

GRL Capstone Thesis

**Bringing the World Home: How Students Who Participate in International Education  
Perceive Their Impact on Home Communities**

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### **Abstract**

This research examines the broader societal influence of international education beyond academia – both through mobility programs and international campus environments. Prior studies have emphasized the individual benefits of international education that learners can gain, including enhanced academic performance and employability. Yet, open questions remain on how students who participate in international education perceive their impact on home communities. Drawing inspiration on the Internationalization of Higher Education for Society (IHES) framework, this study analyzed survey data from 79 undergraduate students engaged in international education through quantitative mediation analysis and qualitative analysis. Global awareness, problem-solving skills, and expanded networks were found to be key mediators of perceived community impact. Specifically, participants report influencing their home contexts through both direct engagement and informal exchanges, including civic involvement, intercultural dialogue, and knowledge-sharing. By connecting student perspectives to community-level outcomes, this research situates itself in the ongoing debate on the social responsibilities of higher education, towards framing international education as a driver for locally *and* globally informed engagement.

*Keywords:* International education, mobility, community impact, global citizenship.

“After all, science is essentially international, and it is only through lack of the historical sense that national qualities have been attributed to it”.

- Marie Skłodowska Curie, the first person to be awarded two Nobel Prizes, the 1903 Physics Prize and 1911 Chemistry Prize.

### **Introduction: Expanding the Scope of International Education towards Community Impact**

Globalization has reached its apogee over the last decades, implying a degree of interconnectedness between societies, economies and people that had never been stronger (Conroy, 2021). The state of today's world presents strong potential for the development of internationalization in higher education, now commonly deemed as highly valuable by scholars and universities (Lilley, 2024). As early as 2006, Vest (2006) observed increased opportunities for exchanges and research projects between US universities and the rest of the world: “Openness describes the state of our research universities at the beginning of the twenty-first century, and it establishes a remarkable field of opportunity and responsibility as we go forward in the globalization of higher education.” (p. 1). These observations led the scholars to theorizing the concept of ‘open universities’, where students and professors from different countries can discuss and collaborate, both through in-person meetings and with the aid of technology. More recently, in the book *International Scholarships in Higher Education – Pathways to Social Change*, Dassin et al. (2017) analyze several international scholarship programs, illustrating their impact on individuals, institutions, and broader societal change. Specifically, they explain that: “Despite considerable variation in the [...] skills that international scholarship programs seek to cultivate, these rationales reveal widespread consensus that learning abroad continues to offer benefits to individual learners that cannot be acquired to the same extent locally” (p. 108). While scholars agree on the need for internationalization in higher education, their views differ on what exactly this practice entails. Specifically, some studies focus on international education as a source of knowledge and professional benefits for students *individually* (first definition), while fewer research is conducted on the impact that

international learning environments bring to the non-academic community (second definition). The latter interpretation of international education will be used in this thesis.

When reflecting upon the first definition of international education, scholars have examined the personal, academic, and professional benefits that individual students experience (Birkin et al., 2014; Whatley, 2024). Moreover, when reading about exchange programs on the websites of most higher education institutions, users will notice a similar emphasis on the benefits participants experience by studying and living abroad. For example, the University of British Columbia (Canada) published *In Service - Global Engagement Strategy 2020–2030* as its own action plan towards internationalization (University of British Columbia, 2020). In the coming years, the University aims not simply to increase its international presence, but to create impactful research and meaningful partnerships for sustainable development, and train students to be active global citizens. A further example comes from the University of Cape Town (University of Cape Town, 2023). In the institutional website, users can access an internationalization page, with insights into the University's partnerships within the African continent and beyond, international fellowships and scholarships, and foreign language learning programs. Similarly, the Universitas Indonesia (Indonesia) established a Directorate for Internationalization of Education, with a dual focus on students' mobility through exchange programs and international research partnerships (Universitas Indonesia, 2025).

Within this picture, the benefits and enrichment that communities - both in the host and home countries - can gain has received less attention. Notably, a better understanding of how students' individual benefits may ripple out to the communities in which they are a part needs to be grasped through further research. Ficarra (2019) was one of the first scholars seeking to answer this question, especially focusing on local communities in host countries. More specifically, she gathered insights from Costa Rica and Italy, investigating the motivations why host families and professors decided to welcome and engage with international students from the US, how these interactions develop during the mobility experience, and what are the outcomes of this engagement according to the hosting community. The concept of international education on communities has also been explored at a theoretical level, through

the Internationalization of Higher Education for Society (IHES) theoretical framework, by Jones et al. (2021). According to IHES, universities should align their social impact mission (i.e., third mission) with their internationalization agenda, with the goal to ‘benefit the wider community, at home or abroad, through international or intercultural education, research, service and engagement’ (Brandenburg et al., 2019, para. 7). In other words, the framework suggests that universities must amplify their contributions to global social responsibility, integrating sustainability, equity, and social justice into teaching, research, and community engagement. The IHES theoretical framework could further grow through gathering insights from students who participated in international education.

Building on Ficarra’s research (2019) and on the IHES framework by Jones et al. (2021), the present thesis will further investigate the direct and informal impacts of international education within undergraduate students’ home communities. More precisely, it will seek to explain how students evaluate the influence of their participation in international education on their home community, and what are the main factors that they think lead to community development. Gathering the perspective of students – and not those of the educators that organize international learning programs – is vital to this research. Indeed, this approach will allow for a fuller understanding of the perceived impacts that the students have left directly and informally on their communities, which can hardly be captured by relying on an outsider’s view. In order to answer the research question, literature on the individual benefits of international education and on existing forms of local community impact will be reviewed, followed by a deeper analysis of the IHES framework. Subsequently, quantitative and qualitative data from students will be gathered, analyzed and discussed, ultimately bridging existing theories with new insights, and broadening our understanding of perceived community impact within international education.

Moreover, in this research, international education is defined both as participating in a mobility experience (i.e., exchange) and having regular contacts with an international learning environment within one’s university (i.e., no mobility). In the latter scenarios, examples of international education include – but are not limited to – virtual exchanges, curricula internationalization, and collaborating with international teachers, staff, guest lecturers, and classmates. The impacts of both these dimensions will be

analyzed. Furthermore, community impact is intentionally defined in a broad way, as the extent to which students see the benefits of their study abroad experience as something that is of collective benefit to their home community. This definition leaves openness to capture a diverse set of contributions to the community, giving students the opportunity to fully identify and reflect on what they see as meaningful impacts. Lastly, home communities are defined as the country and city where a student is currently residing. This applies both to domestic students, and to international students who have settled in a foreign country to complete their education, and subsequently pursued an exchange semester and/or interacted with other international students and activities in the university where they will receive their degree. For example, a Dutch student from Amsterdam who is enrolled at a university in Groningen would have Groningen as their home community. Similarly, a South African student enrolled in a full degree program at a Dutch university and who later goes on exchange to Italy would still have the Netherlands (specifically, their university city) as their home community. In both cases, the home community refers to the place where students are based for the majority of their studies and where they are working toward their degree. This definition is supported by research indicating that a longer period of residence correlates with enhanced social inclusion and a stronger sense of belonging (Millán-Franco et al., 2019). Specifically concerning international students in the United States, studies have shown that the most pronounced culture shock typically occurs within the first nine to 24 months of residence, with socio-cultural adaptation increasing over time (Wang et al., 2018). By approximately two years, students are more likely to feel integrated into the culture and community of their host country, reinforcing the idea that their place of study functions as their home community.

