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1066 Budapest, Teréz körút 8.
e-mail: gjsd@gile-edu.org

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AIMS AND SCOPE

The GiLE Foundation has established the GiLE Journal of Skills Development (GJSD) as an open-access publication to promote research and ongoing dialogue relating to personal skills development and lifelong learning. It thereby contributes to the mission of the GiLE Foundation **to support young people** specifically.

GJSD therefore aims to be a valuable, open-access (**CC BY 4.0**) resource for all those who aim to equip rising talent for a future that is likely to involve ongoing skills development, upskilling and reskilling. All of our published content can be utilised by researchers, corporate learning and development practitioners, and those seeking to pursue their own personal and professional development.

GJSD encourages submissions from everyone (e.g., students, researchers, educators, trainers, and policymakers) whose work relates to skills development. Contributions are welcomed from **any discipline** (e.g., agriculture, business, education, healthcare, natural sciences, etc.) if they are appropriately linked to the focus area of the journal.

Although a scientific journal, GJSD also features '**Food for Thought**' and '**Guest Column**' sections where academics and those with a non-academic background may contribute to dialogue with our readership. Consequently, GJSD welcomes data- based essays and case studies from the worlds of both **education and work** that relate to leadership training for young people, support for new **innovators and entrepreneurs**, and **training that upskills** recent graduates, apprentices and other inexperienced hires.

A section called '**Policy and Social Challenges**' invites submissions from students, graduates, employers, career counsellors, academics, and anyone involved in policy decision-making. We encourage submissions to identify and discuss an existing policy or social challenge and offer potential solutions or new directions to address this challenge.

GJSD especially welcomes research articles from **Early-Career Researchers**, i.e., Masters's and PhD students, postdoctoral researchers and young professionals. Authors who submit their papers specifically to this section can expect a targeted evaluation with more supportive feedback to motivate young people, and that improves the quality of their papers.

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EDITORIAL

Dear Readers,

It is with a sense of nostalgia and anticipation that we present to you the final issue of the GJSD under the banner of the GiLE Foundation. Over the years, the GiLE Foundation facilitated the dissemination of research and insights on topics related to the ongoing personal skills development of young people. However, as quoted by one of our Authors, *Dr William E. Donald*, in the closing Policy and Social Challenges piece of this current issue, "The times they are a-changin'." And so are we.

Change is inevitable, and I believe that it is often the catalyst for growth. The GJSD is evolving and expanding, but as it finds a new home and a fresh identity, it retains its core values as well as its commitment to academic excellence.

As you turn the pages of this issue, you will discover a varied selection of research and perspectives. In the **Food for Thought** section, we present four papers. The first two are particularly beneficial for early career scholars as they provide them with practical and insightful guidance for their academic journey.

Dr William E. Donald's article is highly recommended for both early-career scholars and potential mentors. The article draws on the author's significant personal experience and research, offering valuable insights into the benefits of mentorship in academia. The article highlights three key ways that mentorship can support early career scholars, leading to enhanced productivity, career satisfaction, and the likelihood of success.

The article written by *Dr Ponn P. Mahayosnand* and *Ms SM Sabra* is a valuable resource for those seeking to enhance their interview skills in the post-pandemic era. You may notice that this article is longer than a typical Food for Thought paper. However, we have made an exception to the usual page limit criteria on this occasion since the article offers a comprehensive guide with tips, recommendations, and examples aimed at preparing students for virtual interviews.

Dr Nimmi P. Mohandas explores the changing landscape of careers, particularly the rise of the gig economy, and how organizations can respond effectively to these changes. The author emphasizes the importance of various organizational practices in sending positive signals to both current and potential employees.

Mr Norbert Griszbacher advocates for a hybrid approach to the future of work but acknowledges that the transition requires time, creative problem-solving skills, mindset shifts, and upskilling efforts from all parties involved. The article also discusses potential future scenarios and industry implications of adopting hybrid work.

The Issue continues with two **Research Articles** on the theme of Leadership and Change.

Mr Liam Murphy and *Ms Helen Turnbull* highlight the impact of the COVID-19 pandemic on organisational work environments, necessitating new policies and practices. The paper outlines challenges faced by leaders, identifies research gaps, and proposes a future research agenda to support leadership development in the post-pandemic "new normal."

Mr Philip Mong'are Achoki discusses that organizations need to prioritize upskilling and reskilling their employees allowing them to navigate uncertainties and achieve long-term success. A proposed sense-response framework can help organizations respond strategically to the changes in their environment in a volatile, uncertain, complex, and ambiguous (VUCA) world.

The final theme in the **Research Articles** section focuses on Education and Career Development.

Dr Zsuzsanna Soproni reviews research on employability skills, primarily from a labour market viewpoint. The author discusses the incorporation of employability skills training in higher education and provides recommendations for students, educators, and higher education institutions.

Dr Mohammed Estaiteyeh, Dr Nicole Campbell, Dr Isha DeCoito, and Ms Mariam Takkouch explore the impact of an innovative master's programme in interdisciplinary medical sciences that focuses on enhancing students' academic, professional, and personal skills through experiential and interdisciplinary learning. The paper emphasizes the need for explicit and intentional skill development in higher education and offers insights for designing and reviewing graduate programmes.

Mr Jamil Toptsi and *Dr Ahmad Hajeer* examine the impact of spending time abroad at student exchange programmes on intercultural sensitivity among Hungarian business students. The authors highlight the importance of designing effective exchange programmes to prepare students for success in the globalised business environment.

Ms Hiromi Narita's article examines the long-term impact of study abroad programmes by considering how they shape participants' perspectives on global citizenship and how they influence career decisions, intercultural competence, and the understanding of interconnectedness.

Ms Daria Borodina and *Mr Ádrian Estrela* look at the factors that influence international students' decision to study abroad at Hungarian universities. The authors highlight that globalisation has led to increased internationalisation of higher education and the need for universities to understand the decision-making process of international students.

The **Policy and Social Challenges** section concludes Volume 3. No. 2. *Dr William E. Donald,* a housebound academic and a strong advocate for inclusive access to valuable spaces of knowledge exchange, highlights the pressing need for inclusive academic conferences. The article outlines some indicators of an inclusive conference, complemented by pragmatic strategies for delivering them. The article serves as a starting point for further discussion on this important topic, whereby decisions taken by conference organisers have direct impacts on the careers and lives of many in our academic community.

In closing, I extend my warmest wishes to all our readers, be they educators, researchers, students, professionals or lifelong learners. May you discover valuable insights within the pages of Vol. 3 No. 2, and I sincerely hope you enjoy reading the papers.

Kind regards,

Dr habil. Judit Beke

Dr Judit Beke is the Editor-in-Chief, Co-Creator of the GiLE Foundation

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GiLE Journal of Skills Development

Three Key Ways That Mentorship Can Support Early Career Scholars

William E. Donald
University of Southampton, UK & Ronin Institute, USA
ORCID: https://orcid.org/0000-0002-3670-5374

Abstract

Navigating the intrinsic landscape of academia can often feel like attempting to manoeuvre through a maze, especially for individuals at the dawn of their scholarly journey. Drawing on my previous experience as an early career scholar, my current role as a global mentor to emerging scholars, and my decade of research on sustainable careers, I shed light on the profound impact of mentorship for early career scholars. This article uncovers three compelling facets illuminating how mentorship can offer robust scaffolding for these intellectuals. Firstly, we unravel the secret to deciphering the unspoken codes of the academic world, ensuring you are not just a player but a master of the game. Secondly, we explore how taking the reins of your academic destiny can be made more attainable with a mentor's steady support and wisdom. Lastly, we delve into the often overlooked link between mentorship and holistic well-being, emphasising the vital role in nurturing careers and personal fulfilment. Through these insights, we see how mentorship catalyses early career scholars towards heightened productivity, career satisfaction, and an increased likelihood of success in their scholarly pursuits.

***Keywords*:** early career, health, mentoring, scholars, sustainable careers, well-being.

1. Setting the Scene

Are you contemplating a career in academia or actively pursuing a PhD?
Are you a Post-Doc or an Assistant Professor?
Are you currently involved with or interested in mentoring early career scholars?

If you answered 'yes' to any of these questions, this article is tailored to your needs.

While the definition of an early career scholar can vary based on institutional or regional standards, it generally pertains to a maximum of four years in academia following the completion of a PhD (Elsevier, 2023). To illustrate, I obtained my PhD in 2017 (Donald, 2017), which classified me as an early career scholar from 2017 to 2021. Subsequently, I was promoted to Associate Professor of Sustainable Careers and Human Resource Management in 2022.

Therefore, the insights shared in this article are rooted in my prior experience as an early career scholar, my ongoing role as a mentor to scholars worldwide, and my research on sustainable careers.

2. Mentorship for Early Career Scholars

Now, let us delve into three key ways mentorship can be a valuable support system for early career scholars to leverage their mentor's experience as personal learning opportunities.

2.1. Understanding the rules of the game

What do we mean by 'the rules of the game'? Academia can often be a challenging environment to navigate, especially for individuals like me who were the first in their immediate families to attend university. Various institutions, faculties, departments, and academic roles may have differing expectations and criteria for defining career success. Engaging in conversations with your supervisor is advisable to clarify the expectations for career advancement. Once you have a foundational understanding of these expectations, having a mentor becomes especially valuable. This reflects how seeking career advice can enhance career sustainability (Donald & Mouratidou, 2022).

For instance, consider a scenario where success in your academic role hinges primarily on your teaching abilities. In this case, you may need to create and deliver various modules and teaching materials. A mentor can supply insights into best practices and highlight common pitfalls to avoid. Additionally, they can help you to manage and support students effectively.

Conversely, if your career advancement is contingent upon a specific number of research outputs published in highly-ranked journals, a mentor can be instrumental in your journey. They can aid you in identifying suitable journals for publication, navigating the submission systems, crafting compelling cover letters, and formulating responses to peer review reports. Moreover, mentors can help manage your expectations. For instance, it is often a significant shock to early career scholars when they submit their first manuscript and discover that the average time for a first decision can span several months to a year or more, with significant variations based on one's research area and choice of journal to submit to (Huisman & Smits, 2017).

2.2. Taking ownership of one's career

Once you understand the rules of the game, the next crucial step is to take ownership of your career (Arthur et al., 2016; Donald et al., 2019; 2023). In the short-to-medium term, the benchmarks for career progression can serve as your guiding goals. Your mentor can provide strategic insights on pursuing your goals and managing your time effectively. They can also play a pivotal role in helping you periodically review and assess your progress.

In the medium-to-long term, building a sustainable academic career often involves expanding your network and gaining international recognition. For early career scholars, networking can be particularly challenging due to hierarchical power dynamics and limited time to develop relationships, risking academic isolation (Belkhir et al., 2019). However, your mentor likely has an extensive network of contacts worldwide and may be willing to facilitate introductions on your behalf. This can also be an invaluable way to gain insights into the inner workings of different institutions, which can be highly beneficial if you are considering a career move.

2.3. Promoting health and well-being

Building a sustainable career involves adapting to different contexts over time (Van der Heijden & De Vos, 2015), with key sustainability indicators being health, happiness, and productivity (Van der Heijden, 2005). While understanding the rules of the game and taking ownership of your career provides a solid foundation for success, prioritising health and well-being is equally essential.

Academics often contend with demanding workloads, elevated levels of stress, and constant rejection decisions from job applications, grant applications, or manuscript submissions. These factors can collectively affect one's mental health and well-being and may lead to imposter syndrome, where an individual feels underserving of their current position (Abdelaal, 2020). In such situations, a mentor can be incredibly valuable in helping you shift your perspective. For instance, given that rejection is a recurring aspect of an academic career, a mentor can normalise these experiences and encourage you to see them as opportunities for personal growth and development by embracing a holistic, lifewide and lifelong approach to learning (Cole & Donald, 2022).

Moreover, if, like me, you tend to struggle with turning down new projects or opportunities, there is a high risk of burnout. A mentor can aid you in crafting a set of questions to consider before taking on any new commitment. Additionally, a mentor can be crucial in recognising signs of strain on your mental and physical well-being. They can guide you toward specific support services that offer specialised aid, ensuring that you receive the necessary help to maintain your health and well-being as you progress in your academic career.

3. Conclusion

In summary, a mentor can benefit early career scholars, helping them understand the intricacies of academia, assume co-responsibility for their career trajectory, and nurture their mental health and well-being. Consequently, mentorship can enhance productivity, career satisfaction, and success in research endeavours (Diggs-Andrews et al., 2021).

If you are searching for a mentor, consider exploring early career mentorship programs or directly reaching out to individuals whose backgrounds and academic experiences align with your needs and aspirations. I wish you all the best in your academic career.

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Corresponding Author

The corresponding author for this manuscript is Associate Professor William E. Donald who can be contacted by email via w.e.donald@gmail.com

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GiLE Journal of Skills Development

Virtual Interview Preparation for Generation Z Science, Technology, Engineering, and Math (STEM) Students - A Necessity for the Post-pandemic Era

Ponn P. Mahayosnand
Ronin Institute, USA
ORC ID: https://orcid.org/0000-0001-8979-2806

S M Sabra
Islamic University of Gaza, Palestine
ORC ID: https://orcid.org/0009-0002-8682-4811

Abstract

Social distancing and remote work were mandated worldwide during the COVID-19 lockdown. While virtual interviews were conducted before lockdown due to the growing global workforce, they became normalised during the pandemic for both work and school. Hiring agents may believe that having grown up with technology and the internet, Generation Z (Gen Z) may be well-prepared for virtual interviews. However, the challenge they face is not technology-related. Gen Z individuals, particularly those in STEM fields, often lack well-developed practical and pragmatic life skills, such as effective communication. A remote independent research scholar and her student compiled this field report. First, the general characteristics of Gen Z STEM students are presented, followed by a virtual interview preparation guide with tips, recommendations, and examples. Given the ever-changing global remote workforce, future empirical studies are recommended on the virtual hiring process of Gen Z STEM students, which includes and expands upon virtual interviews.

***Keywords*:** Generation Z, STEM students, virtual interviews, soft skills, skill development

1. Introduction

The growing global workforce and gig economy saw a general increase in remote work in recent years. Due to the global COVID-19 lockdown and social distancing mandates, workers and students were forced to work and study remotely. In addition to applying for jobs, the application timeline for college, graduate school, and post-grad admissions did not cease, making virtual interviews a requirement (Lee et al., 2020).

For nearly 30 years, the primary author (herein known as the "mentor") has consistently emphasised to her students and peers that "People hire people" when applying for a job. The authors searched for the origin of this quote but were unsuccessful. Variations of the concept and idea were located, but not the simple 3-word phrase. When offering job advice, coaching

for an interview, or editing resumes, cover letters and/or personal statements, the mentor incessantly repeats these three words. A biologist by trade, the mentor is primarily surrounded by Science, Technology, Engineering and Math (STEM) peers and students. She has first-hand experience that soft skills are underdeveloped in this population and worsens with each generation.

The mentor and one of her students assist undergraduate and graduate STEM students in completing their work and school applications. They help students revamp resumes, reconstruct personal statements, and prepare for in-person and virtual interviews. They gathered their notes and experiences about virtual interview preparation to create this field report. A field report is a type of social science research article that compiles, analyses, and presents the researchers' observations and experiences in the field (Labaree, n.d.).

Key Takeaways:

- Generation Z (Gen Z) students, aged 11 to 26, are the current and up-and-coming workforce with unique characteristics, unlike previous generations. Gen Z has strong STEM skills but lacks the necessary soft skills to make them employable.
- COVID-lockdown normalized virtual interviews. However, virtual interviews are crucial to the hiring process because of the growing global workforce. This report advises students and educators on better preparing for virtual interviews.
- Educators must understand Gen Z and their needs to offer more poignant career advice beyond mastering technical skills taught in the classroom.
- Readers seeking detailed advice on how to master virtual interviews can gain from reading the tips and recommendations detailed in the guide below, even if they are not Gen Z or STEM students.

2. Generation Z (Gen Z) STEM Students

Generation Z, also called Gen Z, represents the next wave of employees entering the workforce, defined as individuals born between 1997-2012 (11 to 26 years old). This set of individuals possesses the most ingrained and natural digital world understanding. When considering engineering students, they possess remarkable theoretical knowledge, occasionally surpassing those of their senior colleagues (Magano et al., 2021). However, their lack of soft skills could potentially put them at a disadvantage in their employability (Kalra, 2019). Soft skills are personal attributes that enable an individual to interact and work effectively and harmoniously with others.

Specific to Gen Z STEM students, the authors define "employment" to include academic work-study opportunities. For example, most students applying to graduate school are also attempting to secure assistantships. Postdoctoral fellowships or residencies are also included, as these postdoc students are paid full-time while in these positions. Last, Gen Z STEM employment includes engineering or computer programming boot camps, which are highly competitive post-grad training and employment placement programs. Therefore, when Gen Z STEM students secure any work-study positions, they are herein known as "employees" in this report.

Understanding and embracing the new generation of employees is vital to adapting and understanding what they have to offer. While Gen Z are the most diverse and adaptable, they also have some individual characteristics that may be new to the workforce. Gen Z was

identified as having underdeveloped social and relationship skills and a lack of attention span, desiring convenience and immediacy (Chicca & Shellenbarger, 2018; Magano et al., 2021). These traits may limit their access to job opportunities, as these soft skills are just as important as one's theoretical knowledge. These transferable skills are universally significant in both employment and daily life.

Gen Z's lack of soft skills may directly correlate to their predominantly online lifestyle, limited in-person interactions and the shift towards online work and education during the COVID-19 pandemic (Pradhananga et al., 2022). Educators must embrace the employability agenda. Educators can help students cultivate social awareness and civic autonomy by building essential graduate attributes and employability skills. As a result, this bridges the gap between students' skills and what employers require (Fellows, 2023).

Gen Z, particularly Science, Technology, Engineering and Math (STEM) students, may face challenges adapting to virtual interviews due to limited experience and skills (Hall Jr. & Gosha, 2018). Interview anxiety is a real phenomenon, and harms interview performance. Mentoring is a mutual knowledge-building experience for both the mentor and mentee (Mahayosnand & Bermejo, 2022). While there are many different training options for mentoring, the main goal is to support and develop the student or mentee (Mahayosnand & Bermejo, 2022; Papp & Horváth-Csikós, 2021). Mentoring offers three focuses: professional and personal support and professional identity development (Papp & Horváth-Csikós, 2021).

3. Virtual Interview Preparation Guide - Tips, Recommendations, and Examples

It is important to showcase your technical skills and authentic self during interviews. Interviews allow you to demonstrate your individuality. It is an opportunity to show your unique and likeable traits beyond the confines of your curriculum vitae or resume. Maintaining a balance of professionalism while expressing your personality is important during the interview stage– particularly behind a camera. Below are tips and recommendations to aid in preparing for a virtual interview.

3.1. Host the Interviewer in Your Home

Change your mindset. Remember that "People hire people", so remain human. A major advantage of a virtual interview is creating the most comfortable environment for you, which can reduce anxiety and stress (M. G. Y. Lee et al., 2020). Remember that you are literally on your own "home turf". Do not fear the superiority of your interviewer. Take on the role of a host welcoming a guest into your home. Prepare and be ready to share a memorable time. Your goal is to make the interviewers remember your warm hospitality so much that they eagerly request to spend their 40-hour work week with you.

Once you enter the virtual room, greet your interviewer with a smile and look eye-to-eye by looking directly into the camera (Laker et al., 2021). Try to gaze naturally into the camera for the majority of your call. Stay engaged and be engaging. If their eyes drift, their mouth slips into a bored frown, or they start fiddling around, be proactive and regain their interest.

3.2. Set The Stage

Take stock of a 360-degree view, starting with you sitting in front of your laptop or computer screen and camera. Select the most ideal, minimalist professional setting for your house. Turn your camera on and start staging your scene (Jones & Abdelfattah, 2020; McKinley et al., 2021; Seifi et al., 2020).

Mirror - Place a mirror behind your camera to judge every step (T. C. Lee et al., 2021). Use the mirror instead of video mirroring so you are not distracted by looking at yourself.

Comfortable chair - Sit in an ergonomic or comfortable chair that positions you upright. Ensure it is not broken, lopsided, too comfortable that you slouch, or twists and turns too much (Chicca & Shellenbarger, 2018; McKinley et al., 2021).

Lighting - Strive for a professional, minimalist, non-distracting, clutter-free, well-lit view. Look and adjust the angles of what is visible around you. Select plain colours and not patterns. Be prepared to explain or share fun stories about everything given the camera, such as a selection of books, stationery, or appropriate decorations (Chicca & Shellenbarger, 2018; Laker et al., 2021; Seifi et al., 2020; Wolff & Burrows, 2021).

Practice live behind the camera - Practice live in a virtual conference room to judge if your stage is appropriate and pleasing.

3.3. Critical Props

Mirror - Explained above.

Cell phone - To serve as a backup method to communicating if you need to call via the phone service or to use your data as a Mobile Hotspot for lost wireless or ethernet internet, poor connection, etc. Do not use the email otherwise (Seifi et al., 2020).

Notebook and writing utensil - Prepare notes and questions (Details will be provided in the sections below).

Clock or Timer - It is better to have a stand-alone clock or timer to pace yourself and your questions and answers. Do not rely on a watch, as that can be distracting, and the interviewer may misunderstand your nerves or lack interest in keeping the conversation fluid. Also, do not rely on your cell phone, which will be used for other purposes (Jones & Abdelfattah, 2020).

A glass of water - Drinking from a glass of water is more pleasant than watching or listening to someone gulp from a water bottle. While staying hydrated is important, a glass of water can be a helpful prop. It serves as an excuse to take a quick sip, giving you a moment to gather and calm your nerves.

3.4. Know Thy Time

Time your answers - It is important to run a mock video interview with a mentor, colleague, classmate or a critical family member or friend. Prepare answers to typical interview questions and test them aloud to your mock interviewer live behind a virtual room camera. Be conscientious of your speed and timing of each answer. Keep each answer to 1-3 minutes long,

and be prepared to answer detailed follow-up questions (Jones & Abdelfattah, 2020; McKinley et al., 2021).

Know your time zone difference - To assist with mishaps, the authors recommend adding all appointments to your digital calendar, such as Google Calendars, based on the interviewer's time zone. The calendar will self-adjust to your time zone.

Plan to arrive 10-15 minutes early - The authors recommend making the interview appointment 15 minutes before its designated time on your digital calendar. Add multiple notifications, such as one day, 1 hour, and 10 minutes before. Share the earlier interview start time (e.g. 9:45 a.m. instead of 10 a.m.) with your family or housemates to allow for some last-minute preparations. Arrive early in the virtual room for the interviewer to let you in, rather than making them wait (McKinley et al., 2021; Wolff & Burrows, 2021).

Schedule with family or housemates - A quiet house to yourself is ideal if possible. Try to arrange for others to wait outside or temporarily leave. Ensure they do not return until you notify them that the interview has concluded, as it may potentially run longer than expected. If some individuals need to stay at home, it is essential to collaborate and agree on quiet activities they can engage in during this period. Make it clear that this is not the time for household chores, cooking, or noisy play.

3.5. Check the Tech

Internet connection - Ideally, a high-speed internet connection is expected in Western countries. However, high-speed internet is a luxury in low- to middle-income countries, especially those in turmoil or war. Be sure to purchase data on your smartphone with the ability to turn on the Mobile Hotspot. If your home is not an option, the next best place is a family or friend's home rather than a loud and public internet cafe. Another option is hourly or a day's rental of co-working office space. You may opt for a cubicle or office with a closed door (Jones & Abdelfattah, 2020; Laker et al., 2021; McKinley et al., 2021; Seifi et al., 2020; Wolff & Burrows, 2021).

Video, sound, and microphone - Test all your electronic equipment at least a day before the interview with your mock interviewer to ensure everything is working smoothly. Try to troubleshoot possible scenarios like static or a shutdown, and try your alternative contact methods. Then, test them again 15 minutes before the interview (Laker et al., 2021; Seifi et al., 2020; Wolff & Burrows, 2021).

3.6. Dress to Impress

Professional attire is still expected, as if you were attending a live in-person interview.

Clothes - A dress shirt and/or jacket are expected. Professional plain colours with no flashy patterns are most appealing as it is the least distracting given the tiny camera view the interviewer will be facing. The authors recommend wearing full professional attire, which includes pants or skirts, socks, and shoes. If an emergency arises and you must hop out of your chair, you do not want your interviewers to see that you are half-dressed, which can be construed as lazy (Jones & Abdelfattah, 2020; McKinley et al., 2021; Wolff & Burrows, 2021).

Body - Groom your hair, nails, and face. Everything visible should be presentable.

Accessories - Keep minimalism in mind. Anything that can make unnecessary noise or distractions to you to your interviewer should be avoided (McKinley et al., 2021).

3.7. Speak with authority and interest

Voice projection - Consider speed and facial expressions. Tone and pacing are important, too. Practice with your mock interviewer that you are not overly expressive in your voice, tone, or speed. Speak clearly. Articulate and enunciate your words. Be conscientious that nerves make people talk faster. Be aware, and note that if your heart begins to race, your body starts to shake, or your voice starts to crack. This would be a time to sip water (Jones & Abdelfattah, 2020; Laker et al., 2021; McKinley et al., 2021; Wolff & Burrows, 2021).

Facial and body language - Be on your best behaviour. Be natural, like a host to your house party. Use natural hand and arm gestures. Do not be excessive or stiff (Laker et al., 2021).

Be confident - Be polite and kind. If you are getting tongue-tied or nervous, pause and politely ask, "May I have a minute?" Confidence can be displayed by allowing moments of silence when appropriate (Wolff & Burrows, 2021). Take another sip of water.

Retain your personality - Plan appropriate anecdotes and relevant jokes to answer commonly asked questions memorably. Make sure you have a story ready for every book, item, piece of clothing, and anything visible that you staged.

Know thyself - Share your strengths while remaining humble and truthful. Be prepared to discuss your flaws and weaknesses (such as lack of experience in a particular program or less work experience than preferred). Be sincere, genuine, and magnetic.

Demonstrate trainability - Emphasise your willingness to learn and adapt.

3.7.1. For your Notebook and writing utensil

The authors recommend having a notebook with two pages opened. The left page will have your prepared notes and the right page will be left empty to take notes during the interview.

The left page:

Guiding notes - Blurbs, bullet points or phrases containing frequently overlooked facts about your skills, resume highlights, or engaging stories to respond to challenging interview questions. A few words in the upper corner of the page are enough. Do not write a script or prose (Laker et al., 2021). Write a few keywords or phrases or draw images to serve as a guide to spark your memory. You should not read full sentences, as you would not do that during a live in-person interview. Looking longingly at your notebook removes your eyes from creating the much-needed connection by looking into the camera.

Questions to ask - Do not ask about salary and start dates, as if you already secured the position. Prepare thoughtful, unique questions demonstrating your genuine interest in the school, program, or company. Do your research. Be sure not to ask questions that could be found on their homepage. STEM is exploratory in nature, so be a scientist and try to discover something new. Try to come up with at least one question to ask. If not already stated in the job posting,

you can ask questions about the timing of the review and how and when you are to expect to hear some kind of decision (McKinley et al., 2021).

The right page:

Be present, attentive, and aware - Interviewers often like to talk or may run off into tangents. Be a detective whose job is to find similarities or strengths you share so that you can keep the conversation going. Even when the interviewer asks questions, they may share relevant company history or program goals not publicised on their website. Jot down these few words and find natural ways to incorporate your anecdotes at the right moments. If the topic never comes up again, circle those notes and draw an arrow toward the left page, singling you to bring that issue up at the end of the interview when they ask if you have any questions or comments before the interview ends (McKinley et al., 2021).

Find a reason to follow up. Pay particular attention to every interviewer in the virtual room. Seek to find similarities or common topics to follow up on after the interview. For example, "I actually have a sample of XYZ. I would love to email it to you after the interview", or "My favourite website/journal on ABC topic is XYZ; I will send you the link after our call". Remain interested and interesting (Seifi et al., 2020).

Use it to organise your thoughts - The authors have mentored several international students for whom English is a second language. Leave this blank page to help organise your thoughts. STEM students often stumble on their words because they think they must be quick in their thinking and answer immediately after an interviewer asks a question. Nerves can snowball into your tongue being tied. The authors recommend saying something like, "That is a great question! Can I please have a minute to gather/organise my thoughts?" Our students/peers have never been denied a minute to think.

Utilising silence wisely is a powerful leadership skill. Exert this power and use your notebook and writing utensil to help take note of an impactful answer. Put your timer on for one minute, and do not exceed this time. You may only need 5-10 seconds to doodle a mind map or outline.

Ask for each interviewer's contact information - You cannot ask for everyone's business cards like you would during a live in-person interview. Many times, interviewees do not even know the name(s) of those who attended their virtual interview, let alone have their email address. Show all your interviewers you care about their time and expertise. I politely ask, "May I please have the correct spelling of your full name, title, and email address?" If they question your motives, kindly share that you would like to personally thank them via email and share what you plan to send them. Beware that some interviewers may not want to share their email and tell you you can contact them via the lead interviewer's email. Request everyone's privacy and comfort (McKinley et al., 2021).

3.8. Post-Interview Follow-up

Send a personalised "thank you" email to every interviewer. Share the requested links or samples you promised to send. If someone requested that you contact them via the lead

interviewer, write a separate email "to Interviewer #2 via Interviewer #1". Make sure you email Interviewer #1 their personalised thank you email first. Then, send the second email separately.

4. Conclusion

Interviews are mandatory for the hiring process, and virtual interviews have their nuances, unlike live in-person interviews. While this report was written specifically for Gen Z STEM students, anyone seeking employment during this post-pandemic era may find value from the tips and recommendations shared. Given the ever-changing global remote workforce, the authors find it critical that further empirical studies be conducted on the virtual hiring process of Gen Z STEM students, which includes and expands upon virtual interviews. Further studies that address the unique needs of Gen Z STEM students and Gen Z in general are also highly recommended.

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Corresponding Author

The corresponding author for this manuscript is Ponn P. Mahayosnand, MPH, who can be contacted by email at ponn.mahayosnand@ronininstitute.org

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Bring the Warriors Back Home – Contemplating How to Retain a Talented Workforce in Organisations

Nimmi P. Mohandas
Amrita Vishwa Vidyapeetham, India
ORC ID: https://orcid.org/0000-0002-8750-6500

Abstract

The paper discusses the changing nature of careers today and how organisations ought best to respond to this scenario. The advantages of participating in the gig economy and how it impacts employees and organisations are discussed against a backdrop of signalling theory. Organisational practices addressing work-life balance issues, inclusion and diversity, job autonomy, flexibility, attractive compensation packages, and fostering an employability culture are all highlighted as positive signals. Conversely, negative signals, such as, in extreme cases, appearing to have a hire-to-fire policy, should be avoided. This paper highlights the need for further research into the factors influencing talented individuals' decisions to return to full-time work and the strategies organisations can use to attract them.

***Keywords*:** talent management, signalling theory, gig workers, organisation policies

1. Setting the Scene

Careers nowadays are undergoing a massive overhaul. The fact that so many career theories have emerged over recent years, such as "protean" careers, "kaleidoscope", and "sustainable" careers (to name but a few examples), indicates just what profound changes careers have undergone. One exciting outcome is that careers are becoming more employee-centric rather than organisation-centric nowadays. Studies emphasise the need to keep the anchor of one's career within one's self rather than depending on the organisation (Van der Heijden & De Vos, 2015). Given this shift, a big question that arises is whether this new situation continues to represent a "win-win" for the organisation and the employee if either one of the parties experiences a setback.

However, despite gig work, consulting, crowdsourcing, outsourcing, and moonlighting potentially providing employees with the slight advantage of not being dependent on an organisation for bread and butter, there are plenty of potential downsides to this, like wage theft, irregular work hours and payments, and above all, uncertainty. Nevertheless, there has been growing interest among millennial and Gen Z employees in pursuing flexible careers that give

them ample time and energy to pursue leisure (serious leisure and casual leisure) and time with their family (work-life balance) (Donald & Nimmi, 2023).

Is this a passing trend, or something here to stay? Without disputing the many benefits of gig work, an organisation-centric career/work has its own charm. The many vicissitudes in the socio-economic environment suggest that relying on gig work will likely result in an unstable career. Scholars whose work is based on signalling theory in the labour market have raised concerns about the structural inadequacy of gig work to support the economic security of a nation (Noldeke & Van Damme, 1990).

