

## UNIVERSITY OF THE WEST OF ENGLAND

### Faculty of Health & Life Sciences

Name of student: OLUKUNBI BENEDICTA FIDEL-IMOISILI

Student registration number: 23075589

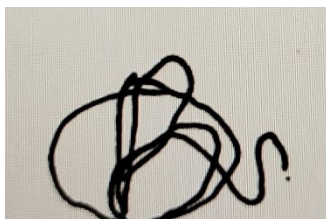
Dissertation Title: Navigating Employment Barriers: The work crisis of International Environmental Health Graduates from UWE in the UK Local Authority Sector

Dissertation Module UZVRTM-45-M

Dissertation submitted in partial fulfilment of the requirements for the award of  
Environmental Health MSc (distance learning/campus), University of the West of  
England.

I declare that this dissertation is my own unaided work.

I declare that the work has not already been accepted in substance for any degree  
and is not concurrently submitted in candidature for any degree.



Signature .....

Date .....14/09/2024.....

## **DEDICATION**

The project is dedicated to God Almighty for his mercies, protection, and provision in making this program successful.

To my father, whose passing during this program left a profound void in my life. He was my rock and academic pillar, always pushing me to reach new heights.

To my mother, for her unwavering prayer and spiritual support, which have been a constant source of strength.

To my children, who are my strength and inspiration, providing me with the resilience to persevere.

To my siblings, especially Pumping, whose support and encouragement were crucial, particularly in helping me make the move to the UK.

To Abbi and Ellis, thank you both for going above and beyond to ensure the success of this work.

## **ACKNOWLEDGEMENT**

First and foremost, I give all glory to God Almighty, whose grace, faithfulness, and love have been my strength throughout this dissertation. His constant presence has guided me every step of the way. I would like to express my sincere gratitude to my supervisor, Abbi Hilton, for her incredible support, guidance, and mentorship throughout this research. Their insightful feedback and suggestions were valuable to the success of this dissertation. I am also deeply thankful to the department of Environmental health, and all my tutors at UWE for providing the academic and research guidelines that have shaped my learning experience. The knowledge and skills I gained here will be instrumental in my future endeavours.

My heartfelt thanks go to my children and GL, their unwavering support and love were vital in helping me start and complete this dissertation. I am also profoundly grateful to my family, for their prayers, patience, understanding, and constant encouragement, which kept me motivated throughout this journey. I would also like to acknowledge the support of my friends and colleagues, such as Phamous and Ukeme, whose assistance contributed significantly to the completion of this work. May the Almighty God continue to bless you all.

Lastly, I extend my appreciation to the authors and researchers (referenced in this dissertation) whose previous works laid the foundation for this research. Their contributions to the academic field have been instrumental in guiding my own data collection and analysis. This dissertation would not have been possible without their valuable input.

## TABLE OF CONTENTS

UNIVERSITY OF THE WEST OF ENGLAND .....	i
DEDICATION .....	i
ACKNOWLEDGEMENT .....	ii
Glossary of abbreviations .....	viii
ABSTRACT .....	viii
CHAPTER ONE .....	1
INTRODUCTION .....	1
1.1 Background to the Study .....	1
This study examines the work crisis, employment barriers, and challenges facing International Environmental Health graduates from UWE in the UK local authority sector. The study also aims to identify critical issues and propose ways that these challenges could be mitigated in a manner that enhances the employment prospects of international graduates in the sector. Note that barriers in the private sector are also a relevant consideration for future research. ....	2
1.2 Statement of Problem .....	2
1.3 Aim of Study .....	4
1.4 Objectives of Study .....	4
1.5 Research Questions .....	4
1.6 Significance of Study .....	5
1.7 Operational Definition of Terms .....	5
CHAPTER TWO .....	7
LITERATURE REVIEW .....	7
2.1 Trends and Statistics of International Students in the United Kingdom .....	7
2.2 The University of the West of England (UWE) and its Environmental Health (EH) Program .....	8

2.3 Role of the Chartered Institute of Environmental Health (CIEH) .....	9
2.4 Pollution and Environmental Health in the United Kingdom .....	11
2.4.2 Water Pollutant .....	12
2.4.3 Chemical Pollutant .....	13
2.5 UK Local Authority (LA) and Environmental Health (EH) .....	13
2.6 Role of Environmental Health Officers / Practitioners .....	15
In addition to these roles, EH professionals manage noise pollution by monitoring noise levels in residential and commercial areas to ensure regulatory compliance and address complaints. They also play a crucial role in workplace health and safety, ensuring adherence to safety standards, conducting risk assessments, and implementing measures to prevent accidents and occupational illnesses. These diverse responsibilities highlight the essential role of EH specialists in maintaining public health and safety across various scenarios (Rodrigues et al., 2021; Hosking, 2024).....	16
2.7 Resources and Capacity of EH Teams in UK LA .....	16
2.8 Employability of International Students .....	17
2.9 Employment Barriers Facing International Environmental Health Graduates and Employers .....	18
2.9.1 Visa Restriction/Policies .....	18
2.9.2. Language Proficiency and Communication Skills .....	19
2.9.3 Cultural Competence and Integration .....	20
2.10 Strategies for Overcoming Employment Barriers Facing International Students and Employers .....	23
2.10.1 Overcoming Visa Restrictions and Policies.....	23
2.10.2 Overcoming the Language barrier .....	24
2.10.3 Overcoming Cultural Integration/Competence Barrier .....	24
CHAPTER THREE .....	26
METHODOLOGY .....	26

This chapter, organized into several sections, outlines the methodology employed to support the research thesis. It utilizes a mixed-methods approach to reach its conclusions. The section structure covers the study's research design, participant selection, sample size, data collection methods, interview techniques, ethical considerations, and data analysis. .... 26

3.1 Research Design ..... 26

3.2 Participant Selection ..... 28

3.3 Sample Size ..... 28

3.4 Data collection ..... 29

3.5 Bias and Confounding Factors ..... 30

3.6 Interview Techniques/ Procedure ..... 31

3.7 Reliability and Validity ..... 33

3.8 Data analysis ..... 33

3.9 Ethical Considerations ..... 33

3.10 Strengths and Limitations of the study ..... 34

CHAPTER FOUR ..... 36

RESULTS ..... 36

4.1 Survey Results ..... 36

4.1.1 Demographic Overview ..... 36

4.1.2 Employment Outcomes ..... 38

4.2 Challenges faced by International Graduates when applying for Environmental Health positions ..... 40

4.2.1 Key Challenges identified by international Graduates ..... 40

4.2.2 Impact of Being an International Graduate on Job Search in the Environmental Health Field ..... 41

4.2.3 Experiences in Cultural Adaptation ..... 41

4.2.4 Experiences in Professional Development ..... 43

4.3 Interview Results ..... 43

4.3.1 Basic Qualification and Skill Assessment .....	43
4.3.2 perception of International Graduates.....	45
4.3.3 Challenges faced by UK Authority when hiring international Graduates...	46
4.3.4 Support and Integration .....	47
4.3.5 Recommendation for Improvement.....	48
4.4 Access and Timing challenges in recruitment of Participants .....	50
CHAPTER FIVE .....	51
DISCUSSION AND CONCLUSION.....	51
5.1 Discussion of Key Findings .....	51
5.1.1 Challenges identified by international students.....	51
5.1.2 Challenges encountered by UK Authorities .....	53
5.1.4 Contributions to Existing Knowledge of Employment Challenges for International Environmental Health Graduates .....	56
5.2 Implications to UWE Students.....	57
5.3 Implications for UK Local Authorities .....	58
5.4 Policy Recommendation .....	59
5.6 Conclusion .....	61
BIBLIOGRAPHY .....	63
APPENDICES .....	74
Appendices 1: Low Risk Ethic Approval Letter.....	74
Appendix 2: Risk Assessment.....	76
Appendix 3: Low risk High risk .....	78
Appendix 4: EH SURVEY LETTER.....	80
Appendix 5: LOCAL AUTHORITY LETTER.....	82
Appendix 6: Information Sheet.....	83
Appendix 7: Consent Form .....	84
Appendix 8: SURVEY QUESTIONS .....	85

SURVEY QUESTIONS FOR UWE INTERNATIONAL ENVIRONMENTAL HEALTH GRADUATES .....	85
Appendix 9: LOCAL AUTHORITY INTERVIEW QUESTIONS .....	88

## LIST OF FIGURES AND TABLES

Figure 1 showing top host Countries for international students.....	8
Figure 2 showing deaths attributed to long-term exposure to NO2 and PM2.5 .....	12
Figure 3 showing trend of bathing water classification in the United Kingdom (1995-2019).....	13
Figure 4 showing a period in securing a job after graduation from UWE.....	38
Figure 5 showing the number of applications submitted within the UK Local Authority .....	39
Figure 6 showing employment sector of participants .....	39
Figure 7 showing challenges faced by international graduates when seeking employment.....	40
Figure 8 showing the impact of international graduates' status on job search .....	41
Figure 9 showing ownership of UK driving license .....	42
Figure 10 showing the importance of a UK driving license on job prospects in Environmental Health.....	42
Figure 11 showing the impact of An UWE degree on an environmental health career.....	43
Table 1 showing international students' enrolment table	28
Table 2 showing a demographic overview of participants .....	36
Table 3 showing thematic analysis on qualification and skill assessment .....	44
Table 4 showing thematic analysis on the perception of international graduates.....	45
Table 5 showing thematic analysis on challenges faced by UK Authority .....	46
Table 6 showing thematic analysis on support and Integration. ....	47
Table 7 showing thematic analysis for recommendations for improvement .....	49

## **Glossary of abbreviations**

**EH-** Environmental Health

**UWE-** University of West England

**CIEH-** Chartered Institute of Environmental Health

**EHO-** Environmental Health Officer

**EHP-** Environmental Health Practitioner

**LA** – Local Authority

**UK-** United Kingdom

**WHO-** World Health Organisation

**FSA-** Food Standard Agency

## **ABSTRACT**

The study explores the barriers faced by international environmental health graduates from the University of the West of England (UWE) as regards seeking employment within the UK local authority. The methodology utilised for this study was a mixed methodology which included both qualitative interviews with local authority representatives and a quantitative survey of international graduates. The results from the survey indicated various responses from international graduates expressing their

opinions on various issues, including visa restrictions, lack of UK-based work experience, limited jobs offered, and competition from home-grown graduates. Many respondents referred to the gap in the recognition of their qualifications by UK-based employers. They indicated that international qualifications, instead of receiving equal recognition, are valued lower compared to UK-based qualifications. These results were further complemented by the qualitative interviews, in which local authority hiring managers identified that international qualification and skills assessment is complex. Other cultural integrations, such as no UK driving licence and lack of familiarity with the UK legislative framework, were also stated to be an important employment barrier for international graduates. While most of the respondents highlighted that English proficiency remains key, some acknowledged the added values of multilingual candidates in diverse communities. This study adds to the literature by undertaking a deeper exploration of both structural and personal impediments affecting international graduates' job-searching scenario in the UK. It also suggests more support mechanisms that must be put in place in the local authorities themselves, such as improved cultural integration programs, and overcoming bureaucratic obstacles, such

as those related to visa regulations. Some useful recommendations based on the findings of this study are given, which if taken into consideration by local authorities, might help improve their recruitment and integration processes, thereby leading to a more inclusive and diverse workforce.

**Keywords:** Employment, Barrier, Environmental Health, Graduates, UWE, Local Authority, United Kingdom.





## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the Study

The United Kingdom (UK) is consistently one of the three countries in the world with the most international students, along with the United States and Australia. Higher Education Student Statistics Agency (2020) indicated that close to 48% of all international students enrolled come from China, India, and Nigeria combined. With some of the best institutions offering quality education on environmental health, the UK attracts students drawn from various international backgrounds who wish to acquire this knowledge to make the most significant impact back in their countries and globally.

WHO (2018) states that environmental health is the study of environmental elements that impact human health. They could be "toxicants" or "pollutants" in soil, air, food, or water, causing adverse effects on the health of humans. It is an interdisciplinary field that integrates aspects of public health, environmental science, and policy. This field prepares its graduates to solve complex environmental problems in a way that significantly affects human health. Those issues involve air and water quality, solid waste management, occupational health, and food safety, among others. Because environmental challenges are a global issue, there is an endogenous increase in the demand for professionals who can produce and implement effective solutions in this aspect.

Even though the quality of education in the UK is high, international graduates often encounter work crisis and substantial challenges in obtaining employment within the UK at the end of their studies. These challenges may be varied, but they are legal or professional and cultural obstacles. For instance, visa and work permit regulations can be a substantial hurdle affecting the ability of international graduates to remain and work in the United Kingdom (Bamber, 2021).

Language proficiency and cultural differences also impact the employment outcomes of international graduates (Sumpton, 2019). Effective communication is necessary for

environmental health, as professionals in this area often deal with several stakeholders including people in the community, government agencies, and private sector companies. The job-seeking process and the effort to establish professional and social connections can be particularly challenging for some international graduates, and cultural adaptation and integration into social networks often complicate their efforts, as they may lack the local connections that can help open doors to employment opportunities. (Wang et al., 2019).

This study examines the work crisis, employment barriers, and challenges facing International Environmental Health graduates from UWE in the UK local authority sector. The study also aims to identify critical issues and propose ways that these challenges could be mitigated in a manner that enhances the employment prospects of international graduates in the sector. Note that barriers in the private sector are also a relevant consideration for future research.

## **1.2 Statement of Problem**

Although the UK is one of the top study destinations, international graduates face numerous challenges as regards finding employment after graduation, especially in highly technical fields like environmental health. International graduates with such expertise often find their transition from academic excellence to professional integration in the UK cumbersome (Bamber, 2021).

One significant barrier is the complexity of visa and work permit regulations. International graduates must go through the immigration process, which is often costly and time-consuming, with rigid demands that do not accord with the reality of the labour market (Sumption, 2019). The uncertainty and instability coming with visa status are discouraging potential employers who do not want to put in much investment in a candidate facing legal and bureaucratic hurdles (Anderson et al., 2015).

Language proficiency and cultural differences also pose significant obstacles. Effective communication is central to roles in environmental health, as practitioners

must communicate effectively with policymakers, community leaders, and the public (Kanavis, 2022)). International graduates may find it hard to express their language competencies and feel devoid of confidence, feeling less confident in themselves during job applications and interviews due to cultural differences.

Two major challenges facing the environmental health industry today are that of a severe crisis and recruitment. A CIEH (2024) survey found that 87% of local authorities are relying on agency cover, and 56% have had vacancies unfilled for more than six months. This shortage of EHOs is not a new problem, but this situation has been further aggravated by the backlog that the pandemic created and an overwhelmed already under-resourced sector.

CIEH (2024) indicated that there are about 3,300 fully qualified EHOs who practice their profession professionally in District and Unitary Local Authorities throughout the UK. Apart from the dwindling number of fully qualified officers, the quality and expertise of these officers are in decline. Most of the graduates do not have any practical experience from their training - a situation which is considered vital. Previously, students would engage in a variety of activities in various fields, including house and food inspections, noise monitoring, and air quality, among others. Current courses entail less practical work, and the authorities are short of the time and resources to mitigate this problem or crisis.

The Environmental Health (EH) workforce crisis is like the challenges faced by nurses and teachers, including staff shortages, recruitment issues, and underfunding. According to Buchan et al., (2020), nurses have always struggled with issues like recruitment, low pay, and aging workforces. Similarly, Worth & Van den Brande (2020) opine those teachers, especially in the field of science and mathematics face shortages due to insufficient professional support and high turnover. Unlike nursing and teaching though, EH has been underappreciated.

The COVID-19 pandemic highlighted the importance of EH in public health, leading to increased attention to EH officers during health emergencies, just like nurses during health crises and teachers during periods of educational reforms. All three professions

face systemic issues requiring long-term investment in workforce development and retention.

There is a need to comprehensively understand the work crisis and actual barriers to international environmental health graduates in UWE. This kind of understanding will be important in developing strategies and policies geared at helping them settle into the UK workforce. It does so by maximizing the benefits of diverse talents and perspectives that these graduates take into the country further enhancing the capacity of the United Kingdom to address complex environmental health issues.

### **1.3 Aim of Study**

The overall aim of this paper is to explore and analyse the work crisis, employment barriers, and challenges facing international environmental health graduates from UWE in the UK local authority sector. The study also attempts to provide a comprehensive understanding of the factors that impede the successful integration of these graduates into the United Kingdom workforce.

### **1.4 Objectives of Study**

- To identify and analyse the work crisis and employment barriers facing international environmental health graduates from UWE in the United Kingdom.
- To identify various barriers and challenges that local authorities encounter when hiring international environmental health graduates from UWE in the UK.
- To investigate practical solutions to these employment problems facing international environmental health graduates from UWE in the United Kingdom.

### **1.5 Research Questions**

- What are the significant barriers and challenges international graduates from UWE encounter regarding their employment in the environmental health sector located in the United Kingdom?
- What are the challenges local authorities encounter when hiring international environmental health graduates from UWE?

- What are the experiences of the UWE international environmental health graduates, and what could be the probable solutions to their work crisis and employment challenges?