## **Literature Review**

### **Individual Benefits of International Education and Existing Forms of Local Community Impact**

Over more than a decade, research conducted on the impacts of international education mainly highlights students' individual benefits. More specifically, Birkin et al. (2014) discuss the professional gains international education can bring to graduates, who can join the workforce with new skills, achieving successful careers and boosting the economic growth of their countries. Additionally,

international education often leads to substantial academic improvements (Cisneros-Donahue et al., 2012). Particularly, Whatley (2024) found that participation in virtual exchanges or in-person mobility programs positively impacts students' GPA and college completion rates, with in-person mobility being the strongest factor. Besides the professional and academic dimensions, studies and blog articles by scholars mention a set of personal benefits that students can gain from learning abroad, including cultural awareness and interdisciplinary competences (Lilley, 2024). Overall, this body of literature indirectly touches upon community impacts, as, by developing professionally, academically, and personally, students can better contribute to society. An analysis of the positive *direct* impact that international education brings to communities is needed to further illuminate this picture.

While research on international education does not cover community impact directly, studies have been conducted on the contributions that local students can bring to their regional or national communities during their studies. For instance, Choi et al. (2023) focused on service learning, an approach that allows students to learn by volunteering in the community through programs organized by their university. Moreover, Tummino and Wong (2020) showcased how students impacted their surroundings by leading a series of online open lectures and debates in collaboration with the Queens Public Library (New York City), where citizens could join and interact. While these examples revolve around the existence of structured projects for students to participate into, community impact can also happen more informally. This may be especially relevant for international education settings, where students immerse themselves in a new culture, bringing it at home and applying it to different areas of their lives. Therefore, exploring the positive *informal* impacts that international education has on communities is an important next step to sharpen our understanding of this subject.

### **Challenging the Current Landscape through the Higher Education for Society (IHES) Theoretical Framework**

The literature so far reviewed reveals that there is no well documented connection between international education and existing forms of community impact. Indeed, international education seems to



be defined as a priority that students pursue individually, to foster their own academic, professional, and personal development, while community impact remains confined to specific sectors within the local dimension. What would happen if these two dimensions were brought together? This question echoes the work of Jones et al. (2021). Notably, the scholars explain that ‘in our super-complex world, the local and the global are intertwined and the concepts of social responsibility and the public good are themselves both global and local in their scope’ (p. 331). Furthermore, they add that both internationalization and community impact programs ‘have been criticized for emphasizing capitalist, competitive, neoliberal agendas over social, human, public benefits’ (p.331), resulting in a low rate of effective community-centered interventions. The research by Jones et al. does not limit itself to assessing the international education and social impact landscape, but also proposes a theoretical framework to reshape current issues.

The Internationalization of Higher Education for Society (IHES) framework was designed specifically to benefit communities, both locally and internationally, and it relies on three principles (Jones et al., 2021), as showcased in Table 1. As the authors stress, the three principles were introduced to ensure respect for communities’ diversity, moving beyond an Euro-centric perspective and working towards leaving tangible and long-lasting empowerment. Overall, by promoting sustainability, equity, and social justice, engaging diverse stakeholders locally and globally, and ensuring mutual benefits and continuous evaluation, universities can become the catalyst of positive change. Jones et al. also provide specific examples of how universities can mutually benefit local and international communities.

**Table 1**

The Key Principles of the IHES Framework

	Principle	The principle is achieved by
1	Universities are driven by values consistent with higher education for the global common good	<ul style="list-style-type: none"> <li>○ Intentionally and purposefully seeking to contribute to and learn from society both locally and globally;</li> <li>○ Promoting a future orientation for society, involving enhanced resilience, sustainability,</li> </ul>

		and equality of opportunity; <ul style="list-style-type: none"> <li>○ Supporting social justice, equity, development, conservation, social integration, and/or community relations within societies.</li> </ul>
2	Universities involve a broad range of people from within and outside the institution.	<ul style="list-style-type: none"> <li>○ Engaging people in different units and academic departments across the home institution;</li> <li>○ Partnering with international/intercultural communities at home and/or abroad;</li> <li>○ Bringing the global to the local and/or the local to the global—treating each as equally valuable.</li> </ul>
3	Universities maximize benefit for all stakeholders and parties involved.	<ul style="list-style-type: none"> <li>○ Incorporating diverse and deep local and international partnerships in the planning, delivery, and evaluation of IHES activities;</li> <li>○ Regularly evaluating and carefully planning activities at home and abroad, based on mutually agreed measures of benefit for all parties;</li> <li>○ Collecting data regularly and scrutinizing them to improve practice.</li> </ul>

*Note.* Based on *Global Social Responsibility and the Internationalization of Higher Education for Society* (p. 340), by E. Jones, B. Leask, U. Brandenburg, and H. De Wit, 2021, *Journal of Studies in International Education*. Copyright 2021 by E. Jones, B. Leask, U. Brandenburg, and H. De Wit.

When referring specifically to local communities, these activities include organizing public lectures and workshops to raise awareness on global issues within the local community, share scholars' research outcomes in accessible formats, such as blogs or newspapers, welcoming students from diverse international backgrounds, ethnic and indigenous communities, and encouraging domestic students who have studied abroad to share their personal experiences. Moreover, examples are provided on how to impact international communities. These include international research partnerships on meaningful issues affecting the international communities, sending tourism students to work in emerging destinations and help developing sustainable tourism practices, and developing a curriculum that is open to insights from diverse international communities, and includes projects to engage and support them.

## **Methods**

### **Research Design**

The study relied on quantitative research methods, as well as some qualitative insights. This design aimed to capture a comprehensive picture of participants' perspectives, not just relying on the wide range of topics that they were asked to discuss, but also on diverse methods and tools that they could use to express their thoughts. Specifically, data was collected through a Qualtrics questionnaire featuring multiple choice questions and numeric rating scales (NRS). These questions helped students to reflect on key insights from the literature – namely that international education increases problem solving skills, leadership skills, network, global awareness, and communication skills. Most importantly, the questions asked students to rate how strongly these gains allow them to achieve community impact. Additionally, the questionnaire included three open questions, allowing for qualitative insights to complement the quantitative component. Notably, the qualitative section was designed to provide anecdotal evidence and concrete cases in which international education has prepared students to shape their communities.

The questionnaire required 5 to 10 minutes to be completed, depending on individual differences among participants. In order to allow for a time-friendly and smooth experience, students were first asked to respond to a set of introductory questions, as showcased in Table A1 (Appendix A), including what age group they belonged to, their country or countries of origin, and whether they participated in a mobility program as part of their university studies. The people who responded affirmatively to the latter were then asked for more information about their exchange destination, program duration and focus areas, as well as to reflect on how having joined an exchange program equips them to impact the community where they returned to as they complete their studies. Table A2 (Appendix A) shows this set of core questions. Conversely, the people who responded negatively to the final introductory question were required to reflect on their international education within the university, and share how they think this journey can help them shape the surrounding community. Table A3 (Appendix A) features this set of core questions.

## Participants

The study's participants primarily consisted of undergraduate students within the researchers' networks, representing diverse academic backgrounds and international exchange destinations. Respondents were mostly between the ages of 18 and 25, with three participants aged 25-30. They came from a wide range of countries across five continents, with 23 students having two nationalities, and 5 having three nationalities. The sample aimed to balance individuals who had firsthand experience in an exchange program with those engaged in an international academic environment without directly studying abroad. 35 respondents had participated in an exchange program, with destinations including countries in Europe, Asia, and Oceania, while 44 respondents had been involved in international education in other capacities. In total, 79 participants completed the survey.