To take an extreme example, to what extent is it good for organisations if they are run by experts who are only paid *pro rata* for their service? Moreover, what about the social setting and the other aspects that an employee receives along with a regular job, which helps him or her develop their professional network and social capital? Even though such connections could be developed in other spheres of life, social capital built through an employee's average vocation triples their chances for career development (Tymon & Stumpf, 2003; Wang, 2009). Moreover, employees develop a sense of belonging or connectedness by fully joining an organisation, which can lead to better social cohesion and well-being (Klein, 2013).

2. Why Gig Work

So, what factors deter potential employees from workspaces and prompt them to indulge in gig work preferably? Gig workers are mainly employees with huge potential and attractive skill sets who look for varied experiences and opportunities to explore the latest trends (Merriman et al., 2018). However, the reasons why employees often prefer not to engage in gig work could be organisation-specific, industry-specific, or personal. Moreover, the challenges of gig workers are many, like the inability to get quality projects, no employee benefits, exploitation, and no labour laws to protect them, and above all, the inability to find consistent work and payment protection (Roy & Shrivastava, 2020).

Awareness of these and many other psycho-social risks creates ambiguity in freelancers' minds. Finally, it may not always be feasible for organisations to rely on temporary workers due to data privacy issues. Practitioners and researchers have called for studies to look into the privacy issues that gig workers face, such as losing their privacy (Sannon & Cosley, 2019).

The question remains: How can organisations attract back this very potentially talented workforce? What factors can lure this talent pool back to organisation-centric careers? The signalling theory of Spence (1973) highlights the importance of quality signals from organisations that can stimulate talented workers to enter the mainstream labour market.

According to signalling theory, the signaller has valuable information for the receiver. This information is communicated through signals. In the absence of further public information regarding the signal, there is an impasse between what is known and unknown about the signal. The strength and quality of the signals are critical as they stimulate the receiver to decode and interpret the signal, ultimately leading to a perceived meaning.

The sender's reputation (or the sender's credibility) is also a prominent factor that will be considered while the recipient is processing the information. Signalling theory has been used to explain many employee performance issues like future uncertainty of performance, emotional exhaustion, and job performance. The framework has also been used to understand how

employees perceive HR practices, which in turn helps HR managers devise better policies and communicate them effectively with employees. Based on the theoretical support of signalling theory and its reputation in human resource development practices, this work proposes to underline the importance of efforts taken by organisations/offices to attract talent to the workplace. Organisations could do worse than look into these aspects of their policies designed to retain and attract talent.

3. Negative signals and positive signals

Although the theory of asymmetric information claims that the receiver might not have complete information on an organisation's functioning, some policies and practices, such as hiring, firing, and nepotism, might be risky to the organisation's reputation. However, positive signals can include the company's benefit programmes and the many CSR policies the board should try to communicate to the prospective stakeholders. Providing an ethical work climate, too, contributes to positive signals. These signals will stimulate talented workers to return to normal employment if they perceive it to be a better option. Here are some of the policies or practices that organisations should pay attention to:

- Do not adopt a "hire to fire" policy. The draconian policy of hiring to fire eventually reflects badly on a company's reputation, and potential talent may choose to stay away from applying to those organisations.
- Provide work-life balance to employees and practice inclusion-diversity and equity at work. Right the way down from corporate board rooms to blue-collar jobs, organisations should try to sincerely include skilled people from all walks of life, irrespective of race, ethnicity, or gender. The board shall not make distinctions based on ableism, sexism, or ageism when recruiting.
- If the employee is a protean talent, they look forward to a work environment that offers job autonomy and freedom.
- Flexibility at work – Most employees are inclined to engage in gig work rather than regular employment because they value flexibility regarding workload and work timing. If employee participation is ensured while deciding work allotment and work scheduling, this effect could be minimised to a certain degree.
- Offer attractive packages – Talented workers will value insurance/labour protection/paid vacation, aspects they miss out on in part-time and gig employment.
- Employability culture – Most freelancers dedicate significant time to upskilling themselves. They aim to keep abreast of the latest techniques and norms that will soon drive the business world. From an organisational perspective, it is imperative to create an employability culture within the organisation that can provide ample opportunities for employees to skill, upskill and re-skill and maintain their employability, both internally and externally.

4. Conclusion

Overall, it is quite clear that organisations, as the senders of, at times, strong signals, should be careful to ensure that the appropriate message reaches the intended recipients. More research still needs to take place in this area, and it should look into the many factors that impact the decisions of talented workers to return to the regular workforce full-time, as well as the different strategies organisations can adopt to "bring the warriors back home".

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Corresponding Author

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Working from Home vs. In-office post-COVID-19: The End of a Seemingly Never-ending Debate?

Norbert Griszbacher
BT, Hungary
https://orcid.org/0000-0003-3682-520X

Abstract

The recent COVID-19 pandemic has swiftly and drastically transformed our daily lives, including our perception of working-from-home (WFH) practices. Even in a post-pandemic world, employees have shown an ardent desire to retain the benefits of the novel pandemic-induced remote work experience, which challenges managers to reintegrate them into the conventional office setting. This paper aims to assess the advantages and disadvantages of home and office work environments from the viewpoints of employees and employers to identify the optimal future scenario that maximises the benefits to all parties involved. Although our understanding of the optimal balance between remote and office work is limited, the future of work will involve a hybrid approach, combining remote and in-office work. The transition to such an arrangement demands time, creativity, trust, and various other factors from the parties. It also calls for serious mindset shifts and up/reskilling efforts. The review ends with a consideration of future scenarios and industry implications of adopting hybrid work.

***Keywords*:** COVID-19, remote work, work from home (WFH), hybrid work, up/reskilling

1. Introduction: A Pandemic that Turned our World Upside Down

The advent of COVID-19 plunged the world into unfamiliar territory: among others, COVID-19 reshaped work dynamics, accelerating the adoption of working from home (WFH) and prompting a re-evaluation of traditional workplace norms. Fast forward three years, with easing restrictions and societies striving to return to normalcy, it became clear that the pandemic left a lasting imprint on the fundamental principles of the modern (working) world (Smite et al., 2023). McKinsey's latest survey (2022) reveals that a significant majority of US workers, specifically 87%, have been given the opportunity for remote work and have expressed a strong desire to maintain this arrangement (having 3 days/week WFH on average).

However, miraculous changes do not happen overnight, and no one-size-fits-all solution exists (Belzunegui-Eraso & Erro, 2020; Smite et al., 2023). Achieving a smooth transformation-

transition requires substantial mindset and skill enhancements from all parties involved (Franzen-Waschke, 2022a;b). Companies and governments have showcased remarkable flexibility and adaptability in responding to the pandemic, driven by purpose and innovation that can also be applied to reequip the workforce for a better future. As per Jain et al. (2022), the key question is which work-from-home practices will persist in the post-COVID world (remote/hybrid/on-site) and what factors should be considered to maximise their potential. Adding to preliminary works, this brief 'Food for Thought' piece initially seeks to encapsulate the present post-COVID situation by examining the pertinent literature while also highlighting pivotal aspects in the journey to address the posed question(s) concerning the future of work.

2. The Future of Working – the Employee of the Future?

COVID-19 brought about a significant shift in people's preferences and practices when it comes to where, when, and how they work. McKinsey's extensive report series (2020, 2021, 2022) emphasises that "Now is the time"; organisations must seize the opportunity and break free from outdated practices and systems. As employers worldwide experiment with reintegrating employees into physical office spaces, it has become imperative to reassess established norms and create workplaces that prioritise safety, productivity, and enjoyment. The challenges at hand are exemplified by the following case, provided by Smite et al. (2023:2):

- *Now it's time to return to the office. (employer)*
- *No, we will continue working from home. (employee)*
- *You must return. (employer)*
- *OK, then we quit. (employee)*
- *Please, don't. You can continue working from home. (employer)*

While telework or telecommuting, often used interchangeably with remote work, emerged in the 1970s, there is no universally agreed-upon definition (Savic, 2020; Wontorczyk & Roznowski, 2022). However, it generally refers to working outside the employer's physical premises, enabled by the latest information and communication technologies (ICT). It can occur in various locations, such as the home, office, or other places, utilising different technologies and frequencies (Belzunegui-Eraso & Erro, 2020; Jain et al., 2022; Wontorczyk & Roznowski, 2022). As a result, a multitude of terms have been used to describe these working modes, contributing to the digital transformation of the workforce, including telecommuting, teleworking, working from home, working remotely, and more (Savic, 2020; Jain et al., 2022). The available evidence strongly supports the enduring nature of remote work as a prevailing trend. As shown in Table 1, WFH has its advantages and disadvantages (Savic, 2020; Jain et al., 2022; Wontorczyk & Roznowski, 2022; Smite et al., 2023):

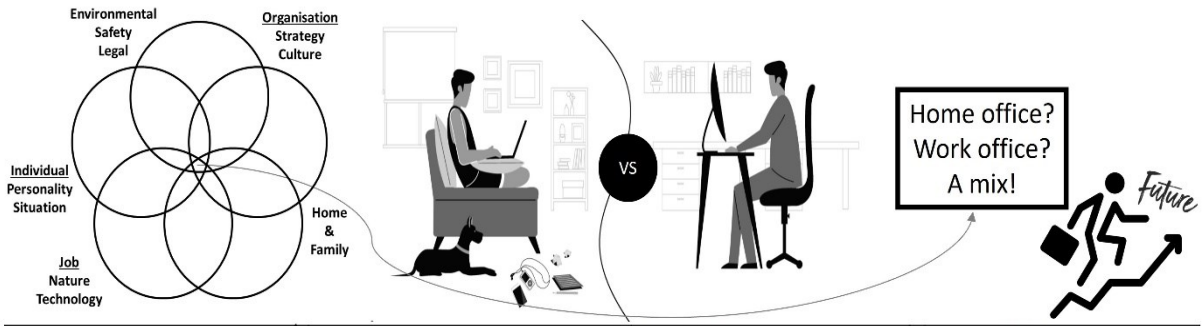
TABLE 1. KEY ADVANTAGES AND DISADVANTAGES OF WFH VS. OFFICE

WFH ADVANTAGES	WFH DISADVANTAGES
Reduced commute time and costs	Limited socialisation → social isolation + feelings of worry & depression
Flexibility in terms of time and space → improved work-life balance (WLB) → minimise work-life conflict → productivity	Blurring boundaries between work and family → constant connectivity → fatigue, tiredness, discomfort, stress, and even physical pain
Control over environmental factors, including indoor environmental quality (IEQ) elements → physical and mental well-being	Huge personal costs associated with WFH ≠ still not the same access to all company resources (e.g., tools, databases, colleagues)
Generally better motivation, increased job satisfaction → enhanced employee productivity Enhanced diversity, improved talent retention, reduced absenteeism, and turnover rates, plus minimised physical (office) requirements and costs for employer, as well as the collective environmental costs	Often issues with teamwork & communication, challenging management approaches, and poor infrastructure → low employee productivity Business costs associated with WFH implementation (trainings, allowances etc.) + lower commitment and identification with the organisational culture and values + heightened risk of privacy and security issues

Source: own compilation, based on Savic, 2020; Jain et al., 2022; Wontorczyk & Roznowski, 2022; Smite et al., 2023

As concluded by Jain et al. (2022), the perception of the advantages and disadvantages of working from home is highly contextual: some studies have reported that teleworkers enjoy the flexibility it offers, while others have struggled to maintain a satisfactory work-life balance with ringing doorbells, noisy pets, and interrupting children at the new dining/worktable (WFH autonomy paradox). Remote work conditions differ across companies and employees, so it is crucial to recognise the differences between expectations and the actual challenges presented.

FIGURE 1. KEY FACTORS INFLUENCING THE FUTURE OF (HYBRID) WORK



BENEFITS	REQUIREMENTS	BENEFITS	REQUIREMENTS
Flexibility (space/time)	technology - technical and digital skills (+ digital/work ethics)	**Better resources** (tech, infrastructure, people etc.)	physical office - company capital + commuting costs
Wok-life-balance (WLB)	resiliency, agility, adaptability, time management - clear boundaries + daily routine (+well-separated workstation)	**Unique face-to-face 'spontaneous' interactions** (e.g. coffee breaks / tea time)	social / communication skills + extra effort (time, energy etc.)
Own designed home office area (safety, no crowd, right temperature, limited noise disturbances etc.)	technology, infrastructure (money) + positive attitude & creative problem solving	**Enhanced teamwork / collaboration**	social / presentation skills + extra effort (e.g. team moral, EI, non-business activities/talks)

Source: own compilation, based on Belzunegui-Eraso & Erro, 2020; Tagliaro & Migliore, 2022; Yang et al., 2023

Currently, there is a lack of extensive research on the long-term implications of remote work practices due to the novelty of the COVID-induced phenomenon (Jain et al., 2022). Furthermore, although our current understanding of the opportunities and challenges presented by working in different environments is limited (Wontorczyk & Roznowski, 2022), traditional workplaces must clearly be redesigned to effectively meet the evolving individual priorities and

entice employees to return. According to Appel-Meulenbroek et al. (2022), future work scenarios will likely involve office-oriented activities (communicative work) and home-based tasks (concentration work).

The primary focus now is finding a golden mean, the optimal balance between remote and on-site work, capitalising on the advantages of each, and identifying the necessary requirements for successful multi-location hybrid work (Figure 1). Managers are adapting to this new reality and seeking ways to fulfil employee needs while also aligning with business objectives. Technology undeniably holds a central position in this journey, requiring a "digital mindset" to keep up with the demands of our modern world. This involves qualities such as abundance, growth, agility, comfort with ambiguity, an explorer's mindset, collaboration, and embracing diversity, which, home office or not, are indispensable traits nevertheless (Savic, 2020:103).

3. Conclusion: New "Office" and 2 Together - 3 Wherever is the future?

Remote work undoubtedly offers advantages for both employers and employees. The benefits, such as cost savings, heightened work engagement, better work-flow, and improved global connectivity make it an attractive choice for many. However, it is important to address potential drawbacks when considering the implementation of the right combination of remote and office work (i.e., hybrid work). These challenges include teamwork issues, blurred work-home boundaries, fatigue, and mental strain, including feelings of alienation, isolation, and worry. The future of work is inevitably hybrid, whether managers (or employees) like it or not.

Organisations prepared for this transition are likely to become "hot spots", appealing to workers seeking co-COVID "freedom" while also desiring aspects of pre-COVID office life. Striking a balance between these two factors will likely shape the work landscape. However, this projection cannot be universally applied across all industries or countries; certain "physical" activities will still necessitate actual presence, and some underdeveloped regions (and consequently, their industries) might not yet be prepared for such transformative shifts.

What sets this article apart is its novelty as one of the pioneering pieces that scrutinises the aftermath of COVID-19 through a comparative analysis of the pros and cons associated with post-COVID in-office and remote office environments. Despite the topic's prevalence, the literature review unveiled a gap in research that compares distinct working modes/methods, particularly in dissecting this trend as a dynamic phenomenon entwined with the evolving COVID-19 landscape (including post-COVID ramifications).

Subsequent research is imperative in this domain to assist organisations in embracing the transformative potential of disruptions like COVID-19, as they must navigate new work policies and practices that balance employee and manager expectations for a feel-good office presence (e.g., optional 2-3 WFH/week, team buildings, food trucks, fruit days, office gym passes etc.). This transition also requires cultural and behavioural adjustments and redefining workforce roles and expectations in a technology-driven hybrid work environment.

These changes will have a gradual yet profound impact, including a decline in office visits that will affect the landscape of current business districts and have implications for the real estate, airline, and tourism industries.

Naturally, this review has limitations, mainly due to the absence of primary research. Future research could employ both quantitative and qualitative methods, involving participants from

diverse industries and countries to validate these findings. While this study doesn't offer a conclusive response to future inquiries, it contributes to both literature and work practices, stimulating further research by presenting insightful considerations for the future.

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The corresponding author for this manuscript is Norbert Griszbacher who can be contacted by email via griszbachern@gmail.com

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"Mind the Leadership Gap!" A Call to Action for the Future Research Agenda

Liam Murphy
University of Chester, UK
ORC ID: https://orcid.org/0009-0001-2348-4445

Helen Turnbull
University of Chester, UK
ORC ID: https://orcid.org/0000-0002-0369-2036

Abstract

The coronavirus pandemic has acted as a catalyst for organisational change, disrupting historic ways of working, and spearheading organisations towards the next evolution of their working environments. In the aftermath of the largest concurrent work from home experiment in the world, organisations are coming to grips with the new policies and practices they need to implement to remain competitive. But there is one crucial stakeholder who continues to be left out in academic research, leaders. New questions now arise as to how we should remodel leadership in an increasingly remote world. What skills do leaders need to develop and how, in order to maintain employee wellbeing and manage the intergenerational divide? This paper presents a short synthesis of the challenges faced by leaders today specifically around remote team management but also in the context of a multigenerational workforce, alongside a summary of the research gaps we face in post-COVID literature. This paper concludes with the production of a future research agenda for scholars to close this gap, and to help organisations in building their leadership capability in the 'new normal'.

***Keywords*:** leadership skills, millennial, remote teams, wellbeing, emotional intelligence

1. Introduction

The coronavirus pandemic has acted as a catalyst for organisational change, disrupting historic ways of working, and spearheading organisations towards the next evolution of their working environments in the post-industrial era (Gherson & Gratton, 2022). Pre-pandemic working environments saw between 3-5% of US and European employees working from home for some part of the week (Afota et al., 2022; Ipsen et al., 2022). However, in the last three years, we have witnessed the creation of more opportunities than ever before for large-scale remote, hybrid, and flexible working practices (Desilver, 2020). The prolonged exposure

to this transformative way of working has resulted in 75% of employees now expecting their organisations to continue some element of home working in the future (Parry et al., 2021). As we reach three years since the start of the global pandemic, the chaos has started to settle and organisations have had time to consider and implement their new working policies. However, scholars have recently concluded that there is still much to learn with respect to upskilling leaders in a post-COVID world (Franzen-Waschke, 2022). This presents us with exciting new research opportunities to analyse the emerging questions which leaders will need to respond to for the modern employee. We seek to contribute to this debate by devising recommendations on specific research focuses which will further direct the discussion and produce practical recommendations for organisations. Questions we need to answer could relate to how to remodel leadership in an increasingly remote world. How to maintain employee wellbeing and resilience? What different leadership approaches do we need to consider from an intergenerational perspective?

2. Leading in a Post-Covid World

2.1. The Remote Working Dynamic

As we enter the 'new normal' of mass remote and hybrid working, it has been proposed that existing organisational leadership models and theories are becoming outdated (Gherson & Gratton, 2022; Tourish, 2019). Scholars argue that with many organisations now flattening their hierarchies, and increasing digitisation and automation, there is the need to change leadership power, skills and structure (Gherson & Gratton, 2022; Murphy, 2022). This is increasingly relevant, given that many leaders of previously physically, co-located teams, have now transitioned into 'e-leaders' (Chamakiotis et al., 2021), and the acceleration of remote management has created new experiences that they may not be trained for (Vargas, 2020; Murphy, 2022). It is important to consider that leaders are now operating in an environment whereby employees are leaving a 3-year period of intense and long-lasting stress, the likes of which we have not seen before. Alongside trying to perform in their jobs and adapt to remote-working, employees have also been worried about finances, health, family, and general well-being (Brown, 2021). While these new remote-working practices can positively influence productivity, creativity, and satisfaction (Abrams, 2019; Kirchner et al., 2021), remote practices are also known to create loneliness and isolation (Hertel et al., 2005; Stich, 2020), alongside impacting organisational communication, knowledge sharing, and socialisation (Choudhurry, 2020). Furthermore, recent research by Simon et al., (2023) exposes that only 5% of investigated companies feel they have the capabilities needed to lead in the remote world, with only 15% of team leaders feeling very comfortable leading remote teams. It is such dynamics that have led scholars to suggest organisational growth needs to be aided by developing training to improve people management and leadership skills in this new working environment (Murphy, 2022; Parry et al., 2021). Scholars such as Pierog (2023) have taken these ideas further to suggest that modern leaders need to adopt the CRAFT (creativity, resilience, agility, focus and trust) qualities first introduced by Kalamar (2022) in the post-COVID world. Pierog (2023) explains CRAFT qualities as a plethora of competencies, intelligences and traits which demonstrate the complex ecosystem of organisations today, and the challenge of being an effective leader in those organisations in the post-COVID world.

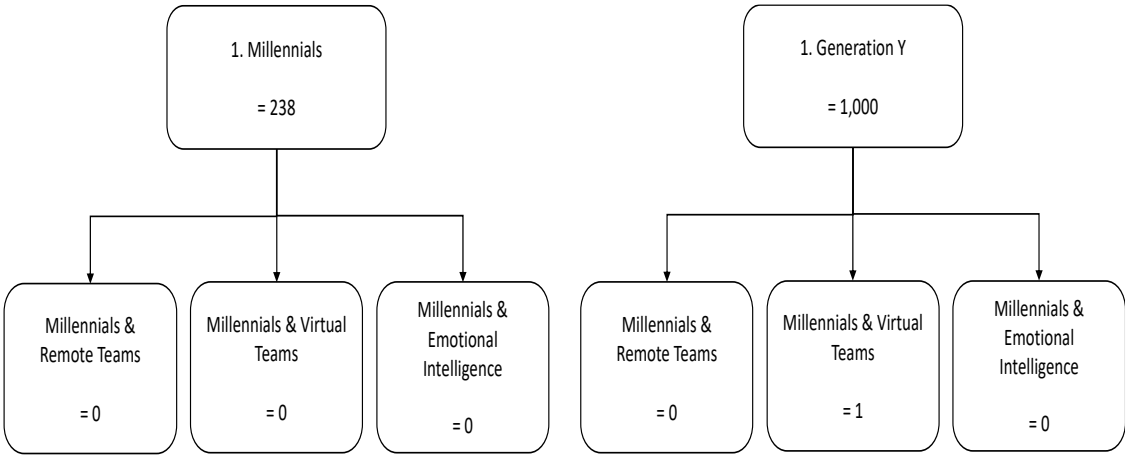
2.2. The Changing Generational Demographics

Another aspect to consider for post-COVID leaders is the changing generational demographics with the rise of millennials to become the largest group within the workforce and Generation Y (Gen Y) entering the world of work (Pasko et al., 2020). Just as leaders have to adapt to and learn a new skill of remote management, they jointly need to consider a generation of employees that prioritises relational aspects, vs. the transactional aspects of the generations before (De Smet et al., 2021). Research suggests that millennials, for example, differ from previous generations in that they seek shared, participative, and democratic leadership (Camp et al., 2021), with an expectation of those leaders being available in a more communal and personal setting (Pasko et al., 2020). Millennials also place high value on teamwork and collaboration (Camp et al., 2021) and prefer open, informal communication with their leaders (Pasko et al., 2020).

Scholars suggest that to manage these new generations, leaders require high emotional intelligence (Pasko et al., 2020). However, Parry et al., (2020) found remote leadership to be exposing the reality that many modern-day leaders are lacking these skillsets. While we have a basic understanding of some of the traits the new generations expect from leadership, we have a less sound understanding of the new skill sets needed by leaders, and how to build those skills when operating in a remote environment (Zhang et al., 2022).

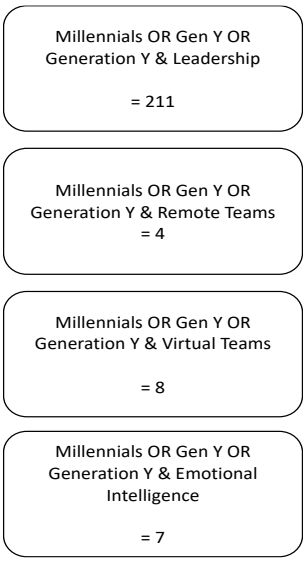
In an EthOS search from the British Library (Figure 1) and a scholarly journal search on the University of Chester library (Figure 2), the results confirmed that current literature focusing on millennials and Gen Y in remote teams is scant, and virtually non-existent when extending that to combine emotional intelligence. For both approaches a Boolean search string was established to search for "Millennials" OR "Generation Y" OR "Gen Y" and then the combinations AND for "remote teams" OR "Virtual Teams" AND "Emotional Intelligence" OR "EI" OR "Emotional Quotient". The results have been summarised into two diagrams by the authors:

FIGURE 1. ETHOS SEARCH



Source: Authors own compilation based on British Library EthOS Search, September 2022.

FIGURE 1. CHESTER UNIVERSITY LIBRARY SEARCH



Source: Authors own compilation based on Chester University Library Search, September 2022

2.3. The Knowledge Gap

When considering all these emerging elements together, it is only natural that organisational leaders may feel ill-equipped to support and manage their teams in a post-COVID age. In fact, these macro-environmental workplace changes have highlighted gaps in our knowledge of how managers should rise to the challenge of leading remote teams and the multigenerational workforce (Hennelly and Schurman, 2023), and how managers should support the mental health, wellbeing, and performance of their employees (Adenle, 2020; Giurge and Bohns, 2020; World Health Organisation, 2020; Kirchner et al., 2021). This widening managerial skill gap is imperative for organisations to resolve (McRae et al., 2023).However, there are gaps in the extant corpus of literature on how to address these topics. In general, current literature is scant on the subject of new leadership practices and theories needed to manage the new work environment. It would appear that the main focus of researchers during the pandemic and pre-COVID were focused solely on the employee aspects. There have been numerous studies conducted on employee performance and turnover (Bader et al., 2019), employee discrimination and hostility (Bader et al., 2018), and employee psychological health and wellbeing (Faeth and Kittler, 2017; Bader et al., 2019; Kirchner et al., 2021). Whilst some papers have tried to address the evolving roles of HR during the COVID-19 Pandemic (Dirani et al., 2020), there appears to be less focus on new leadership practices required post-COVID (Kirchner et al., 2021), and even less understanding of the leadership challenges that have arisen due to the pandemic and other external influences (Dirani et al., 2020). One of the more comprehensive literature reviews discovered in this research area suggested a dearth of research on what adaptations need to be made to leadership approaches in a post-pandemic world (Porkodi, 2022). In his review, Porkodi calls out a research gap, recommending future scholars focus on what new leadership styles and tactics should be implemented by organisations in a post-COVID world. Furthermore, Park and Cho (2022) propose that there is a paucity of research regarding the perceptions and the lived experience of supervisors leading remote teams.

3. Future Research Agenda

This paper suggests scholars narrow the literature gap by pursuing new empirical studies focused on emerging practice issues. Topics that scholars may prioritise in future could be:

1. *What new leadership practices are required post-COVID?*

a) What are the new leadership practices and qualities needed to manage remotely dispersed teams post-COVID? Studies could assess this from Kalamar's (2022) CRAFT qualities, examining the different skills, motivations, behaviours, and practices that contribute to successful e-leadership in a complex organisation.

b) What leadership practices should be implemented in remote teams to support mental wellbeing? How does this inform existing leadership theory?

c) How do we remodel traditional leadership practices and skills to be fit and relevant for the new intergenerational workplace? Studies may focus on specific generations such as millennials, and Gen Z who are now entering the workforce and any distinctive differences and requirements for these generations. Additionally, studies of Baby Boomers and Gen X would also be relevant with people looking to remain in work for longer in life.

2. *How may these new leadership practices be cultivated?*

d) How do we train, mentor and coach both existing and new leaders with remote team members now spanning five generations?

e) How do we help leaders balance organisational pressure from their senior leaders with team members' demands for work-life balance, career development and purpose?

To combat the focus on purely quantitative studies in correlation with the rise and sophistication of Information Technology data collection and analysis tools (Williamson et al., 2018), we suggest researchers pursue qualitative studies to address these gaps. Thus, in doing so, develop a deeper and richer understanding of the practice gaps. Much of the extant research even in relation to the perceived "softer skills" required by modern leaders, such as emotional intelligence, has been quantitative. Grey (2022) suggests that the approach could be problematic when researching concepts such as intelligence. Additionally, as many quantitative studies employ self-measurement surveys, there could be a limitation in relation to the validity of these responses as participants may interpret the questions differently, and they could also rate themselves differently to how they actually behave (Clark et al., 2021).

Adopting a more qualitative research approach on the aforementioned topics will enable the views and experiences of individuals and groups to be understood from a more socially constructed perspective. This would provide a deeper insight into the leadership skills needed in the current working environment, whilst enabling practitioner recommendations to support both existing and new leaders of remote and intergenerational teams. This is in comparison to quantitative studies where the connection between in situ reality and research is limited due to both the reliance on instruments and procedures and because social life is viewed as static and independent of the lived experience (Clark et al., 2021). Additionally, multi-level research would give further dimensions, in which team members', team leaders' and senior managers'

participation could provide a more nuanced perspective. Suggested approaches could involve interviews and focus groups, whilst methods such as observation, diary and documentational analysis should also be considered. Scholars, therefore, could consider case studies or action research approaches that influence and drive change inside organisations and contribute empirical practical recommendations. By adopting more qualitative approaches this will enable insight into the complexity and richness that is a reality in organisations today (Saunders et al., 2019).

4. Conclusion

The future of leadership is changing, and both scholars and practitioners need to address the newly emerging phenomena to ensure our leaders are armed with the right skills, and methods of skills development, to meet the task of leading the modern workforce. While the new reality raises challenges in managing the intergenerational divide, maintaining employee wellbeing and stepping into a remote leadership role, it also creates mass opportunities for skills growth and new ways of working. This paper has presented a synthesis of some of the current leadership research gaps and built on existing studies, to recommend five areas of future research. In addition, a new push for qualitative approaches of study has been raised, aimed at developing a deeper and quality understanding of the practice gap. It is envisaged that these new research areas and approaches will drive new value for organisations through the output of organisational change recommendations, enabling executives and HR offices to train their leaders in the right way, and with the right skills.

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Corresponding Author

The corresponding author for this manuscript is Helen Turnbull who can be contacted by email via 1822392@chester.ac.uk

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Upskilling and Reskilling for a VUCA World: Organizational Sense-Response Framework

Philip Mong'are Achoki
Refined Research Global, Kenya
ORC ID: https://orcid.org/0000-0002-5038-671X

Abstract

Organisations operate in a Volatile, Uncertain, Complex, and Ambiguous (VUCA) world punctuated by volatility, uncertainty, complexity, and ambiguity. Recent technological developments have given rise to new jobs, demands, products, processes, work arrangements, and methods of service delivery, thus significantly disrupting workplaces and creating a need for new workplace skills. There is a growing anticipation of "new normals" characterised by skills revolutions, among other factors. Such a context poses serious challenges to human resource management in regard to developing and maintaining a competitive advantage amidst volatility, uncertainty, complexity, and ambiguity. This theoretical study aimed to assess the need for upskilling and reskilling and propose an organisational sense-response framework for upskilling and reskilling in a VUCA business world. The findings show that for any organisation to ensure sustainability in the VUCA world, it must focus on its most valuable asset— its people. Organisations need to develop employees' skills based on organisational objectives strategically. In such a dynamic world, people require competencies in different skills, including but not limited to technological skills, self-management skills, social and cross-cultural skills, cognitive skills, entrepreneurial skills, and mastery of 21st-century inter-disciplinary themes to exhibit good performance. Therefore, the future of work will likely focus on continuous upskilling and reskilling people to thrive amidst constant disruptions. The proposed framework shows that organisations need sensing and response capabilities to thrive amidst rapid change, especially in the external environment. The sensing capability ensures that organisations continually maintain awareness of external threats or opportunities. The response capability, on the other hand, ensures that organisations can determine how best they can adapt to changes after assessing the relevance of those changes to their organisations' current situations and long-term strategic objectives, as well as the possible benefits and threats of those changes.

***Keywords*:** upskilling, reskilling, VUCA, sense-response framework, skills

1. Introduction

Current business environments are characterised by VUCA (Volatility, Uncertainty, Complexity, and Ambiguity). This term denotes the association of the "rapidly changing environments, diverse employees' needs, and almost unpredictable customer expectations" (Hamid, 2019, p. 1). The VUCA context has unique implications for human resource management (HRM). For instance, managers must deal with the volatility related to technological advancement and customer needs, uncertainty related to the unpredictable nature of using new frameworks, complexity related to the requirement of working with diverse employees, and ambiguity related to the mandated focus on innovation (Saridakis et al., 2017). Because of this, it is difficult for human resource (HR) managers to help an organisation develop a sustainable competitive edge in a VUCA environment (Codreanu, 2016). Any company that wishes to thrive in the VUCA environment must focus on its most valuable asset— its people. Talent development – strategically developing employees' skills based on organisational objectives – is the foundation of an organisation's sustainability (Taylor, 2022).

