

# The politico-socio-economic benefits of learning Russian as a Foreign language in developing economies: The Ghanaian Perspective

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**Abstract-** This study examined the politico-socio-economic benefits of learning Russian as a foreign language in the context of developing economies, with a focus on Ghana. The study combined content analysis, PLS-SEM (Partial Least Squares Structural Equation Modelling) technique, and the human capital theory to analyse relationships between the constructs. Through a theory driven content analysis, the study found that individuals who have learnt Russian as a foreign language gain benefits such as improved human capital, increased productivity, increased social mobility, and improved diplomacy and international relations. Through a PLS-SEM analysis, the study assessed the impact of these factors on the politico-socio-economic development of a developing country. The findings show that human capital, and diplomacy and international relations have significant influence on the politico-socio-economic development of a developing country. Improved Human capital, and productivity derived from fluency in foreign languages does not significantly influence a country's politico-socio-economic development. The implications of these findings will help Ghana to become aware and take advantage of socio-economic benefits that comes with speaking Russian. The study contributes to the growing body of literature on the impact of foreign language education on the development of a country, and provides valuable insights for policymakers, educators, and researchers.

**Keywords:** politico-socio-economic impact, Foreign Language, Russian, PLS-SEM, Developing Economies, Human Capital Theory

## INTRODUCTION

In today's interconnected world, proficiency in foreign languages has gained significant importance due to the increasing globalization and intercultural communication. The study of foreign languages has long been recognized as an important aspect of personal and professional development (Chen, 2022). In today's increasingly interconnected world, the ability to communicate effectively in multiple languages is essential for individuals and countries alike (Barski & Barker, 2019). This is especially true for developing economies, which are often looking for ways to promote economic growth and improve relations with other countries. One language that is particularly relevant for many developing economies is Russian. Russia is a major player in the global economy, with significant resources and a large market for goods and services (Okoedion, 2019). It is also a major political and military power, with a seat on the United Nations Security Council and a history of involvement in global affairs. The Russian language, in particular, has become a subject of interest due to Russia's geopolitical significance, its cultural heritage, and its economic influence. Therefore, understanding the Russian language and culture can be a valuable asset for individuals and countries looking to improve their politico-socio-economic development. Russian is the official language of Russia, Belarus, Kazakhstan, Kyrgyzstan, and Tajikistan. It is also widely spoken in Ukraine, Moldova, and Armenia. Russian is a member of the Slavic language family, and it is closely related to Ukrainian, Belarusian, and Polish. In recent years, there has been a growing interest in learning Russian in the West (Abizada & Seyidova, 2021). This is due in part to the increasing importance of Russia in the global economy. Russia is also a major player in international politics, and it is important for people in the West to be able to communicate with Russians. There are many reasons why people might want to learn Russian. Some people learn Russian for professional reasons. Russian is the language of international business, and it is also used in many scientific and technical fields. Others learn Russian for cultural reasons. Russian is a beautiful and expressive language, and it is the gateway to a rich and fascinating culture.

The current study is motivated by four knowledge gaps. First, despite the attention received in the language literature (Barski & Barker, 2019; Fox, Corretjer, Webb, et al., 2019), there is no quantifiable amount of studies on the impact of foreign language education the politico-socio-economic wellbeing of developing economies. Investigating the politico-socio-economic impact of learning a foreign language helps policymakers, educators, and stakeholders make informed decisions regarding language education policies, resource allocation, curriculum development, and training programs. It can highlight the potential benefits and challenges associated with language learning, enabling the implementation of effective strategies to maximize the positive impacts on individuals and society as a whole. Second, while there is a wide range of literature (Barski & Barker, 2019; Fox, Corretjer, & Webb, 2019; Kroll & Dussias, 2018) on the benefits of foreign language education, there is a lack of research that specifically examines the potential politico-socio-economic benefits that can arise from improved diplomatic relations with Russia. Third, there is the lack of clear theoretical frameworks connecting foreign language education, specifically Russian, with politico-socio-economic development in a developing economy. Petty et al. (2012) and Georgia (2017) posits that studies that are grounded in theory are more likely to be rigorous and valid. This is because they are based on a well-established body of knowledge that has been tested and refined over time. Theory driven studies are more likely to be relevant to the real world (Larkotey et al., 2017). This is because they are based on a body of knowledge that can be used to explain and predict real-world phenomena (Georgia, 2017).

This study examines the politico-socio-economic benefits of learning Russian as a foreign language in the context of developing economies, with a focus on Ghana. Finally, while there is some qualitative research (Ivanova & Klushina, 2021) on the topic, there is limited use of quantitative method. This current study employs both quantitative and content analysis methods. Content analysis allows for the systematic examination of textual, visual, or audio-visual content, providing rich qualitative insights into the meaning, themes, and patterns present in the data. By incorporating quantitative techniques, such as coding and categorization, researchers can quantify and analyse these qualitative data, enabling a more comprehensive analysis of the content. This combination allows for both a deep understanding of the content and the ability to identify trends and patterns across a large dataset.

Moreover, by addressing the above gaps, this study makes the following three contributions;

1. By exploring this aspect, the study offers a unique contribution to the literature, which has a limited research focus on this specific angle. It expands the understanding of the potential advantages of learning Russian in the context of developing economies, such as Ghana.