**Table 5**

Participants' main demographic information

Parameter	Value	Number of participants
Age	18-25	76
	25-30	3
Primary Region of Origin	Europe	73
	Africa	1
	North America	3
	South America	1
	Asia	1
Second Nationality	Europe	15
	Africa	1
	North America	1
	South America	1
	Asia	0
Third Nationality	Europe	4

	Africa	0
	North America	0
	South America	1
	Asia	0
Experience	Exchange	35
	International Education	44
Exchange Destination	Europe	17
	Asia	11
	Oceania	7

### Data Analysis

Part 1 of the analysis focused on the direct effects that participating in an exchange program has on perceived community impact, as well as considering possible mediating factors. Specifically, the variables of interest were (1) perceived overall community impact (dependent variable, DV), (2) participation in an exchange program (independent variable, IV). Moreover, five mediators were accounted for: problem solving skills, leadership skills, increased network, global awareness, and communication skills. These factors were chosen based on previous literature. Specifically, Dassin et al. (2017) reviewed the benefits of international education for students, including the strengthening of social and professional networks, the development of leadership skills, enhanced intercultural communication, greater civic engagement, critical thinking, and improved career outcomes. These experiences not only broaden students' perspectives but also prepare them to navigate and contribute to increasingly interconnected and diverse environments. Based on these concepts, the current study identified five measurable mediators that ultimately connect with the factors highlighted in the literature, offering a clearer understanding of how international education contributes to students' ability to drive meaningful change.

Part 1 of the analysis relied on four models. First, a simple regression was performed, to understand the direct effect that joining an exchange program (IV) has on the perceived community impact (DV). Secondly, a mediator model allowed for investigating the relationship between the IV and mediators. Thirdly, an outcome model was employed to understand the relationship between mediators and the DV. After understanding the relationships between IV, DV and mediators, a SEM analysis through the *lavaan* package in R was conducted.

This last step allowed for computing the indirect or mediation effect, showcasing how the IV influences the DV through the mediators. Specifically, as explained by Hair et al. (2021, p. 4), SEM analysis is a tool to “enable researchers to simultaneously model and estimate complex relationships among multiple dependent and independent variables”, going beyond simpler approaches like multiple regression, logistic regression, and analysis of variance. Reflecting on this study, SEM can provide a holistic overview of vast webs of relationships between IVs, DVs, and the five mediators, as well as it allows for testing the significance and strength of each of these connections.

Part 2 of the analysis proceeded similarly to Part 1. However, this section was testing for the relationship between perceived community impact (DV) and interactions with an international education environment (IV). The same mediating variables were employed: problem solving skills, leadership skills, increased network, global awareness, and communication skills. First, a simple regression focused on the direct effect that participating in international academic programs (IV) has on perceived community impact (DV). As a second step, a mediator model investigated the relationship between the IV and mediators. Thirdly, an outcome model was employed to understand the relationship between mediators and the DV. A SEM analysis computing the mediation effect concluded the section.

Part 3 focused on the qualitative analysis of the open-ended responses in the questionnaire. This section explored participants' perspectives and experiences that were not captured through the quantitative measures in Parts 1 and 2. The analysis involved identifying recurring themes related to the impact of participation in exchange programs and international academic environments on community engagement. Specific attention was given to examples and anecdotal evidence provided by participants. Overall, the

qualitative data provided a deeper understanding of subjective experiences and offered insights into the mechanisms driving the observed relationships.

### **Ethical Considerations**

Potential participants received the survey link as part of WhatsApp messages, where the research aim and participation requirements were summarized. Other participants were contacted with the help of lectures, who allowed the researcher to briefly join the class and introduce the students to the thesis topic. Within this process, addressing ethical concerns and protecting participants' rights was imperative. Before being able to complete the questionnaire, interested students were presented with an in depth overview of the research, as well as made aware that participation is voluntary and free of social, psychological and physical risks. In this section, participants were also informed that their data will be anonymized, treated confidentially, and securely stored based on faculty's guidelines. Lastly, students received the contact details of the research team, with the possibility to reach out to a designated contact person in case of concerns or doubts about the study. After having read this information, students were required to provide their digital signature in order to proceed and access the questions.

## **Results and Analysis**

### **Part 1 – Effects of Exchange Participation on Perceptions of Community Impact**

As a first step in the analysis, a simple regression model was run in order to evaluate the relationship between exchange participation and perceived community impact. The analysis revealed that the variables are highly correlated ( $p < 2.2e-16$ ) and that 71.24% of the variance in perceived community impact is explained by the exchange participation variable (multiple R-squared: 0.7124; adjusted R-squared: 0.7086).

Next, a multiple regression model was designed to measure how strongly participating in an exchange predicts the perceived development and application of different skills (mediators). While the model showed a highly significant correlation between exchange participation and the mediators ( $p < 2.2e-16$ ; multiple R-squared: 0.9106; adjusted R-squared: 0.9095), residuals were plotted, suggesting potential heteroskedasticity. To verify this, a Breusch-Pagan test was run on the model, leading to a highly

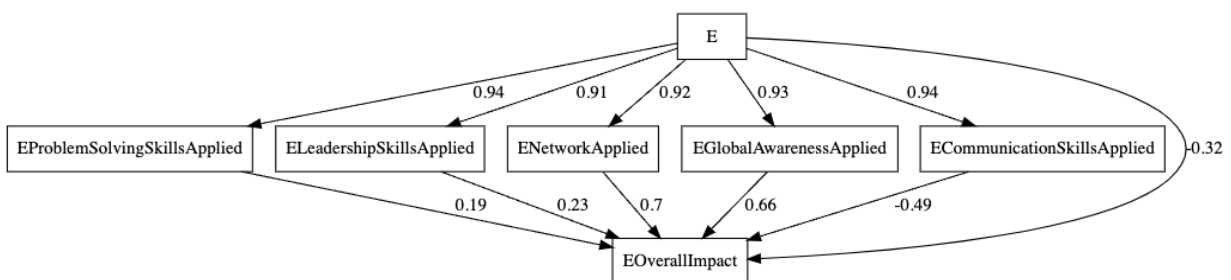
significant result ( $p = 2.03e-05$ ) and confirming heteroskedasticity. In order to account for skewed results due to heteroskedasticity, robust standard errors were calculated. Specifically, despite the presence of heteroskedasticity, these measures suggested that exchange participation is a highly significant predictor of mediators ( $p < 2.2e-16$ ), confirming the initial results of the model.

Subsequently, a third model was run to predict how the perceived community impact is associated with the application of different skills gained during an exchange (mediators). The model led to highly significant results, meaning that the mediators explain 89.75% of the variance in overall community impact (multiple R-squared: 0.8975; adjusted R-squared: 0.8904;  $p < 2.2e-16$ ). Specifically, increased network and global awareness have the strongest positive effects. Surprisingly, however, communication skills negatively affected community impact. This means that better communication skills significantly reduce community engagement and impact. Lastly, problem solving and leadership development yielded an interesting result. Indeed, these mediators are *not* significant predictors, beginning the question of what makes these factors less impactful than others.