## 1.6 Significance of Study

This study is essential in several respects, from an academic standpoint to its practical use value in environmental health. It fills an essential gap in the literature and informs a range of stakeholders about the employment barriers facing international graduates in the United Kingdom's field of environmental health. In so doing, the paper adds to the existing academic literature on international graduates by providing a detailed understanding of the unique obstacles and challenges that environmental health graduates have experienced. This paper contributes to academic discourse across these areas by presenting interdisciplinary insights into integrating perspectives from environmental health, public policy, and education that can guide future research.

The results of this study carry significant policy and practical implications for the unique needs and challenges of international environmental health graduates. Such information is vital for designing policies that ensure positive impacts on their employability, streamlined visa process, and recognition of qualifications gained internationally. These insights will also aid in helping educational institutions by designing better support systems for international students, which will include services related to career, language training, and cultural orientation programs. This will enable employers within the environmental health industry to have a more transparent framework for creating more inclusive employment practices.

## 1.7 Operational Definition of Terms

**International Environmental Health Graduates:** Individuals who have completed a degree (MSc or Diploma) in environmental health from a higher education institution outside their home country and are seeking employment in the UK.

**Work Crisis:** A critical work situation marked by significant disturbances, stress, or conflict that affects the performance of employees, their well-being, and the organization's stability.

**Employment Barriers:** Some of the factors that hinder or prevent international graduates from getting employment in their field of study.

**Environmental Health (EH):** The scientific field concerned with the study of environmental factors that influence public health and diseases. It also entails an assessment and control of physical, chemical, and biological hazards to guarantee and improve public health.

**Employer:** This refers to the council or local authority responsible for employing environmental health practitioners (EHPs) and technical officers. They oversee recruitment, training, and other related functions about employment processes.

## CHAPTER TWO

### LITERATURE REVIEW

The international graduates of environmental health from UWE face various challenges as regards securing suitable employment with local authority sectors within the UK. Although most of these international graduates from UWE obtain UK qualifications, they still encounter problems related to visa limitations and experiences that are highly insufficient in the UK (Morrice, 2020). Also, cultural adjustment issues have been encountered as well as current restrictions on the budget and lack of resources of the local authority, support for the international graduates is becoming limited. Human Capital Theory suggests that the investment made in the education and training of these graduates should have an increasing effect on employability and a complementary effect on economic productivity (Gillies, 2015). However, Financial constraints from local authorities may weaken these same benefits and impede efforts by international graduates to integrate successfully within the workforce.

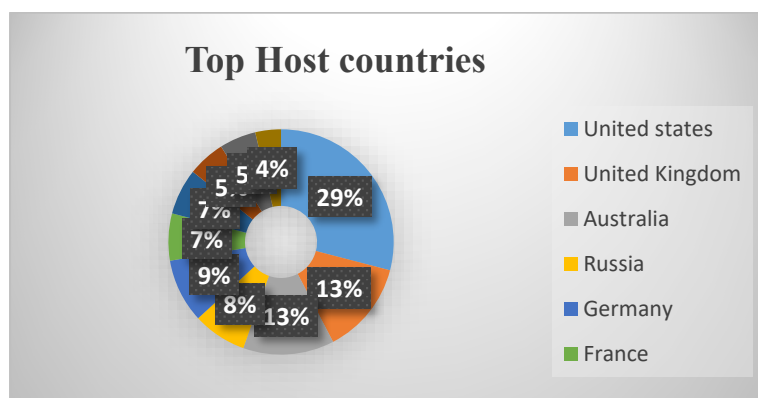
#### **2.1 Trends and Statistics of International Students in the United Kingdom**

The UK is a destination of second choice in terms of popularity for international students which could be attributed to the fact UK hosts some of the best academic institutions in the world including Oxford University, the Imperial College London, and University of Cambridge (UUKI, 2020). These universities have a long history of good academic excellence, excellent quality research output, and very influential alumni groups, making it a destination that pulls students across the globe into the country (UUKI, 2019). However, the OECD (2020) states that the inflated cost of living and education in the United Kingdom might deter the students. The perceived comparison of friendly tuition fees or even free tuition to international students, as per the case with Germany and the Netherlands, respectively, makes the United Kingdom among the least options.

In the 2019–20 academic year, 538,615 international students were enrolled in higher education institutions in the United Kingdom (UUKI, 2020). This accounted for 27.5% of the total student population in the UK, with 15.7% being undergraduates and 40.3%

postgraduates. The economic impact of international students cannot be overemphasized. The 2018-19 cohort contributed an estimated £28.8bn to Britain's economy. On average, each constituency enjoyed a net economic contribution of £40 million from international students to the United Kingdom (UUKI, 2019).

Before the crisis, Canada and Australia were the fastest growing among English-speaking destinations, with growth rates of 16.6% and 6.9%, respectively, from 2018 to 2019. The difference in the number of international students between the UK and Australia in 2018 was minimal. In 2018, the UK had only about 7,600 more international students than Australia, despite the UK's smaller size compared to countries like Japan, China, and Russia (UUKI, 2019).



**FIGURE 1 SHOWING TOP HOST COUNTRIES FOR INTERNATIONAL STUDENTS.**

## **2.2 The University of the West of England (UWE) and its Environmental Health (EH) Program**

England is home to the University of the West of England, Bristol, fondly called UWE. It is a public research institution and the biggest higher education provider in the South-West of England, employing 4,300 people and serving over 39,912 students (UWE, 2022). Originally founded in 1969 as the Bristol Polytechnic, the institution attained university status in 1992 and changed its name to the University of the West of England (UWE, 2018).

By incorporating an employability-focused and applied learning strategy, UWE offers a wide range of undergraduate and postgraduate programs to equip learners with relevant skills and knowledge for specific careers (Times Higher Education, 2021). It is also well known that UWE has an excellent reputation for its solid liaison with current industrial practices, which keeps the curriculum aligned with current professional standards and practices.

The environmental health program offered by UWE is a comprehensive course that can effectively equip one with sufficient skills and knowledge to function in the area of public health, environmental health, or any other related field. With its theory combined with practical experience, it gives students a vital education in the various aspects that surround environmental health. It covers food safety and hygiene, environmental protection, occupational health, public health housing standards and epidemiology. The accreditation of the Environmental Health program at UWE by The Chartered Institute of Environmental Health (CIEH) ensures a curriculum content that is based on industry requirements and best practices in the sector.

UWE focuses on hands-on learning with practical training sessions, laboratory work, and field trips. Students engaged in real projects and case studies that gave them worthwhile experience and skills relevant to their career destinies.

### **2.3 Role of the Chartered Institute of Environmental Health (CIEH)**

The Chartered Institute of Environmental Health (CIEH) is a professional body working towards advancing and promoting environmental health. The Association of Public Sanitary Inspectors, the founding organization that gave rise to the Chartered Institute of Environmental Health, was established in 1883. The Privy Council began to scrutinize it, and during the decade that followed, it took more measures to guarantee the membership's professional qualifications. Consequently, the organization was granted permission in 1994 to alter its name to the Chartered Institute of Environmental Health to indicate its certified identity (Wikipedia, 2024).

The Chartered Institute of Environmental Health (CIEH) has been professional body for environmental health practitioners in the UK for more than 130 years, with focus on setting educational and professional standards, public health, and policy influence. EH professionals are Environmental Health Officers within local authorities and co-regulate with the Food Standards Agency, Environment Agency, and Health and Safety Executive. In England, there are around 3,300 full-time equivalents of fully qualified Environmental Health Practitioners, with around 7,700 experts engaged in environmental health roles.

EHPs often work flexibly across various areas, with the largest share allocated to food safety, private-sector housing, and environmental protection (CIEH, 2024). The CIEH provides crucial accreditation, assuring employers and the public that graduates are fully trained and competent in their field. Completing a CIEH-accredited course certifies professionals at the environmental health level, which is highly valued by employers. This recognition is particularly beneficial when seeking employment, as many local authorities, government agencies, and private sector organizations require CIEH accreditation for various roles (CIEH, 2024).

The Chartered Institute of Environmental Health (CIEH) advances environmental health by conducting research on food safety, housing conditions, air quality, and occupational health. It collaborates with institutions to ensure ambitious, evidence-based research that has influenced public health policy in the UK. However, Lovell et al. (2018) argue that its research scope is sometimes too narrow to tackle serious environmental health issues. CIEH counters that it works with universities and disseminates findings through peer-reviewed journals, reports, and various events (CIEH, 2024).

The CIEH is active in raising public awareness of environmental health issues by offering resources, guidance, and education through campaigns and training programs for both professionals and the public. Wang et al. (2019) commended its air quality campaigns for effectively informing the public about the health impacts of pollution. While the reach and inclusivity of CIEH's efforts are somewhat limited, the organization continues to prioritize public education, working closely with local organizations and private partners to extend its impact.

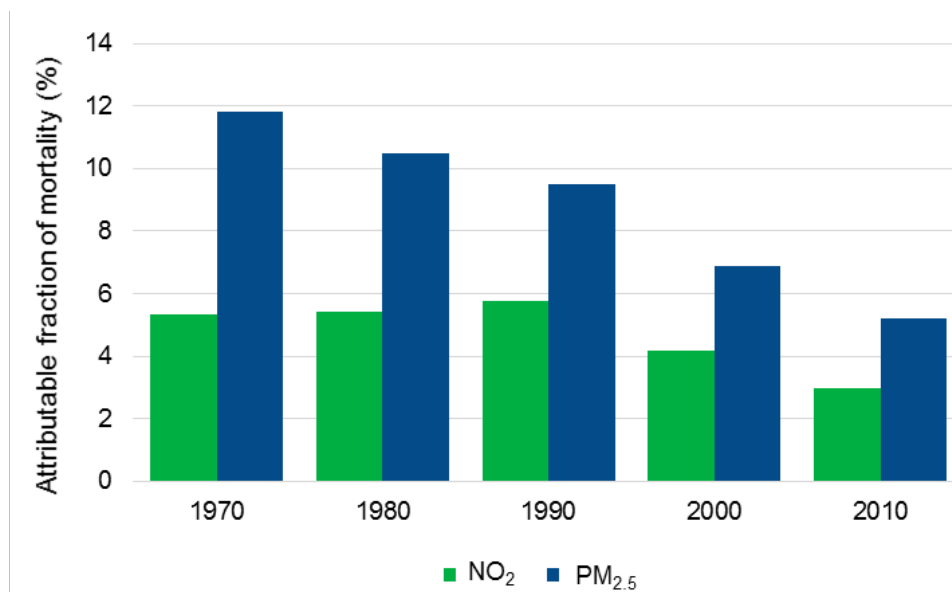
## **2.4 Pollution and Environmental Health in the United Kingdom**

Environmental health, a branch of public health, studies the impact of natural and human-made environments on human well-being, addressing issues like pollution-related illnesses and climate change impacts, to ensure a healthier environment for all (Ranniger, 2024). This field combines both theoretical and practical aspects to assess, control, and prevent environmental risks that could affect current and future generations, focusing on natural elements such as air and water quality, and human-made environments like industrial settings and urban development (Babayemi et al., 2016).

Conservation Institute Team (2018) links industrialization to air and water pollution, recommending stricter regulations and technological advancements to reduce emissions. Dhankhar and Kumar (2023) highlight agriculture as primary source of rural pollution, particularly from pesticides and fertilizers, advocating sustainable farming. Mateo-Sagasta (2017) balances the view arguing both industries and agriculture equally contribute to pollution, calling for comprehensive regulations across all sectors. Emerging pollutants like microplastics and nanoparticles pose new threats, with WHO (2019) reporting that environmental factors account for 14% of illnesses in the UK.

### **2.4.1 Air Pollutants**

Air pollution is a major environmental threat to human well-being, causing short-term effects like breathing difficulties (Public Health England, 2019). In the UK, particulate matter (PM<sub>2.5</sub>) alone accounts for 5% of deaths (Public Health England, 2018), with prolonged exposure reducing life expectancy by several months and impacting tens of thousands annually. Children, the elderly, and those with pre-existing conditions are especially vulnerable. Prolonged exposure to air pollutants has been linked to heart disease, stroke, dementia, and some types of cancer (Sharma et al., 2023).

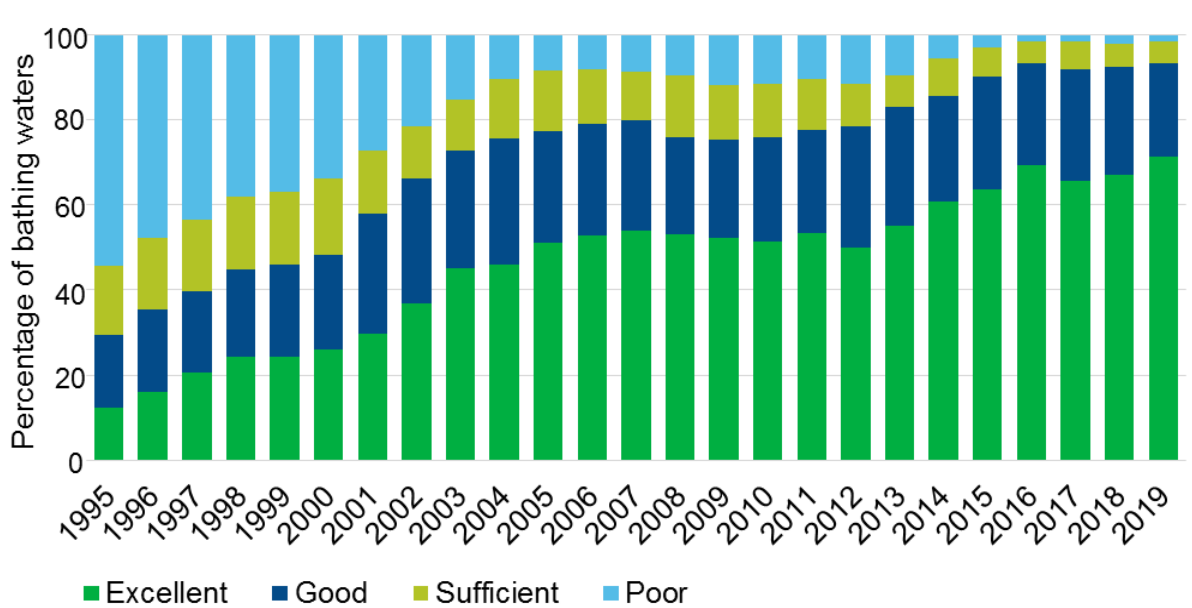


**FIGURE 2 SHOWING DEATHS ATTRIBUTED TO LONG-TERM EXPOSURE TO NO<sub>2</sub> AND PM<sub>2.5</sub>**

#### **2.4.2 Water Pollutant**

Water pollutants pose significant challenges to environmental health and public safety. They originate from agricultural runoff, industrial discharges, sewage, and urban runoff. It is hard to say how many lives sanitation has saved in England, but globally, it is thought that poor sanitation and unsafe drinking water cause around 1.6 million deaths annually (OECD, 2014). However, the quality of England's groundwater, which supplies 30% of its drinking water has been declining over time (Environmental Agency, 2018).

WHO (2019) identifies agriculture-related nitrates as key pollutants. Nitrate limits in drinking water aim to protect bottle-fed newborns from thyroid issues and "blue baby" syndrome, addressing short-term effects with long-term benefits (WHO, 2017). Also, microbes from sewage, livestock, and animals may pollute inland and coastal waterways, contributing to the spread of diseases like hepatitis A, cholera, typhoid and dysentery.



**FIGURE 3 SHOWING TREND OF BATHING WATER CLASSIFICATION IN THE UNITED KINGDOM (1995-2019)**

### 2.4.3 Chemical Pollutant

Chemicals are widely used daily, improving safety, cleanliness, and health. Synthetic chemicals, such as those in plastics, paints, and cleaning products, are prevalent in industries like agriculture and healthcare. Since 1950, around 140,000 new compounds have been synthesized, with many now present in the environment (Landrigan, 2018). Europe produced 81 million tons of harmful chemicals in 2017

(Eurostat, 2019). These chemicals can bioaccumulate in human tissues, potentially contributing to diseases like cancer, hormone disruption, and respiratory conditions (Department of Health and Social Care, 2018). However, WHO (2019) reports a decline in harmful dioxin levels due to improved industrial controls.

### 2.5 UK Local Authority (LA) and Environmental Health (EH)

The UK Local Authority Sector is a cornerstone of public administration, comprising county councils, district councils, and unitary authorities. Each has distinct roles but shares the common goal of serving local communities. County councils handle broader functions like education and transport, while district councils manage local

issues such as housing and environmental health. Unitary authorities streamline these functions into a single tier.

Environmental health is one of the most critical areas within local authorities' districts, covering an extensive range of responsibilities aimed at safeguarding public health and ensuring adequate and safe living conditions. The responsibilities for waste management rest with the local authorities about what is collected, how it is treated, and how it is disposed of to minimize environmental contamination and ensuing health risks. This not only includes the regular collection of wastes but also control of treatment facilities and promotional measures for recycling and waste reduction (Waste Management Network, 2021).