2. The study addresses the third knowledge gap by developing clear theoretical frameworks that connect foreign language education, particularly Russian language education, with politico-socio-economic development in a developing economy. By grounding the research in established theories, the study enhances the rigor and validity of its findings. It also contributes to the body of knowledge by providing a theoretical basis for understanding the relationship between language education and development.

3. The study contributes to the research methodology of the phenomenon by employing both quantitative and content analysis methods. This methodological contribution enhances the robustness and comprehensiveness of the study's findings.

To aim the direction of this study, the research question is as follows: What is the politico-socio-economic impacts of learning Russian as a foreign language in a developing economy? The study combines content analysis, PLS-SEM (Partial Least Squares Structural Equation Modelling) technique, and the human capital theory. Through a theory driven content analysis, the study seeks to identify benefits one can derive from learning Russian. Through a PLS-SEM analysis, the study assessed the impact of these factors on the politico-socio-economic development of a developing country. The remaining sections of the study are organised as follows; literature review and theoretical foundation are illustrated in section 2; section 3 presents the methodology; section 4 presents information on the data analysis and results; finally, section 5 and 6 presents discussion of findings and conclusion.

## LITERATURE REVIEW

### Learning Foreign Languages and Research Opportunities

In this section, a result of content analysis of the existing studies in the extant literature and opportunities paving way to this study are discussed. Content analysis involves identifying patterns, themes, and meanings within existing papers and drawing conclusions based on their findings (Peterson, 2017). The goal of content analysis is to provide insights and understanding of the data in a systematic and objective way (Braun & Clarke, 2012). Analysis of a review study by Fox et al. (2019) explored the benefits of foreign language learning and bilingualism. Based on hundred (100) empirical studies the authors found that cognitive abilities and benefits, aging and health, employability, academic achievement, communicative and intercultural competence, and enhanced creativity are overarching benefits derived from learning foreign languages. Fox, Corretjer, Webb, et al. (2019) also analysed published research from 2005-2011 to explore the benefits of foreign language learning and bilingualism. The study found that bilingualism can improve cognitive abilities such as attention control, working memory, and cognitive flexibility, as well as lead to higher levels of academic achievement and better career opportunities. Other studies (Chen, 2022; Kroll & Dussias, 2018) also revealed that learning a foreign language can also lead to increased empathy, cultural awareness, and a sense of connection to other cultures. The authors suggest that foreign language education and bilingualism should be promoted in schools and communities. The study by Kroll and Dussias (2018) also explored the advantages of multilingualism for personal and professional growth among residents of US correctional facilities. The authors highlight the cognitive, cultural, and social benefits of multilingualism, including improved executive function, enhanced empathy and perspective-taking, and increased opportunities for communication and cultural exchange. The authors also argue that promoting multilingualism in correctional facilities can contribute to successful re-entry and community integration for individuals' post-release. Generally, it can be inferred from existing studies that Learning a new language can improve memory, problem-solving skills, and critical thinking. Studies (Kroll & Dussias, 2018) have shown that bilingual individuals have better cognitive control, executive functioning, and attentional control. It can also delay the onset of age-related cognitive decline. In a globalized world, employers value individuals who can speak more than one language. Being able to communicate effectively with clients, customers, and colleagues from diverse linguistic backgrounds can lead to greater success in international business and diplomacy. Individuals gain a better understanding of different cultures. Through language, individuals can gain insights into a culture's values, beliefs, and customs. This understanding can foster greater empathy and respect for other cultures, which can lead to more positive cross-cultural interactions. Learning a foreign language can also improve communication skills. It allows individuals to communicate with a wider range of people and understand different perspectives (Lee & Hee, 2011). Additionally, learning a foreign language can improve a person's ability to communicate in their native language, as they develop a deeper understanding of language structures and grammar (Keshavarz & Astaneh, 2013). Learning a foreign language can also provide personal growth. It can be a challenging and rewarding experience that boosts confidence and self-esteem. Additionally, it can broaden one's horizons and provide opportunities for travel and cultural exchange.

Drawing motivation from a grounded theory driven content analysis, benefits such as, social mobility, increased productivity, improved human capital, and increased diplomacy and international relations are found to be comprehensive gains of learning foreign languages. Despite the enormous contribution of existing studies, some issues remain unclear. For instance, there exist a distinction between benefits and impacts (Stevens et al., 2016). Benefits refer to positive outcomes or advantages that result from a particular action or event. They are generally seen as desirable and can be intentional or unintentional. For example, learning a

foreign language can provide benefits such as increased human capital, and productivity. On the other hand, impacts refer to the effects or consequences, positive or negative, that result from a particular action or event. Unlike benefits, impacts can be both intended and unintended. For example, the impact of climate change can be negative, leading to rising sea levels, loss of habitat, and food insecurity. It is therefore, important to empirically draw this distinction in the context of language learning. Second, it is clear from the body of research that the study of foreign languages remains an important and active area of investigation. Although the finding that language study benefits learners the most if begun early and sustained is not new, how the study foreign languages improve the political, social, and economic well-being of a country is not fully explored. Therefore, there is a need to understand this phenomenon at a country level. Moreover, according to Fox, Corretjer, Webb, et al. (2019) more than half of the studies focused on elementary/young learners. This study argues that to fully ascertain the benefits and impact of learning foreign language of a country, it is prudent to obtain data from people who have worked with foreign languages and realized some viable outcomes. Gathering data from individuals who have worked with foreign languages as a medium of communication can provide a more accurate understanding of the benefits and impact of learning a foreign language in a practical context. While learners can certainly provide valuable insights into the language learning process, they may not have had the opportunity to fully utilize their language skills in a professional setting. Individuals who have worked with foreign languages, on the other hand, can provide more tangible examples of how language skills have contributed to their personal and professional growth. However, it is important to note that the perspectives of language learners should not be discounted entirely. Learning a foreign language is a significant undertaking that requires dedication and effort, and learners can provide valuable insights into the challenges and rewards of language learning. Additionally, learners who have not yet had the opportunity to work with foreign languages in a professional setting can still provide insights into the potential benefits and impact of language learning. Therefore, while obtaining data from individuals who have worked with foreign languages is important, it should not be the sole source of information. A well-rounded understanding of the benefits and impact of learning a foreign language should include perspectives from both learners and professionals.