Recent technological developments have resulted in new jobs, demands, products, processes, and methods of service delivery, thus significantly disrupting workplaces and creating a need for new workplace skills to recover from the potential obsolescence of some job tasks (Bennett, 2018). Some scholars such as Cukier, Mccallum, Egbunonu, and Bates (2021) have argued that there will be no return to normal; hence, the world should anticipate a "new normals" characterised by skills revolution (Pedron, 2018) among other factors. In addition, Frankiewicz and Chamorro-Premuzic (2020) maintain that the future of work is likely to focus on upskilling and reskilling people to thrive amidst constant disruptions.

The world of work is undergoing fundamental workforce evolution and epochal transition (Brasher, 2021; Illanes et al., 2018). A recent report by McKinsey Global Institute projects that by 2030, up to approximately 14 per cent of workers worldwide may be required to change occupational classifications because of automation, digitisation, and technology disruptions in the labour market (Manyika et al., 2017). A World Economic Forum (2017) study forecasted that by 2022, roughly 42% of the core skills needed in various occupations would revolve, and more than 133 million new jobs would emerge (Zahidi, 2020). Such technological disruptions have also led to skills mismatch (Mgiba, 2019) as demand for present-day skills relevant to thriving in new work environments increases (Chakma & Chaijinda, 2020). In order to meet the job demands of the VUCA environment and close the widening skills gap, collaborative efforts and initiatives are needed to equip current and future employees with relevant skills for the VUCA world.

This study contributes to addressing an existing research gap. The full spectrum of skills required to thrive beyond the recent disruptions remains under-explored (Cukier et al., 2021). More studies are also needed to explore adequate skill needs across different sectors (Jaiswal et al., 2021). In adopting new technologies in organisations, HR managers are required to have full commitment and adequate understanding toward providing employees with adequate training and development opportunities and support (Ng et al., 2021). Therefore, there is a need for a framework to determine the existing capabilities of professionals and the needs related to upskilling initiatives (Lacity & Willcocks, 2021). Finding out what kinds of skills and competencies will be required in the future and ways of managing and developing them in organisations sustainably are top concerns for both organisations and researchers (Hancock et

al., 2020; Schlegel & Kraus, 2023). In addition, Hirschi (2018) recommends continued conversations among researchers and practitioners regarding the implications of the increasing digitisation and automation of work in the workforce and how research and practice can address these emerging trends. Therefore, this study aimed to assess the need for upskilling and reskilling and propose a comprehensive organisational sense-response framework for upskilling and reskilling in a VUCA business world that seems to be missing in the existing literature. The study can be beneficial to HRM practitioners, policymakers, and scholars.

2. Literature Review

2.1. VUCA Business World

The United States Army coined the term VUCA to characterise the dynamic, unpredictable, and unfavourable environment following the Cold War's conclusion (Sinha & Sinha, 2020). It was thereafter embraced by leaders and organisations all across the world. The term VUCA gained traction in corporate circles in the late 1990s and became a widespread acronym in the private sector with the advent of the 2008-09 financial crisis (Clegg et al., 2019). This is a continuing phenomenon; all predictions indicate that VUCA will be with us in the future (Sinha & Sinha, 2020). This fast-paced and ever-changing business environment is the new normal. This has compelled businesses and industry sectors globally to redesign their HR strategies in order to survive the VUCA era.

VUCA, which denotes volatility, uncertainty, complexity, and ambiguity, describes how organisations perceive themselves in the present and how they can prepare for the future (Sinha & Sinha, 2020). Organisations now need to plan strategically and transform VUCA challenges into opportunities (Clegg et al., 2019). VUCA has four dimensions, according to Bennett and Lemoine (2014) and Schoemaker, Heaton, and Teece (2018):

1. **Volatility:** Volatility is defined as an unknowable shift with a generally unsteady course.
2. **Uncertainty:** Although cause and effect links may be known, uncertainty is described as the lack of predictability of occurrences, making it challenging to examine potential future consequences.
3. **Complexity:** Complexity is viewed as a phenomenon or scenario with numerous interrelated variables that overwhelm an information network.
4. **Ambiguity:** Ambiguity is a situation in which there is uncertainty regarding the nature of a relationship, particularly its cause-and-effect dynamic. The uncertainty that might arise while attempting to make judgments in a novel scenario and the novelty of the situation itself can sometimes be the reason for this ambiguity.

2.2. Fourth Industrial Revolution

The world has been undergoing industrial revolutions. We are now in the fourth industrial revolution (4IR), also referred to as Industry 4.0 (Schwab, 2016). This revolution era follows the earlier three revolutions: mechanical production in the 1800s, mass industrial production in the late 19th century, and personal computers and the Internet in the 1960s (Frey & Osborne, 2013). The 4IR is characterised by major technologies, including "genetics, artificial intelligence, cloud computing, nanotechnology, biotechnology, and 3-D printing" (Hirschi, 2018, p. 2), among many others. Although there are similarities between Industry 4.0 and earlier

revolutions, Brynjolfsson and McAfee (2014) argue that besides aiming at replacing physical work and augmenting human workers, one main difference is that the technologies in the 4IR are aimed more at replacing cognitive work and human workers as well. Ford (2015) posits that this view raises the fear that artificial intelligence (AI) will gradually take over most jobs where humans are currently needed.

The 4IR has often been referred to as comprising accelerated digitisation and automation of work (Schwab, 2016). Several scholars consider it the most significant societal and economic trend in the globe that will significantly alter work dynamics, business, and society going forward (Arntz et al., 2016; Frey & Osborne, 2013; Hirschi, 2018). Current researchers also project that the disruptions of the 4IR may result in the disappearance of several jobs and significant changes in many other current jobs (Hirschi, 2018). On the other side, scholars maintain that the 4IR is also likely to result in new jobs, industries, and work arrangements (Brynjolfsson & McAfee, 2014). Therefore, based on these projections, digitisation and automation are the forces that are likely to shape the future of work and careers.

Although some scholars project that the 4IR technologies, such as AI, will lead to mass unemployment and dehumanisation of work, some other scholars criticise this view. For instance, Autor (2015) argues that jobs entail several tasks, many of which might not be easily automated. Thus, AI does affect some tasks but is unlikely to eliminate entire jobs (Hirschi, 2018). Another key criticism is that although previous revolutions also brought fears of mass job loss, these fears have not materialised (Hirschi, 2018). Consequently, labour economists generally agree that mass job loss is a highly unlikely scenario in the coming years (Arntz et al., 2016; Autor, 2015; Furman, 2016). However, Hirschi (2018) maintains that the world of work will experience major structural changes.

Acemoglu and Restrepo (2019) argue that AI potentially creates countervailing effects. On one side, it could create a significant displacement effect by taking over human tasks, thus reducing labour demand and employment (Brynjolfsson & McAfee, 2014; Ford, 2015). On the other side, automation could expand the economy, thus increasing demand for labour and sectors (Autor, 2015). Nevertheless, Acemoglu and Restrepo (2019) also argue that a greater force that could increase the demand for labour is "the creation of new tasks, functions, and activities in which labour has a comparative advantage relative to machines" (p. 198). The two scholars posit that such a scenario would potentially create a mismatch between the emerging technological demands of emerging tasks and the skills of workers.

2.3.The Changing Skills Landscape

As the disruptions of the 4IR transform workplaces, job profiles are likely to change, thus requiring employees to be upskilled and reskilled in a variety of competencies (Chakma & Chaijinda, 2020). According to the World Economic Forum's (2020) Future of Jobs Report, approximately "50% of all employees will need reskilling by 2025, as adoption of technology increases" (para. 1). Some of the skills believed to increase in prominence include critical thinking, complex problem-solving, and self-management (such as active learning, resilience, stress tolerance, and flexibility). Moreover, "The Forum estimates that by 2025, 85 million jobs may be displaced by a shift in the division of labour between humans and machines. But even more jobs – 97 million – may emerge that are more adapted to the new division of labour

between humans, machines, and algorithms" (World Economic Forum, 2020, para. 6). Figure 1 below shows the Forum's projected *Top 10 Skills of 2025*.

FIGURE 1. TOP 10 SKILLS OF 2025

Source: Future of Jobs Report 2020, World Economic Forum, 2020.

Cukier et al. (2021) argue that innovation, adaptation, and resilience skills are increasingly becoming critical when facing challenges and change. The Future of Jobs Report 2020 by the World Economic Forum (2020) shows that the top skills required in the labour market have shifted in response to recent disruptions. A comparison of the 2020 report with the 2018 report by the same organisation showed that skills related to innovation and entrepreneurship dominate. Moreover, skills associated with technology use, technology design and programming, monitoring and control, flexibility, stress tolerance, and resilience seem to have risen on the list. This trend reflects a "rapid advancement of digitisation and the need to adapt to the changing work and a changing world" (Cukier et al., 2021, p. 19). On the other hand, skills such as attention to detail, time management, emotional intelligence, trustworthiness, and co-ordination seem to have dropped off the list.

Moreover, Kiers and Van Der Werff (2019) argue that the skills employees may need to acquire amidst digitisation, automation, and robotisation may not be limited to technological proficiency, active learning, and analytical thinking.

The two scholars maintain that employees will need other skills such as "creativity, originality and initiative, critical thinking, persuasion and negotiation, and attention to detail, resilience, flexibility, and complex problem-solving" (pp. 1-2). Chakma and Chaijinda (2020) maintain that future skills ecosystems will include "flexibility, accountability, social and cross-cultural skills" (p. 5). Brasher (2021) also suggests that enhancing employees' soft skills is as critical as technical skills. In addition, Chakma and Chaijinda (2020) posit that besides the basic subjects, continuous upskilling and reskilling also require mastery of "21st-century inter-disciplinary themes such as global awareness, financial, economic, business, and entrepreneurial literacy, civic literacy, health literacy, environmental literacy" (p. 5).

Notably, in whichever work environment, entrepreneurial skills seem to be highly valuable. Such skills include developing new ways of identifying opportunities, creating new combinations, and acquiring the necessary resources to implement the required solutions (Cukier et al., 2021). For instance, some countries such as China and Singapore have given priority to developing entrepreneurial skills in their formal education systems (United Nations Conference on Trade and Development, 2012).

The European Commission (2019) adopted a framework of eight competencies for lifelong learning. "The reference framework presents successful ways to promote competence development through innovative learning approaches, assessment methods, or support" (p. 4).

The recommended "key competencies are a combination of knowledge, skills, and attitudes" (p. 5). These competencies include digital competence, literacy competence, cultural awareness and expression competence, multilingual competence, entrepreneurship competence, mathematical competence and competence in science, technology, and engineering, citizenship competence, and personal, social, and learning competence. The European Commission (2019) maintains that these eight competencies are needed nowadays and will be needed in the future. Therefore, organisations need to continually develop these human resources competencies, especially in a volatile, uncertain, complex, and ambiguous environment.

Human resources are the most important organisational assets. Frankiewicz and Chamorro-Premuzic (2020) argue that "digital transformation is more about people rather than technology, (hence) the key technological skills are soft skills rather than hard skills" (p. 4). Moreover, the World Economic Forum (2017) has predicted that future occupations will likely focus more on human skills, enabling value-creating activities for firms.

Nevertheless, a study by Jaiswal et al. (2021) revealed that although social skills such as communication, leadership, and interpersonal are evergreen skills, they require less upskilling than technological and cognitive skills. On the other hand, routine skills, including project management and basic statistics, are likely to decline in the future and hence need no upskilling. Table 1 summarises the skills increasing and declining demand.

TABLE 1. SUMMARY OF CHANGING SKILLS LANDSCAPE

Increasing Demand	Based On	Declining Demand	Based On
Technological skills: Technology use, technology design and programming, monitoring and control, data analysis, and digital skills	Cukier et al. (2021); European Commission, (2019); Jaiswal et al. (2021); World Economic Forum (2020)	**Hard skills** in general	Brasher (2021); Frankiewicz & Chamorro-Premuzic (2020)
Soft skills: curiosity, flexibility, adaptability, stress tolerance, resilience, accountability, social and cross-cultural skills	Chakma & Chaijinda (2020); Cukier et al. (2021); European Commission, (2019); Frankiewicz & Chamorro-Premuzic (2020); World Economic Forum (2020)	**Routine skills**: project management, accounting, and basic statistics, Office administration and production, etc.	Jaiswal et al. (2021)
Cognitive skills: continuous learning, decision-making, creativity, originality and initiative, critical thinking	European Commission, (2019); Jaiswal et al. (2021); Kiers & Van Der Werff (2019)	Attention to detail, time management, emotional intelligence, trustworthiness, and co-ordination.	Cukier et al. (2021); World Economic Forum (2020)
Entrepreneurial skills andinnovation	Cukier et al. (2021); United Nations Conference on Trade and Development, 2012), World Economic Forum (2020)		
Mastery of 21st century inter-disciplinary themes: global awareness, financial, economic, business and entrepreneurial literacy, civic literacy, health literacy, environmental literacy	Chakma & Chaijinda (2020); European Commission, (2019)		

Source: Own compilation

2.4. Theoretical Frameworks

The following three theories, namely, the dynamic skill theory, neo-human capital theory (NHCT), and the theory of AI job replacement, illustrate the need for human resources development during rapid technological advancements in the VUCA world.

2.4.1. Neo-Human Capital Theory

The NHCT highlights a rising demand for technology-induced skills as well as the need to develop human capital during rapid technological change (Pereira & Malik, 2015). Bartel and Lichtenberg's (1987) posit that individuals with greater human capital competency in terms of education, training, experience, exploration, and openness to learning have a higher probability of adopting technological changes and developing new skills. Previous scholars (Jaiswal, Arun, & Varma, 2021; Pereira & Malik, 2015) have indicated that technological knowledge will not cause a decline in the need for workers' training. Therefore, the adoption of AI technologies is highly likely to increase the demand for new skill sets and higher human competencies.

2.4.2. Dynamic Skill Theory

The dynamic skill theory (Fischer & Bidell, 1998) considers skill development as web activities taking place in particular contexts. These interconnected activities are also outcome-oriented (Kunnen & Bosma, 2003). In addition to this web of skills, this theory also highlights the complexity of skills in different contexts (Fischer, Yan, & Stewart, 2003). For instance, in a dynamic world, people require competencies in different skills, including "social, emotional, technological and physical skills to exhibit good performance or demonstrate appropriate behaviour" (Jaiswal et al., p. 6) according to the relevant context. Therefore, this theory can be used to investigate the concept of the changing nature of work and skills.

2.4.3. AI Job Replacement

The unfolding of the potential of AI has also raised fears of job displacement. However, the theory of AI job replacement (Huang & Rust, 2018) narrows down displacement by AI to the task level and not the job level. In particular, the changing nature of work significantly affects easy and routine tasks that entail mechanical intelligence before it can affect tasks that require analytical intelligence (Jaiswal et al., 2021). Hence, soft skills will be critical for humans in the AI dispensation. The future workforce will require higher job complexity intelligence, such as intuitive intelligence and empathetic intelligence (Jaiswal et al., 2021). Although AI will replace some human tasks, Huang and Rust (2018) maintain that skills such as communication, empathy, problem-solving, sense-making, relationship-building, and reasoning cannot be easily displaced by AI. Therefore, in a VUCA world, current and future employees must continually upskill and reskill to remain relevant.

2.5. Upskilling and Reskilling

2.5.1. Role of Upskilling and Reskilling

Upskilling refers to augmenting existing skills with new or significantly enhanced knowledge or skills to enable individuals to continue and succeed in the same profession or field of work, whereas reskilling implies helping individuals gain new knowledge or skills to enable them to perform new jobs or enter new professions (Brinegar & Masino, 2021). The disruptions of the 4IR developments continue to reshape the type of skills required in the digital labour markets. Some scholars maintain that industries experiencing such disruptions are likely to develop skills initiatives as a classic response (Bajpai & Biberman, 2019).

Considering the need for employees to be equipped to thrive during technological disruptions (Van Deursen & Van Dijk, 2014), organisations need to invest more in training their workers to help them acquire knowledge and skills to perform new tasks with long-term career opportunities during the 4IR (Ecless & Serafein, 2017). Similarly, Mgiba (2019) highlights "a need to augment existing skills with new or significantly enhanced knowledge or skills to enable individuals to continue and succeed in the same profession or field of work or to move on to new positions" (p. 5). Therefore, upskilling and reskilling are critical initiatives for sustainability and continuity during the 4IR.

Work during the 4IR is knowledge-intensive and heavily depends on the interaction between AI-enabled technologies and employees (Bondarouk, Parry, & Furtmueller, 2017). Although technology enables organisational deliverables, Jaiswal et al. (2021) argue that employees are the key drivers of value creation and sustainable competitive advantage. The scholars thus

suggest that besides organisations developing physical and organisational capital, they should also develop human capital which is critical to success and sustainability.

Upskilling and reskilling have numerous benefits. For instance, lifelong learning can help mitigate the negative effects of the 4IR (Mokyr, 2015; Penprase, 2018). Hence, for future employees to thrive in the new normal, they will need to update and acquire new skills (Hirschi, 2018; Pedron, 2018). In addition, Brasher (2021) argues that upskilling and reskilling can help employees grow as well as have a feeling of progress and being valued in the organisation. Such a practice can thus help retain talent within the organisation by minimising the need for redundancies and outsourcing. This can help build an organisation's resiliency and agility. In this regard, Brasher (2021) recommends continuous upskilling and reskilling. Therefore, organisations should continually identify the need to upskill and reskill and encourage their employees to develop new skills.

2.5.2. Upskilling and Reskilling in the Post-pandemic Era

HRM transformed due to the COVID-19 pandemic. The pandemic accelerated the adoption of technology, such as artificial intelligence (AI), and caused a change in working arrangements (Mer & Virdi, 2023), such as remote working that required variant skills in employees (Durai & Jose, 2022). Mer and Virdi (2023) posit that the pandemic also "led to a paradigm shift in HRM practices. AI-enabled HRM practices are now centred around remote and contingent workforce management, mindfulness, social capital, increasing employee engagement, reskilling, and upskilling towards new competencies, etc." (p. 1). Such a paradigm shift has forced various organisations to think of new ways of organisational learning (Durai & Jose, 2022). There is a need for HR practitioners to develop employees who can adapt quickly to the world of work changes.

One challenge HR practitioners faced during and after the pandemic was upskilling and reskilling the workforce to thrive in the new context of remote working (Durai & Jose, 2022). Since the onset of the pandemic, organisations have not been able to depend on the skillset they relied on in the past years. Organisations have had to find ways of continually developing their workforce by equipping them with in-demand skills. Durai and Jose (2022) posit that the shift of learning and development in the post-pandemic era entails aspects such as a liquid workforce, optimal learning, remote working, hybrid learning, social learning, virtual learning, and life-long learning. Therefore, in the post-pandemic era, continuous upskilling and reskilling are key to surviving and thriving amidst constant and uncertain changes. Moreover, Raimi (2021) suggested that career reinvention in the post-pandemic era requires collaborative efforts from key stakeholders (such as governments, employees, and business organisations).

2.6. Collaborative Response of Governments, Educators, and Industry

The revolutionary changes of the 4IR require collaborative efforts to find both short-term and long-term solutions. Some scholars, such as Kiers and Van Der Werff (2019), have suggested that educational institutions, the industry, governments, and the wider community should collaborate to maximise the efficiency of upskilling and reskilling during the 4IR. Although organisations can carry out upskilling and reskilling independently, this may be costly and unequally implemented. However, Kiers and Van Der Werff (2019) recognise the risk of these sectors waiting upon each other to take the first initiative.

Besides impacting organisations, the 4IR technologies, such as AI, have initiated the process of developing a "learning and feeling economy" (Jaiswal et al., 2021, p. 21). A learning economy denotes a workforce that continually learns, upskills, and reskills as a result of innovation and technological advancements (Bughin et al., 2018). In a feeling economy, employment is based more on feeling tasks, including empathy and interpersonal, than mechanical and thinking tasks (Huang, Rust & Maksimovic, 2019). Therefore, managers have the task of restructuring their jobs to be "more people-oriented, feeling-conscious and emotionally intelligent" (Jaiswal et al., 2021, p. 21) by developing workforce on people skills as well as feeling intelligence.

Governments have a major role to play. Kiers and Van Der Werff (2019) suggest that governments can be instrumental in facilitating the process of upskilling and reskilling as it happens in Denmark. The Danish Government recognises the significance of world-class lifelong learning and the existence of good opportunities for the continuous upgrading of skills for the future (Danish Government, 2019). Another example is the Singapore government, which provides every employee with an amount for upskilling, hence promoting lifelong learning (Singapore Government, 2018). In addition, the Singapore government encourages employers, private training providers, higher institutions of learning, and society to support lifelong learning.

Learning institutions are also instrumental. Some scholars have suggested that education ecosystems should be designed to meet the future needs of the industry (Nordin & Norman, 2018). Nordin and Norman (2018) posit that to combat the impact of AI and robots, institutions of learning should design curriculums that integrate the 4IR technologies in teaching and learning so that learners are familiar with the potential of such technologies from early childhood. Moreover, Zahidi (2020) has proposed that higher institutions of learning can help by making skills visible and collaborating with the industry to develop a relevant taxonomy of skills.

With the prediction that AI will potentially create new tasks, functions, and activities, new skills will also be required to execute these tasks (Acemoglu & Restrepo, 2019). In cases where the workforce lacks those skills, an adjustment to new realities might be hindered. In particular, the failure of the educational systems to identify and provide these skills will be a great blow to any adjustment during the AI revolution. Considering the rising concerns of several employers being unable to find suitable employees (having the right skills) for their jobs (AfriBlocks, 2021; Deloitte and The Manufacturing Institute, 2011), educational systems need to be reviewed and revised accordingly. The European Investment Bank (as cited in Kiers & Van Der Werff, 2019), recognises the importance of a coherent and progressive strategy for human resources and skills as one of the solutions to the challenge of skills shortage.

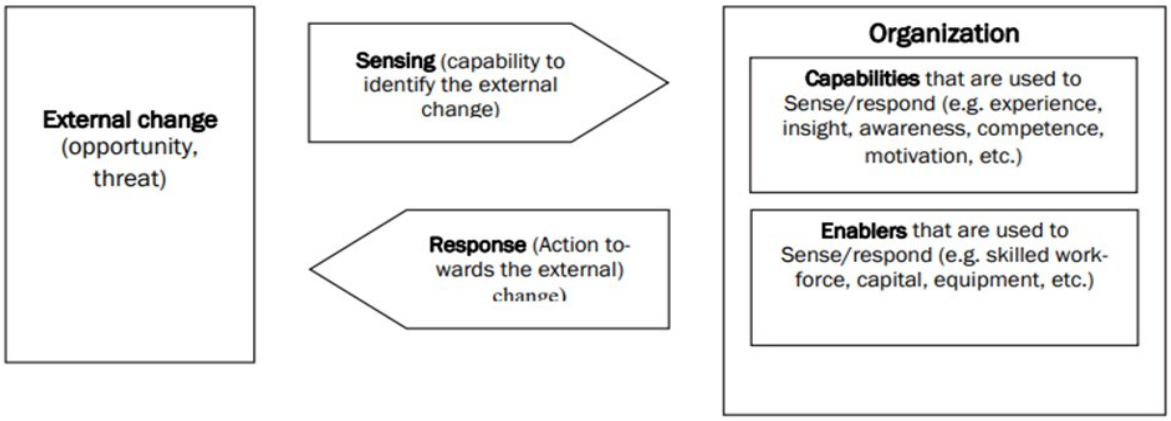
2.7. Organisational Sense-response Framework

The sensing and response dimensions heavily affect the change process (Žitkienė & Deksnys, 2018). A driver for organisational change often occurs from the external environment. For instance, a shift in customer preferences, competitive conduct, or industry developments can impact a firm externally. To capitalise on these changes and turn them into opportunities, companies must first identify and acknowledge them. This capacity or act of recognising heavily relies on an organisation's capabilities, people skills, experience, and expertise. The sense-response framework (Figure 2), proposed by Žitkienė and Deksnys (2018), lists the

sensing ability (sub-process) as the first phase. Once external threats or opportunities have been identified, the organisation must determine how well it can adapt to these changes, including whether they are relevant to its current situation and long-term strategic objectives, whether they could be advantageous to it, and whether it is capable of taking action to address them.

A second sub-process in the sense-response framework is the capacity to use organisational resources (capabilities and enablers) from both inside and outside the organisation in response to environmental changes (Žitkienė & Deksnys, 2018). The capabilities and enablers of the organisation heavily influence its reaction or response. An organisation uses its capabilities and enablers to respond to the opportunity or threat after choosing to act in response to an external change. Based on the sense-response framework, the foundation of a successful organisation is this intricate process of evaluating and taking appropriate action in response to external changes. Although this framework has been used to study organisational agility, it can be adapted to studies on upskilling and reskilling for a VUCA world characterised by rapid, unpredictable changes in the external environment (such as technology, competition, customer needs and wants, labour market, and employee needs, etc.) that require organisations to constantly sense and keep track of changes and respond to them accordingly.

FIGURE 2. ORIGINAL SENSE-RESPONSE FRAMEWORK



Source: Žitkienė & Deksnys, 2018, p. 122.

2.7.1. Upskilling and Reskilling Drivers

Researchers have predicted that technological advancements of the 4IR will be the key drivers of opportunities for new growth and the need for upskilling and reskilling. *The Future of Jobs Report 2018* (World Economic Forum, 2018) shows that automation, AI, ubiquitous high-speed mobile internet, cloud technology, and widespread adoption of big data analytics will dominate as positive drivers of business growth. Hall (2023) maintains that "as market circumstances, technologies, and organisational requirements evolve, in-demand skills will do the same. Throughout history, forces such as globalisation have reshaped most employees' jobs. Technology, including AI, stands to revolutionise those positions even more" (para. 1). Hall (2023) also posits that shifts in talent needs amidst rapid changes drive organisations to upskill and reskill their employees to be able to handle fast-happening developments. Moreover, the current business environment's volatility, uncertainty, complexity, and ambiguity force organisations to adopt various upskilling and reskilling strategies to survive or thrive in the present and prepare for the future (Sinha & Sinha, 2020).

2.7.2. Upskilling and Reskilling Enablers

As stated earlier, people are the most essential assets of an organisation. Hence, for any upskilling and reskilling initiative to be successful, organisations need a skilled and empowered workforce (Vroman & Danko, 2022). Low, the vice president of human resources at Cengage Group (as cited in Vroman & Danko, 2022), maintained that "employees want to understand future career opportunities, and what skills, competencies, and capabilities they need to get there" (para. 3). Therefore, empowered employees can be critical enablers of the upskilling and reskilling initiatives as they will own such programs for their career development. Besides an empowered workforce, internal networks (connections) and policies are fundamental for upskilling and reskilling (Schad, 2020).

According to a study by the Center for Creative Leadership, *The 70-20-10 Rule for Leadership Development*, "most learning happens through challenging experiences and assignments" (para. 2). Hence, ensuring a culture of learning and growth through favourable internal networks and policies can enable employees to upskill and reskill continually. Besides internal networks, strategic external partnerships with resourceful organisations are equally beneficial (Hammer, 2022). Moreover, using technology can enable stronger internal and external networks for learning and development (Hammer, 2022).

2.7.3. Upskilling and Reskilling Capabilities

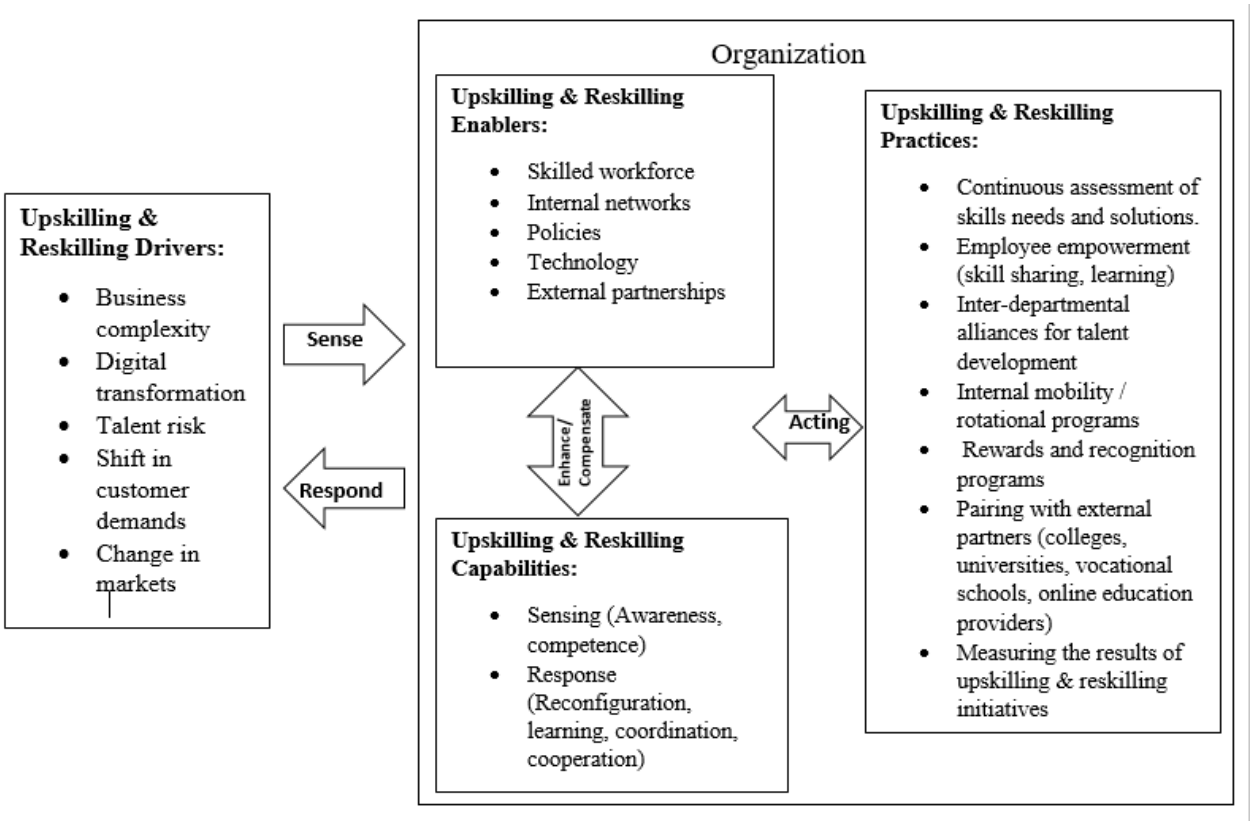
According to Žitkienė and Deksnys (2018), organisations need sensing and response capabilities to thrive amidst rapid change, especially in the external environment. The sensing capability ensures that organisations continually maintain awareness of external threats or opportunities. Identifying these drivers is key to finding relevant ways of addressing them. The response capability, on the other hand, ensures that organisations can determine how best they can adapt to changes after assessing the relevance of those changes to their organisations' current situations and long-term strategic objectives, as well as the possible benefits and threats of those changes. Organisations can enhance these capabilities by reconfiguring talent and skills, learning, co-ordination, and cooperation of various entities within the organisation (Rogers, 2020).

2.7.4. Upskilling and Reskilling Practices

The Institute of Innovation and Professional Development (2023) suggested that some upskilling and reskilling practices include providing employee learning opportunities, creating a culture of learning within their organisation, offering incentives, and supporting career development. "This can include offering training programs, workshops, and courses related to their field or industry. Employers can also provide access to online learning platforms and educational resources to help their employees expand their skill sets" (para. 2). Organisations can also achieve this by enhancing employee empowerment through knowledge and skills sharing initiatives such as inter-departmental alliances, rotational programs, and partnering with external training providers such as universities, colleges, vocational schools, online education providers, and private trainers (Abu-Rumman, 2021, Hammer, 2022).