As a final step, a mediation analysis was conducted using structural equation modelling (SEM) through the *lavaan* package in R. The results of the SEM analysis confirmed what the previous model had predicted concerning the relationship between participation in an exchange program, the mediators, and perceived community engagement that derives from this experience. Figure 2 showcases the mediation process visually, through indicating the standardized path coefficients connecting the independent variable, the mediators, and the dependent variable. Once again, an expanded network and increased global awareness are key predictors of community impact.

**Figure 1**

Visual representation of the mediation process, with standardized path coefficients





Differently from the third model, however, communication skills are not classified as a significant predictor anymore, while still being negatively related to perceived community engagement. This shift in statistical significance was investigated by measuring variance inflation factor (VIF) values for each mediator. Specifically, all five mediators showed VIFs above 9, with communication skills reaching a critical level of 19.22. This indicates multicollinearity among the mediators, meaning that communication skills are strongly correlated with other variables such as global awareness and leadership. When these interdependencies are accounted for in SEM, communication skills no longer demonstrate a unique contribution to community impact. This suggests that while communication is likely important, its influence may be indirect or subsumed by other, overlapping constructs.

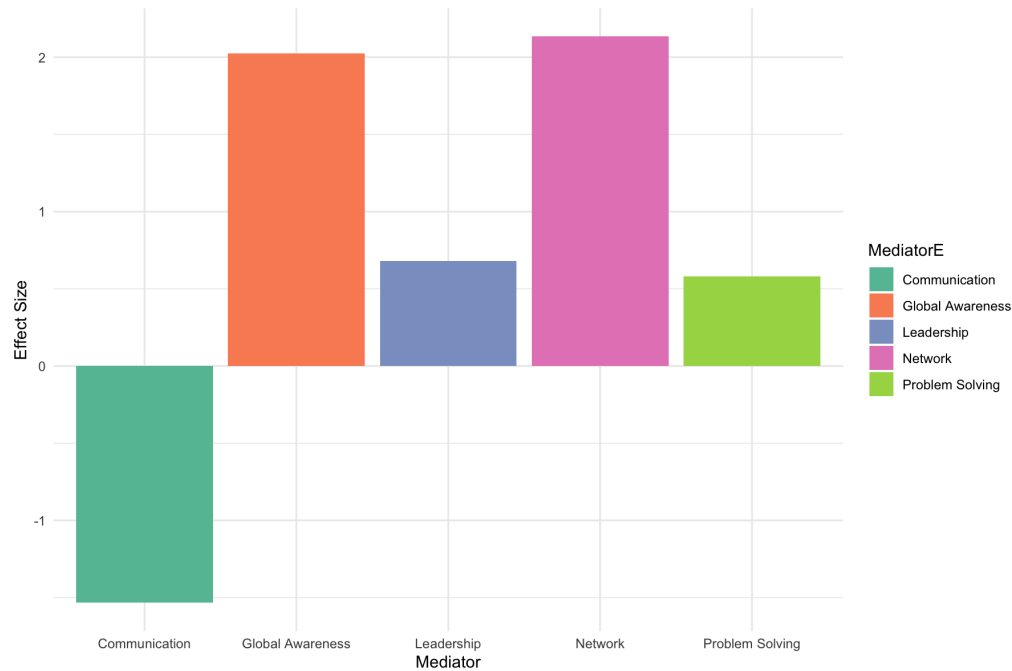
Moreover, when all five mediators were included simultaneously in the SEM model, the overall model fit was poor. Key fit indices such as RMSEA (0.412), TLI (0.739), and a significant chi-square test ( $p < 0.001$ ) indicated that the hypothesized model did not adequately capture the relationships in the data. This suggested potential issues such as multicollinearity or overlapping variance between the mediators, leading to unreliable estimates and poor overall fit. To address this, the model was simplified by analyzing the significant mediators individually. When network and global awareness were tested separately as mediators of the relationship between exchange participation and perceived community impact, the model fit improved dramatically. Both simplified models showed perfect fit statistics ( $CFI = 1.000$ ,  $TLI = 1.000$ ,  $RMSEA = 0.000$ ,  $SRMR = 0.000$ ), providing strong support for their roles as mediators.

Most importantly, the SEM results were able to bring the research a step further by measuring how problem-solving skills, leadership skills, increased network, global awareness, and communication skills mediate the relationship between exchange participation and perceived community impact. Specifically, the individual indirect effects of each mediator were calculated, as visually showcased in Figure 2. The total indirect effect (3.884), derived by summing these values, was highly significant ( $p < 0.001$ ), suggesting an indirect-only mediation. In other words, this means that the chosen mediators are fully instrumental in driving impact. Specifically, participants who took part in the exchange program

showed a significantly higher perceived community impact – by about 3.88 points – *because* of the skills and experiences gained, mainly referring to expanded networks and higher global awareness.

**Figure 2**

Visual representation of the indirects effects of mediators (exchange) on perceived community impact



**Table 5**

Summary of key model statistics and results for exchange participation and perceived community impact

Model	Statistic	Value
Simple Regression (Exchange Participation and Perceived Community Impact)	p-value	< 2.2e-16
	R-squared	0.7124
	Adjusted R-squared	0.7086
Multiple Regression (Exchange Participation and Mediators)	p-value	< 2.2e-16
	R-squared	0.9106

	Adjusted R-squared	0.9095
	Breusch-Pagan test p-value	2.03e-05
Model Predicting Perceived Community Impact (Mediators' Effect)	p-value	< 2.2e-16
	R-squared	0.8975
	Adjusted R-squared	0.8904
Structural Equation Modeling (SEM) - Model Fit (Five Mediators)	RMSEA	0.412
	TLI	0.739
	Chi-square p-value	< 0.001
SEM (Simplified Model Network & Simplified Model Global Awareness)	CFI	1.000
	TLI	1.000
	RMSEA	0.000
	SRMR	0.000
Total Indirect Effect (Summed Mediators' Effects)	Total Indirect Effect	3.884
	p-value	< 0.001

## Part 2 – Effects of International Education on Perceptions of Community Impact

For Part 2, the analysis began with a simple regression model to assess the relationship between international education participation and perceived community impact. The results showed a significant relationship between the two variables ( $p < 2.2e-16$ ), with 78.99% of the variance in perceived community impact explained by international education participation (multiple R-squared: 0.7899; adjusted R-squared: 0.7871). This high proportion of explained variance suggests that international education plays a key role in shaping community impact in the view of participants.

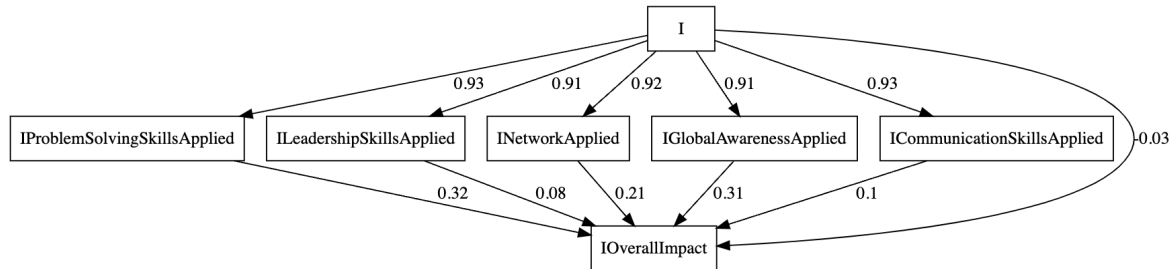
Next, a multiple regression model was developed to examine how participation in international education predicts the development and application of different skills (mediators). The model revealed a highly significant relationship between international education participation and the mediators ( $p < 2.2e-16$ ; multiple R-squared: 0.9064; adjusted R-squared: 0.9052), suggesting that international education is a strong predictor of skills development. Similarly to Part 1, residual analysis indicated potential heteroskedasticity. A Breusch-Pagan test was performed, leading to a significant result ( $p = 0.002859$ ), which confirmed the presence of heteroskedasticity. To address this, robust standard errors were calculated, and despite the heteroskedasticity, the results confirmed that international education participation is a significant predictor of mediators ( $p < 2.2e-16$ ).