## **THEORETICAL FOUNDATION**

**The Human Capital Theory:** The human capital theory was developed by economist Theodore Schultz in the 1960s (Schultz, 1972). Schultz's research focused on the idea that investment in education and training is similar to investment in physical capital, such as machinery and equipment, and can contribute to economic growth and development. This theory suggests that investing in education, including language learning, can lead to an increase in productivity and economic growth. This theory can be used to study the economic benefits of language learning and how it can improve individuals' human capital and contribute to economic development. Past studies using HCT have demonstrated that education is an important determinant of economic growth and development, and that language education, specifically, can have a positive impact on economic growth and development. In this study, social mobility, productivity, diplomacy and international relations, and human capital are viewed as some benefits individuals fluent in foreign languages may gain. The human capital theory suggests that an individual's economic and social success is highly dependent on the level of their education and skills. The theory is deemed fit for this study as it provides a framework for understanding how education, skills, and knowledge can impact an individual's economic and social opportunities (Lu, 2023).

The more education and skills an individual possesses, the greater their earning potential and the higher their social status (Saidov, 2020). Thus, being fluent in a foreign language can be viewed as a form of human capital that can potentially increase an individual's economic, political, and social opportunities. Social mobility is the ability of individuals to move up or down the social ladder. Being fluent in a foreign language can increase an individual's social mobility as it opens up opportunities for them to work and interact with people from different cultures and backgrounds. In a globalized world, fluency in a foreign language can be a valuable asset that enables an individual to expand their network, build relationships, and access new opportunities (Barski & Barker, 2019). Productivity is another important factor that can affect an individual's socio-economic development. Being fluent in a foreign language can increase an individual's productivity, especially in jobs that involve communication with international clients or partners. A person who can communicate effectively in multiple languages can facilitate business negotiations, provide better customer service, and improve team collaboration. Diplomacy and international relations are also key factors in socio-economic development. Fluency in a foreign language can be a critical asset in diplomacy, enabling individuals to build relationships with people from different cultures and countries (Stevens et al., 2016). In international relations, fluency in a foreign language can help individuals to understand the nuances of language and culture, which can be essential in building trust and negotiating agreements. Human capital refers to the knowledge, skills, and abilities that individuals possess that can be used to create economic value (Saidov, 2020). Being fluent in a foreign language can be seen as a form of human capital that can create economic value for individuals and their employers. For example, a multinational company may value an employee who is fluent in several languages, as this can help the company to expand its customer base and increase its revenue.

## **Methodology**

### **Research Model and Hypotheses Development**

#### **Social Mobility**

Social mobility is the degree to which people can improve their social status or standard of living through education, employment (OECD, 2018). Through the fluency in foreign languages, individuals can acquire social mobility. Consequently, when there is an increase in social mobility, people from lower-income backgrounds have a better chance of moving up the socio-economic ladder. This means that there is less of a divide between the rich and the poor, which can reduce inequality and promote social cohesion.

When people feel that they have a chance to succeed regardless of their background, they are more likely to be invested in the political system. This can lead to greater political stability and a stronger democracy. Social mobility can lead to improved social outcomes, such as better health and education outcomes. This is because people who are able to move up the socio-economic ladder have better access to resources that promote these outcomes. Social mobility can also have a positive impact on economic growth. A more mobile society is likely to have a more skilled workforce, which can lead to greater innovation and productivity (Haveman & Smeeding, 2006). This, in turn, can lead to increased economic growth. Some studies have suggested that social mobility can be a key factor in promoting economic growth and reducing poverty (OECD, 2018). The study of foreign languages can positively impact social mobility, leading to political, social and economic growth and stability. Therefore, this study hypothesizes that **H1**: An increase in social mobility (i.e., the ability for individuals to move up the socio-economic ladder) will lead to a positive impact on the politico-socio-economic environment.