Organisations should also ensure continuous assessment of skills needs and solutions and continually measure the results of their upskilling and reskilling initiatives to keep improving them (Agarwal et al., 2022). Figure 3 shows the proposed organisational sense-response framework for upskilling and reskilling in a VUCA world.

FIGURE 3. PROPOSED ORGANISATIONAL SENSE-RESPONSE FRAMEWORK FOR UPSKILLING AND RESKILLING IN A VUCA WORLD



Source: own compilation based on Abu-Rumman, 2021; Agarwal et al., 2022; Hall, 2023; Hammer, 2022; Rogers, 2020; Schad, 2020; Sinha & Sinha, 2020; The Institute of Innovation and Professional Development, 2023; Vroman & Danko, 2022; World Economic Forum, 2018; Žitkienė and Deksnys, 2018

3. Conclusion

Although organisations operate in a VUCA environment characterised by volatility, uncertainty, complexity, and ambiguity, they need o plan strategically and transform VUCA challenges into opportunities. Any company that wishes to survive and/or thrive in the VUCA environment must focus on its most valuable asset— its people. Talent development – strategically developing employees' skills based on organisational objectives – is the foundation of an organisation's sustainability during the ongoing 4IR. Digital transformation is more about people rather than just technology. As disruptions of the 4IR transform workplaces, employees are to be upskilled and reskilled in various competencies. Continually developing people by combining the dual focus on the potential of soft skills and knowledge of hard skills is essential in ensuring organisations respond accordingly to the changes in the external environment. Besides organisational efforts, employees should be willing to take personal initiatives to learn new skills despite their many years in their existing roles.

The disruptive changes of the 4IR require collaborative efforts to find both short-term and long-term solutions. As various scholars have suggested, various entities such as educational institutions, industry, governments, and the wider community should collaborate to maximise the efficiency of upskilling and reskilling during the 4IR. Such collaborative efforts can help make relevant skills visible and enable the development of a relevant taxonomy of skills. This

will ensure that the skills shortage problem is addressed gradually and there is a constant supply of relevant talent to meet the labour demand. Moreover, it will ensure that employees are prepared for the unpredictable future due to their attained flexibility, agility, and resilience. With the fear that advanced technologies will take over people's jobs, thus rendering them obsolete, organisations can do well to continually upskill and reskill their employees to remain relevant despite rapid disruptions. Such efforts will ensure that employees are empowered to continue and succeed in the same professions or field of work, perform new jobs, or enter emerging professions.

Although the sense-response framework has been used to study organisational agility, in this study, I propose that it can be adapted to studies on upskilling and reskilling for a VUCA world characterised by rapid, unpredictable changes in the external environment (such as technology, competition, customer needs and wants, labour market, and employee needs, etc.) that require organisations to constantly sense and keep track of changes and respond to them accordingly. Organisations need to enhance both the sensing and response capabilities to ensure that they continually maintain awareness of their external threats or opportunities and can determine how best they can adapt to these disruptions after assessing the relevance of those changes to their organisations' current situations and long-term strategic objectives, as well as the possible benefits and threats of those changes. In the end, upskilling and reskilling will benefit both employees and, organisations and society at large.

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Corresponding Author

The corresponding author for this manuscript is Philip Mong'are Achoki who can be contacted by email via philipmongare99@gmail.com.

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Employability Skills – Rethink Your Learning

Zsuzsanna Soproni
International Business School, Hungary
ORC ID: https://orcid.org/0009-0002-1838-5351

Abstract

Technology has been responsible for the digitisation and automation of routine jobs. With the advent of Artificial Intelligence (AI) this trend is likely to continue into more technical or sophisticated work. This gives rise to the question; how can graduates and employees ensure they have a job in the future? A precondition for understanding lifelong learning is to clarify what kind of learning may take place throughout an employee's career. This paper explores the concepts of employability skills, soft skills, and 21st century skills in an effort to identify where particularly human skills will still be essential. After reviewing research in the area of employability skills, mainly from a labour market perspective, the paper goes on to contextualise the training and development of employability skills in higher education. Following that, reasons for developing and introducing employability skills modules in higher education are discussed and based on the literature, recommendations are made for higher education institutions, tutors, students, and employees.

Keywords: knowledge, skills, competencies, employability skills, higher education, career development

1. Introduction

With computerisation present in all walks of life and AI finding its way into more and more areas, education needs to redefine its role, purpose and means. This is especially true of higher education where students' entry into the labour market is imminent and where applicants' decisions often depend on graduates' rate of employment.

This article is a theoretical research paper based on a review of the relevant literature. It aims to give an overview of research on employability skills while presenting some examples of skills development programmes in higher education. For a wider understanding, it is also important to situate employability skills in the framework of declarative and non-declarative knowledge. The article wishes to highlight the importance of skills and competence development in higher education institutions (HEIs) in the 21st century with a special focus on employability skills and communication skills.

Before the term employability skills is defined, it is important to explain some concepts which are often used in relation to learning. This is in accordance with the proposition made by Cole and Donald (2022, p. 4) that the narrative needs to shift "towards an understanding and language for learning that embraces a more diverse range of outcomes for graduates".

The most down-to-earth and widely used term is *knowledge*, which refers to familiarity with theoretical, factual, or lexical information. For example, a learner who has completed secondary education is expected to know that the capital of Australia is Canberra and not Sydney. Knowledge can be acquired in many ways. The learner might read, hear, or watch a video about Canberra and, most of all, needs to be able to remember and retrieve the name of the city. Knowing the capital of a country is a simple example of knowledge. The European Qualifications Framework (EQF) distinguishes eight different levels of knowledge, the highest level of which includes "knowledge at the most advanced frontier of a field of work or study, and at the interface between fields" (European Commission, 2018).

In comparison with knowledge, the term *skills* refers to the ability to do something. For instance, language programmes often include conversation classes where learners develop their speaking and social skills. Similarly, the same skills may be easily observed at a birthday party. For some, their skills develop naturally and intuitively as they grow older, one example being interpersonal skills. Other skills, especially specific skills, such as the ability to use an application or the ability to conduct online research, can be improved with practice. In the context of the EQF, skills are labelled as cognitive and technical (European Commission, 2018). The Organisation for Economic Co-operation and Development (OECD) Learning Compass 2030 distinguishes between three different types of skills: 1) cognitive and metacognitive skills; 2) social and emotional skills; and 3) physical and practical skills (OECD, 2019).

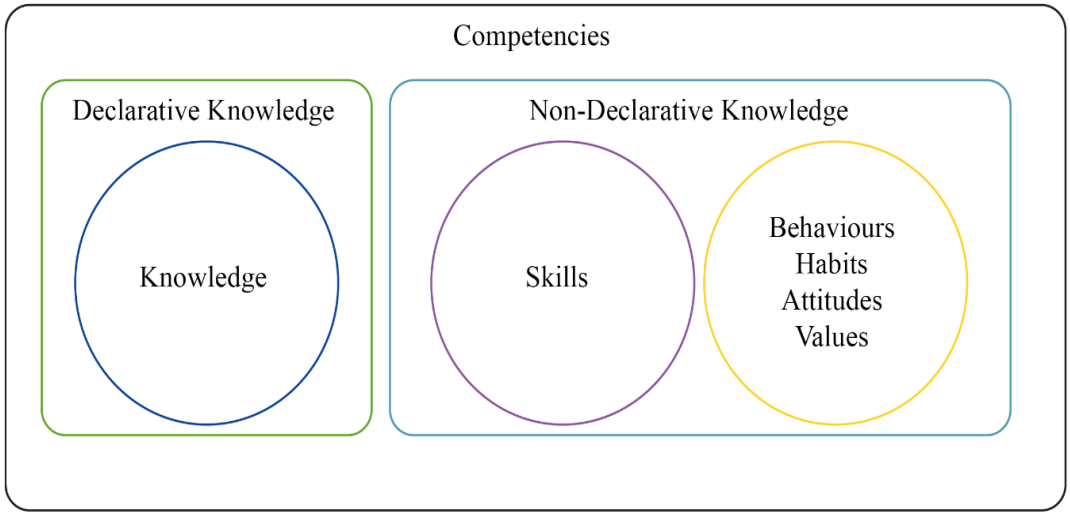
The terms *competence or competencies*, however, are broader terms. Both are used to mean the ability to do something well. Foreign language competence, for example, is often measured with complex language examinations where different knowledge and skills are assessed, very often in an integrated manner, for instance, mediation, vocabulary, or presentation skills within an oral assessment task. Another example of competencies could be intercultural communication competence, which clearly involves the knowledge and awareness of cultural differences and the adequate skills and behaviour to effectively interact with people who belong to different cultures. According to Vitello and Geatorex (2022), "competence is the ability to integrate and apply contextually-appropriate knowledge, skills and psychosocial factors (e.g., beliefs, attitudes, values and motivations) to consistently perform successfully within a specified domain". To cite another, more compact and more recently published definition, competence is "an intricate component of knowledge, skills, attitudes, and values" (Crosta et al., 2023, p. 41).

In psychology, two types of knowledge have been the focus ever since Aristotle described technical knowledge and practical knowledge (Pléh, 2001). By and large, two kinds of knowledge are defined. *Declarative knowledge* is the knowledge of lexical information, the learning of which is typically school-based. For centuries, the focus was on the retention and storage of information, which explains why studies on how memory works and the use of mnemonic techniques dominated the field. *Non-declarative knowledge*, which is the streetwise application of knowledge, however, is seen as skills and habits (Kump et al., 2015), which are typically shaped by experience. Access to information in the 21st century is far easier than was

traditionally, therefore, more attention could be paid to skills and competence development both in formal and informal learning contexts. (For a more comprehensive overview of knowledge in knowledge management literature, see Jakubik, 2007.)

In Figure 1, knowledge, skills, and competencies have been illustrated in the context of declarative and non-declarative knowledge. The underlying belief is that an employee would need to activate all the domains of their competencies in order to solve complex work problems.

FIGURE 1. DOMAINS OF COMPETENCIES



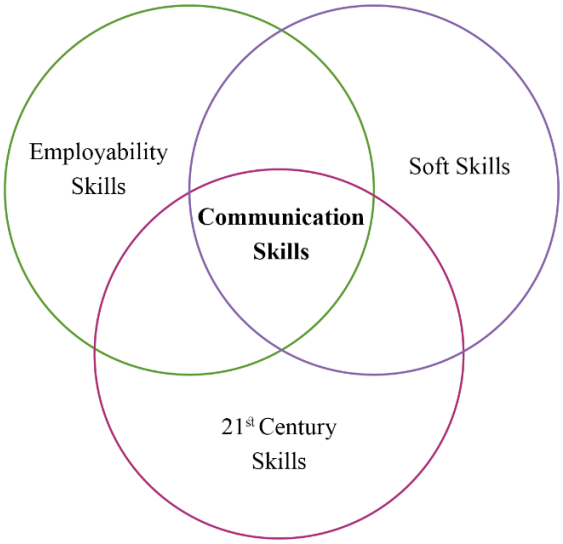
Source: Own compilation

For the purposes of this paper, it is important to clarify the notions of employability skills, soft skills, and 21st century skills as these are very often used synonymously. The term e*mployability skills* has been used for long and is seen as "job-readiness skills" (Robinson, 2000, p.1) that help job-seekers find jobs. These skills naturally vary from job to job and field to field. Teachers, doctors, and sales managers, for example, all need presentation and persuasion skills, but teachers and doctors need more empathy than a salesman who will need to sound much more convincing. Employers, too, may make their expectations position-specific by looking for a certain skill set when advertising a position in a team where certain skills are missing. The skills requirements of jobs may also change over time, for example, employees may need more digital skills as the technological context develops. Employability, in the author's understanding, therefore, is an amorphous and elastic notion.

When it comes to the notion of *soft skills*, the easiest way to define it is to state what it is not. Very often soft skills surface in comparison with hard skills. Hard skills are skills that we need to do in order to complete a task. For example, a hard skill would be computer programming. In contrast, soft skills include professionalism or work ethic, oral and written communication, teamwork and collaboration skills, critical thinking, or problem-solving skills (US Department of Labor, n.d.). Soft skills could include distinct skills, from dressing properly through speaking politely to leading others. Many of the soft skills belong to the umbrella term of interpersonal or people skills, but not all. Empathy, conflict resolution, and mediating, for instance, do, while critical thinking and problem-solving do not.

Twenty-first century skills, on the other hand, are skills that are not as much work-related as employability skills or soft skills may be. This is a buzzword in education, especially at primary and secondary school levels. Most typically, 21st century skills include four skills: 1) critical thinking, 2) communication, 3) collaboration, and 4) creativity (Batelle for Kids, n.d.). The assumption is that children in the 21st century need a set of different skills from earlier generations because the world has fundamentally changed: it is now a "digitally and globally interconnected world" (Batelle for Kids, 2019). The four skills that belong here are usually supplemented by other skills, such as self-direction, global awareness, innovation, and social and intercultural skills, so it is easy to see why the three terms are so intermingled. In Figure 2, an example of the label of communication skills can be seen in the intersection of the three skills groups, demonstrating the overlap between the three concepts.

FIGURE 2. OVERLAPPING SKILLS NOTIONS



Source: Own compilation

Many other terms are used in educational contexts that are related to employability skills, soft skills, and 21st century skills, for instance, applied skills, interdisciplinary skills, or transferable skills. For the purposes of this article, the term employability skills is used primarily, but when cited authors use the terms soft skills or 21st century skills, the original terminology is kept.

In what follows, the first research in the area of employability skills is reviewed, mainly from a labour market point of view. Then, the paper goes on to contextualise the development of employability skills in higher education. Next, the justification for developing and introducing employability skills modules in higher education is discussed. Finally, some recommendations are made for students, tutors, and HEIs.

2. Research on Employability Skills - What Employers Demand

The theme of employability skills was identified as the third most important one in the area of career research by Akkermans and Kubasch following career success and career decision making (2017). Employability skills, in other words, "job-readiness skills" (Robinson, 2000, p.1) help young graduates find jobs, fit into their work context, and keep their jobs. The present article may be useful for students, graduates, and professionals wishing to improve their employability since a more recent definition of employability skills emphasises that

employability skills also include the skills needed at later stages of their careers, for instance, in order to get promoted, face change, or change jobs (Fajaryati et al., 2020). Since HEIs cannot promise to prepare graduates for their entire career, students are regularly encouraged to become lifelong learners because tutors are aware that in the era of unstoppable technological development and volatile labour market trends, lifelong learners and innovators are needed on the job market. When students transition into the workforce, again, there are various training programmes with the same aim: to update graduates' knowledge or widen their skill sets (Hagel III, 2021). A daunting finding of the World Economic Forum (WEF) is that 60% of workers will require training before 2027 (WEF, 2023a) because of the restructuring of available jobs. Let us look at what exactly employability skills consist of.

In a large-scale interview study in the United Kingdom in 2015, researchers found that employers believed complex analytical skills, time management, management and leadership, sales, and customer handling skills were the skills that employees lacked (Vivian et al., 2018). In fact, a more recent publication says that "analytical thinking is considered a core skill by more companies than any other skill" (WEF, 2023a). More specifically, in the business sector, for example, Vivian et al. found that employees lacked the ability to manage their own time and prioritise their own tasks, while in the financial sector, they lacked the ability to persuade or influence others (Vivian et al., 2018, p.160). In addition to job-specific skills, the most missing skills identified were planning and organisation, customer handling, oral communication, problem-solving, and written communication (Vivian et al., 2018, p.161).

In the United States (US) context, after collecting data from 1,251 job recruiters with MBA recruitment experience at 547 companies, Bloomberg identified the most looked-for skills in the financial sector; for example, the two "most desired but least available skills" were communication skills and strategic thinking (Levy & Cannon, 2016). The *sweet spot* is the name given to the skills that are not available but in high demand, including communication skills, strategic thinking, leadership skills, and creative problem-solving for all industries. In another 2017 US study, having studied almost 700,000 online job ads researchers found that for the skilled technical workforce, the top eight skills were communication skills, planning, writing, problem-solving, organisation skills, research skills, using MS Office and MS Excel (Lancaster et al., 2019, p. 11).

As part of a European research project, through interviews and online surveys with labour market actors and academics in five countries (Bulgaria, the Czech Republic, Italy, Spain, and Turkey), Crosta et al. (2023) found that the two most important employability skills were communication skills and collaboration with some differences between the countries However, with the help of questionnaires, they also identified the lack of competency-based assessment in tertiary education: 63% of the 156 higher education students from Bulgaria, the Czech Republic, Spain, and Turkey stated that they had never been evaluated using competencies as a framework (Crosta et al., 2023, p. 48). It was particularly salient in the qualitative summary of expert responses in Spain that "higher education tends to assess students based on content rather than competencies" (Crosta et al., 2023, p. 46) which is not an uncommon feature of programmes in HEIs in Europe. In fact, Crosta et al. found that 21st century skills surface in many educational documents in the above five countries, but "education systems are lacking in terms of teaching these skills and there is still a long way to go" in terms of implementation (Crosta et al., 2023, p. 53).

In a review article, Fajaryati et al. (2020) concluded that the skills most often found to be missing in young employees by relevant studies are problem-solving skills, communication, teamwork, and IT skills. In an earlier review article, Suleman (2016, p. 173) stated that "there is no one best way to examine the set of skills that makes a graduate more employable", while acknowledging that there was consensus on the importance of interpersonal skills, communication and team-work skills, perhaps because these are easily observable.

In addition to these specific employability skills, Römgens et al. (2020), while reviewing higher education and workplace learning literature on employability, also mention career management skills, movement capital, and career competencies, which seem to be skills that employees need to manage their skills development and learning in their active years. Indeed, with constant changes concerning technology and the labour market, one has to take ownership of and proactively manage their own career, especially in the context of a protean career (and not a traditional one) in which the individual needs to "repackage…[their] knowledge, skills, and abilities in line with the changing work environment to remain employable" (Donald et al., 2019, p. 602).

What can be concluded from the literature review above is that in addition to subject content, the importance of skills and competencies cannot be ignored. Communication skills, analytical skills, and strategic thinking and planning seem to emerge as central themes. Naturally, the above sources examine the question of being and remaining employable from a labour market point of view. Academics may find this approach overly pragmatic, practical, and rational since the approach mainly focuses on the role of education in the ecosystem of the economy (Barnett, 2018, cited in Jakubik et al., 2023). This approach may disregard important ecosystems that higher education is also part of, for example, the ecosystem of persons or that of culture (Barnett, 2018, cited in Jakubik et al., 2023). The labour-market-oriented approach may also overlook vital concepts in education, for example, the power of intrinsic motivation, or the importance attached to optimal learning situations (Csíkszentmihályi, 2008).

3. Employability Skills in Higher Education

The European Union (EU) expects its members to have educated populations, although education is left in the hands of member states in accordance with the subsidiarity principle. By 2025, the EU aims to establish the European Education Area and by 2030 member states are expected to increase the rate of 30 to 34-year-olds with higher education qualifications to 50%. In 2020, the rate stood at 40.3% (European Parliament, n.d.). According to the European Commission, "in the period up to 2025, half of all jobs are projected to require high-level qualifications" (2017). Therefore, the EU's higher education agenda prioritises the following: 1) align skills development in higher education with the needs of the labour market; 2) make higher education widely accessible and more inclusive and increase its societal outreach; 3) boost the innovation capacity of higher education; 4) increase the effectiveness and efficiency of higher education (European Parliament, n.d.). These projections and directives place responsibility on HEIs to develop programmes and frameworks that assist their students in developing skill sets that make them employable.

The commercialisation and marketization of HEIs (Jakubik et al., 2023) also force them, especially private ones, to compete for applicants and their parents' support. Not only do the institutions wish to offer attractive programmes, but they also need to ensure and demonstrate that their graduates are successful in the labour market. Their graduates' success greatly helps

them in their own performance: the sooner and the more graduates find jobs, the more and the better applicants they will be able to recruit.

Many HEIs offer their students career advice either at the institution or the faculty level to enhance their employability. This might include mentoring, coaching, liaising with employers, job fairs, or offering workshops or individual consultations on various aspects of applying for jobs. Using case studies in class or employing industry-experienced lecturing staff (Jakubik et al., 2023) also improves students' chances of finding a job later. However, most employability skills, similarly to all skills, take time to develop, so programmes that include longer-term skills development modules, internships, or work-based projects may be more effective.

Although the focus of universities is traditionally on science, that is, subject-matter knowledge, some have started to measure, monitor, and improve their students' employability skills. How this is done is not yet in line with the recommendations of the OECD, which states that these skills would need to be tested with the same tools across different institutions (2013). Considering the different competence levels and combinations of skills that graduates in different fields might need, the uniform testing of the relevant skills does not seem feasible. Skills development is also very often intertwined with the subject matter, for example, both doctors and businesspeople need communication skills, but the contexts in which they use these skills are very different. In what follows, three recent examples will be presented where the HEI attempted to incorporate the teaching of employability skills into their curriculum.

The University of Turin introduced a complex soft skills development programme called the Passport Project to promote academic success and work readiness. The project was based on an online platform for the evaluation and enhancement of soft skills; workshops for first-year students; a "Fall School" for outstanding graduates focused on soft skills for employability; and the introduction of soft skills development for faculty members (Emanuel et al., 2021). The project focussed on three areas: 1) task orientation (e.g., making decisions and organising time); 2) self-awareness (e.g., the ability to manage and regulate emotions); 3) motivational area (e.g., coping with stressful events). The responses of a control group of 187 students and an intervention group of 355 students to a skills-specific self-reported questionnaire revealed that the participants who had completed the course presented a statistically significant increase in all the soft skills of the model except for one.

In a project aimed at data driven course development at the International Business School (IBS) in Hungary, approximately 100,000 job advertisements were studied: the full 2015-16 job advertisement database of Professon.hu. Data came from job adverts for positions that required university or college degrees (The Upskill Programme Handbook, 2022). The most important requirements identified in job postings were communication skills, problem-solving skills, and the use of the MS Office Suite. Precision, writing skills, teamwork skills, and the ability to work independently were also looked for by employers.

Therefore, six innovative employability skills modules were introduced for second year business and management Bachelor programme students in IBS (See also Soproni, 2023). The six modules were the following: written communication skills, oral communication skills, quantitative skills, analytical skills, organisation, and information technology (IT) skills. Similarly to a model discussed by Fajaryati et al. (2020, p. 600), IBS students are given personalised training based on their specific needs. For example, an oral communication skills score is computed for each student on the basis of three first year subjects and they are allocated

to an oral communication group of adequate level for them specifically. Given the fact that IBS has a diverse student body and its students are likely to work in various contexts, the oral communication skills module also includes familiarisation with cultural differences.

One Finnish Master's programme embraced work-based learning (WBL) by requiring a Master's thesis that is based on a work development project (Jakubik, 2020). The institution is the University of Applied Sciences (UAS), which puts heavy emphasis on "a more practical education, which aims to respond to the needs of the labour market" (p. 434). The work development project requires the student, the university-based academic, and the work-based tutor to form a learning community, to interact and solve a real-life business problem. In this case study, evidence was found through the analysis of keywords from over 100 Master's students and from 91 business advisors that the students had expected to develop their skills during the work development project while business advisors had thought the students' competencies would develop the most. The author emphasises that the WBL project contributed to the development of students' workplace skills: "In this collaborative ecosystem of academia and business, the students' leadership, communication, problem-solving, networking and teamworking skills" developed (Jakubik, 2020, p. 443).

The importance of skills in general is further demonstrated by the fact that the WEF propagates a skills-first approach that "emphasizes a person's skills and competencies – rather than degrees, job histories or job titles". This approach would exclude HEIs, but the WEF estimates that this way 100 million people could be recruited in many economies around the world where there are labour shortages at the moment (WEF, 2023c).

4. Why Employability Skills - What Reality Demands

A document published by the OECD, an international organisation whose members include all the countries mentioned above with the exception of Bulgaria, a candidate for accession (OECD, n.d.), emphasised the importance of cognitive, metacognitive (e.g., learning to learn), social, emotional (e.g., empathy), practical, and physical skills (e.g., using communication technology devices) as a result of the changes expected in the labour market (OECD, 2019). The OECD's prediction was that more and more routine jobs would be done by computers and technological devices, especially with the help of artificial intelligence (AI), and more and more non-routine jobs would be created for humans with highly developed interpersonal and emotional skills as well as creativity (OECD, 2019).

Indeed, similar projections are made by other organisations. The WEF (2023, p. 5), for instance, stated that "technology adoption will remain a key driver of business transformation in the next five years". Labour market churn is expected to be around 23% between 2023 and 2027, which means that 83 million jobs are predicted to be lost and 69 million are to be created, thus, a quarter of the workforce will have to be reallocated (WEF, 2023a, p. 28). The reasons cited are advancing technology adoption and increasing digitisation (WEF, 2023b).

Therefore, the importance of digital skills is and was forecast to increase (OECD, 2019), with the warning that digital skills are also the most vulnerable to becoming obsolete, which highlights the value of lifelong learning. This view is shared by many, for example, Laukkonen et al. (2018) believe that in comparison with machines and AI tools, the greatest asset of humans may be their adaptability to change through learning in today's volatile, uncertain, complex, and ambiguous (VUCA) world. According to the WEF (2023, p. 5), "more than 75% of

companies are looking to adopt these [AI] technologies in the next five years", which means more traditional jobs are likely to be done by AI-powered tools and more employees with AI handling skills will be needed.

Fellows also argued that the employability agenda cannot be ignored. In his view, the employability skills described earlier need to be incorporated into higher education curricula not only because capitalism demands it. He asserts that universities cannot disregard the socioeconomic reality that students will enter as graduates, but also, it is the teaching of the very same skills that allow educators to develop students' social awareness and sense of civic autonomy. He stressed that employability skills development creates opportunities where "competence and character development lend themselves as readily to the development of critical social engagement as to professional efficacy" (Fellows, 2023, p. 10).

A further argument in favour of fostering employability skills in HEIs could be their transferable nature. Not only are these skills relevant in the 21st century workplace, but they are also a good investment since they are transferable to other sectors and technologies (OECD, 2016). With younger employees spending less time than before at one given workplace in the European Union (Bussolo et al., 2022), the likelihood that graduates will make use of these transferable job-readiness skills is high.

5. Conclusion

With the instant availability of information on the internet, the presence of computer-assisted ways of working and AI-powered tools, educational institutions have to redesign their programmes and students have to reframe their learning. The skills desired by employers, such as problem-solving skills, leadership skills, analytical skills, communication skills, and organisation skills, have to be better incorporated into training programmes without compromising subject-matter knowledge if graduates are to easily transition into the labour market.

One direction that HEIs could take is increasing collaboration with industrial actors to co-develop and co-deliver skills-based training (OECD, 2016; WEF, 2023c) in graduate, postgraduate, and on-the-job programmes. The ideal programme needs to balance the short-term requirements of higher education with the long-term goals of preparing students for a protean career. Needless to say, HEIs need to be responsive to the ever-changing skills demands of the labour market. HEIs in different fields need to make informed choices as to what programmes and teaching methodologies for employability they apply and "adapt their employability tactics" (Jakubik et al., 2023, p. 22).

In a similar vein, tutors need to keep up-to-date with labour market trends and better integrate skills and competence development and competency-based assessment into their classes. Tutors themselves might benefit from skills training, as was the case in the Passport Project in Turin (Emanuel et al., 2021). Self-development could better prepare tutors to assist their students in adapting to a world in which VUCA situations are likely to be more frequent.

The future may demand the use of soft and hard skills that we have little knowledge about at the moment. The focus is likely to be on skills in which employees can surpass machines and AI, for example, in interpersonal and emotional skills. In addition, students and employees also

have to take more responsibility for their own learning (Akkermans & Kubasch, 2017) and develop the sweet spot of their present and future employers if they wish to consciously influence the path their careers take.

Taking ownership of their careers is a skill that students cannot learn from their parents, who lived in a different era and did not have to prepare for a protean career. Taking ownership of one's career is primarily the individual's responsibility. However, it is the responsibility of educational institutions as well to assist their students and to embrace and continually update their employability skills training so that graduates can become "individuals who are tolerant of uncertainty" and who are ready to engage with lifelong learning and "see VUCA situations as opportunities for learning" (Laukkonen et al., 2018, p. 17).

As far as students are concerned, a prerequisite for making adequate decisions about their own learning is to know which area of their knowledge, skills, or competencies needs to be developed. Therefore, knowing oneself, knowing what forms of knowledge there are, and monitoring and evaluating one's own learning are vital. Students need to be aware that learning is "not a homogeneous activity: it comes in many different shapes and sizes" (Claxton, 1999, p. 5). Each learning opportunity is also a step toward becoming a better learner, or as Claxton (1999, p. 9) puts it, "learning to learn is the lifelong shadow of learning itself".

Non-declarative knowledge is not only important because employers demand recruits to possess different constituents of it, for example, organisation skills or analytical skills. Skills, especially communication skills are also important since they enhance the informal or "osmosis learning" (Jones, 2021) that is going on at the workplace where "knowledge is co-created by individuals … through continuous verbal and non-verbal communication… [and] mainly through co-experience" (Kump et al., 2015). Through the cooperation and communication of different professionals, more interdisciplinary learning could be going on. This way, a new way of looking at learning could focus on innovation, especially in the workplace, where "real learning — the creation of new knowledge, not just the handoff of existing knowledge" (Hagel III, 2021) would be taking place.

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Corresponding Author

The corresponding author for this manuscript is Zsuzsanna Soproni who can be contacted by email via zssoproni@ibs-b.hu

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Setting Students up for Success: Developing Interdisciplinary Skills in a Medical Sciences Graduate Program

Mohammed Estaiteyeh
Brock University, Canada
ORC ID: https://orcid.org/0000-0001-8925-3108

Nicole Campbell
Western University, Canada
ORC ID: https://orcid.org/0000-0003-0191-1108

Isha DeCoito
Western University, Canada
ORC ID: https://orcid.org/0000-0002-8315-9150

Mariam Takkouch
Western University, Canada
ORC ID: https://orcid.org/0000-0001-8144-9149

Abstract

Acknowledging the importance of skill development in graduate programs, Western University in Canada developed an innovative master's program in interdisciplinary medical sciences. The program aims to promote students' academic, professional, and personal skills by engaging them in experiential and interdisciplinary learning that adopts an explicit and reflective approach in focusing on seven core skills: problem-solving, communication, leadership, critical reflection, working in diverse teams, project management, and decision making. This paper draws on the experiences and reflections of the inaugural cohort of students enrolled in the program to address the following research questions: 1) How does the MSc IMS program impact students' skill development? and 2) How did students practise the seven core interdisciplinary skills outlined in the program? The study utilizes a mixed methods approach by collecting quantitative and qualitative data using pre- and post-online surveys administered to the students. The findings highlight the program's positive impact in terms of students' reflection on their level of competence in the seven core skills, especially in complex problem-solving, oral and written communication skills, and critical reflection. Results also show that students specifically appreciated the contribution of experiential learning components of the program in advancing their skills. The paper emphasizes the importance of addressing students' skill development in higher education in an explicit and

intentional approach and engaging students in reflective practise on their skill development. Implications for the design and review of graduate programs are also discussed.

***Keywords*:** skill development; medical sciences education; interdisciplinary; higher education; program design

1. Introduction

With the increasing complexity of the job market and the rapidly evolving nature of many industries, graduate students must continually develop their skills to remain competitive and advance their careers. Colagrossi (2019) indicates that skills have recently gained more traction than formal degrees. They point out that prestigious companies no longer require a college degree for work and that a lot of what is being taught in postsecondary institutions is irrelevant to the day-to-day functions of a real job. In Canada, for instance, job posting data shows that employers reduced university degree requirements by 13% between 2012 and 2022 (Hill, 2023). Fuller et al. (2023) reached the same conclusion in the US context after analysing 51 million jobs posted between 2017 and 2020. This indicates that many companies are moving towards skill-based hiring, especially for middle-skill jobs. At the same time, the extent to which university graduates are equipped with 21st-century skills to enter the job market is questionable. For instance, Crosta et al. (2023) highlight a mismatch between the actual value of these skills and the level of training provided by European universities to their students in this regard. Similarly, Grayson (2021) reports on low skill levels among university students and graduates in Ontario, Canada. Crosta and Banda (2022) call for improving soft skill preparation in universities, especially critical thinking, collaboration, and self-direction, to increase young graduates' preparedness for the marketplace.