Another essential function is pollution control, where local authorities monitor and regulate air and water quality to prevent environmental pollution that may impact public health. They conduct regular inspections and enforce regulations to limit emissions from industrial and commercial sources, while also working to reduce vehicle emissions and other urban pollutants (Defra, 2019). This is fundamental in preventing respiratory illnesses and other health problems linked to poor air quality.

Food safety is another area of concern for the local authorities, as they seek to inspect food establishments for hygiene standards. EHOs regularly inspect restaurants, cafes, food factories, and all other food businesses to prevent any chances of a person contracting foodborne illness (Defra, 2019). Furthermore, Public Health of England (2017) agrees with this statement by indicating that they investigate complaints and outbreaks of food poisoning, ensuring that actions taken to correct or rectify the anomaly are prompt in restoration of the safety of public health.

Local authorities undertake various public health initiatives which includes disease surveillance, health education campaigns and vaccination programs, all aimed at preventing infectious diseases, promoting healthy behaviours, and monitoring population health. These efforts involve collaboration with other agencies to ensure coordinated and effective public health responses (CIEH, 2024). These programs rely on the support of administrative, technical, and other staff to ensure smooth operations.

Environmental health officers, who are key members of the local authority sector, work alongside occupational and public health professionals. They serve on the front lines of public health protection by inspecting premises, enforcing legislation, and responding to public health emergencies. Public health professionals, meanwhile, design and implement strategies to improve population health in partnership with health agencies and community organizations. Together, they form a coordinated force dedicated to safeguarding public health.

## **2.6 Role of Environmental Health Officers / Practitioners**

Environmental Health Officers / Practitioners (EHOs/EHPs) are pivotal in implementing and enforcing regulatory standards within local authorities. They collaborate with key agencies such as Environment Agency, Food Standards Agency and Health and Safety Executive to ensure comprehensive management of health risks. EHOs operate within a complex regulatory framework that includes monitoring and controlling infectious diseases, assessing environmental hazards, and responding to health emergencies.

Their role extends to conducting inspections, advising on health and safety regulations, and ensuring compliance with public health laws. They also engage in public education, guiding practices to prevent environmental health issues. EHOs' expertise spans various sectors, including government, academia, and military operations, reflecting their critical role in protecting public health and safety (Bullivant, 2023).

EH professionals are also deeply involved in addressing housing-related health risks. They manage issues such as substandard housing that can result in some respiratory problems and other medical issues, by conducting inspections and ensuring compliance with health and safety standards. By collaborating with landlords and tenants, EHOs work to remediate hazardous conditions and improve overall housing quality (Bray, 2024).

During the COVID-19 pandemic, Environmental Health (EH) professionals were crucial in managing risks to public health, controlling the spread of infection, and ensuring safe environments (Rodrigues, 2021). Their expertise in enforcing health

regulations, assessing risks in various settings, and advising on safety protocols was essential in mitigating the virus's impact on communities. EH officers played a significant role by implementing safety measures, conducting inspections, and providing guidance on hygiene practices, reinforcing their vital role in crisis management and public health protection.

Beyond pandemics, EH professionals address various public health challenges. For example, in food poisoning outbreaks, they trace contamination sources, enforce food safety regulations, and ensure thorough sanitation of affected establishments. During epidemics, like a flu outbreak, they work with health agencies to manage spread and implement preventative measures. They also respond to emergencies, such as fire outbreaks, by inspecting affected areas to assess health risks and ensure safe conditions for those impacted.

In addition to these roles, EH professionals manage noise pollution by monitoring noise levels in residential and commercial areas to ensure regulatory compliance and address complaints. They also play a crucial role in workplace health and safety, ensuring adherence to safety standards, conducting risk assessments, and implementing measures to prevent accidents and occupational illnesses. These diverse responsibilities highlight the essential role of EH specialists in maintaining public health and safety across various scenarios (Rodrigues et al., 2021; Hosking, 2024).

## **2.7 Resources and Capacity of EH Teams in UK LA**

It is reported by the Chartered Institute of Environmental Health (2024), that there are about 3,300 full-time equivalents of fully qualified Environmental Health Practitioners working for local authorities in England—around 10.1 full-time equivalents per local authority. In all, around 7,700 full-time equivalent professionals are involved in the provision of environmental health care, which comes to about 23.7 full-time equivalents per Local Authority. EHPs often work flexibly across various areas, with the largest share of resources allocated to food safety (33%), private sector housing (25%), and environmental protection (19%).

While the distribution of environmental health services has remained unchanged over the past few years, as evidenced by 45% of LAs, 31% of LAs reported that they had stopped certain services, discretionary activities, advice, and guidance to businesses, or non-statutory services. There are also accounts that 11% of LAs outsourced some services and partial outsourcing during the same period by 21% of LAs (LEAMS, 2021). Also, CIEH (2024) is in line with the statement by indicating that although budgets were unchanged in around half of local authorities, 51% of LAs reported a budget decrease and only a 17% increase in 2019/20, compared with the previous year – indicating a trend of shrinking budgets within environmental health departments.

## **2.8 Employability of International Students**

Employability encompasses the skills, knowledge, and traits necessary for graduates to succeed in their careers and contribute positively to the workforce, society, and economy (Nguyen & Hartz, 2020). It is crucial for international students, who often seek to integrate into their host country beyond just professional or financial gains. Despite recognition of their qualifications, international graduates face employment barriers in the UK (Anderson et al., 2015).

Graduates are increasingly expected to be work-ready, applying their degree knowledge and skills in the workplace (Winterton & Turner, 2019). Universities must ensure their graduates are prepared with the necessary competencies to transition smoothly into professional roles (Pouratashi & Zamani, 2019). For example, CIEH accreditation ensures Environmental Health graduates meet industry standards and are competent for professional practice (CIEH, 2024). However, international students face additional challenges, such as the extensive EHP Portfolio requirement, including work experience and associated costs (CIEH, 2024).

There is concern that universities may not adequately prepare graduates for labour market demands, leading to a skills gap and dissatisfaction among employers (Salas-Velesco, 2021; Small et al., 2022; De Lange et al., 2022). The evolving nature of employability perspectives from graduates, employers, and higher education

contributes to this mismatch, highlighting the need for ongoing alignment between university education and market requirements (Mansour & Dean, 2016).

## **2.9 Employment Barriers Facing International Environmental Health Graduates and Employers**

The UK is highly reputed for hosting one of the highest numbers of international students, yet international graduates often struggle to find employment with local authorities. Visa regulations, competence with language, perceptions of employability, integration into the culture, and sheer lack of support systems are some of the issues and challenges these students encounter.

### **2.9.1 Visa Restriction/Policies**

Visa restrictions are a major challenge for international graduates seeking employment in the UK. The Skilled Worker visa (formerly Tier 2) places considerable financial and administrative burdens on local authorities, making visa sponsorship costly and operationally complex. The Migration Advisory Committee (2020) highlights these financial and administrative burdens as a significant deterrent for employers.

Additionally, the Post-Study Work visa (Graduate Visa) permits international graduates to stay and work in the UK for up to two years after finishing their studies. However, the application fee of £715, coupled with an Immigration Health Surcharge (IHS) of £624 per year (Morris, 2024), adds substantial cost. Despite these provisions, the financial strain and complexities of visa applications continue to present significant barriers for international graduates.

The visa status is often used to exclude candidates, regardless of their credentials and abilities. Immigration policy is a recurring topic in national discussions across the globe that has an impact on migrant workers. Anderson et al., (2015) indicates that, immigrants are prevented from exploring job prospects in their areas of expertise using temporary work permits. Nonetheless, a significant body of research on immigration laws and characteristics influenced by policies that impact immigrants or student immigrants has been published.

Immigration laws in Australia, Canada, and New Zealand are friendly and point-based, while those in the UK are very stringent (GOV.UK, 2020). Numerous studies have shown that people's treatment in their host nation differs according to their visa status. For instance, visa requirements often create a hierarchy of mobility, where individuals from certain countries encounter stricter entry conditions compared to others, resulting in varying levels of access to rights and services and significantly shaping their overall experience in the host country (Mangrio and Sjögren Forss, 2017).

Due to the abundance of resident options, those who are citizens or residents of the host nation tend to obtain employment more rapidly. Obtaining a suitable visa with favourable working conditions is crucial for overseas students seeking jobs after graduation. Employers find it difficult to hire foreign students or migrants since there is no assurance that they will remain in the nation. As a result, many firms are reluctant to invest in recent graduates who may decide to leave the nation (Howe et al., 2019).

### **2.9.2. Language Proficiency and Communication Skills**

Proficiency in language and cultural integration presents a key challenge. While most students speak excellent English, specialized professional or technical language for environmental health may be a drawback. Research has focused on these challenges, with Wilczewski et al. (2023) identifying two principal areas:

- **Second-Language Proficiency:** This examines how well students adapt to using English for academic purposes, including mastering vocabulary, understanding complex concepts, and expressing ideas clearly.
- **Interactions in the Host Country:** This explores how students communicate with locals, with mixed findings on how interactions with fellow nationals affect adaptation, sometimes challenging existing theories.

In the United Kingdom, immigrants who do not speak English as their first language may encounter difficulties. Aure (2013) demonstrates a clear link between poor work performance and inadequate language ability, this aligns with the findings of Madera et al., (2012) who opine that limited English proficiency among employees can result in language barriers, misunderstandings, and ambiguity. After a thorough evaluation of immigrants' experiences and qualifications, Kostenko et al. (2012) state that

English-speaking immigrants have a higher chance of finding work in a profession that matches their skill set than immigrants from non-English-speaking backgrounds.

For many years, there has been discussion and worry about the English proficiency of international students. Confidence is the most important virtue in any interview, especially for an international graduate who is entering a new job market. The ability to articulate one's skills, experiences, and qualifications means everything, and it will go a long way in helping to change or alter the perception of the interviewer (Butcher et al., 2015). International graduates in Environmental Health experience a reduction of their confidence during interviews because of a language barrier that makes them more hesitant or unsure during the answering of questions, thereby making them less competent and prepared in response to the employers' understanding.

This shows that foreign students who do not speak English as their first language face miscommunication, prejudice, or even blatant racism. Employers across all industries seek recent graduates who can communicate freely in a variety of settings and who speak English well (Butcher et al., 2015). According to Maydell and Diego-Mendoza (2014), some immigrants from English-speaking nations speak the language effectively, but with distinctive accents like those of Nigeria and Zimbabwe, which might cause issues or language barriers among locals in the UK. Ho (2015) asserts that immigrants' limited proficiency in the English language makes it difficult for them to get work or earn more money. However, Fouche (2014) disagrees with this notion by stating that there is clear discrimination against migrants in the UK labour market, even if they speak the language well.

### **2.9.3 Cultural Competence and Integration**

Employers tend to hire candidates who can seamlessly adapt to both the cultural environment and working conditions of their organization to avoid potential cultural misunderstandings. This poses a significant challenge for international students, who may encounter pre-existing expectations about cultural fit that influence hiring decisions. Molinsky and Hahn (2024) note that companies increasingly value employees who can adapt to diverse cultures, recognizing this ability as crucial for several reasons.

In a globalized economy, businesses operate across multiple countries and regions, necessitating employees who can navigate diverse cultural norms and practices. Being culturally adaptable not only enhances communication and collaboration with international clients, partners, and colleagues but also fosters more effective and harmonious working relationships. This adaptability allows employees to innovate and solve problems by integrating various perspectives and contributes to creating an inclusive workplace, which in turn enhances employee satisfaction and retention. Overall, cultural adaptability supports a company's global strategy and strengthens its competitive advantage.

Studies indicate that supervisors highly value intercultural communication skills, along with flexibility, sensitivity, and tolerance for cultural diversity. These qualities are essential for managing multicultural teams and ensuring smooth operations in diverse environments. Consequently, cultural competence or the skill to work efficiently in diverse environments has emerged as a critical employability factor for international students. This competence involves not only understanding the history, traditions, and beliefs of the host nation but also engaging effectively with its citizens (Nguyen & Hartz, 2020). Such understanding helps international employees integrate more successfully into their workplaces, reducing the risk of misunderstandings and fostering better collaboration.

In addition to cultural awareness, international graduates must navigate the host nation's legal, social, and economic systems to thrive in a multicultural society. These systems can be complex and mastering them is essential for full participation in both professional and social contexts. Although it is commonly believed that studying abroad leads to cultural shifts, many foreign students experience culture shock as they adjust to their unfamiliar environment. Ibrahim (2015) argues that studying overseas broadens one's horizons rather than forcing students to abandon their own cultural identities in favour of the host nation's culture.

The ability to clearly communicate task-related actions and understand UK-specific legal terminology is also crucial for international graduates to effectively convey their skills. This presents an additional challenge, as mastering these cultural nuances, combined with potential biases and differences in expectations, can complicate the

job search. Maydell and Diego-Mendoza (2014) and Ho (2015) suggest that linguistic competence alone is insufficient; understanding and navigating workplace cultural expectations are also essential for international graduates to thrive in the challenging employment market.

#### **2.9.4 Work Experience**

Lack of relevant professional experience is a significant obstacle for foreign graduates seeking employment. For foreign graduates, securing an internship is an ideal strategy as it enables them to build important connections, gain job experience, and learn about workplace customs and procedures specific to the host nation. However, this ideal scenario is not always realized. Often, students tend to apply to firms with which they are already familiar from their home countries, rather than seeking out local internship opportunities that could better facilitate their integration into the job market (Pham et al., 2018).

Moreover, the employment market in the United Kingdom presents additional challenges for international students. Anttila (2022) notes that the competitive nature of the job market can exacerbate the difficulties faced by international graduates in securing internships. Local students often have an advantage due to their relevant work experience, which can make them more attractive to employers compared to international students who may lack such experience. This situation is further compounded by Anttila's (2022) observation that higher education institutions often fail to adequately prepare students with the practical knowledge and communication skills needed in the job market. Employers have reported that graduates frequently lack the hands-on experience and industry-specific skills that are typically acquired through employment rather than academic coursework.

In contrast, the Prospects Early Careers Survey (2021) presents a broader perspective on the issue by highlighting that 45% of college students may feel unprepared or lack adequate experience to pursue employment or apprenticeships. This survey underscores the widespread recognition among students of the importance of job experience for both their personal development and employer expectations. However,

the difficulty in acquiring such experience remains a substantial barrier, not only for international students but for many students in general.

Overall, the challenge of gaining relevant work experience is a significant hurdle for international graduates. It impacts their ability to compete effectively in the job market and underscores the need for targeted interventions to improve their employment prospects. This includes enhancing support for securing internships, better aligning academic programs with job market requirements, and addressing the systemic issues that hinder the acquisition of practical experience.

## **2.10 Strategies for Overcoming Employment Barriers Facing International Students and Employers**

### **2.10.1 Overcoming Visa Restrictions and Policies**

One of the most viable ways in which international graduates can overcome visa restrictions and policy may involve informing students about the various visa options in the UK, including the new Graduate Route visa or Tier 2 General visa, allowing two years of post-study work as early as possible during their studies (GOV.UK, 2023).

Many universities, UWE included also have specialized services regarding support in visa applications and help students through the complexities involved in requirements and deadlines. Equally important is developing good relations with potential employers who will be ready to sponsor them for a visa. These can be organized through internships, networking events, and industry placements while they are studying their courses.

Also, keeping up to date with the changing landscape of immigration policies and actively engaging in professional organizations can provide essential resources and advocacy support on their behalf. If international graduates adopt these strategies, challenges related to visa issues would be better addressed, and their employability in the UK would be enhanced.

Furthermore, educational establishments should provide a link between academic learning and practical work experience, especially for international graduates in Environmental Health. Such positive university and employer partnerships can afford

the students opportunities to gain experience from work placements, thereby acquiring relevant experience in the UK job market (Abramitzky & Boustán, 2017).

However, with such placements, these intensive 12-month MSc programs do pose quite a challenge in trying to balance academic work with job placements. This therefore means that institutions should be cautious with the integration of placements into the course curriculum in such a manner that students would not feel strained by offering more flexible or aligned placement options to enhance employability.

### **2.10.2 Overcoming the Language barrier**

Pratchett (2021) indicates that employers and higher educational institutions must work together with foreign students to overcome the language competency barrier. Employers should emphasize the advantages that foreign students may provide to their business. Educational institutions could provide language support in English, business English, and technical English courses to develop students' communication abilities. Companies could set up onboarding language training and mentorship programs where international graduates can practice their language skills in a natural environment. Additionally, a conducive workplace culture with diversity and openness in communication would help international graduates build trust and be more easily integrated. It will help international students seeking jobs to address the issues of language barriers in advance.

### **2.10.3 Overcoming Cultural Integration/Competence Barrier**

Universities have a significant role to play in facilitating integration since overseas students see the academic environment as being vital in terms of cultural integration (Juusola et al., 2021). Aure (2013) indicates that having a basic understanding of the culture, society, and workings of the host country enhances the employability of international graduates.