#### Productivity

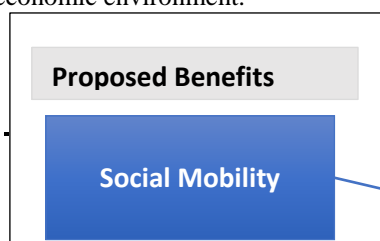
There is a growing body of literature that suggests that learning a foreign language can have a positive impact on productivity. For instance, a study by Méndez-Aguado et al. (2020) found that students who learned a foreign language showed an improvement in their academic performance, including higher grades and better study habits. Additionally, a study by Marian and Shook (2012) found that bilingual employees had a higher level of cognitive flexibility and adaptability, which can lead to greater productivity in the workplace. While the existing literature suggests a positive relationship between language learning, and productivity (Fox, Corretjer, Webb, et al., 2019), there are several limitations to the current research. For instance, much of the existing research has focused on student populations, and there is a need for more research on the relationship between language learning and productivity in the workplace. Additionally, the causal relationship between language learning and politico-socio-economic outcomes is complex and multifaceted, and more research is needed to fully understand the nature of this relationship. As such, more research is needed to fully understand the complex relationships between language learning, productivity, and socio-economic outcomes. As the world becomes increasingly interconnected, language learning may become an even more important tool for individuals and societies to navigate the complex global landscape. Based on the existing gaps in the language literature, we hypothesize that **H2**: An increase in productivity will lead to a positive impact on the politico-socio-economic environment.

#### Human Capital

There is a substantial body of literature (Muhammadjonovna et al., 2021; Rajab et al., 2022) suggesting that an increase in human capital can have a positive impact on the politico-socio-economic environment. Human capital, defined as the education, skills, and knowledge possessed by individuals in a given society, is widely recognized as a key driver of economic growth and development. Several studies have shown a positive correlation between levels of education and income or economic growth. For example, a study by Gradstein and Brückner (2013) found that differences in educational attainment accounted for a significant portion of differences in per capita income across countries. Similarly, a study by Hanushek and Wößmann (2007) found that increases in educational attainment were associated with higher economic growth rates. In addition to economic benefits, an increase in human capital can also have positive effects on social and political outcomes. For instance, individuals with higher levels of education are more likely to participate in civic activities, such as voting or volunteering, and may be better equipped to make informed decisions about social and political issues (Méndez-Aguado et al., 2020). Similarly, Hanushek and Wößmann (2007) found that higher levels of education were associated with lower levels of political instability and conflict. However, while the literature generally supports a positive relationship between human capital and politico-socio-economic outcomes, there are several limitations to the existing research. For example, the causal relationship between human capital and these outcomes is complex and may be influenced by a range of contextual factors, such as linguistic skills, and cultural norms. Additionally, there is a need for more research on the relationship between specific types of human capital, such as of human capital enabled by foreign language skills, and politico-socio-economic outcomes. Foreign language acquisition is one potential pathway to increasing human capital and, as a result, can have a positive impact on the politico-socio-economic environment. However, this is not empirically verified especially in the context of Russian language and a developing country. Therefore, the author argues that **H3**: An increase in human capital (i.e., education, skills, and knowledge) will lead to a positive impact on the politico-socio-economic environment.

#### Diplomacy and International Relations

The study of foreign languages has long been recognized as an important tool for building diplomatic and international relationships. Diplomacy refers to the practice of managing international relations and negotiations between different countries, governments, and other international actors. International Relations (IR) focuses on the interactions and relationships between states and other international actors, including non-state actors such as international organizations, multinational corporations, and non-governmental organizations. Learning Russian as a foreign language can help diplomats and government officials communicate effectively with their Russian counterparts, leading to stronger diplomatic ties. Strong diplomatic relations can facilitate trade, investment, and other forms of cooperation that can contribute to economic growth. Russia is a resource-rich country, with vast reserves of oil, gas, and other natural resources. Knowledge of the Russian language can help individuals and businesses access these resources and create opportunities for economic growth. Learning Russian can facilitate cultural exchange between Russia and other countries. This can promote mutual understanding and help to build bridges between different societies. Cultural exchange can also help to promote tourism, which can be a source of revenue for countries. Russia has a rich cultural and educational heritage. Learning Russian can provide access to educational opportunities in Russia and other countries where Russian is spoken. This can help to develop the skills and knowledge necessary for economic growth. Strong diplomatic ties with Russia can help to promote political stability in the region. This can create a favorable environment for economic growth and development. **H4**: Strong diplomatic and international relations enabled by Russian as foreign language will lead to a positive impact on the politico-socio-economic environment.





**Fig. 1 Research Framework****Data Collection**

The data for this study were collected using a survey questionnaire. The survey questionnaire consisted of a 5-point Likert scale and was designed to capture data on the politico-socio-economic impacts of learning Russian as a foreign language in a developing economy. The questionnaire was administered to a sample of 450 respondents from Ghana, who were selected using a purposive sampling technique. The study targeted people who have learnt Russian and are using it in their jobs. Some of these respondents were found at the Russian embassy, University lecturers and teachers teaching Russian, private, and public sector office holders, and diplomats fluent in the Russian language. The survey questionnaire was divided into six sections. The first section collected demographic information from the respondents, including age, gender, educational level, and knowledge on the Russian language. The second section focused on the respondents' perceptions of how Russian language has contributed to their social mobility and its impact on attainment of politico-socio-economic development. The third section assessed the respondents' perception of how their knowledge in Russian has helped them to be productive. The fourth, fifth, and sixth sections emphasized on collecting measurement items on variables such as human capital, and diplomacy and international relations, and politico-socio-economic development. The questionnaire was pre-tested with a small sample of fifty (50) respondents to ensure its validity and reliability. The data collected from the pre-test were used to refine the questionnaire and make necessary modifications to ensure its effectiveness in capturing the data required for the study. Data collection was carried out over a period of four weeks, during which the questionnaires were distributed to the respondents. The respondents were given clear instructions on how to complete the questionnaire, and were assured of the confidentiality of their responses. This study was conducted in accordance with ethical principles. The privacy and confidentiality of the respondents' personal information were ensured by using anonymous questionnaires. Informed consent was obtained from all participants prior to their participation in the study. The official language of Ghana is English, but there are also several indigenous languages spoken widely. The government of Ghana has also made efforts to promote the teaching and learning of foreign languages, including Russian, in schools and universities. Ghana is a developing economy that has experienced significant growth in recent years. The country has also undergone economic reforms that have led to increased foreign investment and trade. As a result, the demand for foreign language skills has increased, particularly in industries such as tourism, international trade, and diplomacy. This makes Ghana a suitable setting to investigate the politico-socio-economic impacts of learning Russian as a foreign language. Investigating the politico-socio-economic impacts of learning Russian as a foreign language in this context can provide valuable insights into the role of language learning in economic development.