In programs where degrees are essential, such as medical science education and engineering, there is still a need to address and document students' skill development explicitly rather than implicitly (Almeida & Morais, 2023; Fuller et al., 2023). Correspondingly, to address the complexity of issues that medical science students are expected to tackle upon graduation, there is a dire need for an interdisciplinary approach in graduate science programs. For instance, Wilkerson et al. (2009) highlight the importance of integrating biomedical sciences with the social and clinical sciences. Greene et al. (2018) suggest the integration of foundational science and clinical science education in healthcare educational programs so that students explore the relevance of their learning and its future applications.

1.1. The MSc IMS Program

Acknowledging the importance of interdisciplinary skill development in higher education, and specifically in graduate medical science programs, the Schulich School of Medicine and Dentistry at Western University in Canada developed a new course-based one-year Master of Science degree in Interdisciplinary Medical Sciences (MSc IMS). Table 1 provides a brief overview of the major program components. Through courses and seminars, experiential learning rotations, capstone projects, and e-portfolio development, the program exposes students to a breadth of topics in basic and clinical sciences.

TABLE 1. SUMMARY OF THE MSC IMS PROGRAM COMPONENTS

Component	Title	Overview
Block Courses (4-week consecutive courses; 24 hours of instruction each)	Communicating science in the 21st century	This course discusses different types of oral and written scientific communication and how to communicate with different audiences effectively.
	Designing, analysing, and interpreting medical science research	This course teaches experimental design's theoretical framework and important scientific method aspects.
	Science policy	This course simulates a policy-focused work environment where students learn the foundational principles of Canadian science policy and government regulation.
	Ethical research practises	This course examines the ethical implications of advanced research, emphasising the importance of integrating solid ethical principles in scientific exploration.
	Academic integrity and professionalism	This course examines ethics and academic integrity in research. Students openly discuss what constitutes ethical behaviour and the implications of academic misconduct.
	Data Science	This course provides students with a foundational understanding of data science's role in research design, data collection, analysis, interpretation, and presentation of findings to various audiences.
	Research excellence through diversity	This course emphasises the importance of diversity and inclusion in medical research, addressing implicit bias and exploring the impact of diverse teams and study populations on enhancing research excellence.
	Intellectual property, implementation, and commercialisation	This course will examine the business and intellectual property challenges that must be overcome for successful clinical translation.
Skill Development Seminars (24 hours of instruction each)	Interdisciplinary skill development and career development	This course will provide students with workshops focused on the personal and professional skills needed to work in collaborative interdisciplinary environments.
	Career development and communication skills	This course teaches students how to effectively communicate complex health research in written and oral forms, emphasising diverse presentations, feedback techniques, and self-reflection skills for career development.
Experiential Learning (~48 hours each)	Basic science rotation	This rotation provides students with a breadth of exposure to a specific field in basic medical science research.
	Clinical science rotation	This rotation provides students with a breadth of exposure to a specific clinical medical science research field.
	Community-engaged learning	This rotation provides students with a breadth of exposure to a specific field outside of academia.
Milestones	Capstone Project	The capstone project connects theory and practice from the courses and rotations.
	e-Portfolio	The e-portfolio showcases the student's personal, professional, and academic achievements throughout the program.

Source: own compilation

Concurrently, the program focuses on the development of the following seven core interdisciplinary skills: complex problem solving, communication, leadership, critical reflection, working in diverse teams, project management, and evidence-based decision

making. The program adopts an explicit and reflective approach (Abd-El-Khalick & Lederman, 2000) in addressing students' skill development as evident in the titles of some of the offered courses and other program features. Each core skill includes three constituent sub-skills (see Table 2). The skills and sub-skills were derived based on an extensive environmental scan that mapped and validated the most relevant skills in medical science graduate programs (Campbell et al., 2022).

TABLE 2. THE SEVEN CORE SKILLS ADDRESSED IN THE MSC IMS PROGRAM AND THEIR CONSTITUENT SUB-SKILLS

Core Skills	Constituent Sub-skills
1. Complex problem solving	1. Apply design thinking strategies to personal, professional, and academic problems. 2. Identify the scope of a problem. 3. Integrate knowledge from multiple disciplines to solve complex problems.
2. Leadership	4. Articulate personal strengths. 5. Identify areas of growth and create a plan to develop these character traits in the future. 6. Demonstrate integrity and accountability in personal, professional, and academic settings.
3. Communication (oral and written)	7. Produce scientific materials for a wide variety of audiences and in a variety of formats. 8. Communicate complex scientific concepts using various mediums. 9. Effectively use storytelling to engage various audiences in different contexts.
4. Critical reflection	10. Identify personal learning goals and evaluate progress. 11. Critically evaluate prior expectations, beliefs, feelings, attitudes, and judgements. 12. Integrate key insights from personal reflection to influence future personal, professional, and academic development.
5. Working in diverse teams	13. Collaborate with individuals with diverse personal and professional experiences. 14. Create or be part of diverse, equitable, and inclusive teams. 15. Identify and work to eliminate barriers to diversity, equity, and inclusion.
6. Project management	16. Identify clear project goals, timelines, and final deliverables. 17. Continuously engage with stakeholders from organisations and various disciplines. 18. Complete project deliverables on time and as specified.
7. Evidence-based decision making	19. Understand the assumptions and limitations inherent to research. 20. Collect and analyse data appropriately. 21. Interpret various forms of information (e.g., raw data, published literature, stakeholder feedback) to make a recommendation or solve a problem.

Source: own compilation

Furthermore, to ensure that students are aware of their skill acquisition and are capable of articulating their development, the program engages students in on-going reflective practises (Minott, 2011). Reflection is viewed as the most important transferable skill in lifelong learning as it affects continuous personal and professional development. It allows learners to

contemplate their new experiences and how they are associated with past experiences and ultimately encourages them to focus on future transformation (Colomer et al., 2020; Ironsi, 2023). Acquiring this skill helps prepare students to appropriately use their knowledge in complex systems to provide solutions in routine and non-routine situations (Orsino & Ng, 2019). Additionally, students' ability to reflect on their skills and communicate their competence with potential employers is linked to their employability (Carpenter et al., 2022). In practice, Marshall et al. (2022) note that reflection can be facilitated through dialogues between peers, more experienced colleagues, and/or facilitators. Accordingly, in the MSc IMS program, students reflect on their experiences through end-of-course progress reports, end-of-rotation progress reports, end-of-term progress reports, end-of-term individual meetings with the program director, peer discussions, and the development of personalised e-portfolios.

1.2. The Seven Core Skills Addressed in the MSc IMS Program

As previously mentioned, the seven core interdisciplinary skills were derived following an extensive inspection by the program's curriculum development team. An environmental scan and a literature review were performed to determine a comprehensive yet broadly applicable list of skills students needed to develop to succeed in the program and their future endeavours. These seven core skills and their importance in medical science education are described below.

1.2.1. Complex problem solving

Despite 21st-century advancements, humanity is witnessing more complex problems that are notoriously difficult and require an interdisciplinary approach. These are often called wicked problems (Kawa et al., 2021). Accordingly, to prepare future citizens to be able to solve them, higher education institutions must address wicked problems in their programming (Veltman et al., 2019) by advancing students' problem-solving skills.

Problem-solving is associated with transfer, defined as using a concept learned in one context to solve a problem in a different context (Norman, 2009). Several studies highlight the importance of transfer in medical science education, in which primary science students apply their knowledge and solve problems in clinical settings (Collard et al., 2016; Norman, 2009). From a pedagogical perspective, the incorporation of problem-based learning in higher education health science programs has shown success in promoting students' problem-solving skills, enhancing meaningful learning, and concurrently developing interpersonal skills, communicative skills, reflective skills, and leadership skills (Sistermans, 2020).

1.2.2. Communication

Marbach-Ad and Marr (2018) report notable gaps in science graduate students' oral and written communication skills. They highlight the importance of training students to communicate their research to diverse audiences. Additionally, Shipps et al. (2023) highlight how a graduate interdisciplinary program in Physical and Engineering Biology incorporated student-led communication workshops to promote their communication skills. The study also shows the positive impact of these workshops on students' discussion skills and community building, which would lead to interdisciplinary research collaborations and enhanced participation in science outreach efforts. These findings highlight the direct and indirect effects of developing students' communication skills in medical science programs.

1.2.3. Leadership

Shipps et al. (2023) discuss the importance of providing students with leadership opportunities through peer mentoring and group activities. Such initiatives empower students, leading to high student retention rates and successful program recruitment. In accordance, James et al. (2021) evaluate leadership training in medical education. They highlight that several leadership intervention types exist, such as workshops, stand-alone non-curricular courses, and curricular courses aimed at promoting leadership, change agency, and teamwork. However, James et al. (2021) argue that such leadership training must be contextualised within medical science programs to ensure students' mastery of leadership skills related to interprofessional, ethical, and evidence-based medicine and practice.

1.2.4. Critical reflection

Reflection positively impacts students' learning of diverse subjects, comfort with learning in complex situations, and engagement in learning. Reflection is a habit that can be developed with practice (Winkel et al., 2017). Lázaro et al. (2022) report on a study on using learning logs as a tool of reflection and metacognition in a bioethics course. They show that learning logs successfully promote complex reflective and self-reflective processes and that such recognition of one's learning process promotes critical thinking.

1.2.5. Working in diverse teams

Interdisciplinary research and teamwork are indispensable to each other (Borrego & Newswander, 2010). Bleske et al. (2016) present how team-based learning leads to students showing greater confidence in performing higher-order tasks, including therapeutic recommendations and critical thinking, compared to lecturing teaching styles. Multiple studies document the positive impact of working in teams on both students' self-driven and cooperative learning (Marbach-Ad & Marr, 2018) as well as enhanced trust among members in interprofessional healthcare education settings that motivate them to collaborate with other professions once they enter the workforce (Burgess et al., 2020).

1.2.6. Project management

According to the Project Management Institute (2017), project management is "the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements" (p. 10). Shirley (2020) summarises the guidelines for understanding what must be done in project management in the healthcare environment. These include defining the project, developing the work breakdown structure, estimating time and budget, developing the schedule, monitoring the project's progress, controlling the project, and closing it out. Bond-Barnard et al. (2018) highlight the important role of project team trust and collaboration in determining the success of the entire project.

1.2.7. Evidence-based decision making

Straus et al. (2019) highlight that evidence-based medicine requires integrating the best research evidence with clinical expertise and the patient's unique values and circumstances. This requires practitioners to seek the best available evidence for selecting, adapting, and implementing treatment. Ongoing progress monitoring aids such professional judgement and makes the patient play an active part in the decision-making process (Spencer et al., 2012). Baba and HakemZadeh (2012) propose five dimensions to assess the rigour and relevance of

evidence, including methodological fit, contextualisation, replicability, transparency, and scholarly and expert consensus.

1.3. Research Questions

Acknowledging the founding nature of the program, it is crucial to evaluate its impact from inception to provide ongoing quality assurance and improvement. Accordingly, this paper will draw on the experiences and reflections of the inaugural cohort of the MSc IMS program to address the following research questions: 1) How does the MSc IMS program impact students' skill development? and 2) How did students practise the seven core interdisciplinary skills outlined in the program?

2. Methodology

This study utilised a mixed methods approach (Creswell & Creswell, 2018) by collecting quantitative and qualitative data using pre- and post-online surveys distributed to the inaugural cohort of students enrolled in the program between May 2021 and April 2022.

2.1. Participants

The participants consisted of 15 students (three students identified as males and 12 identified comprised 15 students (three identified as males and 12 as females). The students were from different academic backgrounds, reflected by their bachelor's degrees, with four of them in medical sciences, three in biology, two in biology and medical sciences, two in psychology, two in life sciences, one in forensic science, and one in psychology and health studies. The inaugural cohort of students enrolled in the MSc IMS program comprised 15 students. Hence, the participation rate was 100% of the students registered in the program.

2.2. Data Sources

This paper reports the findings of pre-and post-surveys, in which students reflected and self-reported on their personal and professional skill development. The pre-survey was administered on the first day of the program in May 2021, whereas the post-survey was administered on the last day of classes in the program in April 2022, both using Qualtrics online software. The pre-and post-surveys included 21 Likert 5-scale items for students to self-assess their competence in the seven core skills outlined by the program and the subsequent sub-skills. Students were asked to rate their competence level in the 21 sub-skills presented in Table 2 from 1 to 5, where 1 being "Novice" would be the least competent and 5 being "Proficient" would be the most competent. Additionally, the post-survey included six Likert 5-scale items related to the evaluation of various program components (1 being "Not effective at all" and 5 being "Extremely effective") for students to reflect on the effectiveness of these components in developing their skills. As such, the pre-survey included 21 Likert 5-scale items, whereas the post-survey included 27 Likert 5-scale items. Furthermore, the post-survey included one open-ended question developed by the research team, asking students to detail how they practised each of the seven skills in the program. The question stated: "*Provide one or more examples of how you practised the following skills in this program [list of the 7 skills provided]. You can describe any course, assignment, rotation, etc.*"

2.3. Data Analysis

Quantitative data obtained from the Likert scale items were analysed using Microsoft Excel and SPSS. The analysis on Microsoft Excel included descriptive statistics such as calculating average and standard deviation. Each core skill is a composite variable constituted of three sub-skills. As such, the sub-skills were considered as aggregate items that formed the constructs i.e., core skills. For example, students' self-recorded competence in the core skill 'complex problem solving' was determined by calculating the average of its three constituent sub-skills 1, 2, and 3 (shown in Table 2). Similarly, the level of core skill 2 was calculated as the average on sub-skills 4, 5, and 6. Furthermore, SPSS was used to perform inferential statistics such as the Wilcoxon test to evaluate the significance of change between the pre- and post-surveys (Connolly, 2007).

Qualitative data obtained from open-ended questions were analysed through an interpretational analysis framework (Stake, 2020) to corroborate the quantitative results. Two research team members collaboratively performed thematic coding to address the research questions. To enhance the qualitative data analysis trustworthiness (Creswell & Creswell, 2018), a third member of the research team reviewed the analysis and collaborated on finalising the emerging themes. It is worth noting that the open-ended responses obtained from all 15 participants were analysed and discussed in the opening paragraphs of sections 3.2.1 to 3.2.7. Yet, selected quotes are included in this paper. To address the research question on how students practised the seven core interdisciplinary skills outlined in the program, the research team included quotes that are more detailed and more relevant and insightful to readers.

Although the study participants are all the students of the inaugural cohort of the MSc IMS program, the authors acknowledge that the sample size is relatively small for a solely quantitative study. As such, we adopted a mixed-method design to ensure a rigorous analysis of the data and to support the quantitative analysis. The quantitative and qualitative data were integrated by merging and explaining each other. This integration minimises the limitations of both approaches, offers additional insight beyond the information provided by either one alone and gives a more comprehensive understanding of the research findings (Creswell & Creswell, 2018).

3. Results

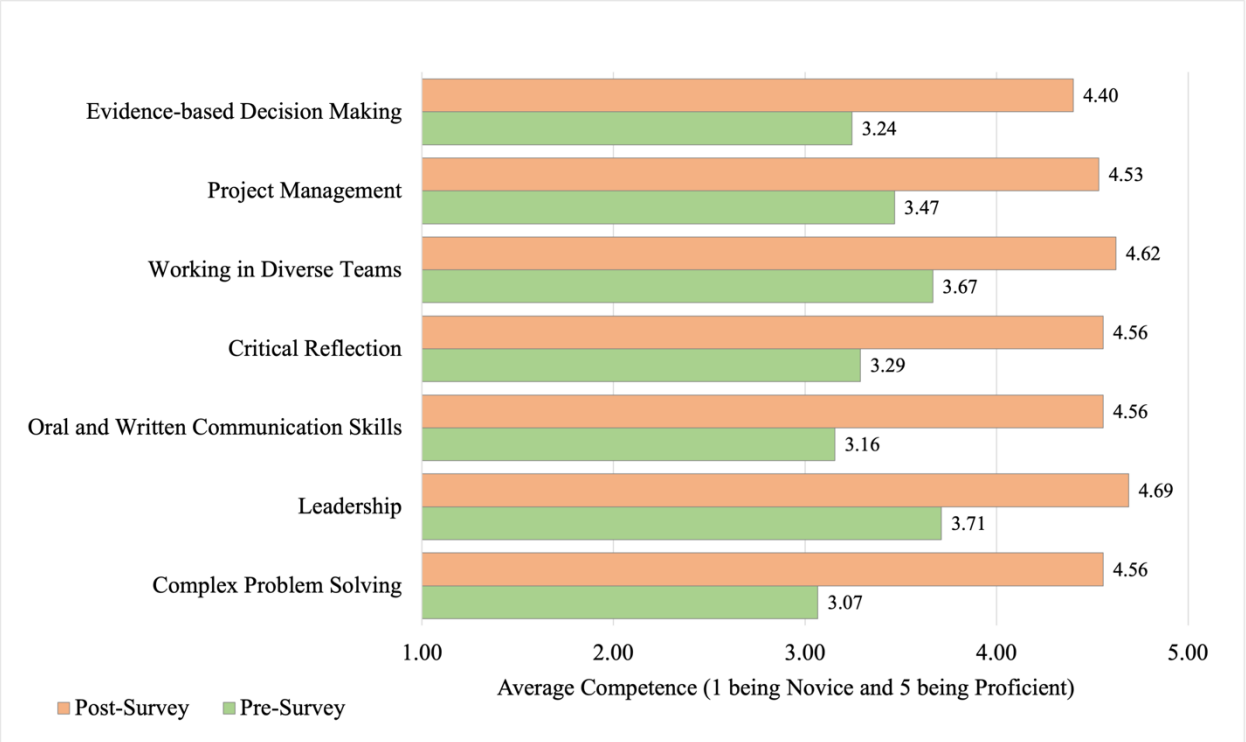
The section below presents the results pertaining to each of the two research questions.

3.1. Impact of the Program on Skill Development

To draw on the experiences and reflections of the MSc IMS program and explore its impact on skill development, students were asked to rate their level of competence in the seven core interdisciplinary skills. Figure 1 highlights the average responses of students' initial and final self-reported ratings on these Likert-scale items, with 1 being novice and 5 being proficient. Results show an overall improvement in students' responses on all items, with all post-survey responses recording a mean value ranging between 4.40 and 4.69, indicating high proficiency in those skills. Additionally, the highest difference between the post-survey and the pre-survey levels was recorded on complex problem-solving (difference = 1.49) and oral and written communication skills (difference = 1.40), followed by critical reflection (difference =

1.27). In contrast, despite the improvement, the lowest difference was recorded in leadership (difference = 0.98) and working in diverse teams (difference = 0.96).

FIGURE 1. STUDENTS' REFLECTIONS ON THEIR COMPETENCE IN VARIOUS SKILLS



Source: own calculations

Furthermore, the results of the Wilcoxon test indicate that the pre-post change was significant on all seven skills:

1. Complex problem solving: The Wilcoxon signed rank test revealed that students' self-reported competence was significantly higher at the end of the program ($M = 0.00$, $n = 15$) compared to the beginning of the program ($M = 0.00$, $n = 15$), $z = 3.31$, $p < .001$, with a strong effect size, $r = .61$.
2. Communication (Oral and Written): The Wilcoxon signed rank test revealed that students' self-reported competence was significantly higher at the end of the program ($M = 0.00$, $n = 15$) compared to the beginning of the program ($M = 0.00$, $n = 15$), $z = 3.14$, $p = .002$, with a strong effect size, $r = .57$.
3. Leadership: The Wilcoxon signed rank test revealed that students' self-reported competence was significantly higher at the end of the program ($M = 0.00$, $n = 15$) compared to the beginning of the program ($M = 0.00$, $n = 15$), $z = 3.32$, $p < .001$, with a strong effect size, $r = .61$.
4. Critical Reflection: The Wilcoxon signed rank test revealed that students' self-reported competence was significantly higher at the end of the program ($M = 0.00$, $n = 15$) compared to the beginning of the program ($M = 0.00$, $n = 15$), $z = 3.35$, $p < .001$, with a strong effect size, $r = .62$.
5. Working in diverse teams: The Wilcoxon signed rank test revealed that students' self-reported competence was significantly higher at the end of the program ($M = 0.00$, $n =$

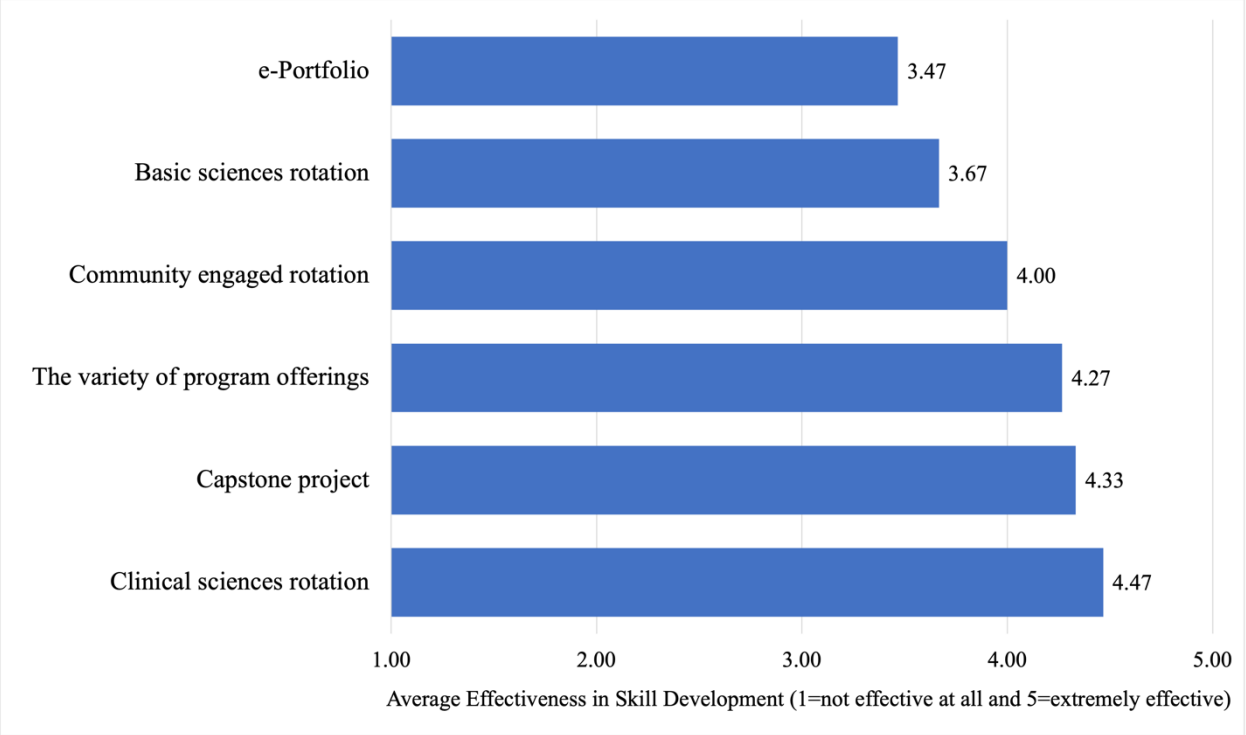
15) compared to the beginning of the program (M = 0.00, n = 15), z = 2.85, p = .004, with a strong effect size, r = .52.

6. Project Management: The Wilcoxon signed rank test revealed that students' self-reported competence was significantly higher at the end of the program (M = 0.00, n = 15) compared to the beginning of the program (M = 0.00, n = 15), z = 3.33, p < .001, with a strong effect size, r = .61.
7. Evidence-based decision making: The Wilcoxon signed rank test revealed that students' self-reported competence was significantly higher at the end of the program (M = 0.00, n = 15) compared to the beginning of the program (M = 0.00, n = 15), z = 3.31, p < .001, with a strong effect size, r = .60.

3.2. How Students Practised the Skills

In the post-survey, students rated the effectiveness of each program component in developing their skills on a 5-point Likert scale with 1 being not effective at all and 5 being extremely effective (See Figure 2). Four program components scored between 4 and 4.47, implying very to extremely effective. These components included the clinical sciences rotation (M = 4.47, SD = 0.64), capstone project (M = 4.33, SD = 0.72), the variety of program offerings (M = 4.27, SD = 0.70), and community-engaged experiential rotation (M = 4.00, SD = 1.13). However, the basic sciences rotation (M = 3.67, SD = 0.98) and e-Portfolio (M = 3.47, SD = 1.25) ranged between moderately and very effective.

FIGURE 2. STUDENTS' EVALUATION OF THE EFFECTIVENESS OF VARIOUS PROGRAM COMPONENTS IN DEVELOPING THEIR SKILLS



Source: own calculations

Correspondingly, students' responses to open-ended questions on how they practised each skill in the program corroborated the quantitative findings above.

3.2.1. Complex problem solving

Most students related complex problem solving to their capstone project, as they were required to address a wicked problem and suggest solutions by considering the literature and reported best practises. Two students said:

> *I practised complex problem solving almost in all courses and rotations in this program. In particular, the capstone project on COPD {Chronic Obstructive Pulmonary Disease} is about which problem we want to address and what actions we could take to reduce the increasing prevalence of COPD in Canada. (Student 2)*

> *Complex problem solving was a core skill that I practised through many experiences in the program. One experience, for example, was when my capstone group and I needed to provide and define calls to action for our wicked problem. I need to approach solving this wicked problem in a non-traditional fashion. From this experience, I learned that complex problem solving requires critical thinking that requires one to consider all perspectives of the problem. Since this was a yearlong project, finding solutions to this complex problem, I needed to work collaboratively with my group and brainstorm ideas. Over time, an important part of this skill of complex problem-solving that I learned was the importance of collaboration and communication. (Student 3)*

Additionally, some students expressed a relational understanding of complex problem-solving. Those students reported on this skill being practised as they encountered specific group conflicts or dealt with personal problems while trying to manage their coursework and assignments. For example, Student 4 said:

> *I think troubleshooting and persevering through a difficult CEL {community engaged learning} rotation is an example of how my group engaged in problem-solving. We had some hurdles to get over, but we were able to seek support and move past these.*

3.2.2. Communication

Students reflected positively on their ability to practise written communication skills in their courses by completing the reflective progress reports at the end of each course, collaboratively writing an academic article, writing a final report based on complex scientific information, and creating an e-portfolio. Additionally, oral communication skills were practised with different audiences, such as course presentations to peers and instructors, microteaching a concept in one of the courses, communicating with peers in group projects, presenting to community partners in the community-engaged rotations, and engaging in public speaking by presenting the capstone projects to the academic community in a showcase at the end of the program. Some students highlighted the importance of two specific courses in addressing these skills: the “Communicating Science in the 21st Century” course and the “Career Development and Communication Skills” seminar. Students also emphasised the importance of instructors’ feedback, ongoing reflections, and constant practice in developing their communication skills.

> *My communication skills improved significantly since the start of this program. Through the science communication course, I learned more ways how messages could be delivered. From the micro-teach sessions to larger presentations such as the EDI {equity, diversity, and inclusion} project to our final capstone showcase, I had so many opportunities to practise and improve myself by incorporating the feedback I received. (Student 2)*

Throughout this program, I have had many opportunities to enhance my public speaking, written reflections, and assignments. At the beginning of the program, one of my goals was to improve my public speaking and confidence in communicating with a large audience. I was able to reach this goal through the practise, and feedback that I received from my peers, instructors and staff that helped me to achieve my oral and written communication goals. (Student 3)

There are so many examples of where I improved in my oral and written communication skills however, most notably, I significantly improved on my oral communication skills. I have had plenty of experience now with presenting through the various course assignments and update presentations and I have a newfound confidence with presenting and public speaking. (Student 4)

In the Community Engaged Rotation, my group and I worked to develop a PowerPoint presentation for our partners to use for clients. In this way, we ensured the presentation was easy to understand, eliminated jargon, and was visually appealing to follow along. (Student 6)

Communication was a tremendously developed skill for me this year. I was already proud of my communication skills but learning to tailor it to suit specific target audiences was a big learning curve for me. I also learned to communicate through various mediums i.e., presentations, publications, and more creative formatting. (Student 8)

3.2.3. Leadership

All students referred to the importance of ongoing group activities as a major program component that promoted their leadership skills. Students specifically highlighted their collaborative work in all three rotations and the capstone project, which necessitated assuming leadership tasks and capitalising on their strengths at many instances. Students mentioned how they took on leadership roles to interact with the various stakeholders, professors, and professionals during experiential rotations, set and managed group deadlines, led group meetings, and respected group dynamics.

I practised leadership skills through working with my capstone team and doing group projects in all the courses. In particular, at the start of the program where science was a bit heavier. I was able to make plans and help out with my team members. I learned that each of us has our own strengths and weaknesses. A big part of leadership is to optimize the final performance by acknowledging the strengths of everyone. (Student 2)

As part of my capstone group… I recognized that each of my group members had different leaderships styles and while this was difficult at first to understand how we could best utilize each of our unique leadership skills effectively, I felt that having leadership position to organize, delegate task and communicate with my group became part of my leadership style. I find that I was able to become a calm, collective and quiet leader who motivated my group to accomplish tasks well and efficiently throughout the year. (Student 3)

In the Clinical Science rotation, I acted as a leader for my group as our rotation was centred on an area that I would like to pursue as my career. I used my prior knowledge from work and volunteering to guide my group members and improve our competency in this field as a whole. (Student 6)

3.2.4. Critical reflection

Most students emphasized the importance of writing progress reports at the end of each course, rotation, and term to develop their reflective skills. Additionally, some students highlighted the significance of the e-portfolio and the end-of-term meetings with the program director in showcasing their accomplishments and challenges in the program. Notably, some students mentioned that these required exercises led them to naturally engage in ongoing reflection about their achievements and plans, even at times when they were not asked to formally submit a reflective piece. Additionally, one of the students noted that engaging in ongoing reflections positively impacted their achievement in the program.

> *At the end of each course and stage of the program, we wrote a progress report that included SMART goals and reflections on our learning. Critical reflection was also developed during the development of the e-portfolio as I looked back on past work. It also occurred for me naturally at different times in the program where I would make a realization of what I have been able to accomplish and where we are in the program to date. (Student 1)*

> *Through our reflection after each course, I was able to develop a reflective habit that has continued to contribute to my personal, professional, and academic development. More specifically, I had the opportunity to showcase individual work in front of peers and the director in our final reflection at the end of term meetings (3 in total throughout the program). (Student 3)*

> *I worked to improve my critical reflection this year to gain the most from each rotation. If I hadn't done this, I don't think I would have gained nearly the same experiences from the rotations. Additionally, having a difficult group environment at times caused me to reflect on how I could resolve the conflict and move forward. (Student 8)*

3.2.5. Working in diverse teams

In conjunction with leadership skills, students referred to group activities in the courses and the rotations in which they worked in diverse teams. Students reflected on how they dealt with new group members in different activities, navigated differences, and networked with community and academic partners in their rotations. They also emphasised the importance of the collaborative capstone project in nurturing this skill.

> *I have had many opportunities to practise working in diverse teams, whether that be with my capstone group or on group assignments, I was able to work with and have a chance to gain perspective on each of my classmates' work ethic and diverse expertise. It was a privilege to get to know each of my classmates on a professional and academic level as well as understanding the importance of everyone's individual goals and values. I was able to practise working in a diverse team continuously throughout the year and practicing this has made the experience a wonderful learning opportunity. (Student 3)*

> *The members in my capstone group all came from different academic and personal backgrounds which contributed to the success of our group. We all shared different perspectives and built a respectful and open environment together. (Student 4)*

> *Working in diverse teams was a huge component to the program and my learning. Different from undergrad, we were expected to complete most components within groups,*

working together to come up with a positive product. This was at times difficult within my capstone group, when I felt workload was not being evenly distributed but I have learned how to work through these difficult situations and come out stronger. (Student 8)

3.2.6. Project management

Students' responses on how they practised project management can be classified into two categories. Some generally reflected on their work in the program as a whole and considered it as a project. This included prioritizing tasks, deadlines, and assignments in coursework, rotations, and capstone work. Other students considered project management to be highly evident in the capstone project in which they broke down a lengthy project into smaller more manageable tasks, set and managed deadlines to ensure progress was on track, organized deliverables, and came up with solutions using decision-making skills.

