement from the aggressor state, the protection of children from vulnerable categories, and others. Clearly, these issues are among the most pressing for Ukrainian society, which explains the strong interest they generate among students. From a pedagogical perspective, contributing to the resolution of these problems enhances students' sense of personal significance and agency, develops practical experience, and enables them to apply the knowledge they have acquired in real-world contexts.

Limitations

Although the service-learning projects analysed above impacted positively on both communities and the university, and are consistent with sustainable development goals in higher education, this study presents several limitations that should be taken into account when interpreting its findings:

- First, the study is situated within the specific context of Ukraine's ongoing war, and the unique social, institutional, and logistical challenges associated with this environment may restrict the generalizability of the results to other countries or to peacetime conditions;
- Second, the absence of longitudinal data limits the ability to assess the

long-term impacts of service-learning on sustainable development outcomes, particularly given the rapidly changing wartime circumstances;

- Thirdly, the cases selected for analysis may also reflect a positive bias, as they focus on successful or early-adopting implementations of service-learning, potentially overlooking less effective or more complex examples;
- Finally, the study does not employ quantitative metrics to evaluate the implementation of sustainability principles, relying instead on qualitative interpretations. While this approach provides valuable insights, it limits the capacity to measure effectiveness with precision.

Future research would benefit from broader sampling, a mixed-method analysis, and long-term evaluation of service-learning initiatives under both wartime and post-war conditions.

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The Attitudes of Georgian Youth towards Mental Health

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ABSTRACT

Mental health problems are widespread among youth worldwide, including in Georgia. This qualitative study explored how Georgian university students (aged 18–24) define mental health, what supports their well-being, and which factors hinder it. Using semi-structured in-depth interviews with 25 participants from multiple Georgian universities, data were analyzed through thematic analysis.

The research revealed that Georgian youth describe mental health as including a feeling of peace and well-being. In their opinion, hindering factors for mental health include psychological trauma, the loss of a loved one, and social and economic factors. On the other hand, contributing factors for maintaining good mental health include physical activity, positive communication with others (friends and loved ones), listening to music, and traveling.

Research participants noted that the use of drugs and psychotropic substances has a mostly negative impact on mental health. They also emphasized that moderate use of the Internet and social networks is necessary for maintaining mental health. The findings underline the need for improved, accessible mental health services and prevention programs targeting Georgian youth.

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Introduction

Mental health issues have become a significant global concern among young people. Research shows that a substantial proportion of college students experience mental health challenges, with around 25% of university students affected (American College Health Association, 2013). Yet, despite the prevalence of psychological distress, many students remain reluctant to seek support from campus counseling services (Eisenberg *et al.*, 2012).

Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and to contribute to their communities (World Health Organization, 2022). It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships, and shape the world we live in. Mental health is a basic human right, and it is crucial to personal, community and socio-economic development (World Health Organization, 2022).

Enjoying good mental health means we are better able to connect, function, cope and thrive. Mental health exists on a complex continuum, with experiences ranging from an optimal state of well-being to debilitating states of great suffering and emotional pain. People with mental health conditions are more likely to experience lower levels of mental well-being, but this is not always or necessarily the case (World Health Organization, 2022).

The aim of this research is to address the following questions: How do Georgian youth

define mental health? What factors hinder them from maintaining good mental health? And what factors support Georgian youth in preserving their mental well-being?

1. Literature Review

According to a UNICEF report, young people aged 18-24 in Georgia are particularly vulnerable to mental health issues, mirroring global trends (UNICEF, 2023).

Key findings indicate that:

- 89% of students consider mental health a significant problem among their peers, with 68% viewing it as a very important issue;
- 62% of students know someone they believe needs professional mental health help;
- 33% of students aged 18-24 have experienced suicidal ideation, with higher rates among females (37%) than males (28%);
- 44% of students in this age group have never discussed their mental health feelings and experiences with anyone (UNICEF, 2023).