**Demographic Characteristics of Participants**

The table 1 presents information on four demographic variables: nationality, gender, age, and knowledge about the Russian language. The table shows the frequency counts and proportions of each variable's levels. The first variable, nationality, has three levels: Ghanaian, Non-Ghanaian but African, and Others. Of the 450 participants, 441 (98.0%) are Ghanaian, 1 (0.2%) is non-Ghanaian but African, and 8 (1.8%) fall under the category of non-Russian natives who are also non-Africans. The second variable, gender, has two levels: Female and Male. The table shows that 234 (52.0%) participants are female, while 216 (48.0%) are male. The third variable, age, has three levels: 0-25, 26-50, and 51-75. The table shows that 226 (50.2%) participants fall under the age range of 0-25, 168 (37.3%) fall under the age range of 26-50, and 56 (12.4%) fall under the age range of 51-75. The last variable, knowledge about the Russian language, has two levels: No and Yes. The table shows that 34 (7.6%) participants do not have knowledge about the Russian language, while 416 (92.4%) participants have knowledge about the Russian language.

Table 1: Participants' Demographic Characteristics

Variable	Level	Counts	Total	Proportion
Nationality	Ghanaian	441	450	0.980
	Non-Ghanaian but African	1	450	0.002
	Others	8	450	0.018
Gender	Female	234	450	0.520
	Male	216	450	0.480
Age	0 - 25	226	450	0.502
	26 - 50	168	450	0.373
	51 - 75	56	450	0.124
Do you have knowledge about the Russian language?	No	0	0	0.000
	Yes	450	450	100.0
Have you worked with/working with Russian language?	Yes	450	450	0.000
	No	0	0	100.0

### Data Analysis

The ADANCO (advanced analysis of composites) version 2.2.1 software was used to analyse the data. ADANCO is a software that utilizes variance-based structural equation modeling and was first released in 2014 by Henseler and Dijkstra (2015). It implements several limited-information estimators, such as partial least squares path modeling (also called PLS modeling, PLS-SEM, or simply PLS) or ordinary least squares regression based on sum scores. PLS-SEM is a statistical method used in data analysis to study the relationships between multiple variables. The PLS-SEM technique was utilized in this study. The technique is often used in social sciences, marketing, and management research, as it can handle complex models with a relatively small sample size. The method involves constructing a measurement model to assess the reliability and validity of the measurement instruments and a structural model to test the hypothesized relationships between the constructs of interest.

### Results

#### Measurement Model

The table shows the composite reliability and average variance extracted (AVE) values for five different constructs: Social Mobility, Productivity, Human Capital, Diplomacy & Int. Rel, and PSE. Composite reliability measures the internal consistency of a construct and indicates the extent to which the items in the construct are related to each other. A value of 0.7 or above is generally considered acceptable, and all constructs in this table have values above 0.9, indicating excellent internal consistency. Average variance extracted (AVE) measures the amount of variance in the construct that is captured by its indicators. A value of 0.5 or above is considered acceptable, and all constructs in this table have values above 0.78, indicating that the indicators of each construct capture a substantial amount of the variance in the construct. These results suggest that the constructs are reliable and valid measures of the underlying concepts they are intended to capture.

Table 2:

Constructs	Composite Reliability	Average Variance Extracted (AVE)
Social Mobility	0.9299	0.7822
Productivity	0.9319	0.7851
Human Capital	0.9285	0.7801
Diplomacy & Int. Rel	0.9502	0.8332
PSE	0.9285	0.7786

#### Discriminant Validity

The Fornell and Larcker criterion is an important tool for assessing the discriminant validity of constructs in a PLS-SEM model. Discriminant validity is a critical aspect of construct validity and ensures that the constructs are measuring distinct concepts and not just the same underlying construct. If the constructs are not distinct, the results of the model may be biased or misleading, which can lead to incorrect conclusions and decisions. If the criterion indicates that the constructs do not have discriminant validity, it highlights the need for further refinement of the measurement model to ensure that each construct is measuring a unique concept. Overall, the Fornell and Larcker criterion is an essential tool for ensuring the validity of PLS-SEM models and the accuracy of the results they produce. The table shows the Fornell and Larcker criterion results for assessing the discriminant validity of a PLS-SEM model. The criterion compares the square root of the AVE values for each construct (shown along the diagonal) to the correlations between constructs (shown in the off-diagonal cells). If the square root of the AVE value for a construct is larger than its correlations with other constructs, it is considered to have discriminant validity. Looking at the table, we can see that all constructs have a higher square root of AVE value compared to their correlation with other constructs. This indicates that each construct has discriminant validity, meaning they are measuring distinct constructs and not just the same underlying construct. For example, the square root of the AVE value for Social Mobility is 0.7822, which is higher than the correlation values with Productivity (0.7604), Human Capital (0.6182), Diplomacy & Int. Rel (0.6480), and PSE (0.4655). This suggests that Social Mobility has discriminant validity and is measuring something distinct from the other constructs. Overall, the Fornell and Larcker criterion results suggest that the PLS-SEM model has good discriminant validity and that the constructs are distinct and not measuring the same underlying construct. The R-squared value of 0.6275 indicates that approximately 62.75% of the variability in the dependent variable (Politico-socio-