Villa et al. (2016) further agrees with this statement by emphasizing that before joining the workforce, students must get familiar with the culture of the place they will be studying to have an awareness of crucial customs. Higher education institutions should, therefore, assist this integration process by providing opportunities such as

intercultural projects and group projects in which students from the host nation and international students work together on initiatives and exchange cultural insights.

#### **2.10.4 Overcoming Barriers of valuable work experience in the UK**

Higher education institutions must recognize and incorporate the demands of business life into their curricula to enable students to acquire competencies that employers value and guarantee that international students will graduate with sufficient experience to overcome employment barriers (Villa et al., 2016). Also, White et al (2019) agree with this statement by stating that institutions must allocate more resources towards hosting guest lectures featuring business leaders or collaborating on joint ventures with nearby organizations and institutions. This will enhance their comprehension of the business practices and necessary competencies of the host nation.

Also, course structure should also provide placement opportunities and internships as part of the curriculum, where students get first-hand experience in the field. Graduates could also do volunteer work or part-time jobs in their area of interest to enhance their resume and get adequate work experience.

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter, organized into several sections, outlines the methodology employed to support the research thesis. It utilizes a mixed-methods approach to reach its conclusions. The section structure covers the study's research design, participant selection, sample size, data collection methods, interview techniques, ethical considerations, and data analysis.

#### **3.1 Research Design**

A mixed methodology approach is adopted in this study to explore the work crisis of international environmental health graduates from UWE within the local authorities in the UK. In respect, this study used methods that were both quantitative and qualitative to achieve clear underpinning information about issues raised. In this way, a mixed-methods approach to the study provides a clear understanding of the challenges of employment faced by UWE international graduates.

The two-pronged approach captured a wide span of data points and dug deep into firsthand experiences to present the issue holistically and critically. Quantitative methods identified patterns and correlations, while qualitative methods explored the underlying reasons behind these patterns. The two together enabled the exploration and explanation of the employment barriers that UWE international graduates encounter in the United Kingdom.

The research philosophy that was most suitable for this study was interpretivism, which aligns with the focus of the study on examining complex personal experiences complex, subjective experiences. Interpretivism based on the idea that reality is shaped by social interactions and can vary according to individual viewpoints, making it well-suited for this research. Given that the study aimed to explore the detailed experiences of international Environmental Health graduates and local authorities regarding the perceptions and barriers they encounter, the interpretivist approach was

essential for delving into the subjective meanings participants attach to these experiences.

This philosophy enabled the researcher to move beyond the mere presentation of objective facts or quantifiable data, emphasizing instead the interpretation of complex human behaviours, motivations, and social interactions that influence the employability of international graduates. For instance, employment barriers may not always be apparent in statistical data but may emerge from individuals' firsthand experiences and interactions with cultural, organizational, or legal systems. Interpretivism allowed for these subtleties to be explored, helping to uncover the underlying factors shaping these employment challenges.

By adopting this approach, the research could capture the rich, contextualized insights of both the international graduates who face these barriers and the local authority representatives who navigate the challenges of hiring them. This focus on interpreting social and behavioural contexts was particularly relevant, as the barriers to employability often involve a combination of personal, cultural, and systemic factors. Interpretivism provided the framework to understand how these elements intertwine and shape each participant's perceptions and experiences.

Moreover, interpretivism was crucial in facilitating the use of qualitative methods, such as interviews and surveys, that allowed for a deeper exploration of individual perspectives. By engaging directly with participants, the research was able to gather detailed accounts and diverse viewpoints, offering a more comprehensive and multi-faceted understanding of the issues at hand. These methods allowed the researcher to engage with participants' lived realities, interpreting not just what they said but also the broader social contexts in which their experiences occurred.

Thus, the interpretivist philosophy enabled the study to transcend the limitations of more positivist approaches, which focus primarily on quantifiable data, by fostering a richer, more nuanced understanding of the social factors and personal motivations influencing the employability of international Environmental Health graduates.

### 3.2 Participant Selection

A comprehensive recruitment approach targeted international Environmental Health (EH) graduates from the University of the West of England (UWE). Strategies included posting survey letters on the LinkedIn pages of the researcher, module, and dissertation coordinators, EH UWE, and UWE, as well as sending bulk emails to UWE EH alumni. The survey was also posted on SurveyCircle, though it did not generate any responses. Additionally, recruitment letters for interviews were distributed to local authorities through LinkedIn and bulk emails.

Despite these efforts, most EH alumni declined to participate. While the Chartered Institute of Environmental Health (CIEH) did not assist with their database due to data protection concerns, one of their directors supported the recruitment by posting the survey on his LinkedIn page. Only five local authorities responded to the interview invitation. Several other authorities expressed interest after the data analysis phase, making it too late to include them in the study.

TABLE 1 SHOWING INTERNATIONAL STUDENTS' ENROLMENT TABLE

YEAR	No Enrolled Students	No of International Students
21/22	33 students	19
22/23	32 Students	21
23/24	23 students	16

### 3.3 Sample Size

The study specifically focused on UWE international alumni with an MSc in Environmental Health and current international UWE students with a diploma in

Environmental Health who were in the process of completing their dissertations. Participants who did not meet these criteria were excluded. Efforts were made to ensure a balanced gender representation. However, there were limitations because participant selection was dependent on the UWE EH alumni and diploma student databases. Any potential gender imbalances in the sample will be acknowledged during data analysis, with specific attention given to any gender-related trends or differences that emerge. This will also be recognized as a limitation of the study, and future research could address this by broadening the sampling strategy to ensure a more balanced gender representation.

The survey questions were anonymized to protect the privacy of the participants, ensuring no identifying details like contact details or names, were included. Demographic data, such as nationality, gender, and year of graduation, were collected, but none of this information could be used to identify individuals. Moreover, all data were securely stored, with access limited to authorized personnel, ensuring the confidentiality of participant responses.

### **3.4 Data collection**

This study utilized a mixed methodology approach, with data collection conducted in two distinct phases, quantitative and qualitative phase.

- **Quantitative Phase:** Purposive sampling was employed to select participants who were international graduates of UWE. These participants were administered an online survey designed to collect information on various experiences related to their job search and employment outcomes within the UK. The focus of this phase was to gather measurable data on the challenges these graduates faced, their methods for seeking employment, and their overall success or failure in securing jobs.
- **Qualitative Phase:** Semi-structured interviews were conducted with representatives from local authorities (LAs), not students, as the aim was to explore the perspectives of employers in the sector. This method was chosen because it offers both flexibility in exploring participants' experiences and a

structured framework that facilitates comparison across responses. The open-ended nature of the questions

In the interview phase, specific barriers to employment were investigated, such as visa issues, recognition of international qualifications, and language proficiency. These interviews provided context for understanding the challenges international graduates face from an employer's perspective, adding depth to the quantitative findings from the survey. The interviews not only highlighted the barriers but also explored potential solutions or improvements that could be implemented in future hiring practices to better accommodate international graduates.

A pilot study was carried out to assess the relevance of the survey and interview questions. This preliminary phase involved both international Environmental Health graduates from outside UWE and a representative from a local authority outside the target area. The goal was to gather feedback on the wording, structure, and overall appropriateness of the questions, ensuring they were consistent with the objectives of the study. Based on the feedback received, adjustments were made to refine the data collection tools, making them more effective for the actual study participants. This process helped enhance the validity of the survey and interviews, ensuring they accurately captured the intended information.

In conclusion, this dual-phase methodology ensured a comprehensive approach to understanding the complex challenges encountered by international Environmental Health graduates in the UK, by incorporating both the perspectives of graduates and those of local authority employers.

### **3.5 Bias and Confounding Factors**

Several types of bias could potentially affect the research study, including confirmation bias and sampling bias. Given the researcher's personal experience as an international student who has faced similar challenges, there is a risk of unintentional data bias or leading interview responses in a particular direction. For instance, during one interview, when a hiring manager's responses diverged from the focus on challenges, the researcher reminded him of the specific barriers he had previously

mentioned and asked how these challenges could be addressed, which led to recommendations.

To mitigate these biases, efforts were made to remain objective and structured throughout the data collection and analysis phases. Another potential bias is sampling bias, as the research relies on UWE alumni, which might not fully reflect the experiences of all international environmental health graduates in the UK. Additionally, various confounding factors such as differing work experiences, language proficiencies, and visa statuses among participants were acknowledged.

Confounding factors which may affect the research results includes variations in participants' work experiences, language proficiency, and visa statuses. These differences could influence how international graduates perceive and respond to challenges in the job market. For example, someone with more extensive work experience might have different views on employment barriers compared to someone with less experience.

Similarly, language skills can impact how effectively participants communicate their experiences and challenges. Visa status might also shape their employment opportunities and perceptions differently. These factors could contribute to variations in the data, making it essential to consider their potential impact when interpreting the results.

### **3.6 Interview Techniques/ Procedure**

- **Recruitment Process:** For the recruitment of participants, a variety of methods were employed to ensure a comprehensive approach. The primary recruitment for the survey targeted international Environmental Health (EH) graduates from the University of the West of England (UWE). Recruitment efforts included posting recruitment letters on UWE's LinkedIn page and the user's personal LinkedIn page. Additionally, the survey was registered on SurveyCircle, though this platform did not yield responses.

To further broaden the reach, the user's tutors also shared recruitment information on their LinkedIn pages and sent bulk emails to all UWE EH alumni and diploma students. Despite these efforts, most EH alumni received the email but declined to participate,

which was disappointing. The Chartered Institute of Environmental Health (CIEH) was contacted to assist with recruitment by accessing their database, but they declined due to data protection concerns, despite explanations that the survey did not require personal data.

For the interview recruitment, local authority representatives were approached through a similar multi-channel approach. Initial outreach involved sending letters via email to various local authorities across the UK, but this method resulted in limited responses. Recruitment of interview participants was primarily achieved through referrals. After securing the first few interviews, subsequent participants were recruited through referrals from these initial contacts and through the supervisor's email outreach. Unfortunately, many emails sent personally and by tutors did not receive responses, and most interviews were finalized through referrals and the supervisor's efforts.

This combined approach for both surveys and interviews aimed to gather a broad and representative sample, but the recruitment process faced challenges that limited participation and necessitated additional strategies to secure responses.

- **Conducting Survey:** An online survey was administered to UWE Environmental Health alumni. The online format was chosen for its user-friendliness and accessibility. The survey aimed to gather data on the job search experiences and employment outcomes of international Environmental Health graduates. See list of Survey questions in Appendix 8.
- **Conducting interview:** Interviews with local authority representatives were conducted using video conferencing platforms. Each interview lasted approximately 50 minutes and focused on hiring processes, the qualifications sought, and the perceptions of local versus international graduates. See list of interview questions in Appendix 9.
- **Recording and Transcription:** Interviews were audio-recorded with the consent of participants to ensure precise data capture. The recordings were then transcribed verbatim for thematic analysis, enabling a thorough understanding of the responses and maintaining the depth of participants' insights.

### 3.7 Reliability and Validity

To ensure reliability during the study, the study was pre-tested on non-UWE graduates and local authority personnel who worked outside Bristol. This is to refine some of the questions and ensure the questions maintain an elevated level of consistency in the process. Nevertheless, the generalization of findings is limited because the sample size is small and relies on one set of graduates. To enhance validity, data collection was carried out through both survey forms and interviews to allow the cross-checking of findings. In addition, efforts have been made to word questions neutrally, reflecting a range of potential barriers and experiences.

### 3.8 Data analysis

The interviews will be analysed thematically, which involves several steps. First, all the transcripts will be read to get familiar with the content. Key statements related to the research questions will be identified and coded. These codes will then be grouped into broader themes. The themes will be reviewed and refined to ensure they match the research objectives and questions.

The quantitative data from the online survey will be analysed using SPSS software to provide additional statistical insights. This combined approach will offer a well-rounded view of the research findings.

### 3.9 Ethical Considerations

The study will seek ethical approval from the institutional review board. Key ethical considerations include:

**Informed Consent:** Participants will be provided with an information sheet outlining the purpose, procedures of the study, and their rights. Consent will be obtained prior to the face-to-face interviews.

**Confidentiality:** Participants' privacy will be respected. Findings will be reported using aliases, and all data will be securely stored and accessible only to the research team.

**Right to Withdraw:** Participants have the right to withdraw from the study at any time without facing any repercussions.

### 3.10 Strengths and Limitations of the study

#### Strengths

- Semi-structured interviews allow for a detailed exploration of experiences and perceptions of international environmental health graduates, thereby affording rich qualitative data that could reveal the complexities of answering questions not easily captured through quantitative methods.
- The study aims to provide recommendations for enhancing support mechanisms and employability for international graduates, which may inform policies and practices, both at educational institutions and in the labour market.

#### Limitations

- **Recruitment:** Recruitment challenges in this study may affect the representativeness of the sample in several ways. The limited response rates, despite extensive outreach through may result in a sample that does not fully capture the range of experiences of all international environmental health graduates. The refusal of the CIEH to provide access to their database, due to data protection concerns, restricted the pool of potential participants, leading to a reliance on a smaller, self-selected group. Additionally, the use of personal referrals and the supervisor's email for arranging interviews may introduce selection bias, as the sample could be skewed towards individuals connected to the referrer, potentially limiting diversity.
- **Sample Size:** The study's reliance on a small sample size implies that its findings will have limited applicability across all international environmental health graduates in the UK. The small sample may not fully represent the diverse experiences of graduates from other backgrounds and institutions, potentially leading to a skewed understanding of the broader population.
- **Time and Resources:** Conducting and analysing in-depth interviews is both time-consuming and resource-intensive, which may restrict the study's scope.

- **Institutional Limitation:** The study is limited to participants from the University of the West of England and does not encompass the experiences and perspectives of international environmental health graduates from other UK universities.

These factors collectively narrow the scope of the study and may affect the overall representation of the broader population of international environmental health graduates.

## CHAPTER FOUR

### RESULTS

#### 4.1 Survey Results

##### 4.1.1 Demographic Overview

Table 2 below provides a breakdown of the demographics of the respondents by gender, nationality, year of graduation, and occupation. Most of the respondents were male (58%), while regarding nationality, the majority were Nigerians at 76%. Regarding the year of graduation, the highest number of respondents graduated in 2024 (50%) followed by those graduating in 2023, at 30%. Also, 70% of the respondents were employed on a full-time basis, 13% each part-time and unemployed, whereas 4% were still students.

TABLE 2 SHOWING A DEMOGRAPHIC OVERVIEW OF PARTICIPANTS

<b>Parameters</b>	<b>No of Participants</b>	<b>% of participants</b>
<b>Gender</b>		
<i>Male</i>	14	58%
<i>Female</i>	10	42%
<b>Nationality</b>		
<i>Nigerian</i>	18	76%
<i>Nepalese</i>	1	4%
<i>Pakistan</i>	1	4%
<i>Sri Lankan</i>	1	4%
<i>Indian</i>	2	8%

*Cameroun*

***Year/Status of Graduation***

*2021*

*2022*

*2023*

*2024*

***Employment Status***

*Employed (Full time All sectors)*

*Employed (Part-time All sectors)*

*Unemployed*

1	4%
2	8%
1	4%
7	30%
14	58%
17	70%
3	13%
4	17%

## 4.1 2 Employment Outcomes

### 4.1.2.1. Period in getting a job in the Environmental health sector after graduation from UWE.

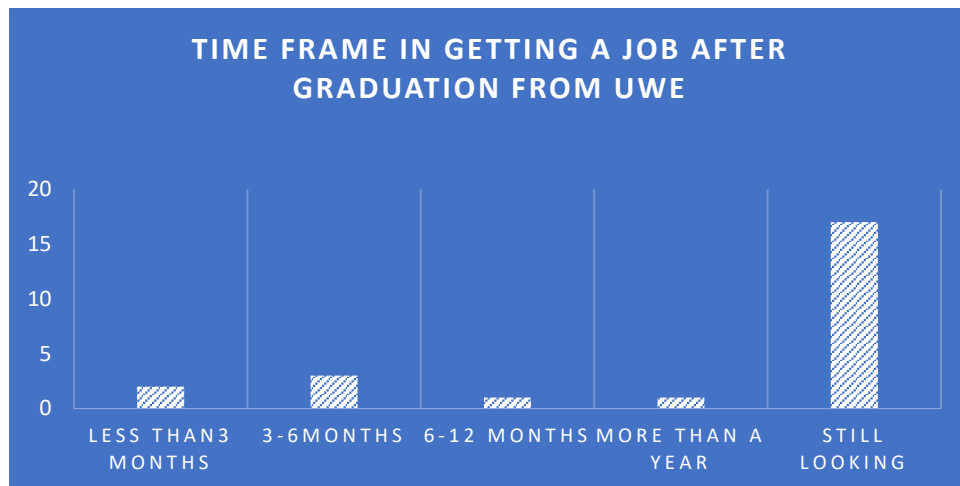


FIGURE 4 SHOWING A PERIOD IN SECURING A JOB AFTER GRADUATION FROM UWE.

Figure 4 indicates how long it has taken UWE graduates to find employment. According to the results generated most of the respondents are still seeking employment (17 out of the 24). Of those who have found work, most found it took 3-6 months to find it (3). Fewer found work in under 3 months (2), from 6-12 months (1), and in over a year (1). This would therefore mean that though some secure employment right after school, a generous portion take time after graduation to seek employment.