The mental health of U.S. college students has been a topic of research for decades. Research has consistently shown that poor mental health is a significant issue affecting students nationwide (American College Health Association, 2013). Anxiety and depression are prevalent concerns, with many students struggling to cope with these conditions (Eisenberg *et al.*, 2012). According to Levin *et al.* (2018), nearly 50% of college students meet the criteria for a diagnosable psychiatric disorder, with anxiety and depression be-

ing the most common mental health issues. Anxiety is a complex phenomenon, encompassing self-perceptions, beliefs, emotions, and behaviors in response to external stimuli (Chin-Newman & Shaw, 2013). College students often experience anxiety in response to unfamiliar or uncomfortable environments, such as transitioning from high school to college, where they may feel uncertain about their relationships with peers and professors (Chin-Newman & Shaw, 2013). This anxiety can be particularly challenging for students navigating significant life changes.

Depression is a prevalent mental health concern affecting many U.S. college students. Research suggests that a substantial number of students experience depression, which can be triggered by various situations and circumstances (Eisenberg *et al.*, 2012). This serious mental health issue can lead to feelings of isolation from family, peers, and academic life (Read *et al.*, 2006). Some students may avoid unfamiliar situations, such as taking certain courses, due to fear or low confidence. For instance, students may struggle with math anxiety, feeling uncertain about how to succeed in mathematical courses, which can exacerbate feelings of depression (Quan-Lorey, 2017).

One factor contributing to the persistence of stigma is the perception of mental health as an illness. Labels such as "illness" and "disease" contribute to public feelings of prejudice, fear, and a desire for distance from individuals assigned these labels (Read *et al.*, 2006). The medicalization of mental health issues can perpetuate stigma and narrow ideas about mental healing in an ableist society (Schrader *et al.*, 2013). Ableism and

medicalization may contribute to societal prejudice, internalized stigma, and limited understanding of mental healing (Schrader *et al.*, 2013).

Mental health oppression is a phenomenon documented by Holley, Stromwall, and Tavassoli (2015) within the context of social work education. Through the process of socialization, individuals with mental illness may internalize oppression by assimilating cultural norms that stigmatize mental illness, such as avoiding those labeled as "crazy," accepting stereotypes that depict people with mental illness as incompetent, and believing myths that portray recovery as impossible. Furthermore, the inadequacy of accommodations in higher education, despite the provisions of the Americans with Disabilities Act, can exacerbate this issue. As a result of internalized oppression, individuals with mental illness may develop a diminished sense of self-worth, experience shame, perceive jokes about mental illness as justified, and even participate in discrimination against others with mental illnesses, thereby colluding with their oppressors (Holley *et al.*, 2015).

Depression can lead some students to engage in harmful habits and addictions, including excessive drinking. Research indicates that a significant proportion of students struggle with serious drinking-related problems, with over 45% participating in binge drinking and 20% experiencing an alcohol-use disorder (Levin *et al.*, 2018). Alcohol is often readily available at social gatherings, and some students may turn to it as a coping mechanism for their mental health issues. For some, drinking serves as a temporary

escape from depression, allowing them to conceal their struggles from others (Levin *et al.*, 2018). This highlights the need for institutions to provide support and resources for students dealing with addiction, addressing the underlying issues that contribute to substance abuse.

Depression has been shown to result in the development of unhealthy eating habits, including eating disorders, among college students (Lewis & Huynh, 2017). These disorders can emerge at any point during a student's academic career, and are often linked to intense anxiety and depression. Research suggests that students may use food as a coping mechanism for their mental health issues, seeing them conforming to their social environment in an attempt to manage their emotions (Stephens & Wilke, 2016). Additionally, negative life experiences, such as academic failures, job loss, or relationship problems, can also trigger eating disorders (Kass *et al.*, 2017). This highlights the need for students to seek healthy coping mechanisms and support for their mental health, rather than resorting to maladaptive behaviors.