economic development) can be explained by the independent variables (Social Mobility, Productivity, Human Capital, and Diplomacy & Int. Rel). This suggests that these four independent variables have a relatively strong association with the dependent variable. However, the adjusted R-squared of 0.6242 takes into account the number of independent variables used in the model. It is slightly lower than the R-squared value, which suggests that adding more independent variables may not necessarily increase the overall explanatory power of the model.

Table 3:

Construct	Social Mobility	Productivity	Human Capital	Diplomacy & Int. Rel	PSE
Social Mobility	0.7822				
Productivity	0.7604	0.7851			
Human Capital	0.6182	0.7534	0.7801		
Diplomacy & Int. Rel	0.6480	0.5796	0.6285	0.8332	
PSE	0.4655	0.4178	0.4990	0.6053	0.7786

Squared correlations; AVE in the diagonal.

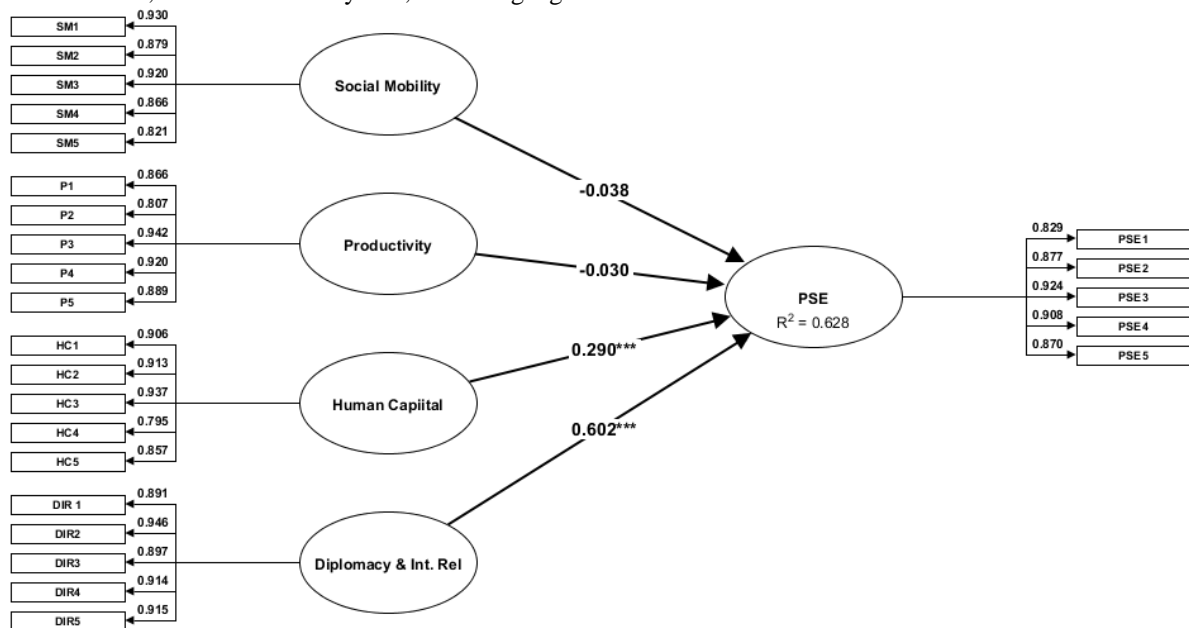
Table 4: R-square values

Construct	Coefficient of determination (R <sup>2</sup> )	Adjusted R <sup>2</sup>
PSE	0.6275	0.6242

Table 5: Confirmatory Composite Analysis (saturated model)

	Value	HI95	HI99
SRMR	0.0672	0.0326	0.0351

Table 5 shows the results of the Confirmatory Composite Analysis (CCA). The CCA was used to evaluate the goodness-of-fit of the model and assess whether it adequately represents the data. The values show a goodness-of-fit index called the Standardized Root Mean Square Residual (SRMR). The SRMR index measures the discrepancy between the observed covariance matrix and the model-implied covariance matrix. A value of 0 indicates a perfect fit, while higher values indicate a poorer fit. In this case, the SRMR value is 0.0672, which is relatively low, indicating a good fit of the model.