### 4.1.2.2 Number of Job applications submitted to UK Local Authority

The chart below (Figure 5) represents the number of job applications submitted to local authorities across the UK by respondents. The results indicate that 6 respondents submitted between 0-5 and 6-10 applications respectively, 5 respondents submitted 11-20 applications while the greatest number of applications at over 20, is represented by 7 respondents.

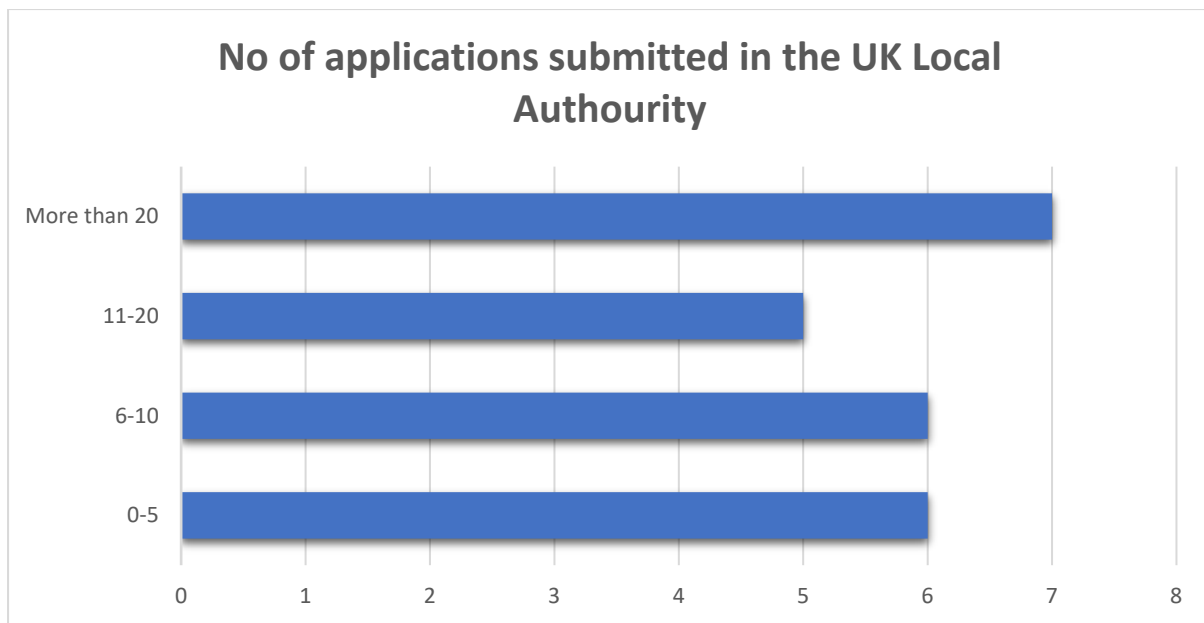


FIGURE 5 SHOWING THE NUMBER OF APPLICATIONS SUBMITTED WITHIN THE UK LOCAL AUTHORITY

#### 4.1.2.3 Employment Sector of Participants

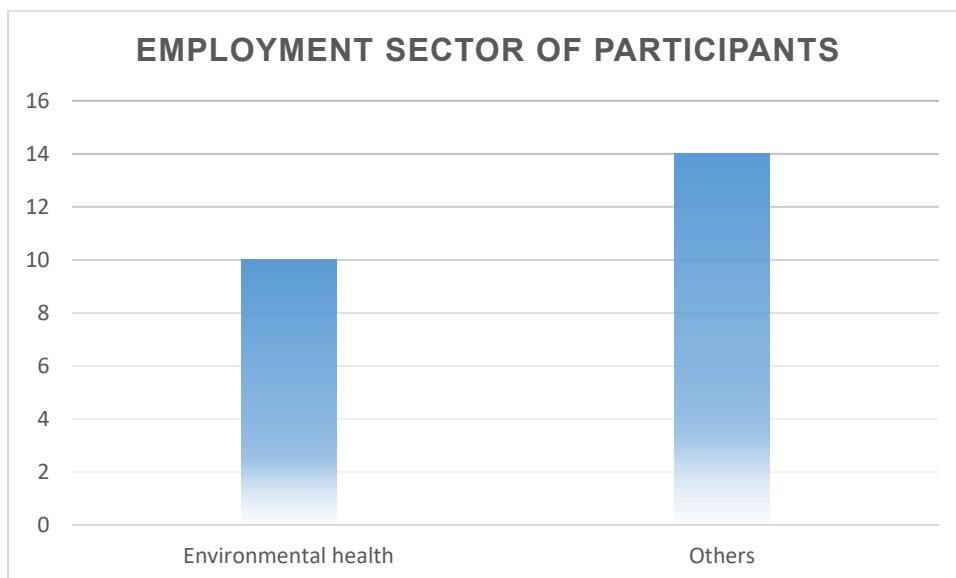
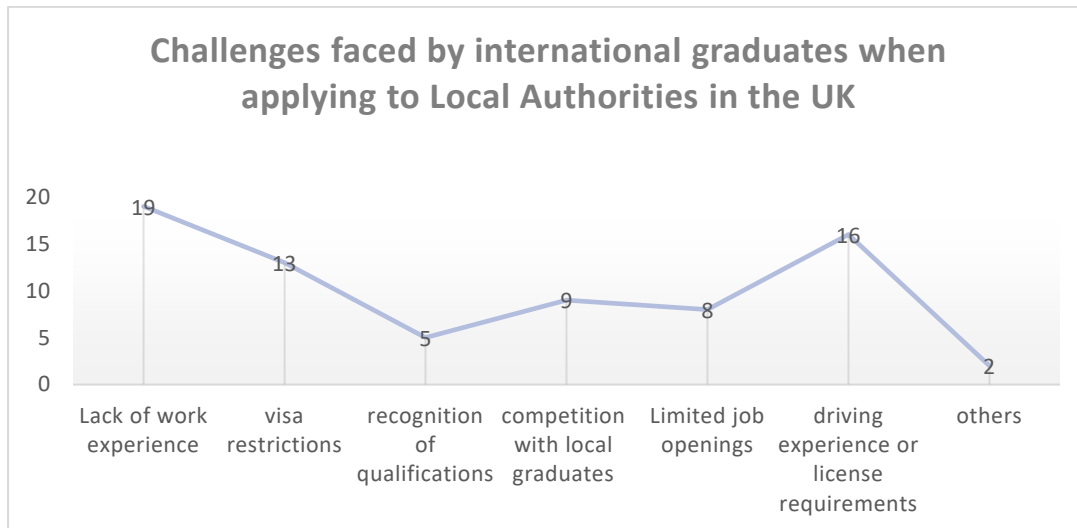


FIGURE 6 SHOWING EMPLOYMENT SECTOR OF PARTICIPANTS

Figure 6 indicates the sectors in which participants work, the results shows that 10 out of 24 participants work in the environmental health sector, while 14 respondent work either work in different sectors or are unemployed.

## 4.2 Challenges faced by International Graduates when applying for Environmental Health positions

### 4.2.1 Key Challenges identified by international Graduates



**FIGURE 7 SHOWING CHALLENGES FACED BY INTERNATIONAL GRADUATES WHEN SEEKING EMPLOYMENT.**

Figure 7 highlights the major employment barriers and challenges encountered by environmental health international students when trying to gain employment within the UK authority. The results indicate work experience as a critical determinant as it was reported by 19 of the respondents. Also, visa restriction issues act as another challenge as 13 respondents reported it, which shows that it is more of a bureaucratic barrier. While 9 and 8 respondents indicated that competition from local graduates and restricted job opportunities is also a challenge. Driving experience/license requirement is another significant obstacle for 16 of the respondents; it shows the need for a driving license issued as it is a basic requirement for many vacancies within the UK authority.

## 4.2.2 Impact of Being an International Graduate on Job Search in the Environmental Health Field

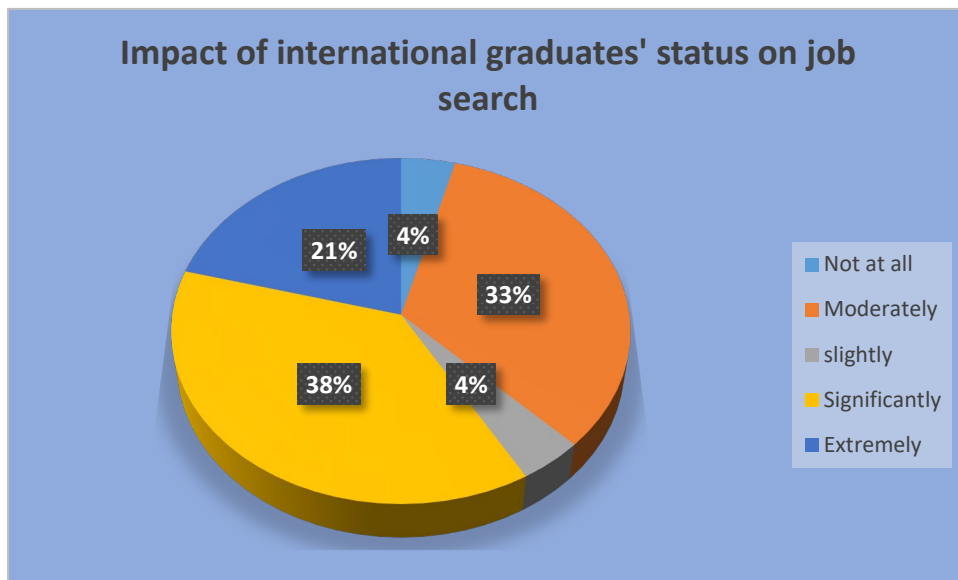


FIGURE 8 SHOWING THE IMPACT OF INTERNATIONAL GRADUATES' STATUS ON JOB SEARCH

Figure 8 illustrates the difference in perceived impacts of being international students on the process of job searching. A few consider that the impact is not at all significant-4%. In contrast, moderate and slightly significant impacts are more commonly reported at 33% and 41%, respectively; hence, being an international student affects the search process, though it might not be unbelievably bad for many. While in their search for a job as an environmental health professional, many students perceive the impact to be significant (38%) or extremely significant (21%).

## 4.2.3 Experiences in Cultural Adaptation

### 4.2.3.1 Possession of a Valid UK Driving License

It is observed from the figure below that 9 respondents have a UK driving license, whereas 15 do not. It reflects that the majority do not have a UK driving license, which

may reflect upon their employability prospects - especially in jobs where driving is mandatory.

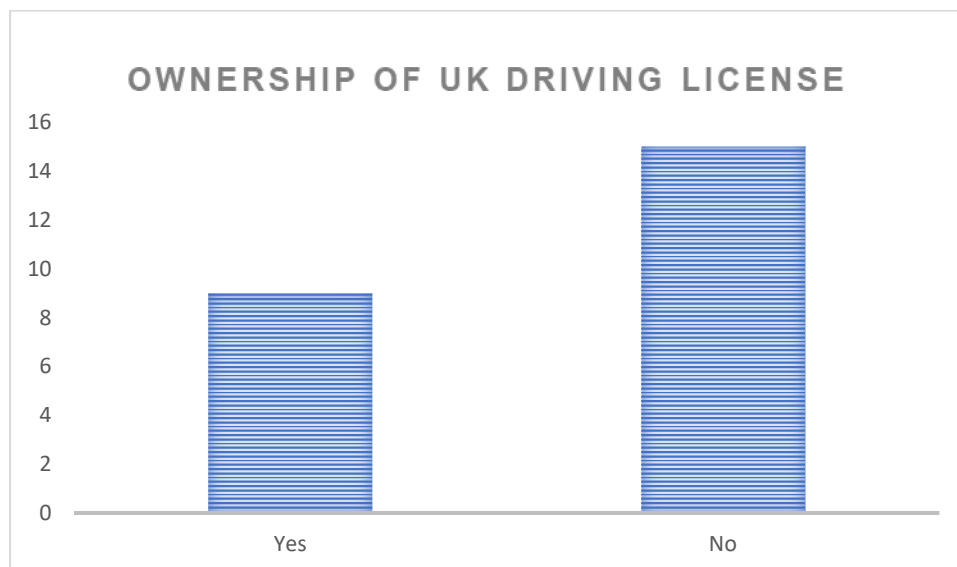


FIGURE 9 SHOWING OWNERSHIP OF UK DRIVING LICENSE

#### 4.2.3.2 Importance of a UK driving license in securing a Job

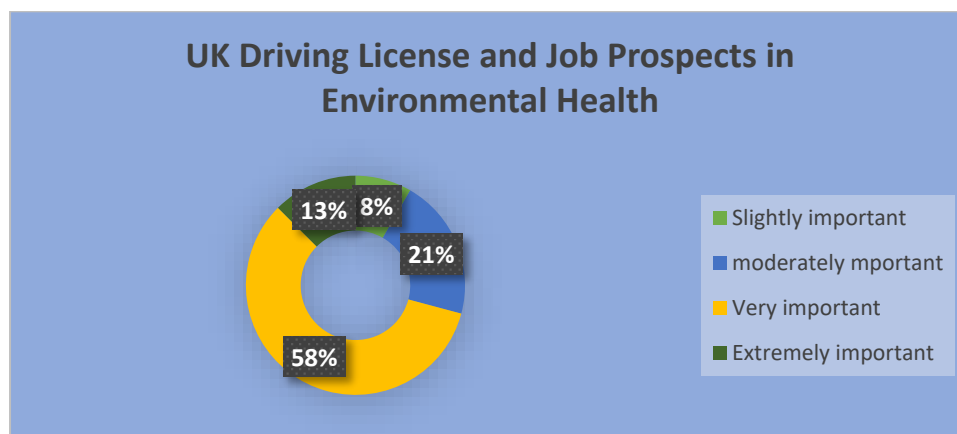


FIGURE 10 SHOWING THE IMPORTANCE OF A UK DRIVING LICENSE ON JOB PROSPECTS IN ENVIRONMENTAL HEALTH.

Figure 10 indicates that there is strong agreement as to how a UK driving license is important in securing a job in the UK local authorities. A majority of 58% consider it especially important, showing that this qualification plays a significant role for them in

looking for a job. Another sizeable portion of 13% attests to seeing it as an extremely crucial factor that determines whether they have employment. While 21% indicate that it is moderately and slightly important, respectively.

#### 4.2.4 Experiences in Professional Development

##### 4.2.4.1 Preparation for Environmental Health Career with UWE Degree

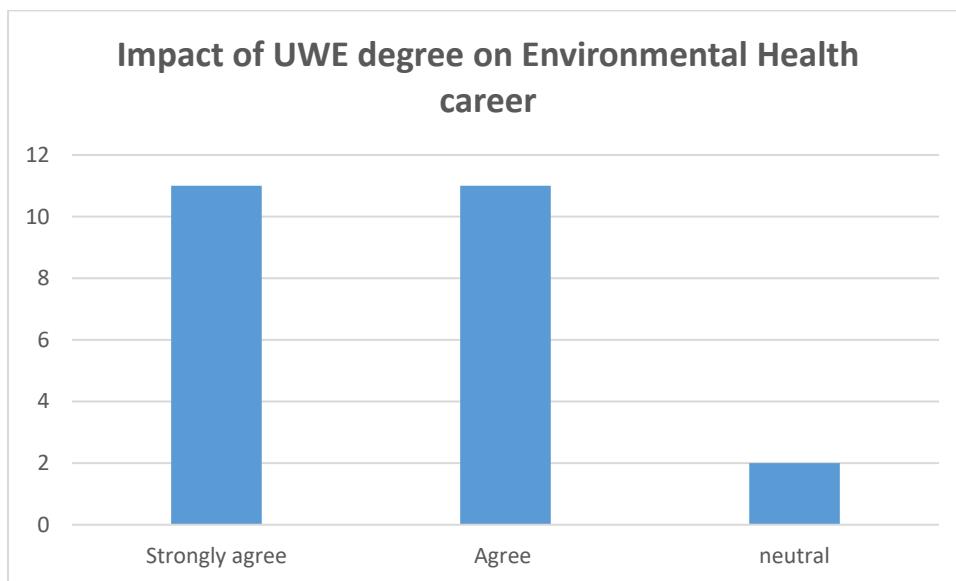


FIGURE 11 SHOWING THE IMPACT OF AN UWE DEGREE ON AN ENVIRONMENTAL HEALTH CAREER

The figure above represents respondents' perceptions of the impact of a UWE degree on a career in environmental health. This shows that 11 respondents each agreed and strongly that the degree here at UWE affects their career prospects positively in environmental health. Only 2 were indifferent, meaning the consensus is that there was truly little disagreement or lack of opinion about whether such a degree has impacted their careers. This general positive orientation underlines the belief that a UWE degree contributes positively to career development within the profession.