Following this, a third model was developed to explore how the application of skills gained through international education (mediators) affects perceived community impact. The results showed that the mediators explain 87.52% of the variance in perceived community impact (multiple R-squared: 0.8752; adjusted R-squared: 0.8666;  $p < 2.2e-16$ ). In this model, problem solving skills ( $p = 0.0163$ ) and increased global awareness ( $p = 0.0247$ ) had the strongest positive effects on community impact. Communication skills, border network, and leadership skills, did not emerge as significant predictors of perceived community impact, which raises questions about why these skills are less impactful compared to others.

To further explore the relationships between international education participation and community impact as seen by the students, a mediation analysis using structural equation modeling (SEM) was conducted with the *lavaan* package in R. The SEM results revealed important insights into the role of various mediators. These results confirm that international education participation significantly impacts community impact awareness through key mediators, including problem-solving skills, leadership, network, global awareness, and communication skills. Figure 3 presents a visual representation of the mediation model, illustrating the standardized path coefficients connecting the independent variable (international education participation), the mediators, and the dependent variable (perceived community impact).

**Figure 3**

Visual representation of the mediation process, with standardized path coefficients

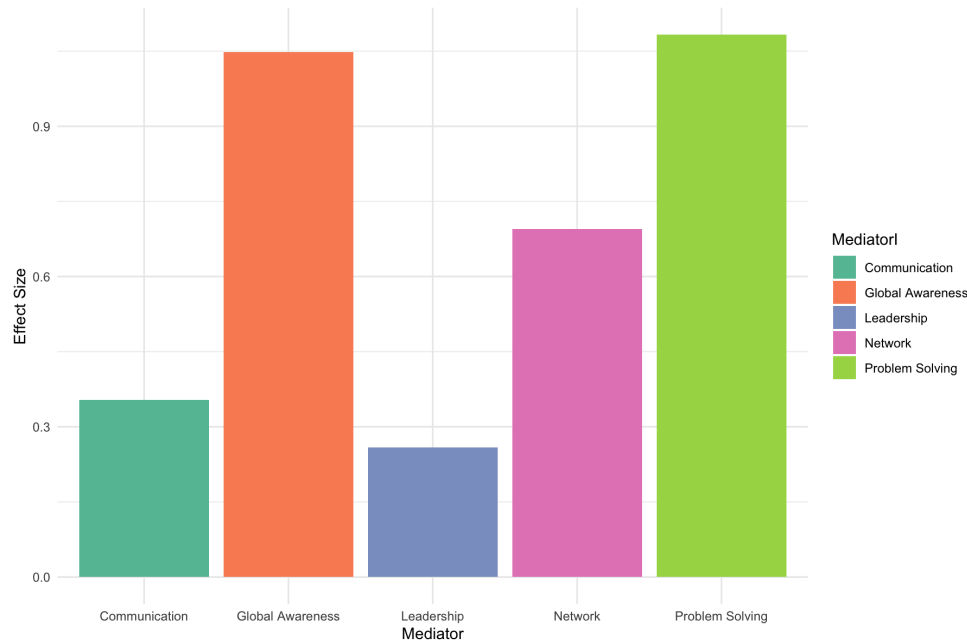


However, when examining the indirect effects, we observe that some mediators had borderline significant or non-significant contributions. For instance, the indirect effect of problem-solving skills (1.082,  $p = 0.093$ ) was close to the threshold for significance, indicating a potentially important but weak indirect effect. On the other hand, the indirect effects of leadership skills (0.258,  $p = 0.765$ ), network (0.695,  $p = 0.227$ ), global awareness (1.048,  $p = 0.181$ ), and communication skills (0.354,  $p = 0.607$ ) were not statistically significant. These results differ from the third model, which identified problem solving skills and increased global awareness as strong predictors. For this reason, further investigation was conducted on the variance inflation factor (VIF) values of each mediator. Overall, four mediators showed VIFs above 9, with problem solving skills (fifth mediator) measuring a borderline value of 8.59. This indicates multicollinearity among the mediators, leading to the non-significant outputs of the SEM model.

Despite the mixed significance of the individual indirect effects, the total indirect effect of all mediators combined was highly significant (3.438,  $p = 0.000$ ), as represented in Figure 4. This demonstrates that the mediators collectively play an instrumental role in shaping the relationship between international education participation and perceived community impact. This result emphasizes the overall importance of the mediators, even if some individual indirect paths did not reach statistical significance due to the multicollinearity.

**Figure 4**

Visual representation of the indirect effects of mediators (international education) on perceived community impact



To further explore these relationships, model fit was considered. Initially, the SEM model including the five mediators showed a poor fit (TLI: 0.742, RMSEA: 0.398; significant chi-square test,  $p < 0.001$ ). In order to address this, two simplified models were estimated using only the mediators that showed the most promise. The first model, which focused on problem solving skills as a single mediator, exhibited an excellent fit with the data (CFI = 1.000, TLI = 1.000, RMSEA = 0.000, SRMR = 0.000). The indirect effect was statistically significant (2.026,  $p = 0.001$ ), suggesting that this mediator alone accounted for a substantial portion of the total effect (total effect = 3.341,  $p = 0.000$ ). Similarly, the second model, which included only global awareness as a mediator, also displayed perfect model fit (CFI = 1.000, TLI = 1.000, RMSEA = 0.000, SRMR = 0.000). The indirect effect of global awareness was likewise significant (1.984,  $p = 0.000$ ), and the total effect remained strong (3.341,  $p = 0.000$ ).

These simplified models confirm that although the full model with all five mediators showed poor fit, likely due to multicollinearity, analyzing the most relevant mediators individually reveals robust and statistically significant indirect pathways. This approach highlights the critical role of problem-solving skills and global awareness in mediating the impact of international education experiences on community engagement as seen by the students.

**Table 6**

Summary of key model statistics and results for international education and perceived community impact

Model	Statistic	Value
Simple Regression (International Education and Perceived Community Impact)	p-value	< 2.2e-16
	R-squared	0.7899
	Adjusted R-squared	0.7871
Multiple Regression (International Education and Mediators)	p-value	< 2.2e-16
	R-squared	0.9064
	Adjusted R-squared	0.9052
	Breusch-Pagan test p-value	0.002859
Model Predicting Perceived Community Impact (Mediators' Effect)	p-value	< 2.2e-16
	R-squared	0.8752
	Adjusted R-squared	0.8666
Structural Equation Modeling (SEM) - Model Fit (Five Mediators)	RMSEA	0.398
	TLI	0.742
	Chi-square p-value	< 0.001

SEM (Simplified Model Problem Solving & Simplified Model Global Awareness)	CFI	1.000
	TLI	1.000
	RMSEA	0.000
	SRMR	0.000
Total Indirect Effect (Summed Mediators' Effects)	Total Indirect Effect	3.438
	p-value	< 0.001

### Part 3 – Anecdotal Evidence of Community Impact

The open questions aimed at collecting anecdotal evidence from students. Open Question 1 asked to provide examples of how participants' engagement with an international environment is *directly* influencing the community where they study their degree program. When answering this question, some students saw teaching as a key pathway to generate impact. Specifically, participants explained that they were able to teach languages, recipes, board games, and music amongst their home community. Another way in which impact was perceived to be generated is through involvement in local, national or international organizations, including Amnesty International and UNICEF. As one participant from the international education group explained:

‘Since being here [in the Netherlands] I’ve been able to be a part of UNICEF, which is present back home in my home country. However, I don’t think I would’ve been so interactive with the organization unless it was for me coming here to study’.