Due to the compressed time frame of the program and the courses, project management was important for all tasks and deliverables throughout the entire program. There were consistently multiple tasks to manage and project management was key to ensuring all the work got done. It was also very highlighted in the capstone milestones, where the project management needed to be decided amongst peers. (Student 1)

My group and I worked in our rotations and Capstone project to manage various tasks and deliverables that had to be completed. We did this by holding ourselves accountable (i.e., holding regular meetings), keeping an organized Teams Channel, and working on tasks on a daily basis. We were also flexible with each other's schedules and lives outside of school, which allowed us to succeed as a whole. (Student 6)

3.2.7. Evidence-based decision making

Students drew on several experiences in the program in which they practised evidence-based decision making, such as the capstone project by proposing a solution to a wicked problem, various experiential learning rotations, and research activities in certain courses in which they had the opportunity to conduct a scoping review and perform an environmental scan to make scientific arguments based on available data.

There have been several opportunities where I have had the experience of integrating my knowledge and through evidence-based decision making. For example, during my clinical science rotation, alongside my group, I was required to explore cancer research and making clinical connections through evidence-based decision making. (Student 3)

In our community-engaged rotation, my group and I used evidence in the literature surrounding the best exercise interventions for various forms of arthritis to incorporate these into a slideshow presentation for individuals that are living with the disease. We also used evidence on best practices when presenting scientific information to patients and made sure our slideshow was laid and easy to follow along. (Student 6)

4. Discussion and Conclusion

This paper draws on the experiences and reflections of the inaugural cohort of the MSc IMS program to address the following research questions: 1) How does the MSc IMS program impact students' skill development? and 2) How did students practise the seven core interdisciplinary skills outlined in the program?

The pre-post survey comparison highlights the positive impact of the program in terms of students' reflection on their level of competence in the seven core skills outlined in the program, especially in complex problem solving, oral and written communication skills, and critical reflection. These findings address a major gap in medical science education research and practise highlighting the need for developing students' skills in these three areas specifically (Collard et al., 2016; Lázaro et al., 2022; Marbach-Ad & Marr, 2018; Norman, 2009; Shipps et al., 2023). Conversely, based on the quantitative and qualitative data analysis, and despite the improvement noted by students, three skills stood out as the ones that students need to develop further: leadership, working in diverse teams, and evidence-based decision making. This finding parallels the literature recommendations on engaging medical science graduate students in more leadership opportunities (James et al., 2021; Shipps et al., 2023). It also sheds light on the need for medical graduate students to practise teamwork and evidence-based decision making as these two skills are crucial in learning medical sciences (Bleske et al., 2016; Borrego & Newswander, 2010; James et al., 2021; Shipps et al., 2023).

Moreover, students rated the effectiveness of various program components in developing their skills. Results show that they were highly satisfied with the experiential learning components of the program, in particular the capstone project, the clinical sciences rotation, and the community-engaged rotation, in addition to the various topics covered in the courses. Students especially appreciated being immersed in a real-life scenario for their capstone project in which they tackled a wicked problem using an interdisciplinary lens. This finding was further corroborated as these experiential learning experiences were mentioned by most students in the open-ended responses in which they explained how they practised each of the seven core skills. These results parallel existing literature emphasising the importance of capstone projects (Lee & Loton, 2019) and experiential learning opportunities (Carson et al., 2018; Crosta & Banda, 2022; Hodza-Beganovic et al., 2021). In contrast, the quantitative data showed that the e-portfolio was rated as the least effective among program components. This finding confirms similar reported challenges on e-portfolios (Fisher & Hill, 2017). Yet, the open-ended responses highlighted that some students were able to link the importance of the e-portfolio to developing their reflective practice and personal skills (Greviana et al., 2020).

Finally, the findings reiterate the importance of addressing students' skill development in higher education and specifically in graduate medical science programs through an explicit and intentional approach (Carpenter et al., 2022; Claydon et al., 2021; Crosta et al., 2023; Demaria et al., 2018; Gross & Sohl, 2021; Hart & McKinney, 2020; Jahn & Kenner, 2018; Pitan, 2017). The results also emphasize the importance of engaging students in reflective practise on their skill development (Carpenter et al., 2022; Minott, 2011). This explicit and reflective approach is essential to ensure that students not only acquire interdisciplinary skills but are also aware of and able to articulate their accomplishments and areas of improvement. Additionally, the adopted explicit and reflective skill-based training model highlights the importance of scaffolding student skill development throughout the coursework and experiential experiences. This balance between practising the skills on several occasions in the courses and concurrently in the experiential learning rotations and the capstone project would help students acquire a more complex understanding of and higher proficiency in those skills.

One limitation of this paper is the reliance on self-reported student reflections as the major source of data in exploring the impact of the MSc IMS program on students' skills. Future research can corroborate those findings by exploring instructors' feedback, and longitudinal

analysis of students' practises in relation to the seven core skills in their future studies or careers. Research can also extend the findings of this paper by exploring the impact of differences in skill development depending on students' academic backgrounds, age, prior experiences, and gender. The findings of this study offer insights to develop future research within the MSc IMS program, given the projected growth in its student enrolment and beyond the program.

Despite these limitations, this research offers valuable implications for designing new and reviewed existing graduate programs to ensure that program developers and educators incorporate components that address students' skill development to set them up for success in their future endeavours.

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Corresponding Author

The corresponding author for this manuscript is Dr. Mohammed Estaiteyeh who can be contacted by email via mestaiteyeh@brocku.ca.

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The Relationship Between Time Spent Abroad and Intercultural Sensitivity: Implications for ICC Skills Development Among Hungarian Business University Students

Jamil Toptsi
Eötvös Loránd University, Hungary
ORC ID: https://orcid.org/0009-0009-6824-8217

Ahmad Hajeer
Budapest Business University, Hungary
ORC ID: https://orcid.org/0000-0002-4045-7289

Abstract

In today's globalised business landscape, characterised by a proliferation of multinational corporations employing culturally diverse workforces, intercultural sensitivity is important in facilitating collaboration. Regarding higher education, it has been found that intercultural sensitivity can be increased through time spent abroad, although the results have been shown to vary depending on the specific context. As the impact of time spent abroad on intercultural sensitivity has yet to be examined in the Hungarian context, this study aimed to investigate whether there were significant differences in various components of intercultural sensitivity between Hungarian business students who had spent varying periods abroad. A total of 270 Hungarian business students from a leading Hungarian business university, aged 18-26, completed the Intercultural Sensitivity Scale (ISS). The focus was on intercultural sensitivity levels between students who had spent less than one month abroad and those who had spent more than one month abroad. The findings indicated that students who spent more time abroad showed improved confidence in intercultural interactions; however, significant differences for other components of the ISS were not observed. Although the results are specific to the Hungarian or Central European context, the findings provide insight for institutions seeking to design effective exchange programs that promote intercultural competence among students, preparing them for success in the global business environment.

***Keywords*:** intercultural sensitivity, higher education, exchange programs, time spent abroad

1. Introduction

In an increasingly interconnected and globalised world, navigating interactions with individuals from diverse cultures is essential (Hur et al., 2020; Ozer et al., 2021). Travelling abroad provides a unique opportunity to engage with different societies and foster intercultural sensitivity (Chen & Hu, 2023). In the context of higher education, academic institutions have recognised the significance of equipping students with the necessary skills to navigate intercultural encounters, a crucial aspect of their forthcoming entry into the job market (Sonnenschein & Ferguson, 2020). This is especially critical for students in Hungary and other Central European countries, which in recent years have experienced an increased presence of multinational companies in their markets employing culturally diverse employees (Szanyi, 2019; Tarlea, 2017).

Under these conditions, students' intercultural competence from their experiences abroad is important to their career development (Lantz-Deaton & Golubeva, 2020). Many employers today value potential employees' ability to work effectively with individuals of different cultural backgrounds (Adamoniene et al., 2022; Daly et al., 2015; Fitzsimmons et al., 2017). This is particularly true for multinational companies operating in diverse markets, where intercultural competence facilitates effective collaboration and prevents potentially harmful misunderstandings (Guo & Stapa, 2023; Tam et al., 2014). However, despite its importance, intercultural competence has been shown to be less valued by young graduates in some Central and Eastern European countries (Crosta et al., 2023, p. 49), highlighting the importance of promoting it at the university level.

As a key component of intercultural competence, intercultural sensitivity plays a crucial role in fostering a respectful and inclusive workplace environment, highlighting its role as an important soft skill (Giacomazzi, 2022; Hayles, 2014; Kaličanin & Trenčić, 2023). Developing their intercultural sensitivity for young professionals can make them more attractive to potential employers and equip them with the ability to succeed in diverse settings (Jones, 2013; Vu, 2021). Intercultural sensitivity is also important for graduates who wish to develop leadership skills, as it can help them overcome challenges stemming from cultural differences and cultural communication issues that may arise in diverse work contexts (Schweimler, 2022).

One approach to cultivating intercultural sensitivity among business students involves implementing exchange programs in collaboration with international universities (Bloom & Miranda, 2015; Guner et al., 2022; Jackson, 2013). However, for these universities to tailor suitable exchange programs for their students, it is imperative to assess the impact of overseas travel on the development of students' intercultural sensitivity. Thus, the present study aims to examine differences in intercultural sensitivity based on the time Hungarian business students spend abroad. As the choice of a valid framework and instrument for the measurement of intercultural sensitivity is crucial for achieving this aim, the subsections below explore the concept of intercultural sensitivity and describe the instrument chosen for this study (i.e., the Intercultural Sensitivity Scale developed by Chen & Starosta, 2000).

1.1. Defining Intercultural Sensitivity

Scholars hold different perspectives when it comes to defining intercultural sensitivity, which has led to a lack of consensus on the concept (Bhawuk et al., 2015). Bennet (1986), for instance, outlines a gradual developmental process consisting of six stages, ranging from denying cultural

differences to integrating them; however, this linear, stepwise understanding has been challenged by those who view intercultural competence as a more dynamic, non-linear construct (Sarli & Phillimore, 2022). Understanding intercultural sensitivity as the ability to modify behaviours to suit diverse cultural contexts informed the construction of questionnaires such as the Intercultural Sensitivity Scale (Chen & Starosta, 2000). Highlighting the importance of the affective component of intercultural sensitivity, Chen and Starosta propose that intercultural sensitivity, awareness, and adroitness function as components of intercultural competence. Intercultural awareness relates to cognitive abilities, while intercultural adroitness focuses on behavioural aspects, with intercultural sensitivity associated with affective dimensions. Luo and Chan (2022) emphasise that although multiple terms have been used to describe intercultural competence, they all refer to individuals' performance in intercultural settings.

1.2. Chen and Starosta's (2000) Intercultural Sensitivity Scale

Chen and Starosta's ISS (2000) have been widely utilised in various professional and cultural contexts to measure intercultural sensitivity. Previous research has employed the ISS to measure intercultural sensitivity among individuals in fields such as education (Demir & Kiran, 2016) and hospitality (Yurur et al., 2018), as well as in different cultural contexts like Taiwan (Wu, 2015), Macao (Chen & Hu, 2023), and Algeria (Boudouaia et al., 2022).

The ISS development comprises three key stages (Chen & Starosta, 2000). Initially, a comprehensive review of the relevant literature led to the creation of a set of 73 items measuring intercultural sensitivity using a five-point Likert scale. A study involving 168 participants was conducted to validate these items, identifying 44 valid items. In the second stage, 414 participants completed the questionnaire to determine the factor structure of the 44 items. Five factors emerged, encompassing a total of 24 items, which included Interactions Engagement, Respect for Cultural Differences, Interaction Confidence, Interaction Enjoyment, and Interaction Attentiveness.

Only a few studies have examined the interaction between time spent abroad and intercultural sensitivity. One such study was Park (2015), which found that students who spent more time abroad showed significantly higher scores on the ISS subscales as well as the scale as a whole. However, in another study in the US context (Akdere et al., 2021), no significant relationship was identified between students' time spent living and travelling abroad and their intercultural sensitivity, measured using a drastically reduced four-item version of the ISS.

The studies above reveal gaps in the research examining the connection between time spent abroad and cultural sensitivity as measured by Chen and Starosta's (2000) ISS. While this connection has been explored in a number of national contexts, it has yet to be explored in Central Europe in general and Hungary specifically. Bearing this in mind, the present study seeks to expand on this area of research through an investigation into the Hungarian context. The study aims to identify significant differences in the different components of intercultural sensitivity in the ISS based on the lengths of time that students have spent abroad. This aim is reflected in the research question below:

RQ: Are there significant differences in intercultural sensitivity between participants who spent less than one month abroad and those who spent more than one month abroad?

2. Methods

The following section provides details regarding the research methodology used to address the research question stated above. This includes information about the instrument employed, participant selection, data collection procedures, and the applied analysis. Subsequently, the findings will be presented for examination.

2.1. The Instrument

The instrument used to collect data for the present study was developed by Chen and Starosta (2000). The structured questionnaire comprises 24 items (see Appendix 1), which represent five constructs, namely:

1. Interaction Engagement (7 items): examines the disposition of interactants to engage in an intercultural exchange. For instance, "I often show my culturally distinct counterpart my understanding through verbal or nonverbal cues". Cronbach's alpha: .669
2. Respect for Cultural Differences (6 items): examines the acknowledgement and acceptance of the differences between individuals or groups from different cultural backgrounds. For example, "I would not accept the opinions of people from different cultures". Cronbach's alpha: .751
3. Interaction Confidence (5 items): refers to an individual's level of self-assurance when interacting with a culturally distinct person. For instance, "I am pretty sure of myself in interacting with people from different cultures". Cronbach's alpha: .848
4. Interaction Enjoyment (3 items): refers to the positive feelings and satisfaction an individual experiences during an intercultural interaction. For example, "I get upset easily when interacting with people from different cultures". Cronbach's alpha: .600
5. Interaction Attentiveness (3 items): refers to the interactant's ability to focus on an interaction with another culturally distinct person. For instance, "I try to obtain as much information as I can when interacting with people from different cultures". Cronbach's alpha: .437.

2.2. Participants and Data Collection

The data was collected with the help of an online questionnaire that was created using the Google Forms platform. 10 educators associated with a private business school in Budapest agreed to disseminate the link to the questionnaire among their students via email. The email communication and questionnaire detailed the test's purpose, guaranteed the participants' anonymity, and explicitly affirmed the voluntary nature of participating to avoid coercive influence and ensure more reliable data collection. A total of 270 participants took part in this study. One hundred participants were male and represented around 37% of the sample, while the 170 female students comprised around 63% of the participants.

The average age of the participants was 19.88, with participants ranging from 18 to 26 years old. The participants in this study were Hungarian BA students and had at least an upper-intermediate level of English proficiency, as a B2 English exam is required to apply to that particular study programme. Thus, the instrument was not back-translated, as the authors assumed the English level of the students was high enough to comprehend the items on the questionnaire. Within the questionnaire, students were queried regarding the duration of their lengthiest overseas stay. The available response options included the following: less than one

month, 1-6 months, 6 months to 1 year, 1-2 years, more than one year, and never. Table 1 shows the distribution for the different time periods spent abroad by the participants.

TABLE 1. TIME SPENT ABROAD BY THE PARTICIPANTS

Time Spent Abroad	No.	%
Never	7	2.6
Less than one month	194	71.9
1-6 months	54	20
6-12 months	5	1.8
1-2 years	4	1.5
More than 2 years	6	2.2
Total	270	100

Source: own calculations

2.3. Data Analysis

Before running the main procedures, the reliability of the five scales of the ISS was measured using Cronbach's alpha test. Using a threshold of .60 for the reliability coefficients (Fashami et al., 2021), the Interaction Attentiveness scale was removed as it produced a Cronbach's alpha of .437. Initially, we intended to utilise a one-way ANOVA statistical test to assess the variation among the distinct groups. However, due to the substantial disparity in the number of students within each group, conducting this test proved impractical. As a result, we decided to divide the groups into two categories: the "less time spent abroad" group, comprising individuals who had been abroad for less than a month or had never travelled abroad, and the "greater time spent abroad" group, encompassing students who had spent more than a month abroad. To compare the two groups, an independent samples ***t***-test was conducted to identify significant differences between them.

3. Results

An independent-sample *t*-test was carried out to determine whether there were any significant differences between the students who spent less time abroad and those who spent a greater amount of time abroad. The results (Table 2) showed that the only significant difference between the two groups was for the interaction confidence subscale, with students who spent less time abroad reporting significantly lower interaction confidence scores (M = 3.43, SD = .77) than those who had spent a greater amount of time abroad (M = 3.76, SD = .72), $t(268) = -3.164$, p = .002. Calculating Cohen's d indicated a small effect size (d = .39), suggesting that the observed effect, though statistically significant, is small in its magnitude (Lovakov & Agadullina, 2021). An examination of the other components of the ISS (i.e., Interaction Engagement, Respect for Cultural Differences, Interaction Enjoyment, and Interaction Attentiveness) showed no significant differences between the two groups, indicating that the length of time spent abroad did not have a statistically significant impact on these aspects of intercultural sensitivity in the Hungarian sample examined. The findings also show that there were no differences regarding the intercultural sensitivity construct as a whole.

TABLE 2. MEAN DIFFERENCES BETWEEN LESS TIME SPENT ABROAD AND GREATER TIME SPENT ABROAD GROUPS

Variable	Less time spent abroad		Greater time spent abroad		*t*(268)	*p*
	M	*SD*	*M*	*SD*		
Interaction engagement	3.75	.49	3.80	.58	-.685	.494
Respect for cultural differences	4.28	.59	4.23	.62	.559	.576
Interaction confidence	3.43	.77	3.76	.72	-3.164	.002*
Intercultural enjoyment	3.95	.71	4.11	.62	-1.757	.08
ISS (total scale)	3.85	.47	3.96	.49	-1.621	.106

* $p < .05$

Source: own calculations

4. Discussion

This study set out to identify differences in intercultural sensitivity based on Hungarian students' time abroad at a business university. The results show that students who spent longer periods abroad had significantly higher levels of interaction confidence than those who spent shorter periods abroad. The findings also suggest that spending time abroad did not influence other aspects of the participants' intercultural sensitivity regarding their respect for cultural differences, enjoyment, and engagement.

The lack of significant differences for the majority of the ISS components suggests that shorter periods abroad can provide similar benefits to longer periods, with the exception of Interaction Confidence, which appears to be significantly impacted by spending longer than one month abroad. Although significant differences were not observed, it is possible that there are subtle differences that were unable to be captured by the ISS or that differences may become more pronounced over time or with repeated trips abroad. When considered as a whole, the intercultural sensitivity construct as measured by the ISS did not show a significant difference based on the length of time the participants spent abroad, suggesting that the intercultural sensitivity of the Hungarian students who spent less time abroad did not significantly differ compared to students spending more time abroad. In regard to the significant difference in Interaction Confidence between the two groups, the findings suggest that longer periods of time studying abroad (i.e., greater than one month) lead to higher levels of confidence when engaging in intercultural interactions. However, it is important to note that the small effect size implies that while longer periods abroad do have a significant positive effect on Interaction Confidence, the magnitude of this effect is small and may be negligible.

Although previous research comparing time spent abroad to intercultural sensitivity is scarce, the present findings can be compared to Park's (2015) Korean study, which examined the impact of multicultural experience on intercultural sensitivity using Chen and Starosta's ISS scale (2000). Contrary to the present study, Park revealed significant differences based on time spent abroad for four of the ISS scales (i.e., Interactional Engagement, Respect for Cultural Differences, Interactional Confidence, and Interactional Enjoyment) and the intercultural

sensitivity construct as a whole. Contrasting findings between Park (2015) and the present study may result from differences between the cohorts in the two studies. In the case of Park's investigation, 29.3% (n = 168) of the participants had never left their home country compared to 2.5% (n = 7) in the present study. The relatively homogenous nature of our sample, with the overwhelming majority of the participants having spent time abroad, may explain the lack of significant differences regarding the ISS scales. This also suggests that even short periods spent abroad can change various aspects of intercultural sensitivity and that longer periods can further enhance interactional confidence.

5. Conclusion

The present research aimed to examine differences in intercultural sensitivity among Hungarian business students based on their duration of time spent abroad. The findings indicate that those who had experienced longer stays abroad were more confident in cross-cultural interactions compared to their peers who travelled abroad for shorter durations. However, the length of time spent abroad did not seem to affect other facets of their intercultural sensitivity (i.e., respect for cultural differences, interaction enjoyment, and interaction engagement). This second main finding may have resulted from the characteristics of the cohort examined in this study: most of the students in the sample (97.4%) had already spent time abroad, and this prior experience may have influenced their cultural sensitivity scores, as previous research has shown that any exposure to different cultures can enhance intercultural sensitivity (Akdere et al., 2021; Park, 2015). Nonetheless, there was a significant difference (albeit with a small effect size) identified in regard to the interaction confidence scale among those who spent longer periods abroad (i.e., more than one month).

These findings provide several insights in connection with study abroad programs and other efforts that universities can make to improve the intercultural sensitivity of their students. First, the analysis showed that students who spent shorter periods of time abroad had similar levels of intercultural sensitivity to those who had spent longer periods abroad, except for the Interaction Confidence subscale. This suggests that to enhance intercultural sensitivity, universities could prioritise providing students with opportunities to take part in academic programs abroad, even for short periods (i.e., less than 1 month). Student exchange initiatives could be taken advantage of in order to foster students' exposure to diverse cultures and increase various aspects of their intercultural sensitivity, improving their employability and career prospects as they enter a multicultural job market (Schweimler, 2022).

However, it is important to note that due to the low number of participants who had never spent time abroad in this study, it cannot be stated with certainty that the time spent abroad led to the relatively high levels of cultural sensitivity among the participants. These high levels may simply be a characteristic of the population sampled in the present study. Secondly, the finding showing significantly higher levels of Interaction Confidence in participants who had spent longer periods of time abroad shows that periods of study abroad greater than one month can be particularly beneficial to enhancing students' confidence in intercultural situations. In addition, in regard to the shorter periods of study abroad mentioned above, universities can continue to encourage students to take part in longer periods of study abroad through ERASMUS, Fulbright, and other such programs (Atalar, 2019).

5.1. Future Research

There are limitations to the present study that can be addressed through future research. While this study focused on the single longest duration of time that the participants spent abroad, a more detailed analysis accounting for their total cumulative time spent abroad (taking into account multiple trips) could offer a more nuanced understanding of the effect of time spent abroad on intercultural sensitivity.

In addition, designing a study with a different sample containing more students who had never travelled abroad could help to determine whether Park's (2015) findings could be replicated in the Hungarian context. Future research may also benefit from more detailed inquiries concerning the overall duration and motivations for international experiences, thereby enhancing our understanding of the impact of these experiences on university students. Furthermore, future studies could explore the impact of specific types of experiences abroad (e.g., internships, volunteer work, or language immersion programs) on intercultural sensitivity. This could provide more detailed and insightful information for universities seeking to enhance the intercultural sensitivity of their students through trips abroad. Addressing these areas of research can shed further light on the complex relationship between time spent abroad and intercultural sensitivity examined in the present study.

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Appendix A. ISS

Below is a series of statements concerning intercultural communication. There are no right or wrong answers. Please work quickly and record your first impression by indicating the degree to which you agree or disagree with the statement. Thank you for your cooperation.

5 = strongly agree, 4 = agree, 3 = uncertain, 2 = disagree, 1 = strongly disagree

(Please put the number corresponding to your answer in the blank before the statement)

1. I enjoy interacting with people from different cultures.

2. I think people from other cultures are narrow-minded.

3. I am pretty sure of myself in interacting with people from different cultures.

4. I find it very hard to talk in front of people from different cultures.

5. I always know what to say when interacting with people from different cultures.

6. I can be as sociable as I want to be when interacting with people from different cultures.

7. I don't like to be with people from different cultures.

8. I respect the values of people from different cultures.

9. I get upset easily when interacting with people from different cultures.

10. I feel confident when interacting with people from different cultures.

11. I tend to wait before forming an impression of culturally-distinct counterparts.

12. I often get discouraged when I am with people from different cultures.

13. I am open-minded to people from different cultures.

14. I am very observant when interacting with people from different cultures.

15. I often feel useless when interacting with people from different cultures.

16. I respect the ways people from different cultures behave.

17. I try to obtain as much information as I can when interacting with people from different cultures.

18. I would not accept the opinions of people from different cultures.

19. I am sensitive to my culturally-distinct counterpart's subtle meanings during our interaction.

20. I think my culture is better than other cultures.

21. I often give positive responses to my culturally-different counterpart during our interaction.

22. I avoid those situations where I will have to deal with culturally-distinct persons.

23. I often show my culturally-distinct counterpart my understanding through verbal or nonverbal cues.

24. I have a feeling of enjoyment towards differences between my culturally-distinct counterpart and me.

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Corresponding Author

The corresponding author for this manuscript is Jamil Toptsi who can be contacted by email via jtoptsi@gmail.com

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Long-Term Effects of Studying Abroad: Building Global Citizenship Skills for a Contributive Way of Living

Hiromi Narita
Soka University of America, USA
ORC ID: https://orcid.org/0009-0002-4071-289X

Abstract

Amidst U.S. higher education institutions (HEIs), there is a prevailing notion that global citizenship education (GCE) is a driving force in furnishing students with aptitudes suited for the 21st century. As a result, study abroad programs have been used as a standard method to promote GCE and provide intercultural experiences for students. However, little research has been conducted to measure the long-term effects of GCE and such study-abroad programs and how these experiences can impact participants' characters. Employing a qualitative approach, this research delved into phenomenological interviews to reveal how study abroad has worked as GCE to foster global citizens. The subjects of this study experienced semester-abroad programs during their undergraduate program[1] at a U.S. university. The research outcomes showed a multitude of insights: (1) research participants developed comprehensive perspectives regarding the concepts of global citizenship and contributing to society, irrespective of their diverse backgrounds; (2) the enduring influence of GCE and study abroad became evident in the decision-making processes related to their career and academic trajectories post-graduation; and (3) study abroad experiences substantially nurtured interviewees' ability to navigate diverse cultures, to take purposeful action based on their established connections with others, and to perceive differences and interconnectedness. Furthermore, the research outcome showed that enduring skills and traits as global citizens could be acquired throughout the undergraduate program on a daily basis, and these skills include intercultural competence, dialogue, and understanding of interconnectedness. These results fill the existing research gap and reinforce the effectiveness of young people's character-building as global citizens through GCE and study abroad programs.

***Keywords*:** contributive life, global citizens, global citizenship education, higher education institution, Soka University of America, study abroad

[1] An undergraduate program in the U.S. usually refers to a higher education program, and that is pursued by students after their secondary education, such as high school.

1. Introduction

Global citizenship has been widely defined and discussed in order to address the need to foster globally minded citizens for humanistic and democratic purposes, and there-by confront global-scale issues (Goulah, 2020; Hansen, 2008; Lewin, 2009; Nussbaum, 1997; Reimers, 2006; Reimers et al., 2016; Twombly et al., 2012; UNESCO, 2015). Some of those issues are specifically articulated in the Sustainable Development Goals (SDGs) while calling for immediate actions at local and global scales (Reimers et al., 2016). Higher education institutions (HEIs) in the world have responded to the call by implementing GCE (Brewer & Cunningham, 2010; Hansen, 2008; Jorgenson & Shultz, 2012; Lewin, 2009; Mayo, 2005; Nussbaum, 1997; Reimers, 2006; Saito, 2010; Wang et al., 2018; White & Openshaw, 2005). GCE is expected to cultivate intercultural competence, which is a set of skills that allow the possessor thereof to perceive the distinctly human connections that underly all human beings and collaborate regardless of differences in background, in a manner that retains respectful awareness of the local and global social needs and takes responsibility for what is socially just (Brewer & Cunningham, 2010; Hacker & Umpstead, 2020; Horn & Fry, 2013; Maharaja, 2018; Terzuolo, 2018; Twombly et al., 2012). Despite some political, economic, and safety-related challenges, studying abroad or international education programs have continued to be a common strategy to foster GCE among many HEIs (Brewer & Cunningham, 2010; Hacker & Umpstead, 2020; Horn & Fry, 2013; Maharaja, 2018; Terzuolo, 2018; Twombly et al., 2012).

However, not many studies have investigated the long-term effects of GCE and study-abroad experiences on individuals. Previous research that measured students' growth as global citizens was carried out in cross sectional studies through either interviews or surveys (Horn & Fry, 2013; Kishino & Takahashi, 2019; Streitwieser & Light, 2018). Nevertheless, the full benefit of GCE may not be fully realised within the scope of short-term research (Kishino & Takahashi, 2019). Moreover, scholarly works are scant in providing a clear connection between individual-level transformations and global-level societal changes due to GCE or study abroad programs. Hence, there has not been much research that explicates the particularities of how HEIs' effort to promote GCE really impacts the global society.

This research was developed in order to diminish such research gaps and direct the focus towards the long-term effects of providing GCE through study abroad at HEIs in the U.S. As a result, the following research questions were developed: (1) What was the significance of the study abroad experience in understanding or reconsidering the meaning of living a contributive life as a global citizen?; (2) How are they living a contributive life as global citizens after graduation?; and (3) How the definitions of "global citizenship" and "living a contributive life" are interpreted by the study participants?

2. Literature Review

2.1. Global Citizenship

There is an ongoing dispute regarding the definition of global citizenship (Davies et al., 2018; Hill, 2011; Pashby et al., 2020). Not only it is a contested term, but it has also been described as "cosmopolitanism," "world citizens," and "global village." Scholars often trace back the history of these words to the ancient Greek term *kosmopolitan* (the citizens of the world) or mention Immanuel Kant, who defined cosmopolitans as wanderers of the world or strangers to some foreign countries (Cavallar, 2012; Hansen, 2008; Saito, 2010; Schattle, 2009). Some

scholars argue that the term "global citizenship" infers political aspects because citizenship is often understood as a right granted to people of a certain geographical or national area (Marshall, 2019). Others also denote that both global citizenship and cosmopolitanism contain political, legal, economic, ethical, and moral dimensions (Cavallar, 2012; Hansen, 2008; Marshall, 2019; Pashby, et al., 2020; Saito, 2020; UNESCO, 2015). Previous research on the typologies of global citizenship confirmed that the term is often interpreted with three different approaches: liberal (e.g., aiming at the development of social awareness, ethics, morality, and compassion for others), neo-liberal (e.g., aiming at the reciprocal development of a nation and its economics), and critical (e.g., aiming at the improvement in social justice) (Pashby et al., 2020).

Unlike these previous examples of definitions, Ikeda (2010) introduced his unique view on global citizenship while highlighting the inner quality of human beings. In his 1996 lecture, Ikeda pointed out the following elements as essential qualities of global citizens:

- The wisdom to perceive the interconnectedness of all life and living.
- The courage not to fear or deny difference, but to respect and strive to understand people of different cultures, and to grow from encounters with them.
- The compassion to maintain an imaginative empathy that reaches beyond one's immediate surroundings and extends to those suffering in distant places. (Ikeda, 2010, p. 55)

Goulah (2020) analysed that Ikeda's definition of a cosmopolitan or global citizen is centred around humanism while highlighting the need to perceive the interconnectedness of all human beings, the value of each individual, and the importance of collaboration. Furthermore, Ikeda's focus on the importance of cultivating inner quality as global citizens has a strong implication for creating a peaceful world. According to Urbain (2010), Ikeda's view on the defining characteristics of global citizens is the key concept for human beings to pursue inner transformation. Urbain noted, "*I believe that in the context of Ikeda's philosophy of peace, courage, wisdom and compassion are the human virtues at the core of our capacity to actualize inner transformation effectively*" (Urbain, 2010, p. 94). Such transformation of oneself, according to Urbain (2010), allows humans to create a more peaceful world by turning negative tendencies into something positive and meaningful. Therefore, Urbain's (2010) study on Ikeda's peace philosophy explicated that Ikeda's definition and philosophical view on global citizenship are a catalyst to achieve a peaceful society.