Despite the availability of mental health resources, many students experiencing mental health concerns fail to seek help, highlighting the need to understand the underlying barriers (Jennings *et al.*, 2017). Research has identified several factors that contribute to this issue, including stigma associated with seeking help, negative attitudes towards treatment, and practical obstacles, such as limited time and financial resources (Jennings *et al.*, 2017). The stigma surrounding mental health problems is particularly significant,

with two distinct types: self-stigma and perceived stigma (Levin *et al.*, 2018). Self-stigma refers to the lack of understanding or acknowledgment of the severity of one's mental health condition, leading some students to exacerbate their symptoms as they worsen. This highlights the importance of providing support and education to help students understand the critical nature of mental illnesses, and the benefits of seeking treatment.

According to the World Health Organization (2022), people stop seeking help for mental health due to the following factors:

- Poor quality of services;
- Low levels of health literacy in mental health;
- Inaccessible or unaffordable mental health services;
- Stigma and discrimination.

Research by Shea *et al.* (2019) highlights the significance of students' attitudes towards seeking mental health support. The study suggests that negative perceptions of mental health counseling may stem from students' limited understanding and recognition of mental health issues. Some students may be uncertain about the causes of their mental health problems, or the appropriate course of action, leading to a negative attitude towards seeking help (Shea *et al.*, 2019). This attitude can create a barrier, preventing students from accessing mental health services and receiving the support they need.

Several factors can hinder students from accessing mental health services, with a notable barrier being a lack of time, making it challenging for students to schedule treatment (Ennis *et al.*, 2019). The demands of

academic life, combined with the need to balance independence and financial responsibilities, can be overwhelming. Many students have to work to support themselves, forcing them to prioritize work, academics, and then mental health needs. Some college students do not have financial support from their families, and, unfortunately, this often means that students are unable to align their schedules with the available hours of mental health services, further limiting their access to support (Nguyen-Feng *et al.*, 2017).

Although students may seek institutional resources and peer support, they often struggle to locate mental health resources on campus. The transition to adulthood can be particularly challenging, with many students facing significant difficulties (Jorgensen *et al.*, 2018). Research has shown that a substantial number of college students experience mental health issues, with over 60% reporting overwhelming anxiety and 38% experiencing depression during their undergraduate studies (Drouin *et al.*, 2018).

A recent study conducted in Australia underscores the imperative for augmented investment in prevention research that targets a broad spectrum of social determinants and health behaviors, as well as their intersecting effects on youth mental health (Ross *et al.*, 2025). The study's findings highlight the need for governmental intervention to address the economic drivers of mental health, enhance timely access to subsidized mental health support services, and optimize the capacity of educational institutions to promote student well-being and mental health (Ross *et al.*, 2025).

2. Method

This study employed a qualitative research approach to examine the mental health experiences of Georgian youth. Through in-depth interviews, I explored participants' subjective perceptions and understandings of mental health. This approach enabled a detailed examination of how mental health is defined, experienced, and navigated by young people in Georgia, capturing the complexities and nuances of their experiences.

To facilitate an in-depth discussion on mental health issues among respondents, I employed a qualitative research method – specifically, through semi-structured in-depth interviews. I developed an interview guide tailored for Georgian youth, which addressed topics such as the definition of mental health, factors that hinder mental well-being, and factors that support it. As part of this study, students aged 18–24 from various faculties and universities across Georgia were interviewed. The use of qualitative methods allowed participants to freely express their thoughts and respond to questions in their own words, providing rich, detailed insights into their experiences and perceptions of mental health (Barker *et al.*, 2002). These methods enabled the uncovering of diverse perspectives and opinions shaped by individual experiences (Alderfer & Sood, 2016) and subjective worldviews (Willig, 2008).

The data collection process involved conducting semi-structured interviews with a sample of Georgian youth. The interviews were carried out by me, Natalia Mchedlishvili, and my student, Ekaterine Mazmishvili,

who was a peer of the respondents and in her fourth year of studying psychology at Sulkhana-Saba University. A total of 25 interviews were conducted with respondents, comprising 13 female participants and 12 male participants. The participants were students aged 18-24, and were recruited from a diverse range of universities in Georgia (10 institutions in total).