Model Evaluation

These are the results of direct effects in PLS-SEM, which show the relationship between each predictor construct and the criterion construct (PSE). The results include the path coefficient, t-value, p-value, and percentile bootstrap quantiles, which indicate the range of the estimated coefficients based on bootstrap resampling. Based on the results social Mobility and Productivity have a negative direct effect on PSE, but the effects are not statistically significant (failed). This means that Social Mobility and Productivity do not have a significant impact on PSE in this model. Human Capital has a positive direct effect on PSE, with a path coefficient of 0.29 and a p-value of 0.0002 (supported). This indicates that Human Capital has a significant positive impact on PSE in the model. Diplomacy & Int. Rel has a much stronger positive direct effect on PSE, with a path coefficient of 0.60 and a p-value of 0.0000 (supported). This indicates that Diplomacy & Int. Rel has a very strong positive impact on PSE in the model. Overall, these results suggest that Diplomacy & Int. Rel and Human Capital are the most important predictors of PSE in this model, while

Social Mobility and Productivity do not have a significant impact. However, it is important to consider these results in the context of the research question and theoretical framework, as well as to assess the overall fit and validity of the model.

Table 6: Direct effects of Path Coefficients

Effect	Path Coefficient	t-value	Percentile bootstrap quantiles			Decision
			p-value	0.5%	2.5%	
Social Mobility -> PSE	-0.0382	-0.5491	0.2915	-0.2032	-0.1651	Failed
Productivity -> PSE	-0.0302	-0.5294	0.2983	-0.1962	-0.1437	Failed
Human Capiital -> PSE	0.2900	3.5850	0.0002	0.0719	0.1295	Supported
Diplomacy & Int. Rel -> PSE	0.6019	10.6382	0.0000	0.4459	0.4908	Supported

## Discussion

This study aimed at examining the impact of learning Russian as a foreign language on the politico-socio-economic development of developing countries. Based preliminary content analysis of the extant language literature, this study argues that the benefits gained from learning Russian as foreign language has the potential of positively impacting the politico-socio-economic success of developing countries. Drawing motivation from the human capital theory, this study argues that through learning of Russian as a foreign language, individuals of developing countries will gain social mobility, human capital, productivity, and diplomacy and international relations that will have direct positive impact on the politico-socio-economic development of such countries. Based on the results, the hypothesis that an increase in human capital (i.e., education, skills, and knowledge) will lead to a positive impact on the politico-socio-economic environment of developing countries learning Russian as a Foreign language is positive and significant. This implies that by investing in the development of a nation's human capital with Russian as a foreign language, individuals can acquire new skills and knowledge that can be used to create economic value and promote socio-political stability and cultural exchange. The result suggests that learning Russian as a Foreign language can provide Ghanaian individuals with skills and knowledge that can contribute to economic growth and development, as well as promote socio-political stability and cultural exchange. For example, learning Russian can help Ghanaian individuals to expand their job opportunities and business networks, facilitate international trade and investment, and promote cultural diplomacy and international relations. By learning Russian as a Foreign language, individuals can acquire new language skills, cultural awareness, and global perspectives that can enhance their ability to navigate and succeed in the global economy, and contribute to the overall development of Ghana and other developing economies. These findings are consistent with previous research that highlights the importance of education and training in promoting economic growth and development. For example, research has shown that investments in education and training can lead to increased productivity, innovation, and competitiveness, which can in turn lead to higher levels of economic growth and development. Additionally, learning a foreign language has been linked to various cognitive and socio-cultural benefits, including improved memory, creativity, and intercultural communication skills. Similarly, the results reveal that learning Russian as a foreign language have a direct positive impact on a country's politico-socio-economic growth, particularly through enhanced diplomacy and international relations. This means improving communication and understanding between non-Russian speaking countries and Russia can help to bridge cultural and linguistic divides and create opportunities for economic and political cooperation. This is particularly relevant for countries that have historical or economic ties with Russia, or for countries seeking to diversify their diplomatic and economic partnerships. The findings also underscore the importance of developing language learning programs that emphasize the practical application of language skills in diplomatic and international contexts. By creating opportunities for learners to engage with Russian-speaking cultures and societies, and to develop a deeper understanding of their customs, traditions, and values, language learning programs can help to build stronger, more resilient international partnerships that can contribute to a country's overall growth and development. These findings suggest that policymakers and educators may want to consider promoting the learning of Russian as a foreign language as a means of enhancing a country's diplomacy and international relations, and ultimately, its politico-socio-economic growth. This could involve creating language learning programs that are tailored to the specific needs and interests of learners, or developing policies that incentivize the learning of Russian as a means of building stronger international partnerships.

On the other hand, the results of the PLS-SEM model indicate that social mobility and productivity do not have a significant impact on obtaining politico-socio-economic growth through the study of Russian as a foreign language. Social mobility refers to the ability of an individual or group to move up or down in the social hierarchy. The study of Russian as a foreign language may be seen as a proxy for social mobility, as it is an educational pursuit that may provide access to opportunities that are not otherwise available. However, the results of the study suggest that this pursuit does not lead to politico-socio-economic growth in developing countries. The results implies that social mobility, as measured through the study of Russian as a foreign language, is not an effective way to promote politico-socio-economic growth in developing countries. There could be several reasons for this. For example, studying Russian may not be directly relevant to the needs of the country or its economy. Alternatively, the benefits of studying Russian may not be distributed equally, meaning that only a small portion of the population can access the opportunities that come with learning the language. In addition, the human capital theory suggests that education and training can improve an individual's productivity and contribute to economic growth and development. Thus, if individuals in developing countries study Russian as a foreign language, it may increase their productivity and contribute to politico-socio-economic growth. However, the results of this study do not support this theory. One possible explanation for this could be that the study of Russian as a foreign language may not be directly relevant to the needs of the country or its economy. For example, if the economy of a developing country is primarily based on agriculture, then the study of Russian may not directly contribute to the productivity of the workforce in that sector.