Moreover, having an international background was recognized to be helpful in imagining solutions to address local issues through policies. Notably, students portrayed how the global and the local dimensions can be merged within their international classroom. As one of them wrote:



‘In some courses we have had guest lectures with local experts about global issues which seem easy at first but turn out to be complicated, showing that solutions normally are not straightforward, but small scale solutions are possible and viable’.

When reflecting on specific examples of policy applications, one of the participants explained that they are contributing their knowledge with other international students to help a local company in recycling waste materials from production. Another student explained that, during her exchange, she learned *‘how heatwaves are addressed in Korea’*, which could help *‘prepare the Netherlands or Germany for this same issue’*. Similarly, someone explained how their degree program *‘often invites local innovators and inventors in the Chemical Engineering sphere to speak to us international students’*, allowing fruitful collaborations through projects.

Open Question 2 asked to provide examples of how participants’ engagement with an international environment is *informally* influencing the community where they study their degree program. As one student beautifully explained, this process can sometimes also be unconscious, especially when the skills and take home lessons from an international experience are internalized deeply:

‘I bring the habits and/or customs I saw and participated in Finland back here, either knowingly or unknowingly. I have a better understanding of the different people in Europe and the realization that there are so many possible connections to make’.

Overall, the majority of the answers touched upon the process of discussing with (relevant) others within the home community. For instance, one student reflected on the impact that they see international education had on their family, sharing that *‘studying with international people made me more open to habits from other cultures and perspectives from other cultures, which I have discussed sometimes with my parents’*. Another participant explained a similar dynamic within their friend group: *‘I’m learning a lot about different cultures, and I’m learning how to be more accepting and open-minded, and many debates come up with my friends from different backgrounds’*. Interestingly, social media were also mentioned as a tool to spread impactful reflections to the community. As someone mentioned, *‘I think*

*that my international education has allowed me to share knowledge on social media (Instagram), where I can publish academic texts or philosophical insights, since I study Philosophy and Politics’.*

Lastly, Open Question 3 invited students to specifically unveil the connection between their international education and specific projects and impact generated. In other words, students were asked to give examples of how they think their international education influences the community where they study their degree program, for example through field projects as part of their courses. The themes that emerged are similar to what was discussed in Open Question 1 and 2. Some students who specialized in global health worked on designing a nutrition campaign for the community, while another participant wrote that they learned dancing while on Erasmus, adding that *‘now I am teaching a few people in my community the basic steps’.*

### **Discussion**

This section focuses on contextualizing the results obtained for the exchange group and the international education group within broader theories and literature, as well as discussing key differences between the two groups. Based on previous literature (Dassin et al., 2017), the research investigated five key mediators: problem-solving skills, leadership development, global awareness, intercultural communication skills, and expanded network, with some being later identified as significant predictors. Specifically, the study aimed to explain which mechanisms translate international education experiences into direct and informal community impact, here defined as the degree to which students perceive the benefits of their study abroad experience as contributing to the development of their home community.

#### **Exchange Group**

##### ***Global Awareness and Expanded Network as Significant Mediators***

Reflecting on participants who joined an exchange, expanded network and increased global awareness were identified as significant mediators. Global awareness was examined through qualitative insights from the exchange group, with emphasis placed on their conversations with significant others, where they discussed issues and solutions learned abroad. These interactions especially reflect *informal*

ways of viewing impact in the community. Most interestingly, however, the exchange group students did not limit themselves to discuss global and local issues, but they also had an explicit awareness of how they can apply the knowledge gained abroad to the home community. As exemplified in the analysis section, one of the participants learned how heat waves are addressed in Korea, and directly linked this approach to solutions that could be implemented in their home communities as well. Overall, the practical implications of being globally engaged highlight *direct* channels through which impact can potentially be generated. Furthermore, these dynamics resemble the concept of global citizenship, as theorized by Grad and Van Der Zande (2022). According to the authors, global citizenship refers to the recognition of individuals' rights and responsibilities toward both their local/national communities and the broader transnational community. It involves developing competencies such as intercultural understanding, global awareness, and the ability to engage constructively across cultural and national boundaries in an increasingly interconnected world.

Secondly, network expansion was identified as a significant mediator for individuals who participated in a mobility program. The exchange experience not only expanded participants' social circles but also may have provided access to more diverse, cross-cultural, and practically useful connections. As theorized by Kloeckner et al. (2019), having contacts with an international environment is not simply a process involving encounters between individuals from different countries, who connect across borders and physical spaces (geographic distance). Rather, attention should be also focused on the *context* in which movement happens (contextual distance). Especially when joining a mobility program, distinct environments and daily lived experiences abroad may have amplified the perceived value of new networks. Specifically, participants were required to navigate unfamiliar social, cultural, and academic landscapes, pushing them to actively engage with a broader and more varied group of individuals, and to perceive these networks as catalysts of impact for their home communities as well.

### ***Problem Solving: Analyzing the Lack of Significance***

It is interesting to observe that problem solving does not emerge as a significant mediator in the mobility context. One possible explanation is that its importance is overshadowed by stronger variables

such as network-building and global awareness, which are more distinctly associated with creating impact. Additionally, as highlighted in previous paragraphs, global awareness is perceived by the exchange group students as a toolkit of experiences and knowledge that can help them craft solutions for local issues within the home community. Their take on global awareness clearly overlaps with the ability to solve problems. This interpretation suggests that students' did not identify problem solving as a separate driver of impact, but rather perceived it as an integral step in their global awareness journey. Therefore, this finding further corroborates the strong connection between the two mediators as identified in previous literature (Nkopuruk, 2024). Lastly, for international students in particular, problem solving may already be an integrated skill due to their prior exposure to international education and cross-cultural experiences. As such, it might not stand out as a unique or differentiating factor in explaining their ability to make an impact when joining an exchange program abroad.

### **International Education Group**

#### ***Problem-Solving Skills As A Key Mediator in Non-Mobility Contexts***

Shifting the focus to the international education group, problem-solving skills emerged as a central mediator in driving perceived community impact. In order to fully understand this result, it is necessary to acknowledge that problem-solving is tied to the socio-cultural context where challenges arise (Rhodes et al., 2024). In other words, as Rhodes et al. (2024, p. 2) explain, “the sociocultural context in which problem solving is being observed helps define the parameters of the problem being solved, which in turn influences the pieces of information that may be relevant to its effective solution”. This also means that problem-solving requires individuals to present high levels of adaptability to diverse environments and issues (Bobrowicz & Thibaut, 2023).