2.2. Global Citizenship Education and Study Abroad Programs

Study abroad has been a common strategy to foster global citizenship among many HEIs across the globe (Brewer & Cunningham, 2010; Hacker & Umpstead, 2020; Horn & Fry, 2013; Maharaja, 2018; Terzuolo, 2018; Twombly et al., 2012). This is because such programs are expected to instil specific skills, such as intercultural competence in students, in addition to language acquisition (Maharaja, 2018; Terzuolo, 2018; Twombly et al., 2012). Twombly et al. (2012) especially accentuated the effectiveness of study abroad programs in cultivating higher awareness of other cultures and willingness to collaborate across diverse populations:

"Clearly, the cognitive, intrapersonal, and interpersonal capacities necessary to exhibit intercultural competence—sensitivity to cultural differences, awareness of sociohistorical cultural contexts, adaptability and flexibility to view cultural differences and contextual circumstances through an informed ethnorelative lens, and the empathy to seek deeper

understanding while withholding judgment—are all attributes that could mitigate the presence of the unfavourable conditions...and thereby increase the likelihood of a positive cross-cultural outcome" (Twombly et al., 2012, p. 72).

Other research similarly demonstrated the impact of study abroad programs in cultivating intercultural competence. For instance, quantitative research demonstrated that an increase in students' volunteerism was observed among those who undertook service-learning in a developing country during their study abroad (Horn & Fry, 2013). A qualitative study showed that participation in a semester-long program can enhance students' personal development and acquisition of intercultural competence, such as awareness and understanding of differences between their own and others' cultures, global mindset, a better understanding of their identity, self-awareness, and confidence (Maharaja, 2018). Participants of such programs also developed critical and mindful views of their own countries (Twombly et al., 2012). Because of these expected outcomes, study abroad has been commonly utilized to promote GCE among HEIs.

However, study abroad programs in the U.S. have not been accessible to the diverse population. The typical population that participates in study abroad programs has been characterised as being White, single, young, female, having no disability and financially stable (Stallman et al., 2010). Some factors strongly influence students' decision to study abroad, so not only preparing a wide variety of programs is important but also understanding obstacles that interfere with students' intents is crucial:

"The choice to study abroad is influenced by various individual and contextual resources, such as socioeconomic status, availability of information about study abroad, previous travel abroad, perceived importance of study abroad, and language proficiency, as well as the home and school context. Generally, these factors can be organized under four broad categories: human capital (knowledge or skills that could be advantageously increased by studying abroad), economic capital (funds available to invest in study abroad), social capital (information or networks that increase one's ability to gain access to study abroad), and cultural capital (attitudes and values that contribute to increased social strata, prestige, and cultural refinement). In addition to directly influencing the decision to study abroad, factors within these categories can be mediated by structural variables such as graduation or degree requirements and institutional climate" (Twombly et al., 2012, p. 39).

Due to these obstacles, it is possible that the current research on the effects of study abroad programs has only focused on the limited population that has access to these experiences.

2.3. Long-term Effect of Study Abroad Programs

Although the amount of research is limited compared to that of short-term qualitative and quantitative research, several studies investigated the long-term impact of study abroad programs. Paige et al. (2009) conducted a mixed-method study which involved survey data collected from 6,391 U.S. study-abroad participants and 63 interviews. The result showed several findings:

1. Participation in study abroad programs can be considered one of the most significant experiences that students undertake during university.
2. Previous participants became more engaged with global activities.

3. Study abroad programs impacted "five dimensions of global engagement (civic engagement, knowledge production, philanthropy, social entrepreneurship and voluntary simplicity)" (Paige et al., 2009, p. 1).
4. Participants' experiences impacted career choices, including the selection of international jobs.
5. Many of the participants of the study continued their education at their graduation school.

Another mixed-method study revealed that based on the 34 previous participants of study abroad programs from U.S. HEIs, acquisition and mastery of intercultural competence requires long-term and continuous effort (Krishnan & Jin, 2022). However, another study found that, upon returning to college from abroad, American students demonstrated long-term personal growth, such as an increase in maturity, independence, and self-confidence (Hadis, 2005). There might be factors, such as lengths of stay (Dwyer, 2004), that contribute to students' growth and development of intercultural competence. However, not many investigations have provided how study abroad program as well as GCE can encourage the personal transformation of participants as global citizens and their contributive attitude after graduation.

3. The Study

3.1. Theoretical Framework

Social constructivism was used as this research's main theoretical framework. Creswell (2013) explains that an ontological belief of social constructivism is that individuals try to make sense of their lived experiences and develop their understandings (Andrews, 2012). These meanings or understandings are not something innate but are constructed through interactions with other people (Creswell, 2013). By applying this framework, the research aimed to approach each participant's testimonies as holistic products of what they have seen, experienced, and lived so far.

3.2. Design of the Study

This study utilized a qualitative research method by conducting in-depth phenomenological interviews. According to Creswell (2013), this approach allows researchers to focus on a group of individuals, who have experienced a phenomenon, and to collect in-depth data from the study subjects. The main goal of this approach is to understand and illustrate the lived experience of participants (Starks & Trinidad, 2007). The interview method is useful to deeply understand participants "in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them." (Denzin & Lincoln, 2011, p. 3). Thus, the phenomenological approach is useful to highlight a variety of descriptions of a phenomenon from a targeted research group (Åkerlind, 2005). For this study, the phenomenon is "living a contributive life as global citizens." Through this approach, it will be possible to understand how each participant is going through the phenomenon and compare each experience to elucidate differences and similarities. Interview questions focused on what aspects of their GCE and study abroad experiences impacted their growth as global citizens.

3.3. Research Questions

The present study focused on alumni of Soka University of America (SUA), a liberal arts college founded in 2001 in Aliso Viejo, California. In order to commit to its mission statement *"to foster a steady stream of global citizens committed to living a contributive life"*, the

university has offered GCE in multiple curricular and co-curricular educational forms, including a mandatory semester-long study abroad program. There are no other universities or colleges in the U.S. that require all students, both domestic and international students, to take foreign language courses and participate in a study abroad program for one semester. The main question asked in this research was: How did the university's semester-long study abroad program impact research participants to transform themselves into global citizens to live a contributive life? More specifically, this study aimed to explore the following research questions:

RQ1. What was the significance of the study abroad experience in understanding or reconsidering the meaning of living a contributive life as a global citizen?

RQ2. How are they living a contributive life as global citizens after graduation?

RQ3. How the definitions of "global citizenship" and "living a contributive life" are interpreted by the study participants?

Answers to these research questions were expected to elucidate both long-term effects and the value of cultivating global citizenship in students in a higher education setting to create positive changes in its students at the personal level as well as societal level by helping them become active agents of change.

3.4. Methodology

3.4.1. Participants

This study utilized criterion sampling to select participants for the interviews. This method was suitable to find participants that satisfy pre-established criteria (Creswell, 2013; Palinkas et al., 2015). The criteria used for this study were the interviewees' year of graduation and their status as domestic students when they were enrolled in an undergraduate program.

Participants of this research were alumni who graduated between the year 2007 and the year 2019. The two most recent graduate classes were not a part of this research as the ongoing uncertainty caused by the COVID-19 pandemic might have affected their career path and personal well-being. Additionally, this study focused only on alumni who grew up in the U.S. Such a population of students is called "domestic students" in comparison to "international students" who were born and/or raised outside of the U.S. Table 1 shows the summary of their demographic information.

TABLE 1 DEMOGRAPHIC DATA OF INTERVIEW PARTICIPANTS

Alumni (Class)	Gender (pronouns)	Racial/Ethnic Group	Study Abroad Location
A (2007)	Female (she/her)	White	Japan
B (2008)	Female (she/her)	Asian	Taiwan
C (2009)	Male (he/him)	Asian	Japan
D (2010)	Female (she/her)	Asian	Argentina
E (2011)	Female (she/her)	White	Ecuador
F (2013)	Male (he/him)	White	China
G (2015)	Male (he/him)	Two or more races (Asian and White)	Peru
H (2016)	Male	Hispanic	Taiwan
I (2017)	Female (she/they)	Asian	Taiwan
J (2018)	Female (she/they)	Two or more races (Asian and Black)	France
K (2019)	Male (he/him)	Two or more races (Asian and White)	Japan

Source: Own calculations.

Note: The Racial/Ethnic Group categories were created based on the racial categories used by the U.S. Census (White, Black or African-American, American-Indian or Alaska Native, Asian, Native-American or Other Pacific Islander) (NCES, 2022). The same census recognizes that people who identify themselves as Hispanic or Latino/a can be any of the racial groups (NCES, 2022).

3.4.2. Procedures for Data Collection

This study employed semi-structured one-on-one interviews in person and via Zoom, an online videotelephony software, to take advantage of the opportunities to ask open-ended questions on the spot and probe deeper into the participants' experiences (James & Busher, 2012). The forms of interview questions were mainly open-ended in order to highlight differences and similarities in the way participants describe and make sense of a phenomenon (Creswell, 2013). The research employed individual interviews. Compared to multiple-person or group interviews, this data collection strategy allowed the researcher to conduct an in-depth exploration of the participants' experiences regarding the phenomena (Beitin, 2012).

Questions were developed to understand participants' detailed views on global citizenship and what might have caused them to have such perspectives. Thus, interviewees were asked about their upbringing and what made them enter SUA. Based on Creswell's (2013) guideline, participants were asked two general questions: *"What have you experienced in terms of the phenomenon?"* and "What contexts or situations have typically influenced or affected your experiences of the phenomenon?" (Creswell, 2013, p. 81). In other words, interviewees were asked what they have experienced in terms of living a contributive life as global citizens after SUA and what kind of situations have impacted their experiences of living a contributive life as global citizens. Furthermore, interviewees were asked to elaborate on what aspects of education at SUA (e.g., studying abroad and living on campus with other students) impacted their mindset and behaviours. Due to the researcher's special interest and focus on the role of study abroad programs in the cultivation of global citizenship, interviewees were asked to share their experiences of studying abroad as well.

After conducting interviews with eleven alumni, collected data was organised based on relevance to the Research Questions (RQs). Most of their answers to interview questions were categorized as follows: RQ1: interview questions 2, 3, and 11; RQ2: interview question 9; and RQ3: interview questions 5, 6, and 7. Then, similarities and differences among responses were captured and highlighted. Whenever there were subthemes across interviewees' answers, they

were noted as well. For instance, RQ1 inquires how research participants define the ideas of global citizenship and living a contributive life. It turned out that their upbringing significantly impacted the way they learned about these concepts. Therefore, upbringing became a subtheme.

3.4.3. Data Analysis Procedure

Each interview was audio-recorded upon the participants' agreement for the purpose of data analysis. For this study, no one disagreed to be audio-recorded. Then, responses from the interviews were transcribed and stored using the upgraded functions of Zoom, which enabled the researcher to record transcripts from a meeting. The feature to automatically process recording transcripts contributed to the accuracy and efficiency of this research project. To protect interviewees' confidentiality throughout this process of data collection and analysis (Kaiser, 2012), each participant was associated with code names such as "Alumni A" and "Alumni B" (see Table 1).

Generally, the core purpose of conducting a phenomenological interview is to understand similarities and differences in the way a group of individuals describe and experience a phenomenon (Creswell, 2013). To analyse interviewees' perspectives, the following three steps were taken. First, their transcribed answers were categorised based on the three research questions (RQ1, RQ2, and RQ3). Second, answers to each research question were compared and contrasted. For instance, for the first research question, descriptions of the definitions of global citizenship provided by participants were listed, and similarities and differences were highlighted. Lastly, the ideas of what may have caused them to provide similar or different explanations and experiences on the phenomenon were analysed. Literature reviews played a significant role in classifying their views and making sense of their experiences. Throughout the process, the researcher aimed to understand the entire picture of the interviewees' perspectives which led them to answer questions in their unique ways. Follow-up interviews were conducted when there were any difficulties understanding their points or descriptions.

4. Study Findings

4.1. RQ1: What was the significance of the study abroad experience in understanding or reconsidering the meaning of living a contributive life as a global citizen?

Interviewees identified different aspects of study abroad programs as factors that impacted the way they define global citizenship and the idea of living a contributive life. First, they highlighted that making friends or creating connections with people from different backgrounds positively influenced their experiences (Alumni A, B, C, D, E, F, G, H, I, J, & K). For instance, Alumni G shared that he could learn about historical, political, and socioeconomic situations that local people have to face on a daily basis by living with a host family. Another alumna shared that throughout the experience, she experienced *"feeling connected with other people and living in a community*" (Alumni E). In terms of friendship, Alumni A mentioned that it's been more than fifteen years since she participated in study abroad, but she still maintains a close connection with the friends that she made. Interaction with local people and friends from other countries has also contributed to expanding alumni's perspectives during study abroad:

"All of these different things were really, really powerful because you get to learn the person's culture and where they are from...and how that culture shapes their own experiences and their own views on the world. And to do this all in Japanese...so many layers of multiculturalism." (Alumni C).

Furthermore, interviewees commented that "travelling with friends and making friends all over the country" were necessary to understand how and why people think differently (Alumni C & F). Therefore, study abroad experiences helped them to see "how important it is to connect to other people" (Alumni D). However, a few of them shared that it was difficult to make friends and overwhelming at first because of language barriers.

Second, interviewees indicated that being exposed to different cultures and new environment expanded their perspectives (Alumni C, D G, H, J, & K). Alumni D expressed *"I don't think I was a global citizen during study abroad, but it widened my perspective. Because everything was different, including the environment I lived in and being away from home, I had opportunities to reflect a lot"*. Particularly, a few alumni mentioned how the experience helped them look at their own country on a global scale. Similarly, a couple of them thought about their own identity and how that has been shaped. For Alumni K, the study abroad program helped his *"understanding that what I thought is normal is not normal"*. *Overall, by being exposed to a new environment, many alumni reported that they became more aware of opinions that come from different angles and perceived the importance of putting themselves in others' shoes. Particularly, the experience of "being a foreigner"* was eye-opening and difficult at the same time:

"When you are abroad, everything is new, you are out of your comfort zone. You are on your toes a lot...You become a foreigner and adapt to their environment. In this foreign country, you are a foreigner, and you adapt to the food, people, and customs of all that stuff" (Alumni G).

Alumni A explained, *"I faced my arrogance. I had to see what it looks like to be a minority and be a foreigner"*. She also expressed that even though she experienced being a foreigner or minority, she encountered people who were supportive and understanding. That made her wish that she could be someone who can understand and embrace people from different backgrounds.

Finally, in terms of academics, most of the research participants mentioned their experiences of learning a new language or taking classes in a different language as a significant factor (Alumni B, C, F, G, H, I, J, & K). A few alumni talked about their struggle to speak a new language and communicate their needs. A couple of alumni, who took classes with local students, expressed that classes were tough and very challenging due to the language barrier. Some of them expressed that it was a very unique and exciting experience to be able to make friends from different countries while communicating in a new language.

4.2. RQ2. How are they living a contributive life as global citizens after graduation?

The purpose of the second research question was to figure out the impacts of study abroad and GCE experiences after graduation. Each research participant is working or studying in a different field, but participants of the study provided meaningful answers to express how they live a contributive life as global citizens. Interviewees mentioned that they tried to live a contributive life by choosing a meaningful career for themselves (Alumni A, C, F, G, H, I, & J). The majority of the research participants have worked for a specific population that they really care about or feel connections with. Some of them worked for NGOs or NPOs (Alumni B, G, H, J, & I). Quite a few of them have been dedicated to an educational field (Alumni A, B, C, E, G, I, J, & K). Two of them have worked for a marginalized population and learned to stand up for them (Alumni H & I).

Moreover, many participants of this study also decided to enrol in a master's program to figure out their career path and dig deeper into the significance of being global citizens. As a result, almost all the interviewees continued to study after graduation for a degree or language program (Alumni A, B, C, D, E, F, G, H, I, & K).

4.3. RQ3. How the definitions of "global citizenship" and "living a contributive life" are interpreted by the study participants?

The purpose of the third research question was to understand how research participants define *"global citizenship*" and "*living a contributive life*". Interestingly, most of the interviewees indicated that they did not have any specific definition of these two concepts before being admitted to the university (Alumni A, B, D, E, G, H, I, & J). However, after experiencing the GCE and study abroad programs, interviewees shared they developed an understanding of global citizenships and the idea of living a contributive life.

First, research participants connected these definitions with certain personal traits and characteristics. The majority of participants emphasized the importance of perceiving interconnectedness with others and/or trying to embrace opinions that come from different viewpoints (Alumni A, C, D, E, F, G, H, I, J, & K). Similarly, interviewees highlighted the need to become someone who can positively impact local communities as well as people around them by being contributive (Alumni A, B, C, D, E, H, I, J, & K). Some participants responded that having empathy and/or compassion for others are definitive characteristics of global citizens (Alumni C, D, G, I, J & K). For them, "being able to see different perspectives and having empathy to others as much as you expect to have for you" are crucial traits of global citizens (Alumni I).

Second, in order to actualize these ideas, many of them recognized the importance of having a dialogue with others (Alumni C, D, & F):

"Regardless of the challenges, we need to be able to still have open ears and be able to have an open dialogue. So, I think global citizenship starts with being able to have an open heart but also just being able to have the courage to use that open heart to be able to reach out to another person. And from a compassionate and sincere standpoint, just really understanding the circumstances that maybe people are going through" (Alumni D).

Another alumnus indicated that being able to engage in dialogue was a learned skill during their undergraduate program, and it is a tool that helps people become collaborative and help each other. Similarly, another interviewee mentioned that being able to have a dialogue is not only a crucial quality of global citizens but also a crucial step to living a contributive life.

Third, throughout the interview, only a few participants of the study actually answered the interview questions by distinguishing the definition of a global citizen and the idea of living a contributive life (Alumni F, J, & K). For instance, Alumni F stated that the definition of living a contributive life means "*helping others and making the world a better place*". On the other hand, many of them combined or perceived living a contributive life as one of the characteristics of global citizens.

Finally, many interviewees indicated that their upbringing and personal experiences might have influenced how they perceived the ideas of global citizenship and living a contributive life. Particularly, how their surrounding situations had impacted the way they initially thought about

these ideas. For instance, multiple alumni mentioned that religious values contributed to forming their ideas on global citizenship (Alumni A, B, E, F, G, J, & K).

In addition, several interviewees highlighted how they explored their own identities while cultivating their understanding of global citizenship (Alumni A, B, C, D, G, I, J, & K). Even though research participants came from distinct backgrounds, it was interesting to observe some overlaps around their opinions.

5. Discussion

The targeted phenomenon of this study is "*living a contributive life as global citizens*" after going through GCE and a study abroad program during an undergraduate program in the U.S. The outcomes of the research questions revealed the long-term impact of study abroad experiences that nurtured global citizenship in students. Analysis of the interviews highlighted three different aspects of such experiences: (1) language and culture classes, (2) friendship and connection, and (3) exposure to a new environment. In fact, these sub-themes of study abroad programs have been considered as crucial aspects to create positive outcomes for students' acquisition of global citizenship or intercultural competence (Saito, 2010; Twombly et al., 2012). Thus, the study results suggested that participants of this study underwent experiences that are perceived as impactful by previous research, and they could foster their global citizenship mindset and demonstrate the long-term effect of such programs. Particularly, study abroad experiences enriched alumni's ability to navigate different cultures, to take action based on attachments they created throughout the program, and to perceive differences and interconnectedness.

Research Question 2 focused more on actions that participants of this study have taken as global citizens. Most of the alumni mentioned their career path to express how they have lived a contributive life (Alumni A, C, F, G, H, I, & J), and almost all the participants continued studying in a graduate school or in the language they took at SUA (Alumni A, B, C, D, E, F, G, H, I, & K). Research that studied the long-term impact of study abroad programs revealed that such experiences can actually influence participants' career choices as well as their decision to continue studying (Paige et al., 2009). Similarly, another study demonstrated how students improved their global citizenship traits after they finished study abroad programs (Kishino & Takahashi, 2019). In other words, the impact of GCE could be grasped not only shortly after certain educational experiences during undergraduate school but also after students' graduation. Hence, based on this previous research, interviewees' decisions related to career and academic pursuit demonstrated that GCE and study abroad experiences could have lifelong effects on learners and impact how they live their lives as global citizens.

In terms of RQ3, the way participants of this study developed their definition of global citizenship and living a contributive life, results showed that university-level GCE helped learners gain perceptions toward these ideas that last for a long time. Many of them shared that they did not have clear ideas at first (Alumni A, B, D, E, G, H, I, & J). However, after their graduation, most of them could express what these terms mean to them. This phenomenon indicated that GCE contributed to the participants cultivating an understanding of global citizenship and the way global citizens live. Scholars and educational organizations articulated the importance and possibility of incorporating GCE in HEIs (Banks, 2004; Reimers, 2016; UNESCO, 2014, 2015). Globally, there has been a trend to incorporate such practices in educational settings (Ho, 2018; Kiwan, 2018; Pashby & Carla, 2018; Ross & Davies, 2018;

Sant & Valencia, 2018). Although the amount of longitudinal research is limited, this finding showed that GCE can be nurtured through educational experiences and that the practice of GCE at HEIs has a long-term effect. As the research finding shows, the majority of participants in this study mentioned personal qualities or attitudes as other important aspects of global citizenship (Alumni B, C, D, F, H, I, & J). Some of them especially indicated that empathy and/or compassion for others are definitive characteristics of global citizens (Alumni C, D, G, I, J, & K). These aspects of personal characteristics are considered important aspects of global citizens by Ikeda (2010). UNESCO (2014) also noted that learners should be able to acquire skills through GCE. Such skills include empathy, and willingness to connect and communicate with others.

In addition, this process of growing as global citizens made research participants self-reflect about their own identities. Most of the interviewees specifically mentioned their unique journey of exploring their own identity or looking at their identity from others' perspectives while cultivating their understanding of global citizenship (Alumni A, B, C, D, G, I, J, & K). Maharaja's (2018) study showed that education focused on global citizenship could cultivate learners' self-confidence and a better understanding of their own identity. Alumni's focus on the way they understand their identity might also be linked to their personal growth because many of them demonstrated positive perceptions toward who they are as a person. However, participants of this research shared how they initially struggled to understand their own identities or positions in society. Indeed, long-term personal growth, including learners' maturity, independence, and self-confidence, was found in a previous study that focused on U.S. students who participated in a study abroad program (Hadis, 2005). Therefore, the researcher argues that the experience of participating in GCE might have caused interviewees to explore their backgrounds and self-identity deeply and for a long time.

In terms of distinguishing the two terms, global citizenship and living a contributive life, most of them combined these two ideas when they defined them. In other words, being contributive is an inseparable quality of global citizens. Indeed, research indicated that the willingness to live contributively is an intercultural competence that can be learned and acquired through GCE (UNESCO, 2014). Participants' way of living a contributive life was further analysed in the section that focused on the findings from Research Question 2 and relevance to the Literature Reviews.

Furthermore, this phenomenon of acquiring an understanding of these terms implied that even though participants came from diverse backgrounds, the idea of global citizenship was nurtured throughout the educational experiences. This is significant because social constructivism points out that people make sense of their reality based on what they experienced in the past and who they interacted with (Andrews, 2012; Creswell, 2013). Clearly, participants of this study were from unique backgrounds in terms of multiple factors (e.g., coming from different states, religions, genders, sexualities, and socioeconomic backgrounds). These upbringings impacted the way they initially understood the ideas and how they interpreted those after graduation. However, regardless of these differences in their origin and experiences prior to higher education, interviewees understood what it could mean to be global citizens and live their lives contributively the way they are. In other words, upbringings had significant effects on learners in their understanding of global citizenship, yet GCE can impact further to help them perceive their past experiences from different angles and create a meaningful understanding of it.

6. Conclusion

This research was conducted to fill the existing research gap that has not addressed the long-term impact of GCE and a semester-long study abroad program at a U.S. college. As a few participants of this study described study abroad programs with positive phrases, such as "eye-opening" (Alumni C & I), study abroad is often illustrated as a valuable experience. Throughout the interviews, however, it was observed that some of them also experienced some challenges, but they decided to use these experiences to grow.

The outcomes of this research contributed to revealing several findings:

1. Participants of this study cultivated understandings of the ideas of global citizenship and contributive life regardless of their diverse backgrounds.
2. The long-lasting impact of GCE and studying abroad was demonstrated in research participants' decision-making process, particularly their career and academic path after graduation.
3. Study abroad experiences particularly nurtured interviewees' ability to navigate different cultures, to take action based on the attachment they created, and to perceive differences and interconnectedness.

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Corresponding Author

The corresponding author for this manuscript is Hiromi Narita who can be contacted by email via hiromi.narita@kirkwood.edu

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The Decision to Study Abroad at Hungarian University – What Benefits International Students Are Looking For?

Daria Borodina
Eotvos Lorand University, Hungary
ORC ID: 0000-0003-3358-6047

Adrian Estrela Pereira
Eotvos Lorand University, Hungary
ORC ID: 0000-0002-8356-2169

Abstract

Globalisation is driving the internationalisation of higher education, promoting open access to universities, enhancing educational programs with an international focus, and stronger presence in the international higher education market. Thus, globalisation stimulates the internationalisation of universities. For universities to attract international students successfully, it is necessary to understand general issues regarding the decision-making process. The study aims to analyse the benefits of studying abroad at a Hungarian university among international students. To fulfil the aim of this study, a questionnaire was administered to 100 international students, aged 18 to 38. The study results showed that international students had been looking for benefits while studying abroad, such as personal development, cultural experience, career prospects, and the possibility of travelling. Some benefits were also related to social and economic factors such as access to unique courses and knowledge, positive country image, safety situation, and affordable living costs in Hungary. The decision to study at a Hungarian university was made according to such benefits, including a desired program of study, comfortable facilities, flexible schedule, admission criteria, opportunity to improve English language skills, good reputation of the university, European degree, supportive environment, related costs, and future career prospects. At the same time, different age groups of international students considered the importance of benefits differently. Also, different groups of international students based on perceived social family status paid attention to different benefits. The findings of this study can be used for the promotion of Hungarian universities internationally to attract more international students with benefits that they look for when studying abroad.

***Keywords*:** decision-making, Higher Education, international students, study abroad

1. Introduction

Globalisation serves as a driving force behind the internationalisation of higher education, facilitating broader access to universities, the enrichment of academic programs with a global focus, and a more formidable presence within the global higher education arena (Maringe & Gibbs, 2009). Consequently, globalisation actively fosters the internationalisation of universities. To successfully entice international students, it becomes essential for universities to gain a comprehensive understanding of the dynamics shaping the entire customer decision-making process and the nuances involved in decision formation. According to the widely recognised five-stage decision-making process model, consumers in the purchasing process go through five stages: need recognition, information search, evaluation of alternatives, purchase and post-purchase evaluation (Kotler & Keller, 2006). This model can also be applied to decision-making among international students who are considering studying abroad.

International students can contribute to the scientific cooperation, economic development (Dassin & Navarrete, 2018), and innovation growth of the host country (Hilal, 2013). To attract and retain talented international students, host countries often use scholarship programs. One of the central purposes of many host countries and universities has been to promote marketing strategies for successful invitation and recruitment of international students, who can contribute to the host country's development.

Stipendium Hungaricum Scholarship Programme was founded by the Government of Hungary in the spirit of its foreign policy "Opening to the East and the South" (Stipendium Hungaricum Programme: Operational Regulations, 2020). Thousands of international students from all around the world apply for higher educational studies in Hungary each year, based on bilateral educational cooperation agreements signed between the Ministries responsible for education in the sending countries/territories and Hungary or between higher education institutions. The objective of this program is to increase the diversity of Hungarian higher education institutions and to promote competitive Hungarian higher education in the world.

The Hungarian university in this study engages international students to participate in the educational process, provides intensive research opportunities, and serves a wide variety of educational programs, talent management and quality education for future professionals in a friendly atmosphere and unique favourable cultural environment.

A better understanding of the benefits international students are seeking can help us comprehend how the decision to study abroad is made. If a particular university knows what students are looking for, it is possible to work on delivering and highlighting those aspects in the marketing campaigns. Highlighted benefits promote higher education in Hungary, attracting more international students according to their needs (Maringe & Gibbs, 2009; Kéri, 2018). International education is an interesting research field not only because of its importance for many people and countries, but also because relatively little has been written on the marketing of education within international markets (Mazzarol, 1998).

The study aims to analyse the benefits related to the general expectations of studying abroad among international students, the benefits of studying in Hungary, the benefits of studying at a Hungarian university, and which benefits are delivered by the university. To fulfil the aim of the study, the questionnaire "What benefits international students are looking for in Hungary and Hungarian universities?" was created and distributed among international students in Hungary. The data were statistically analysed by using mean, standard deviation, and one-way analysis of variance (ANOVA).

2. Literature review

For countries and institutions to be successful in the international area is significantly important to understand not only educational issues but also consumer behaviour and the entire customer decision process. Consumer behaviour can be defined as steps of psychological and physical activities that individuals undertake in the selection, purchase, and consumption of products or services (Kesić & Piri-Rajh, 2004). Universities are interested in attracting and retaining the most talented international students who can contribute to the economic and scientific development of the country.

Based on our literature review, an absence of a student's decision-making theoretical model to study abroad is found (Cubillo et al., 2006; Li & Bray, 2007; Binsardi & Ekwulugo, 2003; Chen & Zimitat, 2006). To cover this gap, the proposed solution is to apply students' decision-making to study at home as a basis for decision-making to study abroad, due to the similarities between the decision to study at home and study abroad. Three major similarities are identified. The first major similarity is financial outlays. Both decisions require consideration of financial resources for an extended period. Secondly, both decisions include considering the criteria such as academic quality and reputation of a higher education institute (HEI) (Anderson, 2007). Finally, the decision to study both cases include several complex influencing factors that need to be considered before making an important decision (Anderson, 2007).

Customer decision is the outcome of consumer behaviour. According to the Five-Stage Model of the Consumer Buying Process, consumers go through five stages, namely: recognition, information search, evaluation of alternatives, purchase, and post-purchase evaluation in the purchasing process (Kotler & Keller, 2006). The stage model of the consumer buying process provides a foundation for how the buying process is viewed (Brassington & Pettitt, 2006; Kotler & Keller, 2006). At the same time, this model can be used as a basis for understanding the decision-making process for studying abroad.

The main focus in this study is on the third stage - the evaluation of alternatives. After the consumer has recognised that there is a need to satisfy and has searched for information, it is time to evaluate the different available alternatives. This first evaluation can be based on objective criteria such as the price, services available, distance, or more subjective criteria such as the status or trust of a supplier – reputation of the university (Brassington & Pettitt, 2006). To satisfy their needs, students look for certain benefits in the product or service, and which program or university can provide the desired benefits.

According to the third phase of the decision-making model, international students look for certain benefits in the product or service, which country, university, or program can provide desirable benefits, and these benefits constitute the foundation of their decision. Based on the previous studies several general benefits to studying abroad can be identified, namely: an opportunity to gain cultural experience; access to unique knowledge; higher quality of education; possibility for migration; improved career prospects, personal development; status and prestige; international travelling; and learning a foreign language (Cubillo et al., 2006; Li & Bray, 2007; Binsardi & Ekwulugo, 2003; Chen & Zimitat, 2006; (Petzold & Moog, 2018; Schmidt & Pardo, 2017; Waibel et al., 2017).

The cultural experience is a unique benefit associated with studying abroad and has a major impact on a student deciding whether to engage in international education or not (United Minds, 2007). All countries and universities offer different programs and courses, and this difference in the courses offered constitutes a factor in the decision (Mazzarol & Soutar, 2002; Russel, 2005). Another benefit for students who are looking to study abroad is to get a higher quality of education abroad than they can get at home (Li & Bray, 2007). Higher education quality is a

core element that makes high-quality perception an important motive for students when deciding where to study (Cubillo et al., 2006; Russel, 2005; Chen & Zimitat, 2006; (Petzold & Moog, 2018; Schmidt & Pardo, 2017; Waibel et al., 2017). Also, a significant number of international students go abroad to study with the purpose of staying in the country after graduation (Mazzarol & Soutar, 2002).

The core outcome of studying abroad is not limited to education alone; rather, it primarily revolves around the benefits that a degree can offer in terms of future employment. (Binsardi & Ekwulugo, 2003). Additionally, enhanced career prospects resulting from an international degree stand out as one of the primary benefits that students are seeking when studying abroad. (Cubillo et al., 2006; Li & Bray, 2007; Binsardi & Ekwulugo, 2003; Chen & Zimitat, 2006; (Petzold & Moog, 2018; Schmidt & Pardo, 2017; Waibel et al., 2017). Another benefit is to get a higher status due to studying abroad, especially for students coming from developing countries to study in more developed countries (Cubillo et al., 2006). Also, foreign language study is still a common component of university education. International students have expectations that spending time in a country will automatically bring about language gains (Freed, 1998).