#### 4.3 Interview Results

##### 4.3.1 Basic Qualification and Skill Assessment

Theme	Common responses	Unique Response	Frequency of Agreement	Frequency of Disagreement
<b>Preferred Qualifications</b>	Most respondents prefer Environmental Health (EH) qualifications, particularly from the UK.		5/5	Nil
<b>Verification of Qualifications</b>	Most respondents trust UK certifications and follow similar verification processes for both local and international applicants.		5/5	Nil

TABLE 3 SHOWING THEMATIC ANALYSIS ON QUALIFICATION AND SKILL ASSESSMENT

The results from the thematic analysis on qualification and skill assessment indicated that all 5 participants agreed that having a degree in environmental health is particularly important in recruitment process of applicants. Also, as regards verification

of qualification all participants are of the view that certifications from the UK is very acceptable.

#### 4.3.2 perception of International Graduates.

TABLE 4 SHOWING THEMATIC ANALYSIS ON THE PERCEPTION OF INTERNATIONAL GRADUATES.

Theme	Common responses	Unique Response	Frequency of Agreement	Frequency of Disagreement
Perception of International Graduates	Several respondents expressed no bias, viewing international graduates equally if they are qualified.	International graduates are disadvantaged due to their lack of theoretical knowledge of the UK structure and legislation	4/5	1/5
Experience with Hiring International Graduates	Respondents who hired international graduates cited positive integration and strong transferable skills.	One respondent does not have any experience with hiring international graduate	4/5	1/5

The results indicated that majority of the participants (4/5) expressed no bias in employing international graduates if they are qualified for the role, however one participant indicated that international students often lack the technical expertise on UK structure and legislation to be successful on the job. As regards experience with hiring international graduates, majority of the respondents (4/5) indicates that international graduates had a positive cultural integration process and necessary skills to perform efficiently while one respondent did not have any experience in hiring international graduates

### 4.3.3 Challenges faced by UK Authority when hiring international Graduates

TABLE 5 SHOWING THEMATIC ANALYSIS ON CHALLENGES FACED BY UK AUTHORITY

Theme	Common responses	Unique Response	Frequency of Agreement	Frequency of Disagreement
<b>Visa and Immigration Policies</b>	All respondents mentioned visa regulations as a significant barrier to hiring international graduates.	No response	5/5	Nil
<b>Language Proficiency</b>	High English proficiency is necessary, and language proficiency is part of the assessment process.	No response	5/5	Nil

<b>Work Experience and Driving License</b>	Driving experience/license is becoming a challenge for international graduates.	No response	5/5	Nil
--	---	-------------	-----	-----

This thematic table illustrates the various challenges encountered by UK local authorities. All respondents indicated that visa and immigration policies, language proficiency and work experience are all significant challenges faced by the authority.

#### 4.3.4 Support and Integration

TABLE 6 SHOWING THEMATIC ANALYSIS ON SUPPORT AND INTEGRATION.

Theme	Common responses	Unique Response	Frequency of Agreement	Frequency of Disagreement
<b>Cultural Integration and inclusion</b>	Local authorities follow equality and inclusion policies with no discrimination based on nationality.	One respondent was unsure if their local authority has a specific inclusion policy for international graduates.	4/5	1/5
<b>Professional development and Training</b>	Most respondents provide general training for all employees,	No response	5/5	Nil

	with no special programs for international graduates			
<b>Support system for integration</b>	Some respondents offer shadowing opportunities and teamwork as part of integration support.	Some respondent highlighted the lack of support due to limited resources	3/5	2/5

Table 6 illustrates the thematic analysis on support and integration of international graduates by the local authorities. Several of the respondents (4/5) indicated that there is no bias in terms of cultural integration and inclusion policies, however one respondent was unsure if the local authority had a special cultural inclusion policy for international graduates. In terms of professional development and training, all participants indicated that there is general training for all employees.

Furthermore, questions on support system for integration indicated that some of the respondents (3/5) agreed that local authorities offer various forms of integration support while other participants (2/5) highlighted lack of support due to insufficient resources.

#### **4.3.5 Recommendation for Improvement**

**TABLE 7 SHOWING THEMATIC ANALYSIS FOR RECOMMENDATIONS FOR IMPROVEMENT**

Sub Theme	Common responses	Unique Response	Frequency of Agreement	Frequency of Disagreement
<b>Career Path and Training</b>	Several respondents suggested improving training and offering career progression opportunities.	One respondent emphasized the need for CIEH and government support for visa regulations.	2/5	3/5
<b>Visa Sponsorship</b>	some respondents recommend easing visa restrictions to help international graduates find employment.	One respondent suggested that UWE should collaborate with local authorities to offer interwork training.	2/5	3/5

The thematic analysis on recommendations for improvement indicates various sub themes such as career path/training and visa sponsorship. The results indicate that several respondents (2/5) suggested improving training and offering career progression while other respondents (3/5) indicated the need for CIEH to support visa regulations. As regards visa sponsorship 2/5 of the respondents recommended that easing visa restrictions is necessary while other respondents recommend a collaboration between UWE and local authorities for training

#### **4.4 Access and Timing challenges in recruitment of Participants**

There were several timing and access problems for participants, especially when the attempt was to reach international graduates and managers of local authorities. Because of logistic and availability issues, the number of participants in this research was limited, which in turn had implications for accessing interviews and responses. The sample size would have been larger, hence seemingly more representative, if more time as well as easier access to key stakeholders were available. Given these constraints, the scope of the research was somewhat reduced. However, while this number is a limited sample and a greater number of participants might have added further depth to the data, the information generated from the research still gives valuable insights into the various barriers international graduates encounter in terms of gaining employment within the UK local authorities.

## CHAPTER FIVE

### DISCUSSION AND CONCLUSION

#### 5.1 Discussion of Key Findings

##### 5.1.1 Challenges identified by international students

The results of this research reveal significant barriers to employment that international students face in obtaining jobs from UK local authorities. These findings are consistent with the studies conducted relating to problems faced by international graduates. One of the major challenges that was revealed by 19 respondents is that of work experience. Indeed, numerous studies reflect this factor that during studies, international graduates have fewer chances of getting practical placements or internships compared to their UK counterparts (Anttila, 2022).

Ecochard & Fotheringham (2017) also indicated that practical experience in areas such as Environmental Health is crucial, with strong emphasis placed on the acquisition of competent manipulative skills and knowledge of UK regulations that apply to the workplace. Graduates who do not have adequate exposure to these factors are often at a disadvantage in their quest for jobs within the local labour market.

Also, the complications that visa restrictions place on employment prospects for international graduates were cited as a big challenge by 13 respondents. Howe (2019) has established that visa and immigration policies constitute significant entry barriers for non-UK students in areas where the market is already particularly challenging. This is further manifested in the reluctance of all local authorities from sponsoring work visas for international graduates, as this reflects concerns of financial and legal burdens associated with these graduates which further decreases the number of job opportunities available to such graduates.

Marginson (2014), supported the result by indicating that visa-related barriers do not only hinder the prospects for international graduates but also deter employers from hiring them, even when they possess the appropriate qualifications and relevant skills, thus further solidifying the difficult transition into the UK workforce.

Cultural integration remains one of the major challenges facing international graduates. The experiences of 16 respondents over driving license requirements are a clear indication. Guth & Hervey (2018) indicated inability to possess a UK driving licence is an obstacle to getting employed in any sector such as Environmental Health that requires much mobility. The requirement for a UK driving licence highlights broader cultural integration challenges. Although many graduates may hold valid licenses from their home countries, adapting to the UK's licensing system can be a lengthy and costly process.

This difficulty obtaining a UK licence further illustrates the wider cultural integration barriers these graduates face. This can be overcome or mitigated by introducing or incorporating various training schemes and collaborating with UK regulatory bodies to provide opportunities for international graduates. For example, UWE could introduce a driving school on campus to help ease this transition and provide a more accessible route into the UK workforce.

Competition with local graduates, which was mentioned by 9 respondents, is a problem in the oversaturated job market. Zaman & Moshin (2014) indicated employers give preference to local graduates for better acquaintance with UK-specific regulations and work environments. This advantageous position for local students may prolong the competitive disadvantage for international students by making them appear to require additional training or support to adapt properly to the labour market. In addition, the availability of few job vacancies makes it even more difficult, with international graduates competing for a few job openings in a highly specialized field.

5 respondents identified recognition of qualifications, as is also reflected in research that identifies how UK employers often prefer to hire workers with UK-based qualifications over those with international qualifications, even when those qualifications are considered equivalent. This is further exacerbated by professional bodies, for example those responsible for Environmental Health, sometimes setting high certification standards that international graduates may struggle to meet without additional and specific training within the UK (Bista, 2015). International graduates may have good academic standing; however, such qualifications are not always fully

understood or valued as much as those of UK graduates, hence presenting another barrier in job seeking. The discrepancy in setting the qualification standard may lead to a mismatch in skills because international graduates are overqualified on paper but perceived to be underqualified in practice due to a lack of local credentials or experience.

Limited job openings appeared as a concern for 8 respondents reflecting the incredibly competitive nature of the job market under consideration in UK local authorities. The Environmental Health sector in the United Kingdom has gone through budget cuts and reorganization that have reduced open positions and effortlessly heightened competition for available jobs, according to Vardoulakis et al (2016). This therefore provides an opportunity for local graduates to have a better edge in these extremely limited opportunities, especially when the employers are unwilling to invest in training and integrating international graduates who may require additional support to get familiar with UK-specific regulations and practices. The category labelled “others” covers more particular or even individual types of challenges, from cultural adaptation to personal circumstances to niche qualifications. These more subjective barriers are harder to quantify but have a strong impact on job opportunities (Shaheen, 2014).

### **5.1.2 Challenges encountered by UK Authorities**

The different challenges thoroughly facing UK local authorities in recruiting international graduates are evidencing the findings to visa and immigration regulations, language proficiency, work experience, and cultural integration. They are also documented in the literature on the employability of international graduates and can explain why many local authorities are unwilling to engage graduates from abroad.

Also, recent political and social views within the UK have influenced the recruitment of international graduates through their local authorities. More stringent immigration policy, most especially with the introduction of the Points-Based Immigration System, has created higher barriers against international graduates seeking work visas to dampen their employment prospects (Givens et al., 2020). As the rise of nationalist sentiments coupled with anti-immigrant rhetoric, largely influenced by political discourses and media portrayals, has mounted public scepticism and resistance to

hiring international graduates, economic uncertainties after Brexit and the COVID-19 pandemic have led to managers being conservative in terms of hiring international graduates, with preferences leading to local candidates, who are considered more stable.

All the respondents indicated that one of the major challenges is visa and immigration regulations. This regulation complicates not only the hiring process but also discourages many of the local authorities from sponsoring a skilled work visa for international graduates. This agrees with findings by Mihut et al., (2017), who argue that one of the major barriers to international graduate employment in the UK is visa restrictions since most of these employers are unwilling to go through legal requirements, which for them is complex, or bear the associated costs. This finding is also coherent with Broadley et al., (2022), where sponsorship is especially difficult for industries like public health, where employers are looking for better long-term devotion and stability.

Another challenge identified by the respondents relates to language proficiency. Whereas all respondents find high proficiency in English important, the need for multilingual skills was focused on as bringing an added value for some cases. This was noticed in the findings of Zenner (2020), the language competence makes the difference in finding an employable graduate from the international categories, especially those where communication and interaction with diverse populations is at high demand. In Environmental Health, there is a huge demand for good verbal and written English, mostly when it comes to functions related to public safety and health inspections. The results also indicated that some of the respondents indicated that, being proficient in a second language apart from English is also an added advantage and could improve chances of getting employed.

Other major challenges identified in hiring international graduates included work experience and driving license requirements. Some respondents noted the lack of practical experience concerning UK Environmental Health settings, which makes international graduates very poorly prepared for the demands expected from local authority roles. This finding is in line with Curaj et al., (2020) who noted that international students experience difficulties in getting work placements while

studying, a factor that puts them at a disadvantage while competing with other locals who may have better experience. In addition, the requirement for a driving license which is a form of cultural integration in the UK poses another challenge since much work in environmental health involves traveling to various sites to carry out inspections. According to Adams et al., (2018) driving may seem like it is not overtly an obvious obstacle, however, it is highly significant for the greater part of jobs that require easy mobility and flexibility. Obtaining a driving licence in the UK requires investment of valuable time and economic resources, which adds to yet another disadvantage for international graduates at a time when they are already facing other bureaucratic and legal obstacles.

### **5.1.3 Perception of International Graduates**

The responses from the participants reflect a more diverse understanding of international graduates employed by UK local authorities. Some participants argued that there was no difference between the local and international graduates if the applicant had the right qualifications and experience. This result is in line with Huang & Turner (2018) which indicates that qualifications and experience are the prime determinants of employment irrespective of nationality. However, other respondents highlighted specific challenges faced by many international graduates. A key concern is their unfamiliarity with the structures and regulations unique to England and Wales, particularly in areas such as environmental health legislation and policies. Woolf et al., (2016) support this finding, noting that a lack of local knowledge can significantly hinder the employability of overseas graduates in professional fields, leaving them unprepared for practice.

A theme that persistently emerged from the comments made by respondents was the belief that international graduates are consistently too qualified or too unqualified. This points to a polarized situation whereby, although international graduates may fulfil the formal requirements, they lack the practical experience that local employers would want. This indicates that employers will prefer to consider only those who possess formal qualifications and relevant work experiences, particularly in professions identified with direct public service such as environmental health. Secondly, the

inability of international graduates to translate overseas qualifications into transferable skills recognized and valued in the UK context may be a contributing factor.

Perceived overqualification and underqualification also relate to broader challenges of the transition into a new labour market. International students often come from educational backgrounds where their training may have had more of a theoretical focus or has been targeted at professional requirements other than those in the UK. Bryan & Guccione (2018) suggests, international graduates, even when they could bring higher qualifications in the form of advanced degrees, still fall short on the dimension of local professional knowledge, thus finding it harder to get jobs in competitive fields like environmental health.

#### **5.1.4 Contributions to Existing Knowledge of Employment Challenges for International Environmental Health Graduates**

These findings represent a substantive contribution to the existing literature on international students' employment challenges, especially in the context of UK Environmental Health graduates working within Local Authorities. Of the most significant barriers, visa and immigration regulations feature predominantly and this supports more recent work by Levy et al., (2020) who identify that restrictive immigration policies limit the job opportunities available to skilled international graduates. This is further aggravated by the fact that UK local authorities are very reluctant to sponsor visas for skilled workers, making it a structural barrier to international graduates' ability to integrate into the workforce within the UK economy.

Language proficiency remains one of the key themes of international graduates for employability, and high English proficiency is always required. Kostenko et al., (2012) indicated that international students who have better English proficiency tend to get better academic and employment outcomes. While this research adds another layer to that view, it also suggests that multilingualism is increasingly one of these factors in public-serving positions, such as Environmental Health, and forms an essential element in serving diverse communities. Kuppens and Ceuleers (2021) also strengthen the argument of multilingualism being an asset, especially in multicultural settings, and increasing candidate value for bridging language gaps in health services.

Another key finding is that of a lack of work experience and practical skills relevant to work in the UK environment. Tran & Gomes (2016) indicated that most international graduates lack industry-relevant experience, which places them in less competitive positions in local job markets. In this paper, these findings are supported, and new evidence is provided on the value attached to UK-specific work experience, particularly for the Environmental Health field, in which knowledge of the local legislation and practice is of paramount importance.

Also, the need for successful cultural integration was highlighted in the study with emphasis on the need for a UK driving licence which was mentioned by many interviewees. Shneikat et al., (2021), indicated a UK driving license is increasingly a requirement for many public health roles due to the needs of mobility and on-site inspections, which for international students is quite difficult to obtain.

## **5.2 Implications to UWE Students**

The implications of this research are quite significant for students at UWE, especially international graduates. The findings pointed to a few key barriers facing international EH graduates when trying to gain employment with UK local authorities. These include visa restrictions, the need for UK work experience, and cultural integration challenges which are not typically faced by their local counterparts. It is therefore important that students coming to UWE, particularly international students, are made aware of these challenges and prepare themselves not only with on-the-job training skills but also extra qualifications that might be needed for a particular job in the UK.

For UWE, this research underlines the need for much stronger support systems to be made available to international students by the university. The most practical extension of career development programs would be to offer guidance on overcoming these employment barriers. This could be achieved through increased access to placements and internships, and by establishing an on-campus driving school that offers reduced-cost driving lessons. Support for both theory and practical tests for obtaining a driving license would also be beneficial.

These measures would not only enhance practical work experience but also address specific barriers to employment, such as driving license requirements, which can be

significant obstacles for international graduates. By providing these resources, universities can better prepare their graduates for the job market and facilitate a smoother transition into professional roles.

Additionally, fostering stronger collaborations between UWE and industry professionals within local authorities is essential. Such partnerships would help align the curriculum with real-world job market demands and develop policies that better support and accommodate international graduates.

Moreover, expanding the career and immigration services offered by UWE would benefit international students. Currently, these services may not provide the detailed guidance necessary to navigate the complexities of visa regulations and job market entry. A more comprehensive approach, offering tailored advice on immigration pathways and long-term career prospects in the UK, would better equip graduates for success. This would not only enhance employability but also ease their transition into the local workforce.