Given these definitions, why is problem solving especially relevant for students who attend international education programs? By being regularly exposed to new ways of thinking and challenged to reconcile different perspectives in classroom discussions, group work, and intercultural collaboration, these students embody the core essence of problem solving within their home communities. Even more importantly, the qualitative insights gathered in the Results and Analysis section showcased that students

see problem solving as a facilitator for *direct* engagement and community initiatives. Specifically, students explained how they are better able to identify solutions for local problems by integrating and adapting different perspectives from their international classroom.

### ***Global Awareness in International Education: Bridging the Local and the Global***

Another strong and consistent predictor of perceived community impact within the international education group was global awareness. Importantly, the significance of global awareness does not lie in abstract knowledge of international affairs, but in students' ability to recognize and articulate the connections between global and local issues. As Kerkhoff (2017) notes in her model of global readiness, the most impactful global education connects students to their own communities, fostering locally grounded action informed by global perspectives.

This form of awareness allows students to contextualize international problems – such as climate change, inequality, or migration – within their own environments. It encourages them to reflect on how these phenomena manifest in their local communities and to consider solutions that are both globally *and* locally relevant. This mechanism was especially apparent in the qualitative responses. When asked about the perceived *informal* contributions to their communities, many participants described informal conversations with family and friends as a primary means of transmitting global insights. These students were not merely absorbing information, but applying it in familiar environments, possibly influencing the worldview and awareness of their peers and family members.

### ***Behind the Lack of Significance for Expanded Network***

The lack of significance of an expanded network for the international education group may depend on the diverse perceptions of geographic and contextual distances by participants (Kloeckner et al., 2019). Applying the concept of geographic and contextual distance to the international education group, it can be suggested that students who did not leave their home community may have experienced their network expansion as contextually limited or less meaningful, given that their physical proximity to the home community remained unchanged and their opportunities for cross-cultural engagement happened within this same environment. A further hypothesis contrasts traditional and non-traditional

views on networks. While scholars recognize that networking is becoming increasingly fluid and self-managed through the introduction of new technologies and social media (Davis et al., 2020), intercultural environments add another layer to this picture. Specifically, the participants in the present study may have interpreted the concept of “network” primarily through a career-oriented lens, rather than seeing it as a flexible and broader set of meaningful social or intercultural connections.

### **Common Non-significant Mediators across the Two Groups: Leadership and Communication Skills**

Surprisingly, leadership, communication skills, and expanded network did not emerge as significant predictors of perceived community impact in either the international education or the exchange group. When reflecting about leadership, it should be noted that several definitions of this concept exist. While traditional leadership literature often emphasizes a “heroic” leader archetype, newer frameworks stress that leadership is increasingly enacted collaboratively (Cavagnaro & van der Zande, 2021; Eva et al., 2019). Notably, Cavagnaro and van der Zande (2021) define leadership as a process of influence rather than of formal and static authority, emphasizing that leaders have an ethical responsibility to act with awareness of their impact on human and non-human stakeholders, guided by values that move beyond self-interest. Within this picture, Eva et al. (2019, p. 1) discuss the idea of collective leadership: “the importance of collective leadership will only increase as organizations embrace more multi-organizational, virtual, and non-traditional teams, creating the need for a more fluid and dynamic process around the granting and claiming of leadership roles”. In the context of international education, leadership might be experienced through team-based projects, student organizations, or peer collaborations. As noted by Edwards and Bolden (2022), these collective dynamics are more difficult to isolate, which may explain why leadership did not show up as a strong individual mediator when participants were asked about their specific contributions. This insight is especially relevant as it reveals that international education is an impactful tool for inclusive collaboration. Specifically, it allows students to see the power of merging diverse perspectives and skills, rather than perceiving academic projects and real-life issues as challenges that can be managed in a top-down manner.

Similarly, communication skills may function in more collective ways, as they are inherently relational and bi-directional (Van Ruler, 2018). Especially in intercultural contexts, communication is focused on *interaction*, where subjects from different backgrounds mutually enrich each other's knowledge and views on the world (Baker, 2024). From these insights came the concept of intercultural communication, where subjects 'make use of and negotiate between different cultural resources and languages in interaction, including intersecting cultural identities, communities, references, and meanings (e.g., nationality, ethnicity, class, profession, gender, sexuality), at a range of scales from the local, to the national, and the global' (Baker, 2024, p. 212). This interpretation suggests that communication may not be perceived by students in international education as a standalone skill that they bring back home, but rather as an embedded capacity that enhances several interactions within and outside academia. Supporting this view, the *Global Engagement Survey (GES) Fall 2021 – Summer 2022 Annual Report* (The Community-Based Global Learning Collaborative, 2022) notes that while communication is frequently cited by students as a developmental outcome of international experiences, it is often framed as part of broader intercultural and relational competencies rather than an individual asset. This reinforces the idea that communication is deeply tied to collective processes rather than being viewed as an isolated skill.

Overall, both leadership and communication skills seem to connect to *indirect* and *formal* processes. Specifically, the increased amounts of individuals who are involved in shaping leadership and communication may increase the complexity of said processes, in turn leading to the need for a clearer coordination and structure. Moreover, this interpretation highlights that, as the global issues to be discussed collectively become more complex, it becomes increasingly important to approach them with care and sensitivity, relying on more formal frameworks and indirect, generalized strategies to ensure respectful, inclusive, and effective dialogue across diverse cultural and social contexts.

### **Beyond the IHES Theoretical Framework: Current Contributions and Open Questions**

This study is grounded in the IHES Theoretical Framework developed by Jones et al. (2021), aiming to connect its three core principles with empirical insights from real-world experiences. The first

principle emphasizes the responsibility of universities to contribute to the *global common good* through international education. The findings of this research suggest that such contributions extend beyond individual experiences abroad, and they resonate within the students' perceived impacts on the home communities. A next step in research could be to examine how these local impacts interact with those made in host countries. How can distinct geographical and cultural contexts be meaningfully linked to enhance mutual benefit? And what role can students play in fostering these transnational connections?

The second principle of the IHES framework highlights the importance of inclusivity in international education – extending beyond the academic (teaching) community to incorporate the voices of students, staff, and non-academic actors both locally and globally. This study underscores the value of centering students' perspectives in understanding internationalization outcomes. Specifically, gaining insight from the students themselves has provided a more comprehensive understanding of the direct and informal impacts they believe to have on their community, a concept that is difficult to grasp through an outsider's perspective alone. Future research could expand this approach by integrating the views of staff members and non-academic stakeholders to build a fuller picture.

The third principle argues that universities should strive to generate value for all stakeholders engaged in international education. This can be achieved through incorporating local and international collaborations when planning, delivery, and assessing international education projects, as well as by regularly collecting data and incorporating feedback from community-based partners. While this view focuses on institutional-level contributions, the present study broadens the scope by exploring the informal and direct impacts students perceive to leave within home communities, including partnering with local organizations and companies, teaching new languages and skills to peers, and discussing global issues with significant others. Further investigation could explore the dynamic relationship between structured, institution-led initiatives and the organic, community-level contributions revealed through this research.

Looking more broadly at future research directions, an important observation from this study is that, contrary to expectations, there were no major differences between the two groups in how they



perceived the community impact of their international education experiences. This challenges the assumption that studying abroad is inherently more effective in fostering community engagement than participating in an international learning environment at home. It suggests that meaningful contributions to the local community can be cultivated in both settings. With this awareness in mind, future research could explore how these two forms of international education might be combined, and investigate the unique or compounded impacts on the community when a student engages in both.