The research design consisted of a two-phase approach, commencing with a pilot study involving five semi-structured interviews with students from Ilia State University and Sulkhana-Saba University. Following the pilot phase, the interview guide was refined and finalized. Subsequently, an additional 20 interviews were conducted with students from the aforementioned universities, as well as with students from Tbilisi State University and the Caucasus University in Tbilisi. The participants represented various faculties, among them Social Sciences, Business Administration, International Relations, Mathematics and Computer Science, Natural Sciences, Law, and Humanities. The sample included participants from various stages of their academic programs, ranging from first-year Bachelor's students to final-year Master's students. A purposive sampling strategy was employed to select participants. Interviews were conducted either face-to-face in a private room at the university, or via Zoom (www.zoom.us), and were audio-recorded for subsequent data analysis. Each interview lasted approximately one hour and was conducted in Georgian.

The audio recordings of the interviews were transcribed verbatim, resulting in de-

tailed transcripts of each conversation. A thematic analysis was conducted to analyze the data, using an inductive approach to explore participants' views and attitudes in depth. Through a systematic and rigorous review of the transcripts, codes and overarching themes were developed using NVivo qualitative data analysis software. The data analysis was structured around the three core research questions, with each question examined within three thematic categories: Definition of Mental Health, Hindering Factors, and Facilitating Factors. This analytical approach enabled a comprehensive and nuanced interpretation of participants' narratives, facilitating the identification of key patterns, recurrent themes, and underlying meanings across the dataset.

In the subsequent stage of the research, thematic analysis served as the primary methodological framework, being fully aligned with the overall research objectives. Thematic analysis is a widely used method in qualitative research which allows for the identification of key patterns and themes within data (Braun & Clarke, 2006). This approach involves a systematic search for themes that are essential for describing a phenomenon and establishing connections to broader social issues (Daly, Kellehear, & Gliksman, 1997). According to Braun and Clarke (2006), thematic analysis is a fundamental method for qualitative research, and they proposed a six-phase framework for conducting it, which was applied in this study. Notably, thematic analysis is a flexible method that can accommodate various epistemological positions, as it does not presuppose a specific theoretical

framework (Braun & Clarke, 2006). This approach allows researchers to explore how individuals assign meanings to their experiences, and how these meanings are shaped by the broader social context (Priya & Dalal, 2016). By employing thematic analysis, this study aimed to gain a deeper understanding of the participants' experiences and perspectives, and to identify the underlying themes and patterns that emerged from the data.

3. Results

The thematic analysis of the interview transcripts revealed that mental health is a multifaceted concept that encompasses various aspects of an individual's internal state, including their mental, emotional, and psychological well-being. The Georgian youth participants noted that mental health influences their feelings, thoughts, and social interactions. The analysis also identified several key hindering factors that can negatively impact mental health, including difficulties in relationships, low socio-economic status and/or limited financial resources, substance abuse and addiction, traumatic experiences, and excessive social media consumption. Conversely, the participants highlighted several facilitating factors that can promote good mental health, such as engaging in everyday activities like socializing with friends and loved ones, listening to music, physical activity, watching movies, and reading books. Additionally, they emphasized the importance of exploring new activities, such as developing new hobbies, cultivating positive thinking, daydreaming, and traveling. Furthermore, the participants underlined the

significance of timely access to mental health services, their ease of accessibility, and the provision of high-quality mental health services in maintaining good mental health.

3.1 Theme 1: Defining Mental Health

During the interviews, participants engaged in in-depth discussions about the concept of mental health, and provided their personal definitions and interpretations. The participants stated that mental health is perceived as an emotional and psychological state that encompasses feelings of well-being, the ability to cope with everyday difficulties and triggers, and the capacity to be productive, fruitful, and engaged in public life. These components were identified as essential elements in defining the meaning of mental health, highlighting the participants' nuanced understanding of this complex concept. The participants' perspectives on mental health underscored the importance of emotional and psychological well-being, as well as the ability to navigate life's challenges and contribute to society in a meaningful way.

"In my opinion, mental health refers to a person's emotional, psychological and social well-being, and expresses a state in which a person feels good. A mentally healthy person realizes that he or she has the ability to cope with the normal difficulties and stresses in life, and to be productive and involved in social life." – Participant 17 (female, 21 years old)

Some participants highlighted the significance of mental health in individuals' lives, emphasizing its role in facilitating healthy relationships, achieving life goals, and effectively coping with life's challenges. According

to these participants, good mental health is seen as a crucial factor in enabling individuals to navigate life's demands and pursue their objectives successfully.