International students' selection of a host country can be influenced by a variety of factors. Socio-economic factors include ties between host and home countries (Anderson & Bhati 2012; Singh et al., 2014), the country's image and reputation for offering high-quality education (Li & Bray, 2007), a safe and favourable environment (Russel, 2005; Chen & Zimitat, 2006), living cost, and living standard (Anderson & Bhati, 2012; Pimpa, 2003; Singh et al., 2014).

The second group is Cultural factors. Among these, cultural proximity emerges as a significant influence on international students' choices to study abroad, as they often prefer studying in a country with well-defined social norms and practices that align with their own, contributing to a sense of comfort and familiarity (Singh et al., 2014; McCarthy et al., 2012).

However, some recent studies indicate that many international students choose to study in a country whose culture is completely different from their own culture to gain valuable life experience. That is why a lot of students would like to study in China, South Korea, or India (Clavel, 2015; Eder et al., 2010). Language is also part of a culture, and it is natural that international students would choose to study in a country where they can communicate in the language of the host country well or improve their foreign language proficiency (Bourke, 2000; McCarthy et al., 2012). Learning a language and the availability of English-speaking lecturers must be considered as a desired benefit when students evaluate different options concerning study destinations (Russell, 2005).

The third group is Political factors. Political proximity between the home and the host country has been long recorded as an influential factor in the flow of international students. In the past, a large number of students travelled for study purposes between socialist countries (Nguyen, 2013; Pismennaya, 2010; Pugach, 2012). This political factor still influences the choice of international students nowadays. In addition, policies in the host country that relate to visa procedure, students' jobs, post-graduation employment, or immigration opportunities for international students also draws the attention of international students when selecting a host country (Ho et al., 2007; Yang, 2007).

Several studies have confirmed that some factors influence international students' choice of the host institution. In general, those factors are related to institutional image and international reputation, international and supportive environment, cost issues, outcomes and benefits, admission criteria, and recommendations of stakeholders. (Hemsley-Brown, 2012; Hemsley-Brown & Oplatka, 2015; Lee, 2014; Mazzarol & Soutar, 2002). The institution's image is the sum of opinions, ideas, and impressions that someone has of an institution. This image can be

formed by word of mouth, and feedback from students. Students are becoming more aware when choosing an institution which means that institutions need to maintain and develop a distinctive image to be able to attract more students (Binsardi & Ekwulugo, 2003). Furthermore, it is also substantial that future employers recognise and accept the institution, program studied and academic certificate.

An international and supportive environment is also important. Recent studies indicated that international students were greatly concerned about the location of the host institution and the presence of other international students in an institution in their selection process to maintain their social life (Hemsley-Brown, 2012; Price et al., 2003; Rooijen, 2015).

At the same time, many studies indicated that international students are concerned about the cost they invest in choosing a host country and institution (Anderson & Bhati, 2012; Maringe, 2006; Pimpa, 2003). In the case of granted education through Stipendium Hungaricum Scholarship Program, international students get the opportunity to study in Hungarian universities without paying tuition fees. The choice of institution is based on other factors once cost-related issues are eliminated.

According to the institution choice, international students are considering the benefits that they might receive during and after study, such as improving their academic skills and career prospects (Chen & Zimitat, 2006; Counsell, 2011; Eder et al., 2010; Ivy, 2010). Stakeholders' recommendations have been found to influence students' choice of host country and institution (. Stakeholders can befamily members, friends, teachers, current and previous students, and recruiting agents. Bodycott, 2009; Ivy, 2010; Lee, 2014; Lee & Morrish, 2012; Mazzarol & Soutar, 2002; McCarthy, Sen & Fox Garrity, 2012; Pimpa 2003).

The physical environment of a university can constitute an important element in the decision-making process. University facilities can be considered a relevant factor in influencing a student's selection. High-quality facilities, technical equipment – projectors, computers, laboratories, scientific attachments, and educational tools are especially important. (Cubillo et al., 2006; Russel, 2005).

Admission criteria are one of the key issues for students to consider studying abroad. Academic entry standards and English language proficiency have been found to be two key factors that international students pay attention to when they choose a host institution (Bourke, 2000; McCarthy et al., 2012). According to admission criteria and entrance procedure, a host university tries to facilitate a smoother process for international students by providing special support, instruction, and guidance.

The existing literature on students' decision-making to study at the university mostly has focused on studying in their home country but there has been limited research on student's decision-making to study abroad. To cover the gap, the most famous Five-Stage Model of the Consumer Buying Process is used as a basis for the decision-making process to study abroad (Brassington & Pettitt, 2006; Kotler & Keller, 2006). International students look for certain benefits in the product or service, which country, university, or program can provide desirable benefits, and these benefits constitute the foundation of their decision (Cubillo et al., 2006; Li & Bray, 2007; Binsardi & Ekwulugo, 2003; Chen & Zimitat, 2006). This study aims to analyse the decision to study abroad with a focus on the benefits associated with studying in Hungary and at a Hungarian university.

3. Methodology

A quantitative design was used in this study to analyse the benefits of what international students are looking for studying abroad with a specific focus on survey. It is often associated with the generalization of findings to the population (Creswell & Creswell, 2018). A survey design provided a quantitative description of benefits for what international students are looking for studying abroad and in Hungary, by studying a sample of that population. Survey designs helped to answer descriptive questions and questions about the relationships between variables in this study. Data were statistically analysed with the help of SPSS 22.0 software (Statistical Package for the Social Science).

3.1. Instruments

The questionnaire "What benefits international students are looking for in Hungary and Hungarian universities?" was developed based on the literature review. General benefits associated with the choice to study abroad, different factors associated with the socio-economic, cultural, and political factors of the host country, these factors which influence international students' choice of the host university, received benefits during the study were identified as a foundation for the questionnaire.

The participants were administered the "What benefits international students are looking for at Hungarian university?" to get to know about the benefits associated with studying in Hungary and at a Hungarian university. Based on the broad literature review, this questionnaire was developed. The scales were formulated in English. On this questionnaire, the international students were required to rate, based on a 5-point Likert scale from "fully disagree" to "fully agree", the extent items correspond to what benefits they are looking for in Hungary and at a Hungarian university.

The questionnaire was composed of 43 items subdivided into four scales assessing general benefits associated with the choice to study abroad (cultural experience, access to unique knowledge, or opportunity to improve foreign language). Different factors associated with socio – economic (The study in Hungary would give me a higher status and a certain prestige, affordable living costs), cultural (To understand social practice or to learn Hungarian language) and political factors in Hungary (Political proximity of home country and Hungary, easy to work during my studies abroad would constitute a benefit). Factors which influenced international students' choice of the university (International recognition of the home country, Desired programme), and perceived benefits were identified during the studying in Hungary.

3.2. Procedure

The questionnaire was formed in the Google form service and distributed online to international students who are studying at a Hungarian university. The distribution was carried out through social media in a personal message and a special university group on Facebook. Participation was voluntary and anonymous; each participant could choose the most convenient time to fill out the questionnaire. The approximate length of filling out this questionnaire is fifteen minutes. In this study, the research data were analysed using the software SPSS 20.0 (Statistical Package for the Social Science). For all the statistical analyses conducted, the level of significance was taken as 0.05. Descriptive statistics were used such as mean and standard deviation. A one-way analysis of variance (ANOVA) was also conducted.

4. Results and Analysis

4.1. Participants

The participants of the study were 100 international students who were enrolled in a Hungarian university. The sampling procedure involved convenience sampling based on the students' location in Hungary, studying at a Hungarian university on a full-time basis, their accessibility, and their willingness to take part in this research. The sample consisted of 100 international students (53 female, 47 male, mean age = 26 with an age range from 18 to 37 years. All participants stated their age, gender, level of study and major, gender, perceived social family status, future plans for work, and country of origin.

The English language was the medium of instruction in the module. To ensure that students had sufficient time for adaptation in Hungary and at a Hungarian university, the survey was conducted at the beginning of the second semester. The total time required to complete the questionnaire is approximately 15 minutes. All students provided their background and demographic information.

100 international students are represented in the levels of study – 69 students are Bachelor and 31 are Master students from different programmes of study such as Economics, Agriculture, Business Development, Management, Tourism, Leadership, and Accounting.

Two-thirds of the international students emphasized their perceived social family status as average, some international students perceived family status as over average, and some of them as under average. International students have no greater preference towards working in either their home country, or in Hungary after graduation. However, the students generally did plan to work abroad for more than two years. The participants of the study were from 27 different countries. Table 1 contains the demographic data of the sample.

TABLE 1. DEMOGRAPHIC DATA

Characteristics	Frequency	Percentage
Gender		
Male	47	47%
Female	53	53%
Age		
18-21	38	38%
22-24	43	43%
< 25	19	19%
Level of study		
Bachelor	69	69%
Master	31	31%
Perceived social family status		
Over average	18	18%
Average	69	69%
Under average	13	13%
Working plans after graduation		
Work at home country	28	28%
Work in Hungary for 1 year	24	24%
Work in Hungary for 1 or 2 years	20	20%
Work in another country	10	10%
Work in Hungary for more than 2 years	18	18%

Source: own calculations

4.2. Data analysis

The collected data were coded and analysed. Four scales were represented: expectations about the general benefits of studying abroad, benefits of studying in Hungary, benefits of studying at a Hungarian university, and benefits received during studying abroad. The scale of benefits to study in Hungary consisted of three subscales: socio-economic factors, cultural factors, and political factors. Personal development, cultural experience, career prospects, and the possibility of travelling were the most important benefits of studying abroad related to international students' general expectations. The less popular benefits of studying abroad were associated with the possibility of migration, higher quality of education in the host country, and the prestige of a diploma.

Table 2 represents general expectations about the benefits of studying abroad.

TABLE 2. BENEFITS OF STUDYING ABROAD

Benefits of Studying Abroad	Frequency	Percentage
Personal development	60	60%
Cultural experience	54	54%
Career prospects	51	51%
Possibility for travelling	51	51%
Diploma status	25	25%
Higher quality of education	23	23%
Possibility for migration	21	21%

Source: own calculations

According to socio-economic factors, the most valuable benefits for international students to study in Hungary are improving career prospects, work opportunities after graduation, and access to unique courses and knowledge. Hungary has a positive country image and international recognition, a safe environment, and affordable living costs. At the same time, international students do not perceive studying in Hungary with a higher status or certain prestige. In international students' opinion, the most important benefits of studying in Hungary among cultural factors are understanding the social practice and getting different experiences for life in the international environment, improving English language proficiency as an official language of the study program, and getting familiarity with Hungarian culture. International students do not see the opportunity to learn the Hungarian language as a cultural benefit. Considering the political factors, the most important benefits of studying in Hungary are the opportunity to work while studying and after graduation, a simple visa procedure, and easy access to Hungary. Half of the students do not consider the possibility of migration as a benefit.

Some benefits were identified due to the choice of the particular Hungarian university, such as the desired study program, comfortable university facilities and infrastructure, flexible schedule, admission criteria, and enrolment procedure, the opportunity to improve English language proficiency, good reputation, and popularity of the university, European degree, supportive environment, related costs to study at this university, and future career prospects. Also, these international students did not pay attention to the international recognition of the university in their home country. They did not follow any recommendations of stakeholders, parents, or friends to choose this university.

After more than one semester of studying, students have received some benefits in a particular university. More than half of the students have comfortable university facilities and infrastructure, desired programs, improved future career prospects, refined English language proficiency, and the opportunity to get a European degree.

The level of significance was taken as 0.05 for all the statistically conducted analyses. To compare what benefits international students look for in Hungary and in a Hungarian university, concerning the variables of age and perceived social family status, a one-way analysis of variance (ANOVA) was conducted. Regarding the participants' age, there was a statistically significant difference between the different benefits of studying at a Hungarian university ($p<0.05$). The youngest group of international students (18-21 years old) considered the most important benefits of studying at a Hungarian university, such as international recognition of the Hungarian university, the reputation of the university, the opportunity to get a translated European degree, and the opportunity to learn Hungarian language, compared to the oldest age groups. Table 3 represents the results of one-way variance analysis of the benefits to study at Hungarian university based on age.

TABLE 3. ONE-WAY VARIANCE ANALYSIS OF THE BENEFITS OF STUDYING AT A HUNGARIAN UNIVERSITY

Dimension	Age Groups	F	X	SD	p
International Recognition	18-21	23	3.3333	0.97590	0.018
	22-24	39	2.5806	0.88597	
	<25	38	2.8235	1.08629	
University Reputation	18-21	23	3.5333	0.83381	0.001
	22-24	39	3.3871	0.91933	
	<25	38	3.0588	1.12657	
European Degree	18-21	23	3.6000	0.91026	0.049
	22-24	39	3.7419	0.85509	
	<24	38	3.3529	1.04105	
Hungarian Language	18-21	23	3.5333	0.74322	0.039
	22-24	39	2.9032	0.94357	
	<25	38	2.9412	1.07142	

Source: own calculations

Additionally, statistically significant variation in the results were found between the benefits of studying in Hungary in favour of the international students' perceived family social status ($p<0.05$). Due to the different perception of the family's social status as above average, average, or below average, international students considered important benefits of studying in Hungary differently. A higher quality of education in Hungary, access to unique courses and knowledge, and international recognition of Hungary were some of these benefits. Students who considered their family status as over average paid attention more to the benefits of higher quality of

education, access to the courses and knowledge, and international recognition. Students with the perception of family status as average considered access to the courses and knowledge and international recognition to be more important than the quality of education in Hungary. Students who estimated perceived family social status as under average paid more attention to the quality of education in Hungary than to the access to the courses and knowledge and international recognition. Table 4 represents the results of one-way variance analysis of the benefits to study in Hungary based on perceived social family status variable.

TABLE 4. ONE-WAY VARIANCE ANALYSIS OF THE BENEFITS OF STUDYING IN HUNGARY BASED ON PERCEIVED SOCIAL FAMILY STATUS

Dimension	Group Status	f	X	SD	P
Quality of Education in Hungary	Above Average	18	3.4167	0.79296	0.045
	Average	69	3.0484	0.87642	
	Below Average	13	3.3333	1.03280	
Courses and Knowledge	Above Average	18	3.3333	0.88763	0.040
	Average	69	3.2742	0.99456	
	Below Average	13	2.8333	1.16905	
International Recognition	Above Average	18	3.8333	0.71774	0.027
	Average	69	3.7419	0.69978	
	Below Average	13	3.3333	0.51640	

Source: own calculations

5. Discussion

Personal development, cultural experience, career prospects, and the possibility of travelling were the most important benefits of studying abroad related to international students. Personal development is seen by students as an opportunity to be independent and organize their lives and time around the host university. During studying abroad students could meet people from different countries and get to know more about new cultures. Cultural experience could be considered as a unique benefit, to become more adaptive and flexible. The possibility of travelling greatly affected students' worldviews and helped them to discover different parts of the world.

The less popular benefits of studying abroad were associated with the possibility of migration, higher quality of education in the host country, and the prestige of a diploma. The opportunity to study abroad was linked to the excitement of immersing oneself in a new culture, gaining valuable experiences, and opening up future possibilities. However, it was not primarily associated with the intention to migrate, dissatisfaction with the quality of education in one's home country, or the prestige of a future diploma.

The received results partly corresponded with previous findings. According to the literature review, general benefits to studying abroad had been identified: an opportunity to get cultural experience, access to unique knowledge, a higher quality of education, a possibility for migration, improved career prospects, personal development, status and prestige of diploma, international travelling, (Cubillo et al., 2006; Li & Bray, 2007; Binsardi & Ekwulugo, 2003; Chen & Zimitat, 2006). Students of this study did not consider the higher quality of education, the possibility for migration, and the status and prestige of a diploma as benefits.

According to socio-economic factors the most valuable benefits for international students to study in Hungary were improving career prospects, work opportunities after graduation, access to unique courses, and knowledge which would be difficult to get at home country. Hungary

has a positive country image and international recognition, a safety situation, and affordable living costs. At the same time, international students did not perceive studying in Hungary with a higher status or certain prestige compared to their home country.

According to international students' perspectives, the most significant cultural benefits of studying abroad in Hungary include gaining insights into local social practices and acquiring diverse life experiences within an international setting. Additionally, enhancing proficiency in the English language, which serves as the official language of the study program, and developing an understanding of Hungarian culture are also considered valuable advantages. Unfortunately, international students did not see the opportunity to learn the Hungarian language as a cultural benefit – only 20% of students considered that. However, it's worth noting that learning the Hungarian language could be useful for integration and improvement of career prospects in the future.

Considering the political factors, the most important benefits to study in Hungary were an opportunity to work while studying and after graduation, a simple visa procedure, and easy access to Hungary. The same benefits were identified in several studies, that international students had paid attention to visa procedures, students' jobs, and post-graduation employment, when selecting a host country (Yang, 2007). Almost half of the international students did not perceive political proximity between their home country and Hungary as a benefit to studying in Hungary, one fourth of international students did not see this proximity. Additionally, half of the students did not consider the possibility of migration as a benefit.

The most important benefits when choosing a particular Hungarian university were the desired study program, comfortable university facilities and infrastructure, flexible schedule, admission criteria and enrolment procedure (requirements, English language certificate), an opportunity to improve English language proficiency, good reputation, and popularity of the university, European degree, a supportive environment in both academic and non-academic aspects of life, related costs to study at this university, and future career prospects. Also, these international students did not pay attention to the international recognition of the university in their home country. International students did not follow any recommendations of stakeholders, parents, or friends to choose a particular university. According to the literature review, the most important benefits of choosing a particular university were institutional image and international reputation, international and supportive environment, cost issues, outcomes and benefits, admission criteria, and recommendations of stakeholders (Hemsley-Brown, 2012; Hemsley-Brown & Oplatka, 2015; Lee, 2014; Mazzarol & Soutar, 2002). The main difference between the received results of this study and previous findings is that international students did not consider any recommendations from stakeholders.

Some benefits could be identified based on the students' experience during studying at the university for more than one semester. More than half of the students became accustomed to the university's facilities and infrastructure for the educational process, while almost half of the students reported a blend of immediate improvements and future prospects.

Several studies were conducted to investigate international students' experience while studying at a Hungarian university (Borodina, 2022, Tick et al., 2022, & Kéri, 2018). In a study conducted by Borodina (2022), the motivation of international students to study at a Hungarian university was explored with the help of a two-factor model of intrinsic and extrinsic motivation proposed by the self-determination theory (SDT) of human motivation. The results of the study demonstrated that international students had a high sense of self-determination towards intrinsic motivation. Intrinsic motivation is expected to be facilitated when the university's environment satisfies the three basic psychological needs, such as autonomy, competence, and relatedness

(Deci et al., 1991). Therefore, the environmental factors of Hungarian universities organise a studying process that satisfies the three basic psychological needs, so international students' intrinsic motivation can be facilitated.

In another quantitative study, by Tick et al. (2022), international students' perception of lecturing modes and methods was analysed in connection with university recommendations - a case study of Obuda University. The study aimed to discover how international students evaluate lectures, lecturers, and the student-lecturer relationship, whether they have positive impressions and whether their experience and impression would result in an increase in recommendations and could attract more international students and contribute to the internationalization strategy of higher educational institutions. The sample was represented by 151 international students, in results 44.4% of the respondents were fully satisfied with the quality of the lectures and would recommend studying at the university. All three factors – quality, content and lecturers' guidance had a positive effect on whether students recommended the university to friends. Thus, university recommendations can be boosted by higher lecture quality, content and better lecturer guidance for future careers.

In a quantitative study conducted by Keri (2018) foreign students' motivation and expectations at the University of Szeged, Hungary was examined. Five types of motivation influence students' expectations. These five motivation types are reference groups, self-realization, getting to know the culture, integration into the Hungarian community, and gaining knowledge. Motivation to get knowledge about Hungarian culture and motivation to gain knowledge plays an important role to study in at the University of Szeged. Similar results were received in the current investigation, and benefits to study in Hungary were identified, such as improving career prospects, access to unique courses and knowledge, and getting familiar with social practice and Hungarian culture. Based on these studies, the university environment, lecturing modes and methods, the opportunity of gaining knowledge and familiarity with Hungarian culture among international students can be considered the main part of the experience of studying at a Hungarian university.

At the same time, students from different age groups considered differently the importance of the following benefits: international recognition of Hungarian university, good reputation, the possibility to get a European degree, and the opportunity to learn the Hungarian language. The youngest group of students from 18 to 21 years old paid more attention to university recognition in their home countries compared to the older students ($p = 0.018$). They considered international recognition of the university as an important benefit. The youngest group of students desired to study abroad ($p=0.001$) in a university with a good reputation that is famous internationally. It could guarantee a safe atmosphere, good quality of education, and favourable conditions. Older students paid less attention to it, but it was still important, for students who were older than 25 it has become more neutral.

The age groups of students between 18-24 years old considered a European degree ($p=0.049$) as an important benefit to studying abroad compared to older students. It could be related to the future perspectives to continue education; the older group paid less attention to the status of degree. Also, international students between 18-21 years old emphasized ($p=0.039$) the opportunity to learn the Hungarian language as a significant benefit to choosing a particular university for integration. This age group was motivated to learn the Hungarian language. For older groups, this fact was more neutral.

International students with different perceived social family statuses (above average, average, below average) assessed different social and economic factors in Hungary as benefits. Students with above average ($p=0.045$) and below average perceived social family status emphasized the

higher quality of education in Hungary as a benefit to studying in this country compared to the education in their home country, but students with average perceived social family status paid less attention to this benefit or did not consider it as a benefit.

Also, students with above average or average perceived social family status of the family considered access to unique courses and knowledge which would be difficult to get in the home country as a significant benefit ($p=0.040$) for future perspective and personal development, but for the group with below average perceived social family status this benefit is more neutral. Either students with an above average or average perceived social status of the family paid more attention to the positive country image and International recognition of Hungary than students with under average perceived social family status ($p=0.027$), this could be connected with the desire to keep their status or to improve it.

Personal development, cultural experience, career prospects, and the possibility of travelling are the most important benefits of studying abroad related to international students' general expectations. The most valuable benefits for international students to study in Hungary are improving career prospects, work opportunities after graduation, access to unique courses and knowledge, cultural factors, and the opportunity to work while and after studying. Students from different age groups considered differently the importance of the following benefits: international recognition of Hungarian university, good reputation, the possibility to get a European degree, and the opportunity to learn Hungarian language. International students with different perceived social family statuses (above average, average, below average) assessed different social and economic factors in Hungary as benefits.

6. Conclusion and recommendations

This study was based on the qualitative research design. The sample of study – 100 international students who were studying at Hungarian university from 27 different countries. According to the results, international students were looking for some benefits to studying abroad, and the most important benefits related to the general expectations were personal development, cultural experience, career prospects, and the possibility of travelling. The less popular benefits were associated with the possibility for migration, higher quality of education in the host country, and prestige of a European diploma. Education abroad was also associated with new experiences and future perspectives.

Some benefits were related to social and economic factors such as improving career prospects, access to unique courses and knowledge, positive country image and international recognition of Hungary, safety situation, and affordable living costs. International students did not perceive studying in Hungary with higher status or a certain prestige than in their home country. The most important benefits among cultural factors were understanding social practices, improving their English language, and gaining familiarity with Hungarian culture. Unfortunately, international students did not see an opportunity to learn the Hungarian language as a benefit. Half of the students did not mention the possibility of migration as a benefit to studying in Hungary. Important benefits for students were the opportunity to work during their study period in Hungary and after graduation, the opportunity to enter Hungary, and a simple visa procedure.

The decision to study at a Hungarian university was made according to some benefits for what international students are looking for in regard to general expectations: desired program of study, comfortable facilities and infrastructure, flexible schedule, admission criteria and enrolment procedure, opportunity to improve English language skills, good reputation and popularity of the university, translated degree, supportive environment, related costs, and future career prospects.

Students did not consider international recognition of the university in their home country and did not follow any recommendations of stakeholders, parents, or friends to choose this university. According to the opinion of international students, more than half of students got comfortable facilities and infrastructure in the university for education, almost half received desired programs, and improved future career prospects. A smaller but still noteworthy proportion of students benefited from improved English language proficiency and a European degree as benefits.

As reported by relationship analysis between different variables in the SPSS program with the help of ANOVA - Analysis of Variation method, some significant differences were found. Different age groups of international students considered the importance of benefits associated with studying at the university differently. At the same time, different groups of international students based on perceived social family status paid attention to different benefits of studying in Hungary.

Analysing the advantages that international students seek when considering studying abroad can provide valuable insights into the decision-making process behind their engagement in international education. If a particular university knows what students are looking for, it is possible to work on delivering and highlighting those aspects in their marketing campaigns. The university of this study can emphasize marketing campaign-related benefits to studying abroad: development, cultural experience, career prospects, and the possibility of travelling in general. Some socio-economic, cultural, and political benefits to studying in Hungary can be highlighted. Different marketing messages can be built for different age groups with an emphasis on the benefits of studying abroad. It is significantly important for this university to enhance its visibility and promotion through various measures, including active engagement on social media platforms, the development of an official website with English content, increased participation in social events, and a stronger presence among other Hungarian universities.

There are a few limitations of the current study that need to be addressed in future studies. Firstly, the study was self-reported. However, the research does offer some confirmatory evidence for the investigation of what benefits international students are looking for when considering studying abroad, studying in Hungary and at a Hungarian university. Future intervention studies can be conducted to compare what benefits international students are looking for in Hungary and neighbourhood countries (Austria, Slovakia, Romania, Croatia, Serbia, Slovenia, Ukraine) to discover the main differences. Secondly, the data was collected in Hungary and limited by the European level of data collection. Future studies can be conducted among international students who study in Asia, South or North America, Africa, or Australia to move the research focus to the worldwide area.

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The corresponding author for this manuscript is Daria Borodina who can be contacted by email via dariaborodina95@gmail.com

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Your Old Road Is Rapidly Aging. Please Get Out of the New One if You Can't Lend Your Hand, for the Times They Are A-Changing: Time for Inclusive Conferences

William E. Donald
University of Southampton, UK & Ronin Institute, USA
ORCID: https://orcid.org/0000-0002-3670-5374

1. Setting the Scene

As academics, we play a crucial role in developing our students in a critical phase of their lives as they prepare to undertake the university-to-work transition (Donald et al., 2022). We are often seen as the frontline for student support, whether academically by fostering a commitment to life-wide and lifelong learning (Cole & Donald, 2022) or pastorally, particularly given the detrimental impacts on student wellbeing of the COVID-19 pandemic (Donald & Jackson, 2022). Additionally, our diversity of views and backgrounds can inspire students to feel a sense of belonging and inclusion.

Unfortunately, all is not well 'behind the scenes' in academia, where inclusivity can often feel like an afterthought rather than being embedded into the fabric of every decision (Donald & Frank, 2023; Donald & Yarovaya, 2023). In the context of this piece:

> Inclusion is seen as a universal human right. Inclusion aims to embrace all people irrespective of race, gender, disability, medical or other needs. It is about giving equal access and opportunities and eliminating discrimination and intolerance (removing barriers). It affects all aspects of public life (Inclusion, 2022, Online, Paragraph One).

My viewpoint in this piece is underpinned by the social model of disability, which, unlike the medical model, adopts the view that the oppression and exclusion of people from marginalised communities are "caused by the way that society is run and organised" (Inclusion London, 2015, p. 8). Consequently, Ingram and Gamsu (2022) call for "policy to focus on dismantling rather than reinforcing social hierarchies" (p. 189). This essay focuses on academic conferences, representing one arena where exclusionary practices play out.

You might ask why our ability to attend academic conferences affects our students. First, academic conferences are valuable spaces of knowledge exchange that inform teaching and research (Donald, 2022). Second, they provide access to networks and job opportunities, increasing the likelihood of those attending securing grant funding, publications in prestigious journals, and career progression (Sarabipour et al., 2021). Therefore, they influence the diversity of individuals who transition into influential positions of power and prestige visible to students.

Third, they set the tone for the stance in academia on critical issues such as inclusivity, social mobility, and climate change (Leochico et al., 2021), influencing the appeal of a future career in academia and the sustainability of our academic careers (Donald & Mouratidou, 2022).

In response, this food for thought piece sets out five indicators of an inclusive conference and a call for action. These five indicators are based on nearly a decade of my lived experience as a disabled and housebound academic. My views are complemented by valuable insights from a group of over seventy scholars whom I confidentially advocate for to try and give them a voice since they feel they do not have a voice of their own. I hope that by setting out these five indicators, conference organisers can make more informed and inclusive decisions.

2. Five Indicators of an Inclusive Conference

a) The conference team includes a designated inclusivity specialist who proactively advocates for the broader academic community by identifying areas for improvement and delivering meaningful change. While individuals currently excluded from academic conferences due to a lack of inclusivity should be involved in these discussions (ideally in a paid capacity), they should not be expected to provide solutions since they lack the agency to implement them. Examples of those who are excluded if your event is not run in a fully hybrid or entirely virtual format include disabled or housebound academics such as me, those with carer responsibilities, those without access to funding, and those who cannot secure a visa to travel to the destination where the conference is being held.

b) When excluded members of our academic community approach your conference organising team and voice concerns, you thank them for doing so and look at what action you can take to rectify the oversight. You do not deploy gaslighting tactics by claiming your conference is already inclusive or benchmarking it against less inclusive conferences if colleagues share their lived experiences of exclusion in good faith. Similarly, a survey that says 95% of people think your conference is inclusive is equally irrelevant if a) the 5% represent those from marginalised groups and/or b) your sample is biased because you only sent the questionnaire to people who had the means to attend the last conference run in an inaccessible format. Instead, proactively reach out to marginalised groups for feedback and take responsibility for implementing it where feasible.

c) A fee waiver form is publicised during the submission and registration process whereby at least 10% (ideally, considerably more) of the conference tickets are made available specifically to individuals without the means to attend otherwise. Clear criteria are set out, and the process is run in good faith with minimal paperwork required. You ensure that such provision fully complies with disability law and other legislation related to inclusive practices, viewing these as the absolute minimum requirements. The virtual conference fee is set at the lowest possible amount to promote affordability, volume, and diversity of participants. For instance, if your break-even point is £7,500, then selling 150 tickets at £50 each for a 2-day event is preferable for inclusivity to selling 50 at £150.

d) The conference is either run entirely virtual or fully hybrid (i.e. this applies to keynotes, paper presentations, professional development workshops, meet the Editors, social events, etc.) so that when a fee waiver is secured, individuals attending online have the same opportunities as their colleagues attending in person. An entirely hybrid format is likely more inclusive than fully virtual since everyone can choose the best format for their specific circumstances. However, an entirely virtual format is likely more inclusive than in-person only (or in-person with token elements tagged under a hybrid format). As organisers, it is essential to remember that for those unable to attend conferences in

person, we are entirely excluded from any conference run in person only. We also feel excluded when a conference is run only partly in a hybrid format because we still do not have the same opportunities as afforded to our colleagues with the means and opportunity to attend in person. These risks exacerbate pre-existing inequalities and should be avoided.

e) Your keynote speakers, panels, and other presenters come from diverse regions, backgrounds, career stages, and institutions. You actively foster an inclusive environment where people feel safe sharing diverse opinions and perspectives rather than perpetuating echo chambers by only inviting the 'usual suspects.' You may need to reach out to colleagues beyond your immediate network and ensure such speakers feel welcomed and valued so that they recommend your conference to others in their network - aiding the process of attracting diverse participants for future iterations.

3. Call to Action

The necessity for entirely virtual conferences during the social distancing restrictions of the COVID-19 pandemic put to rest the argument by conference organisers that virtual conferences were not feasible. Yet, my colleagues and I, who temporarily had access to these valuable spaces of knowledge exchange, have now been excluded again, as many conferences have transitioned back to in-person only or in-person with limited virtual options (Donald, 2022). Clearly, as an academic community, we can do better. As conference organisers, we must take every decision with inclusivity, social mobility, and climate change at the forefront of our minds and share best practices or make way for those who will. As scholars, we must advocate for those without a voice and use our privilege and power to influence change for good, whereby the benefits transcend to colleagues, their students, and broader society. *For the times, they are a changing*.

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Corresponding Author

The corresponding author for this manuscript is Associate Professor William E. Donald who can be contacted by email at w.e.donald@gmail.com