Moreover, looking ahead, the results of this study beg the question of whether there is an opportunity to enhance informal, yet powerful, ways students contribute to their communities by creating more structured platforms for engagement. While it is true that students are achieving impact by applying their global awareness, problem solving skills, and network *informally* and *directly* to the community, there could strategies to keep the direct nature of the impact, and amplify it even further by providing a robust structure for it to develop. For example, universities might facilitate events or partnerships with local organizations to allow students to share their insights and backgrounds with wider audiences. Possibly, these more organized settings would allow for skills like communication and leadership to emerge, especially because these mediators were identified as requiring more structured environments to be fully expressed.

### **Limitations**

This study has several limitations, underscoring the challenges of drawing causal relationships between overlapping variables. Notably, the presence of multicollinearity impedes clear distinction between the mediating variables. For example, while communication skills were not identified as significant predictors of impact, the qualitative insights highlighted their role in spreading global awareness and ideas. Moreover, the sample for this study was restricted to students with a connection to the Netherlands, which may not reflect the diversity of internationalization strategies found elsewhere. Additionally, the research relied solely on student self-perceptions, without incorporating the perspectives of other stakeholders – particularly within the home communities they aim to impact. For example, this approach could raise some questions when considering global awareness. Indeed, does *discussing* the

abroad experience imply potential community impact? And how is it possible to clearly distinguish the individual impact that is being shared through communicating with family members and friends from the way these people may transform their views and identities? Overall, these doubts present a gap in understanding the long-term and externally perceived effects of international education. Future research should therefore examine the impact beyond perceptions and aim to include more regions to increase diversity and be able to generalize the findings.

### **Conclusion**

This study explored how internationally engaged students view their societal impacts on communities, revealing both the potential and the complexity of translating global learning into local actions. Specifically, the research was centered on understanding how students participating in international education perceive their impact on their home communities. In the exchange group, the study showed that two mediators – global awareness and expanded network – lead to perceived community impact. Additionally, two mediators – global awareness and problem solving skills – were found to be significant drivers of perceived impact in the international education group. In exploring these topics, the study has incorporated a diverse array of quantitative and qualitative methods, as well as a broad set of disciplines, including education studies, globalization studies, leadership studies, and communication studies.

Besides providing answers to the research question, however, the present thesis also painted a more nuanced perspective on the role of international education in impacting local communities. Specifically, this research underscores that the impact of international education is not merely a product of individual competencies, but of the unique contexts and structures that allow those competencies to flourish and build positive impact. This awareness recalls the words of Marie Skłodowska Curie presented at the beginning of this thesis, as understanding that “science is essentially international” means looking beyond the gains single students and institutions can derive from this process. By recognizing and supporting the direct and informal ways students perceive to create change, higher education institutions

can bridge global learning with local relevance, ultimately materializing their commitment to broader prosperity through a more inclusive and intentional engagement.

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## Appendix A

### Questionnaire - Introductory and Core Questions

**Table A1**

#### Introductory Questions

Type	Format	Order	Question
Introductory	Multiple choice	1	What is your age group?
	Short text entry	2	What country (or countries) are you from?
	Multiple choice	3	Did you participate in a mobility program (e.g., Erasmus) as part of your university studies?

**Table A2**

#### Core Questions - Mobility

Type	Format	Order	Question
General	Short text entry	1	Which country did you (mainly) visit during your mobility program? Please write one country only.
		2	How many months did your mobility program last? Please write numbers only.
		3	What was the primary focus of your mobility program? (e.g., studying specific academic subjects/tracks, language learning, professional experiences)
Quantitative	NRS	4	To what extent has your exchange program improved your ability to solve everyday problems? These can include organizational skills, time-management, budgeting skills, conflict management skills etc.
		5	To what extent do you think these problem solving skills can support you in helping the community where you study your degree program. This community can include your family and friends, the people you work with, the people you play a sport with, etc.
		6	To what extent do you feel your exchange program enhanced your ability to communicate with people from different cultural backgrounds?



		7	To what extent do you feel you can use your intercultural communication skills in the community where you study your degree program? This can include your family, friends, people you work with, people you play a sport with, etc.
		8	To what extent do you feel your exchange program expanded your network, including making new friends, professional and academic connections?
		9	To what extent do you think your community could benefit from your international network as well? This can include your family, friends, people you work with, people you play a sport with, etc.
		10	To what extent do you think that your mobility made you more aware about global problems currently happening?
		11	To what extent have you shared these awareness on global issues with the community where you study your degree program? This can include your family, friends, people you work with, people you play a sport with, etc.
		12	To what extent do you think you have developed your leadership skills during your exchange program? This includes developing any new initiatives, projects, clubs, etc., alone or with other people.
		13	To what extent do you think these leadership skills will help you impact the community where you study your degree program? This can include your family, friends, people you work with, people you play a sport with, etc.
	Multiple Choice	14	Approximately how many people in this community have you directly influenced through the skills or knowledge gained during your exchange?
	NRS	15	How would you describe the overall impact of your exchange program on the community where you study your degree program?
Qualitative	Open Questions	16	Can you give an example/examples of how your engagement with an international environment is directly influencing the community where you study your degree program (e.g. volunteering)?

		17	Can you give an example/examples of how your engagement with an international environment is indirectly/informally influencing the community where you study your degree program (e.g. discussing different views with your parents)?
		18	Can you give an example/examples of how your international education influences the community where you study your degree program (e.g. field projects in the local community as part of your course)?

**Table A3**

## Core Questions - International Education

Type	Format	Order	Question
Quantitative	NRS	1	To what extent has your international education improved your ability to solve everyday problems? These can include organisational skills, time-management, budgeting skills, conflict management skills, etc.
		2	To what extent do you think these problem solving skills can support you in helping the community where you study your degree program? This community can include your family and friends, the people you work with, the people you play a sport with, etc.
		3	To what extent do you feel your international education enhanced your ability to communicate with people from different cultural backgrounds?
		4	To what extent do you feel you can use your intercultural communication skills in the community where you study your degree program? This can include your family, friends, people you work with, people you play a sport with, etc.
		5	To what extent do you feel your international education expanded your network, including making new friends, professional and academic connections?
		6	To what extent do you think your community could benefit from your international network as well? This can include your family, friends, people you work with, people you play a sport with, etc.

		7	To what extent do you think that your international education made you more aware about global problems currently happening?
		8	To what extent have you shared these awareness on global issues with the community where you study your degree program? This can include your family, friends, people you work with, people you play a sport with, etc.
		9	To what extent do you think you have developed your leadership skills as part of your international education? This includes developing any new initiatives, projects, clubs, etc., alone or collaborating with other people.
		10	To what extent do you think these leadership skills will help you impact the community where you study your degree program? This can include your family, friends, people you work with, people you play a sport with, etc.
	Multiple Choice	11	Approximately how many people in this community have you directly influenced through the skills or knowledge gained during your international education?
	NRS	12	How would you describe the overall impact of your international education on the community where you study your degree program?
Qualitative	Open Questions	13	Can you give an example/examples of how your engagement with an international environment is directly influencing the community where you study your degree program (e.g. volunteering)?
		14	Can you give an example/examples of how your engagement with an international environment is indirectly/informally influencing the community where you study your degree program (e.g. discussing different views with your parents)?
		15	Can you give an example/examples of how your international education influences the community where you study your degree program (e.g. field projects in the local community as part of your course)?