"A person also realizes that they can cope with the difficulties of life, of which there are many around us. Anxiety, depression, stress are mental health problems, but people are called human beings because they have the ability to cope with these problems." – Participant 5 (male, 19 years old)

3.2 Theme 2: Hindering Factors for Mental Health

The participants identified several factors that can have a detrimental impact on mental health, which they considered to be hindering factors. These factors include psychological trauma, loss of a loved one, socio-economic challenges, substance abuse/addiction, and excessive social media use. The participants emphasized the significant role of social factors in shaping mental health, highlighting the importance of a supportive social environment for personal well-being. They noted that problems in social life, including challenges in interpersonal interactions and in managing social status, can contribute to mental health difficulties. In the context of their age group, the youth stressed the importance of interpersonal relationships, which are often shaped by their active involvement in various social activities during their university years. The participants' experiences and perspectives underscored the interconnectedness of social life and mental health, particularly during this critical developmental stage.

"Social factors are also important, as that is the environment which I have to live in. If I have to be in an environment which radically differs from my values and views, it is clear that this will create discomfort. And if the chances of correcting it are small, it is clear that this will affect (my) mental health." – Participant 14 (female, 22 years old)

The participants further elaborated on the concept of social status, defining it as an individual's position or standing within a particular social group or community. They noted that social status can vary across different contexts and environments, and that a change of environment, such as moving to a new city for university studies, can lead to a perceived loss of social status. Specifically, students who had a high social status in their native environment may struggle to establish a similar status in a new and unfamiliar setting, potentially leading to mental health issues. This highlights the challenges that individuals may face when navigating different social environments, and the potential impact on their mental well-being.

"In my opinion, low social status or its change also affects the mental health of young people. Sometimes, when you become a student, you go to a big city to continue your studies. You have to live in a different environment, you have to regain your social status – it is quite a stressful process and it also affects a person's mental health." – Participant 22 (male, 19 years old)

In addition to social factors, the participants also highlighted the significant role of economic factors in influencing mental health. They identified low income or pov-

erty as a potential barrier to mental well-being, suggesting that an individual's ability to secure basic living conditions is a crucial determinant of their overall quality of life and mental health. According to the participants, economic stability is essential for maintaining good mental health, and financial difficulties can have a profound impact on an individual's well-being.

"Social and economic factors have a big influence on mental health. A person's quality of life is significantly determined by the extent to which they can satisfy their basic, essential needs. This includes nutrition, health, and self-care. If you don't have a stable economic situation, this directly affects a person's psyche. If you don't have the opportunity to purchase important and necessary things, you obviously start to get nervous, which is followed by depression." – Participant 4 (female, 22 years old)

The participants held ambivalent views regarding the use of drugs as a coping mechanism for stress and negative emotions. While some participants believed that the moderate use of so-called "recreational drugs" could potentially have a beneficial effect on mental health, the majority of participants considered drug use to be a significant hindering factor for mental well-being. According to most participants, the risks associated with drug use outweigh any potential benefits, and they claimed that it can ultimately exacerbate mental health issues rather than alleviate them.

"The use of various 'recreational drugs' can help a person relax and have fun, which has a positive effect on their psyche. On the other hand, excessive dosage or excessive

frequency of use will clearly have a negative effect on a person's health." – Participant 8 (female, 20 years old)

Traumatic experiences were also identified as a major factor impeding mental health. According to the participants, traumatic experiences can have a profound impact on an individual's mental well-being. Trauma can be defined as any severe intensity event that causes psychological traumatization. The participants emphasized the importance of acknowledging the role of traumatic experiences in shaping mental health outcomes. Some participants even shared their personal experiences of trauma, highlighting the lasting effects it had on their mental health and well-being. This sharing of personal experiences underscored the complex and deeply impactful nature of traumatic experiences on individuals' lives.