Overall, this research demonstrates that UWE students need strategic preparation for a career path in terms of paying attention to UK labour market demands. However, UWE itself may also help international graduates in this area of transition.

### **5.3 Implications for UK Local Authorities**

The study is incredibly significant for UK local authorities, especially in their recruitment policies, for the EH posts. The results indicate that international graduates do face a few challenges concerning visa restrictions, lack of UK-specific work experiences, and issues regarding cultural integration which reduce the rate at which they are employed. But this may be an indication to the UK authorities that highly qualified and competent international graduates with talent are excluded due to administrative barriers rather than inefficiency or lack of qualification.

This study indicates that local authorities need to rethink their recruitment approach. For instance, UK authorities could implement more flexible recruitment channels for international graduates. This might include supporting skilled worker visas to enable international candidates to gain the necessary work experience in the UK or providing

temporary work opportunities that would allow them to build relevant experience. Additionally, there is a need to facilitate the recognition of international qualifications and offer detailed, clear guidance on how these graduates can meet specific UK criteria. Such measures would help to minimize barriers to entry and create a more inclusive and accessible recruitment process.

Another issue that has been identified in the study, is cultural integration. Cultural integration includes knowledge about the legal requirements of the country, such as those involved in workplaces and in society in general. For example, a UK driving license, critical for many jobs in Environmental Health, is not just a practical requirement but also a sign of adjustment to the culture. It signifies that the graduate is capable of navigating both professional and personal life in the UK, including essential tasks such as commuting and inspections, which are integral to most local authority jobs.

The need for overseas graduates to acquire a UK driving licence underlines wider issues of cultural integration, since those individuals are expected to be targeted toward a different pattern of traffic, driving behaviour, and regulations. It is an important consideration for the local authorities in the UK because sometimes many otherwise qualified candidates might face obstacles if they do not have a UK driving license. Ensuring that international graduates would feel supported through the process, be it through orientation programs or advice on practical matters such as getting a driving license, could further enhance their retention and performance in the workforce.

#### **5.4 Policy Recommendation**

- Local authorities should liaise with immigration services to simplify and facilitate procedures around visa and work permit applications for international graduates. It may mean advocating for flexible visa policy or, alternatively, developing clear pathways to skilled labour. Better guidance on the possibilities of visa issuance and assistance in the procedure are likely to remove one of the main obstacles to recruitment.
- Local authorities and industry professionals should offer employment and sponsorship to the top three to five graduating Environmental Health students each year. This

approach would provide exceptional graduates with direct job opportunities, addressing barriers such as visa sponsorship and local experience requirements. It would also strengthen the connection between universities and industry, ensuring that academic programs are better aligned with practical job market needs. By investing in skilled graduates, this initiative would help bridge the gap between graduation and employment.

- Design comprehensive cultural integration programs that address both professional challenges and daily life needs. This should include induction covering UK-specific regulations, workplace culture, and practical details such as obtaining a UK driving license. Additionally, support mechanisms like mentorship programs and peer networks could significantly ease the transition for EH international graduates, helping them integrate more effectively into both professional and personal aspects of life in the UK.
- Educate the hiring managers on the worth of international graduates and value-added skills. This may include training on added value from diverse backgrounds for HR professionals and recruitment teams, along with how to assess foreign qualifications. Clear guidelines on assessing and recognizing international qualifications will reduce bias and bring fairness into the recruitment process.
- The CIEH could strengthen support for international Environmental Health graduates by expanding services to include assistance with dissertation completion, securing internships, and navigating employment and visa sponsorship. Additionally, introducing a policy to offer job placements and sponsorship to international graduating students each year would directly address key barriers and enhance career prospects for exceptional graduates. This approach would improve the transition from education to employment and better align with industry needs.

### **5.5 Recommendations for Future Research**

- Future research needs to be conducted on the long-term career prospects of international graduates within the UK Environmental Health industry, such as career progression, stability of jobs, and overall job satisfaction over a considerable period. Regular evaluation of existing integration strategies is crucial to understanding their effectiveness and identifying areas for future modification.

- Future research on understanding the differences in challenges and opportunities related to the employment of international graduates in different regions of the UK would involve conditions of the labour market, local regulations, and practices regarding cultural integration which may vary significantly among different regions as these factors thus play a significant role in the experiences of international graduates.
- A comparative study on both local and international graduates on job outcomes in different regions in the United Kingdom.
- Research on changes in immigration and visa policies that have impacted, or will impact, the employment and recruitment of international graduates. This would involve analysing recent policy adjustments, primarily a reform, and their repercussions on hiring practices among local authorities.

## **5.6 Conclusion**

A complex pattern of challenges and opportunities within the UK local authority sector is revealed for international Environmental Health graduates by this study. While international graduates have a good knowledge base and bring a few diverse views, a few challenges hinder their employment prospects. Key issues include the restrictive visa and immigration rules that are in place, which form a high entry barrier to skilled candidates. These findings reflect a greater number of concerns in the study about highly restrictive visa policies that prevent international talent from integrating into the workforce.

Also, language proficiency remains a critical requirement for effective communication and high-level efficiency on the job. The study indicated that proficiency in English language is more of a basic qualification, while multilingual skills give an added advantage in serving the diverse communities. This finding corroborates recent research underlining the increasing importance of linguistic diversity in professional practice. The research also brings to the fore the need for more effective strategies for integrating culture, with international graduates finding it particularly difficult to get accustomed to UK-specific practices and regulations. This may be compounded by less relevant practical experience and cultural understanding, indicating once again the importance placed on local authorities to implement support systems for more seamless transitions and effective integration processes for international hires.

These barriers need a multilateral approach for them to be prevented or mitigated. The local authorities should enhance their recruitment strategies, solve, and simplify the visa application process, as well as give full support to cultural adjustment. In this way, the full potential of the international graduates can be tapped into, and valuable contributions can be made towards a diverse and skilled Environmental Health workforce. While critical attention of areas for improvement is identified in the present research, actionable insights for policy and practice are also provided to enable international graduates to contribute actively and thrive within the UK's local authority

Throughout the study, several challenges impacted the research process, including timing issues, a last-minute change in supervision, and difficulties in securing participants. Despite varied recruitment efforts, such as outreach through LinkedIn and direct emails, these obstacles led to stress and logistical difficulties, limiting the ability to gather a more extensive and representative sample. Ideally, with more time and better access to participants, the study could have produced a more comprehensive data set, enhancing the overall representation and depth of the findings. Nevertheless, the research has clarified the employment barriers faced by international Environmental Health graduates in the UK and highlighted the importance of equitable hiring practices, emphasizing the need for improved support during their transition.

## BIBLIOGRAPHY

Abramitzky, R. and Boustan, L.P., (2017) Immigration in American economic history. *Journal of Economic Literature*, 55(4), pp.1311–1345 [Accessed 4 July 2024].

Anderson, P.H., Hubbard, A. and Lawton, L., (2015) Student motivation to study abroad and their intercultural development. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 26, pp.39-52. [Accessed 4 July 2024]

Anttila, V. (2022) The barriers in the employment of international students in Vaasa. Master's thesis. University of Vaasa. Available at: <https://osuva.uwasa.fi/handle/10024/13869> [Accessed 12 Sep. 2024].

Aure, M., (2013) Highly skilled dependent migrants entering the labour market: Gender and place in skill transfer. *Geoforum*, 45, pp.275-284. <https://doi.org/10.1016/j.geoforum.2012.11.015>. [Accessed 28 June 2024] Available at: [Health and the Natural Environment Full Report.pdf \(exeter.ac.uk\)](#) [Accessed 29 June 2024].

Babayemi, J.O., Ogundiran, M.B. and Osibanjo, O., (2016) Overview of Environmental Hazards and Health Effects of Pollution in Developing Countries: A Case Study of Nigeria. *Environmental Quality Management*, 26(1), pp.51–71. [Accessed 3 July 2024].

Bamber, M. (2021) 'Enhancing employability in higher education through work-based learning: A comparative study of policy and practice', *Journal of Education and Work*, 34(1), pp. 21-35. [Accessed: 8 June 2024].

Bista, K., (2015) *Global Perspectives and Local Challenges Surrounding International Student Mobility*. Hershey, PA: IGI Global. [Accessed 12 September 2024]

Bray, I., (2024) *Watch Out for Health Hazards in Your Rental Apartment*. Nolo. Available at: <https://www.nolo.com/legal-encyclopedia/watch-out-for-health-hazards-in-your-rental-apartment.html> [Accessed 12 September 2024].

Broadley, T., Cai, Y., Firth, M., Hunt, E. & Neugebauer, J., (2022) *The SAGE handbook of graduate employability*. SAGE. Available at: [Accessed 12 September 2024].

Bryan, B. & Guccione, K., (2018) Was it worth it? A qualitative exploration into graduate perceptions of doctoral value. *Higher Education Research & Development*, 37(6), pp.1124–1140. [Accessed 12 September 2024].

Buchan, J., Ball, J., Shembavnekar, N., & Charlesworth, A. (2020) REAL Centre Workforce pressure points.

Bullivant, G. (2023) 'Force Health Protection: the role of Military Environmental Health Practitioners', *Chartered Institute of Environmental Health*, September. Available at: [Force Health Protection: the role of Military Environmental Health Practitioners - CIEH](#)

Butcher, A., Spoonley, P. and Gendall, P., (2015) United Kingdom's attitudes to Asia and Asian peoples: An exceptional case? *Political Science*, 67(1), pp.38-55. [Accessed 27 June 2024]

Chartered Institute of Environmental Health (CIEH) (2024) Environmental health workforce survey report: local authorities in England. Available at: <https://www.cieh.org/policy/campaigns/workforce-survey-england/> [Accessed: 12 September 2024].

Chartered Institute of Environmental Health (CIEH) (2024) [Qualifying as an Environmental Health Practitioner \(cieh.org\)](#) [Accessed: 10 September 2024].

Chartered Institute of Environmental Health (CIEH) (2024) *Public Health Advisory Panel*. Available at: <https://www.cieh.org/policy/advisory-panels/public-health-advisory-panel/#:~:text=To%20promote%2C%20advocate%2C%20and%20embed%20shared%20principles%20and,policy%20making%20across%20central%2C%20regional%20and%20local%20government> [Accessed: 10 September 2024].

Chartered Institute of Environmental Health (CIEH) (2024) *What we do*. Available at: <https://test2.cieh.org/about-us/what-we-do/> [Accessed: 12 September 2024].

Conservation Institute Team, (2018) *Industrial Pollution: Causes and Effects and*

*Biggest Culprits of Global Warming*. [online] Available at: [Industrial Pollution: Causes and Effects And Biggest Culprits Of Global Warming \(conservationinstitute.org\)](https://www.conservationscience.org/industrial-pollution-causes-effects-biggest-culprits-global-warming/)

[Accessed 26 August 2024].

Curaj, A., Deca, L. & Pricopie, R., (2020) *European higher education area: challenges for a new decade*. Springer Nature. Available at: [Accessed 12 September 2024].

De Lange, P., O'Connell, B.T., Tharapos, M., Beatson, N. and Oosthuizen, H. (2022) 'Accounting graduate employability: Employer perspectives on skills and attributes of international graduates', *Accounting Education*, pp. 1-29. Available at: <https://doi.org/10.1080/09639284.2022.2059383>.

Department of Health and Social Care, (2018) Annual report of the Chief Medical Officer. Health 2040 - better health within reach. Available at:

<https://www.gov.uk/government/collections/chief-medical-officer-annual-reports>

[Accessed 21 August 2020].

Dhankhar, N. and Kumar, J., (2023) *Impact of increasing pesticides and fertilizers on human health: A review*. Materials Today: Proceedings. [online] Available at: <https://doi.org/10.1016/j.matpr.2023.03.766> [Accessed 14 September 2024].

Ecochard, S. & Fotheringham, J., (2017) International students' unique challenges – why understanding international transitions to higher education matters. *Journal of Perspectives in Applied Academic Practice*, 5(2). [Accessed 12 September 2024].

Eurostat, (2019) Chemicals production and consumption statistics. Production of chemicals hazardous to the environment. EU-28, 2004-2017. [Accessed 27 June 2024].

Environment Agency, (2018) State of the Environment: Water quality. Available at: <https://www.gov.uk/government/publications/state-of-the-environment> [Accessed 3 July 2024].

Fouche', C., Beddoe, L., Bartley, A. and de Haan, I., (2014) Enduring professional dislocation: Migrant social workers' perceptions of their professional roles. British

Journal of Social Work, Advance Access published March 19, 2013. Available at: <https://doi.org/10.1093/bjsw/bct054> [Accessed 4 July 2024].

Gillies, D. (2015) 'Human Capital Theory in Education', in Peters, M. (ed.) *Encyclopaedia of Educational Philosophy and Theory*. Singapore: Springer. Available at: [https://doi.org/10.1007/978-981-287-532-7\\_254-1](https://doi.org/10.1007/978-981-287-532-7_254-1) (Accessed: 12 September 2024) [Accessed: 12 July 2024]

Givens, T.E., Navarre, R. and Mohanty, P. (2020) *Immigration in the 21st century: the comparative politics of immigration policy*. Routledge. Available at: <https://www.routledge.com> [Accessed: 16 September 2024].

GOV.UK (2020) *The UK's points-based immigration system: an introduction for employers*. Available at: <https://www.gov.uk/government/publications/uk-points-based-immigration-system-employer-information/the-uks-points-based-immigration-system-an-introduction-for-employers> [Accessed: 12 September 2024].

GOV.UK, (2023) *Changes to student visa route will reduce net migration*. [online] GOV.UK. Available at: <https://www.gov.uk> [Accessed 6 July 2024].

Guth, J. & Hervey, T., (2018) Threats to internationalised legal education in the twenty-first century UK. *The Law Teacher*, 52(3), pp.350–370. [Accessed 12 September 2024].

Higher Education Student Statistics: UK, (2019/20) - Student numbers and characteristics. Available at: <https://www.hesa.ac.uk/news/27-01-2021/sb258-higher-education-student-statistics/numbers> [Accessed: 5 June 2024].

Ho, E., (2015) The changing face of Asian peoples in New Zealand. *New Zealand Population Review*, 41(95), pp.95-118. [Accessed 30 June 2024].

Hosking, L. (2024) 'Environmental health professionals: a vital armoury in protecting public and worker health', *Chartered Institute of Environmental Health*, 29 February.

Howe, J., Charlesworth, S. and Brennan, D., (2019) Migration pathways for frontline care workers in Australia and New Zealand: Front doors, side doors, back doors, and

trapdoors. *University of New South Wales Law Journal*, 42(1), pp.211-241. [Accessed 24 June 2024]

Huang, R. & Turner, R., (2018) International experience, universities support and graduate employability – perceptions of Chinese international students studying in UK universities. *Journal of Education and Work*, 31(2), pp.175–189. [Accessed 12 September 2024].

Ibrahim, S. F. (2015) *Culture shock and stress among international students*. GRIN Verlag. Available at: [Culture shock and stress among international students - GRIN | Grin](#) [Accessed 1 July 2024].

Juusola, P.M., (2021) *Bridging Cultural Barriers: How to Overcome Preconceptions in Cross-Cultural Relationships*. Springer [Accessed 3 July 2024].

Kanavis, C., Sardi, C. and Zapanti, G.T. (2022) ‘Environmental Communication and Health Promotion’, in Leal Filho, W., Azul, A.M., Doni, F. and Salvia, A.L. (eds) *Handbook of Sustainability Science in the Future*. Cham: Springer. Available at: [https://doi.org/10.1007/978-3-030-68074-9\\_22-1](https://doi.org/10.1007/978-3-030-68074-9_22-1).

Kostenko, W., Harris, M., & Zhao, X. (2012). Occupational transition and country-of-origin effects in the early-stage occupational assimilation of immigrants: Some evidence from Australia. *Applied Economics*, 44(31), 4019–4035.

Kuppens, A. and Ceuleers, E., (2021) Multilingualism and Multiculturalism: Challenges and Opportunities in Today’s Society. *Journal of Multilingual and Multicultural Development*, 42(1), pp.1-15. [Accessed 13 September 2024].

Landrigan, P.J. and others, (2018) The Lancet commission on pollution and health. *The Lancet*, 391, pp.462-512. Available at: <https://www.thelancet.com/commissions/pollution-and-health> [Accessed 28 June 2024].

Levy, B.S., Wegman, D.H., Baron, S.L. & Sokas, R.K., (2017) *Occupational and environmental health*. Oxford University Press. [Accessed 13 September 2024].

Local Authority Enforcement Monitoring System (LAEMS) Data (2021) Food Standards Agenc., [Accessed 5 July 2024].

Lovell, R., Depledge, M. and Maxwell, S. (2018) *Health and the natural environment: A review of evidence, policy, practice, and opportunities for the future*.

Madera, J.M., Neal, J.A., & Dawson, M. (2012) 'The effect of knowing a second language and experience working with non-English speakers on job performance', *International Journal of Hospitality Management*, 31(3), pp. 849-857.