## Implications

### Conclusion

This study examined the politico-socio-economic benefits of learning Russian as a foreign language in the context of developing economies, with a focus on Ghana. The findings of this study highlight the need for further research into the specific factors that contribute to the benefits of learning Russian as a foreign language in developing economies. It also underscores the importance of carefully considering the context in which such studies are conducted and the limitations of the models used to analyze the data. These findings may be surprising given the widely accepted belief that education and skill development are important factors in economic and social development. However, it is important to note that this particular study focuses on the benefits of learning Russian as a foreign language in developing economies, specifically in the Ghanaian context. Therefore, the results may not necessarily be generalizable to other contexts or to other languages. Furthermore, it is possible that the lack of significant impact of social mobility and productivity on politico-socio-economic growth through the study of Russian as a foreign language may be due to other factors that were not accounted for in the model. For example, it could be that the curriculum or teaching methods used to teach Russian in Ghana play a significant role.

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### Research Questionnaire

Latent Variable	Indicators/Measurement Instrument	Source
Social mobility	<ol style="list-style-type: none"> <li>1. How has your Russian language proficiency helped you to move up the social ladder?</li> <li>2. How has your Russian language proficiency helped you to advance in your current job or profession?</li> <li>3. Has learning Russian language helped you to interact with new social and professional circles?</li> <li>4. In your opinion, how does Russian language proficiency contribute to social mobility?</li> <li>5. How has learning Russian language helped you to access new opportunities for training, education, and professional development?</li> <li>6. Do you believe that your Russian language proficiency has led to an improvement in your social status?</li> </ol>	Human capital theory
Productivity	<ol style="list-style-type: none"> <li>1. How has your knowledge of Russian language improved your ability to communicate with Russian-speaking clients or colleagues?</li> <li>2. How has learning Russian language impacted your ability to access information and resources in Russian?</li> <li>3. How has your Russian language proficiency helped you to perform your job more efficiently?</li> <li>4. Has your Russian language proficiency helped you to expand your business or professional network?</li> <li>5. How does your Russian language proficiency help you to complete your tasks more quickly and effectively?</li> <li>6. In your opinion, how does your Russian language proficiency contribute to your overall productivity?</li> </ol>	Human capital theory
	<ol style="list-style-type: none"> <li>1. To what extent has your Russian language proficiency helped you to acquire new skills and knowledge?</li> <li>2. How has your Russian language proficiency helped you to solve problems and make decisions more effectively?</li> <li>3. To what extent has your Russian language proficiency helped you to increase your earning potential?</li> <li>4. How has your Russian language proficiency helped you to expand your professional network?</li> <li>5. How does your Russian language proficiency contribute to your employability?</li> <li>6. In your opinion, how does your Russian language proficiency contribute to your overall human capital?</li> </ol>	Human capital theory
Diplomacy & Int. Relations	<ol style="list-style-type: none"> <li>1. How has your knowledge of Russian language affected your ability to engage in diplomacy and international relations with Russia?</li> <li>2. How has learning Russian language improved your ability to communicate and negotiate with Russian-speaking representatives from other countries?</li> <li>3. To what extent has your Russian language proficiency helped you to understand and navigate the Russian political and cultural context?</li> <li>4. How has learning Russian language impacted your ability to access information and resources in Russian related to international relations?</li> <li>5. How has your Russian language proficiency helped you to represent your country more effectively in Russian-speaking environments?</li> <li>6. To what extent has your Russian language proficiency helped you to build stronger diplomatic ties with Russia?</li> <li>7. How has your Russian language proficiency helped you to expand your international network?</li> <li>8. How does your Russian language proficiency contribute to your country's ability to engage in diplomacy and international relations with Russia?</li> </ol>	language as a tool of diplomacy theory

	<p>9. In your opinion, how does your Russian language proficiency contribute to the overall effectiveness of your country's diplomacy and international relations with Russia?</p> <p>10. How has your Russian language proficiency helped you to understand and adapt to Russian diplomatic and international relations customs?</p>	
political, social and economic	<p>1. How has learning Russian language improved the trade and investment relations between your country and Russia?</p> <p>2. To what extent has your Russian language proficiency helped your country to access new resources and opportunities in Russia?</p> <p>3. How has learning Russian language impacted the ability of your country to engage in diplomatic relations with Russia?</p> <p>4. How has your Russian language proficiency helped to improve your country's overall economic performance?</p> <p>5. To what extent has your Russian language proficiency helped your country to achieve political stability and security?</p> <p>6. How has your Russian language proficiency helped to improve the standard of living of your country's citizens?</p> <p>7. How does your Russian language proficiency contribute to the overall politico-socio-economic development of your country?</p> <p>8. In your opinion, how does your Russian language proficiency contribute to the overall relationship between your country and Russia?</p> <p>9. How has your Russian language proficiency helped to understand and adapt to the politico-socio-economic context of Russia?</p>	

These questions aim to assess the impact of learning Russian language on politico-socio-economic development, which is a construct that encompasses the political, social and economic aspects of a country's development. These questions will help to measure how learning Russian language has affected the trade and investment relations between countries, access to new resources and opportunities, diplomatic relations, overall economic performance, political stability and security, standard of living of the citizens and the overall relationship between the countries in a Russian-speaking environment. This will help to identify how much Russian language proficiency contributes to the overall politico