"Traumatic experience works in direct proportion to mental health. To take my example, the loss of a loved one caused severe psychological trauma, which followed me for a long time, and initially completely interfered with my daily life." – Participant 15 (female, 19 years old)

The study participants also explored the impact of social media on mental health, noting that social networks can have both positive and negative effects on an individual's psychological well-being. They emphasized that excessive social media use can lead to addiction, which may have detrimental consequences for mental health. According to the participants, the addictive nature of social media can negatively impact mental health outcomes, highlighting the need for responsible and moderate use of such platforms.

“I think that dependence on the Internet and social networks is quite harmful to mental health. However, it depends on the frequency of use and the content.” – Participant 16 (male, 22 years old)

3.3 Theme 3: Facilitating Factors for Mental Health

The research participants identified various factors that contribute to facilitating mental health, including daily activities and tools that can be utilized to promote mental well-being. According to the participants, everyday activities, such as socializing with friends and loved ones, listening to music, engaging in physical activity, watching movies, and reading books, can help maintain good mental health. These activities were seen as beneficial because they occupy the mind with positive content, thereby reducing stress levels, and making negative emotions more manageable. The participants' perspectives suggest that engaging in enjoyable and fulfilling activities can play a crucial role in maintaining mental health, mitigating the negative effects of stress and emotional discomfort.

“I find it helpful to communicate with people, have fun, relax, and take walks. I can do some crafts. The main thing is to relax my attention, and then, with a relaxed mind, I am better able to find ways to solve problems.” – Participant (female, 22 years old)

The participants also identified that new activities can contribute to maintaining a healthy mental state, such as exploring new hobbies, cultivating positive thinking, daydreaming, and traveling. According to the participants, engaging in new activities can

facilitate a shift in perspective, enabling individuals to reframe problems and conflicts in a more positive light. This, in turn, can lead to increased positive emotions, a more optimistic outlook on the future, and a reduced impact of negative events on mental well-being. By introducing new experiences and activities into their lives, individuals can potentially develop a more resilient and adaptive approach to coping with challenges.

“Education and any new activity that puts a person in a working state has a positive impact on a person's mental health.” – Participant 25 (male, 23 years old)

The participants emphasized the importance of timely access to mental health services, affordability, and the quality of care provided. However, they noted that mental health services are not readily accessible to Georgian youth. Although some universities offer student counseling centers, the demand for services exceeds the available resources, resulting in unmet needs. Furthermore, private mental health services are often expensive and inaccessible to many Georgian students, particularly those outside of Tbilisi. Accessing appropriate mental health services in other cities and regions can be even more challenging, highlighting a significant gap in mental health care for young people.

“In my opinion, the state should regulate the education system, plan various developmental activities, and develop preventive programs so that young people with mental health issues are interested in applying to the appropriate structures. All of this should be accessible.” – Participant 13 (male, 20 years old)

The barriers to accessing mental health services often prevent young people from receiving timely support. Enhancing the accessibility and quality of services would serve as a maintaining factor, enabling young individuals to seek professional help when needed, and facilitating their recovery from mental health challenges. By improving mental health services, young people would be more likely to receive the support they need to navigate difficulties and achieve better mental health outcomes.

“When I had mental health difficulties, I wanted to see an appropriate specialist – a psychologist, a psychotherapist, but I couldn’t find any easily available services. What I did find was very expensive for me.” – Participant 11 (male, 21 years old)

3.4 Summary

In summary, Georgian youth consider mental health to be crucial for overall functioning and well-being. They emphasize the importance of accessible and high-quality mental health services as a key factor in maintaining good mental health. This highlights the need for improved mental health support systems that address the needs of youth in Georgia.

4. Discussion

The definition of mental health offered by the Georgian youth interviewed over the course of this study aligns with that of the World Health Organization (2022), emphasizing the internal state – particularly thoughts and feelings – along with social interactions

and difficulties in relationships. In particular, the World Health Organization defines mental health as “a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community” (World Health Organization, 2022). This definition aligns with the participants’ descriptions of mental health as a multifaceted concept that encompasses emotional, psychological, and social well-being. Georgian youth perceive mental health as a very critical part of their lives.

The participants underlined socioeconomic factors that are important to maintain good mental health. Some researchers also show that socioeconomic disadvantage is a key determinant of mental health outcomes across the course of life (Allen *et al.*, 2014; Kivimäki *et al.*, 2020; Link & Phelan, 1995), with strong socioeconomic gradients observed in both high-income countries (Kivimäki *et al.*, 2020) and low- and middle-income countries (Lund *et al.*, 2010).

This multifaceted construct encompasses various dimensions that are linked to mental health outcomes. Research indicates that educational attainment is associated with the prevalence of mental health disorders (Fryers *et al.*, 2003; Esch *et al.*, 2014), while financial instability and poverty are linked to poor mental health outcomes (Thomson *et al.*, 2022; Guan *et al.*, 2022). Occupational factors, such as job insecurity and unemployment, can also negatively impact mental health (Miller *et al.*, 2020; Kim *et al.*, 2016; Utzet *et al.*, 2020). Poor living conditions and low living standards are similarly associated

with mental health issues (Pourmotabbed *et al.*, 2020; Singh *et al.*, 2019). Structural explanations suggest that social stratification creates unequal access to resources, such as wealth and knowledge, which can help individuals avoid exposure to harmful triggers (Kivimäki *et al.*, 2020).

Higher levels of wealth and income enable access to essential resources, including adequate and safe housing (Singh *et al.*, 2019), sufficient food security (Pourmotabbed *et al.*, 2020), and effective health care. Income losses have a greater impact on mental health than income gains (Thomson *et al.*, 2022). Income volatility, perceived job insecurity, and debt are linked to worsening mental health (Guan *et al.*, 2022; Rohde *et al.*, 2016).

The relationship between socioeconomic disadvantage and mental health is likely bi-directional, with poor mental health impacting earnings and contributing to financial stress (Lund & Cois, 2018). Recognizing the bi-directional and cyclical relationship between socioeconomic disadvantage and mental health is crucial for developing prevention strategies that interrupt the intergenerational transmission of environmental risks for mental disorders (World Health Organization, 2022).

Holt-Lunstad *et al.* (2015) discuss the importance of social relationships and social support for mental health. The participants' emphasis on everyday activities, like socializing with friends and loved ones, listening to music, and physical activity, is consistent with this literature.

The participants' emphasis of the importance of timely access to mental health services, ease of accessibility, and quality of care

is consistent with the World Health Organization's (2022) discussion of the importance of mental health care infrastructure. Furthermore, some findings of this study align with research conducted among young people in Australia (Ross *et al.*, 2025), as both studies emphasize the importance of developing preventive programs and ensuring state-provided access to mental health services.

These connections demonstrate that the results of this research provide a solid foundation for further discussion and practical implications.

Conclusion

Overall, the study demonstrated that Georgian youth perceive mental health issues as both important and urgent, aligning with definitions presented in the existing literature on mental health.

The findings led to several key conclusions:

First, mental health challenges are prevalent among Georgian youth, who perceive psychological well-being as a central component of their overall quality of life and social functioning.

Second, the study offers valuable insights into the nuanced ways in which young people conceptualize, experience, and sustain mental health, revealing a complex interplay between hindering and facilitating factors.

The findings underscore the importance of accessible and high-quality mental health services, as well as the need for holistic approaches to mental health support that prioritize self-care, social support, and everyday activities.

Ultimately, this research underscores the urgent need for policy initiatives that enhance the accessibility, affordability, and quality of mental health services for young people in Georgia. Preventive programs, mental health education, and peer support initiatives at universities could foster better coping mechanisms and reduce stigma.

Study Limitations

A key limitation of this study is that it reflects only the perspectives of Georgian youth, rather than the views of the entire Georgian population on mental health issues. Additionally, the honesty of participants' responses could not be fully controlled. To promote candidness, the in-depth interviews incorporated follow-up questions and, in some cases, the reformulation of primary and supplementary questions. This approach allowed the researcher to assess participants' confidence in their answers and to verify the consistency of the views and attitudes expressed.

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