Mangrio, E. and Sjögren Forss, K. (2017) 'Refugees' experiences of healthcare in the host country: a scoping review', *BMC Health Services Research*, 17, Article number: 814. Available at: <https://doi.org/10.1186/s12913-017-2731-0> [Accessed: 12 September 2024].

Mansour, B. and Dean, J.C. (2016) 'Employability skills as perceived by employers and university faculty in the fields of human resource development (HRD) for entry level graduate jobs', *Journal of Human Resource and Sustainability Studies*, 4(1), pp. 39-49. Available at: <https://doi.org/10.4236/jhrss.2016.41005>.

Marginson, S., (2014) Including the other: Regulation of the human rights of mobile students in a nation-bound world. *Higher Education*, 63(4), pp.497-512. [Accessed 23 June 2024]

Mateo-Sagasta, J., Zadeh, S.M., Turrall, H. and Burke, J.J., (2017) *Water pollution from agriculture: a global review. Executive summary*. [online] Available at: [\[PDF\] Water pollution from agriculture: a global review. Executive summary | Semantic Scholar](#) [Accessed 14 September 2024].

Maydell, E., & Diego-Mendoza, M. S. (2014) Job-entry and on-the-job discrimination as a barrier to successful employment for immigrants in New Zealand. *Communication Journal of New Zealand*, 14(1), 5-34.

Migration Observatory (2020) *Brexit and International Students in the UK*. Available at: <https://migrationobservatory.ox.ac.uk/resources/commentaries/brexit-and-international-students-in-the-uk/> [Accessed: 12 June 2024].

Mihut, G., Altbach, P.G. & De Wit, H., (2017) *Understanding higher education internationalization: insights from key global publications*. Springer. Available at: [Accessed 12 September 2024].

Molinsky, A. and Hahn, M. (2024) 'Building cross-cultural relationships in a global workplace', *Harvard Business Review*, 29 February. Available at: <https://hbr.org/2024/02/building-cross-cultural-relationships-in-a-global-workplace> [Accessed: 12 September 2024].

Morrice, L. (2020) Abyssal lines and cartographies of exclusion in migration and education: towards a reimagining. In *Decolonising Lifelong Learning in the Age of Transnational Migration* (pp. 20-33). Routledge.

Morris, A. (2024) 'PSW Visa: Post Study for Graduates'. Available at: <https://www.davidsonmorris.com/psw-visa/> [Accessed: 12 September 2024].

Nguyen, T. and Hartz, D. (2020) *International students in Australia, employability, and cultural competence*. Available at: [462840\\_1\\_En\\_Print.indd \(oopen.org\)](#) [Accessed 27 June 2024]

OECD (2020) *Education at a Glance 2020*. Available at: <https://www.oecd.org/education/education-at-a-glance/> [Accessed: 12 June 2024].

OECD, (2014) OECD environmental outlook to 2050: the consequences of inaction. Chapter 6: health and environment. Paris: Organisation for Economic Co-operation and Development. Available at: [https://dx.doi.org/10.1787/env\\_outlook-2012-9-en](https://dx.doi.org/10.1787/env_outlook-2012-9-en) [Accessed 28 June 2024].

Pham, T., Bao, D., Saito, E. and Chowdhury, R., (2018) Employability of international students: Strategies to enhance their experience on work-integrated learning (WIL) programs. *Journal of Teaching and Learning for Graduate Employability*, 9(1), pp.62-83 (informit.org) [Accessed 2 July 2024]

Pouratashi, M. and Zamani, A. (2019) 'University and graduates' employability: Academics' views regarding university activities (the case of Iran)', *Higher Education*,

*Skills, and Work-Based Learning*, 9(3), pp. 290-304. Available at:  
<https://doi.org/10.1108/HESWBL-12-2017-0103> [Accessed 11 September 2024].

Prospects Early Careers Survey. (2021) Jobs, apprenticeships, and postgraduate study. [online] Available at:  
[https://graduatemarkettrends.cdn.prismic.io/graduatemarkettrends/7e528f0e-5f54-45bc-8a94-c55a014fb396\\_early-careers-survey-2021-jobs-apprenticeships-and-postgraduate-study.pdf](https://graduatemarkettrends.cdn.prismic.io/graduatemarkettrends/7e528f0e-5f54-45bc-8a94-c55a014fb396_early-careers-survey-2021-jobs-apprenticeships-and-postgraduate-study.pdf) [Accessed 28 June 2024].

Public Health England, (2017) Health matters: Obesity and the food environment. [online] London: Public Health England. Available at:  
<https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment--2> [Accessed 5 July 2024].

Public Health England, (2018) Health matters: air pollution. Guidance. London: PHE. Available at: <https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution> [Accessed 29 June 2024].

Public Health England, (2019) News story: Public Health England publishes air pollution evidence review. [online] Available at:  
<https://www.gov.uk/government/news/public-health-england-publishes-air-pollution-evidence-review> [Accessed 3 July 2024].

Ranniger, G., (2022) *What is environmental health? Examining a massive influence on our health: the environment*. [online] Available at: [What environmental health problems affect our health? - EHN](#) [Accessed 14 September 2024].

Rodrigues, M. A., Silva, M. V., Errett, N. A., Davis, G., Lynch, Z., Dhesi, S., ... & Ross, K. E. (2021) How can Environmental Health Practitioners contribute to ensure population safety and health during the COVID-19 pandemic? *Safety Science*, 136, 105136.

Salas-Velasco, M. (2021) 'Mapping the (mis)match of university degrees in the graduate labour market', *Journal for Labour Market Research*, 55, p. 14. Available at: <https://doi.org/10.1186/s12651-021-00297-x>.

Shaheen, N., (2012) International students at UK universities: Critical thinking-related challenges to academic writing. [Accessed 13 Sept. 2024].

Sharma, A.K., Sharma, M., Sharma, A.K., Sharma, M., and Sharma, M., (2023) Mapping the impact of environmental pollutants on human health and environment: A systematic review and meta-analysis. *Journal of Geochemical Exploration*, 255, p.107325. Available at: <https://doi.org/10.1016/j.gexplo.2023.107325> [Accessed 14 September 2024].

Shneikat, B., Cobanoglu, C. & Tanova, C., (2021) *Global perspectives on recruiting international students: challenges and opportunities*. Emerald Group Publishing. [Accessed 12 September 2024].

Small, L., McPhail, R. and Shaw, A. (2022) 'Graduate employability: The higher education landscape in Australia', *Higher Education Research & Development*, 41(3), pp. 919-933. Available at: <https://doi.org/10.1080/07294360.2021.1877623>.

Sumption, M. (2019) 'The impact of international students in the UK: Challenges and opportunities', Migration Observatory Briefing. (Accessed: 7 June 2024).

Times Higher Education (THE), (2021) University of the West of England. [online] Available at: <https://www.timeshighereducation.com> [Accessed 4 July 2024].

Tran, L.T. & Gomes, C., (2016) International student connectedness and identity: transnational perspectives. Springer. [Accessed 12 September 2024].

University of the West of England (UWE) Bristol, (2018) *UWE history timeline – UWE Bristol: History*. [online] Available at: <https://www1.uwe.ac.uk> [Accessed 6 March 2018].

University of the West of England (UWE) Bristol, (2022) *Student and Staff number*. [online] Available at: <https://www.uwe.ac.uk> [Accessed 25 December 2022].

UUKI (2019) *International graduate outcomes 2019: what do international graduates do? Medium-term destinations and career outcomes of EU and Non-EU graduates from UK Universities*. Available at:

[https://www.universitiesuk.ac.uk/International/Documents/international\\_graduate\\_outcomes.pdf](https://www.universitiesuk.ac.uk/International/Documents/international_graduate_outcomes.pdf) [Accessed: 5 June 2024].

UUKI (2020) *The scale of UK higher education transnational education 2018-19*. Available at: <https://www.universitiesuk.ac.uk/universities-uk-international/insights-and-publications/uuki-insights/scale-uk-transnational-education> [Accessed: 7 June 2024].

Vardoulakis, S., Dear, K. & Wilkinson, P., (2016) Challenges and opportunities for urban environmental health and sustainability: the HEALTHY-POLIS initiative. *Environmental Health*, 15(S1), pp.1-3. Available at: <https://doi.org/10.1186/s12940-016-0096-1> [Accessed 13 Sept. 2024].

Villa, A., Owens, R., O'Higgins, N. and Hewitt, A., (2016) *Internships, Employability, and the Search for Decent Work Experience*. Edward Elgar Publishing.

Wang, M., et al., (2019) Association between long-term exposure to ambient air pollution and change in quantitatively assessed emphysema and lung function. *JAMA*, 322(6), pp.546-556. [Accessed 28 June 2024]

Waste Management Network (2021) 'Responsibility of UK Local Authorities in Waste Management'. Available at: <https://www.wastemanagementnetworks.co.uk/responsibility-of-uk-local-authorities-in-waste-management/> [Accessed: 12 September 2024].

White, M.P., Alcock, I., Grellier, J., Wheeler, B.W., White, M., Evans, D., & Depledge, M.H., (2019) Spending at least 120 minutes a week in nature is associated with good health and wellbeing. *Scientific Reports*, 9, 7730. Available at: [Accessed 2 July 2024].

Wikipedia (2024) *Chartered Institute of Environmental Health*. Available at: [https://en.wikipedia.org/wiki/Chartered\\_Institute\\_of\\_Environmental\\_Health](https://en.wikipedia.org/wiki/Chartered_Institute_of_Environmental_Health) [Accessed: 12 September 2024].

Wilczewski, M. and Alon, I. (2023) 'Language and communication in international students' adaptation: a bibliometric and content analysis review', *Higher Education*, 85(6), pp. 1235-1256.

Winterton, J. and Turner, J.J. (2019) 'Preparing graduates for work readiness: An overview and agenda', *Education + Training*, 61(5), pp. 536-551. Available at: <https://doi.org/10.1108/ET-03-2019-0044> [Accessed: 10 September 2024].

Woolf, K., Rich, A., Viney, R., Needleman, S. & Griffin, A., (2016) Perceived causes of differential attainment in UK postgraduate medical training: a national qualitative study. *BMJ Open*, 6(11), e013429. Available at: [Accessed 12 September 2024].

World Health Organization (WHO), (2017) Guidelines for drinking water quality. Chemical fact sheet. Geneva: World Health Organization. Available at: [https://www.who.int/water\\_sanitation\\_health/waterquality/guidelines/chemicals/nitrate/nitrite/en/](https://www.who.int/water_sanitation_health/waterquality/guidelines/chemicals/nitrate/nitrite/en/) [Accessed 29 June 2024].

World Health Organization (WHO), (2018) '9 out of 10 people worldwide breathe polluted air, but more countries are taking action', *Saudi Medical Journal*, 39(6), pp. 641–643. Available at: <https://www.who.int/news-room/detail/02-05-2018-9-out-of-10-people-worldwide-breathe-polluted-air-but-more-countries-are-taking-action> [Accessed: 6 June 2024].

World Health Organization (WHO), (2019) Guidelines for drinking water quality. Chemical fact sheet. Geneva: World Health Organization. Available at: [https://www.who.int/water\\_sanitation\\_health/waterquality/guidelines/chemicals/nitrate/nitrite/en/](https://www.who.int/water_sanitation_health/waterquality/guidelines/chemicals/nitrate/nitrite/en/) [Accessed 29 June 2024].

Zaman, K. & Mohsin, A., (2014) Internationalization of universities: emerging trends, challenges, and opportunities. *Journal of Economic Info*, 1(1), pp.1–9. Available at: [Accessed 13 September 2024].

Zenner, A., (2020) *Communication skills for international students*. Cognella Academic Publishing. Available at: [Accessed 12 September 2024]

## APPENDICES

### Appendices 1: Low Risk Ethic Approval Letter

Faculty of Health & Applied Sciences

Department of Health and Social Sciences

Frenchay Campus

Coldharbour Lane

Bristol BS16 0QY

04/09/2024

RE: MSc Environmental Health

Title of Project: Navigating Employment Barriers: The work crisis of International

Environmental Health graduates from UWE in the United Kingdom Local Authority Sector

Dear Kunbi,

Thank you for submitting your ethics application. As your project was considered to be low risk, your application has been reviewed, by myself, as your supervisor, and has been granted ethical approval to proceed.

Please note that any information sheets and consent forms must include the UWE logo. Further guidance is available on the UWE website at:

<http://www1.uwe.ac.uk/aboutus/departmentsandservices/professionalservices/marketingandcommunications/resources.aspx>

The following conditions apply to all research given ethical approval by UWE:

You must notify your supervisor if you wish to make significant amendments to the original application: these include changes to the study protocol which have an ethical dimension.

You must notify your supervisor if there are any serious events or developments in the research that have an ethical dimension.

The University is required to monitor and audit the ethical conduct of research conducted by academic staff, students, and researchers. Your project may therefore be selected for audit by the University Research Ethics Committee.

Best wishes


A handwritten signature in black ink, appearing to read 'Abbi Hilton', with a long horizontal flourish underneath.

Abbi Hilton

Dissertation Module (UZVRTM-45-M)

## GENERAL RISK ASSESSMENT FORM

### Appendix 2: Risk Assessment

<p><b>Describe the activity being assessed: A Systematic Study of the Environmental Health Impact of Plastic Waste Conversion Processes</b></p>  <p><a href="#">This Photo</a> by Unknown Author is licensed under <a href="#">CC BY-ND</a></p>	<p><b>Assessed by:</b> Abbi Hilton</p>	<p><b>Endorse d by:</b>  Abbi Hilton Jo Forbes-Cooper</p>
<p><b>Who might be harmed: International Student Graduates (Questionnaire Participants), LAs (interviewees), the researcher.</b></p> <p><b>How many exposed to risk:</b> <span style="border: 1px solid black; padding: 2px 10px;">29</span></p>	<p><b>Date of Assessment :</b> 03/07/2024</p>	<p><b>Review date(s):</b></p>

Hazards Identified (state the potential harm)	Existing Control Measures	S	L	Risk Level	Additional Controls
Graduates: i. Privacy and Confidentiality: Personal data being disclosed. ii. Emotional Distress: Potential discomfort when discussing employment challenges.	Strict adherence to ethical guidelines	2	2	4	i. Regular ethical review. ii. Ensure anonymity by not using identifiable information. iii. Use secure, encrypted communication platforms. iv. Provide clear information about the study and their right to withdraw. v. Include contact information for support services if participants experience distress.

<p>LAs:</p> <p>i. Confidentiality: Risk of sensitive organizational information being disclosed.</p> <p>ii. Professional Repercussions: Potential impact on professional reputation if views are misrepresented.</p>	<p>Strict adherence to ethical guidelines</p>	2	2	4	<p>i. Assure confidentiality and responses.</p> <p>ii. Obtain informed consent interview's purpose and use.</p> <p>iii. Record and store data securely on encrypted devices.</p> <p>iv. Allow participants to review their interview transcripts.</p>
<p>Researcher:</p> <p>i. Data Security: Risk of data breaches.</p> <p>ii. Emotional and Physical Strain: Managing data collection and analysis workload, Screen time.</p>	<p>Strict adherence to ethical guidelines</p>	2	2	4	<p>i. Use encrypted storage for data. Follow data protection regulations and best practices.</p> <p>ii. Establish a balanced schedule for workload and seek support from advisors.</p> <p>iii. Ensure secure and ethical handling of participant information.</p> <p>iv. Use of screen protector and regular breaks in between work.</p>

**RISK MATRIX: (To generate the risk level).**

Very likely 5	5	10	15	20	25
Likely 4	4	8	12	16	20
Possible 3	3	6	9	12	15
Unlikely 2	2	4	6	8	10
Extremely unlikely 1	1	2	3	4	5

1					
Likelihood (L) ↑ Severity (S)	Minor injury – No first aid treatment required <b>1</b>	Minor injury – Requires First Aid Treatment <b>2</b>	Injury - requires GP treatment or Hospital attendance <b>3</b>	Major Injury <b>4</b>	Fatality <b>5</b>

**ACTION LEVEL:** (To identify what action needs to be taken).

POINTS:	RISK LEVEL:	ACTION:
1 – 2	NEGLIGIBLE	No further action is necessary.
3 – 5	TOLERABLE	Where possible, reduce the risk further
6 - 12	MODERATE	Additional control measures are required
15 – 16	HIGH	Immediate action is necessary
20 - 25	INTOLERABLE	Stop the activity/ do not start the activity

### Appendix 3: Low risk High risk

UNIVERSITY OF THE WEST OF ENGLAND, BRISTOL

Department of Health & Social Sciences

### CHECKLIST FOR HIGH/LOW RISK RESEARCH

Please read through the following sections and indicate your response in the appropriate column.

Answering “Yes” to any question may necessitate the need for further consideration in that area and it may indicate that the research should be regarded as high risk and should therefore undergo the appropriate ethical review processes. Please seek advice from your supervisor should you require any clarification or visit the Faculty Research Ethics site at

<http://www1.uwe.ac.uk/hls/research/researchethicsandgovernance.aspx>

Does the proposed research fall into any of the following categories?		
	YES	NO
<ul style="list-style-type: none"> <li>Research involving potentially vulnerable groups – e.g. children and young people, people with a learning disability or cognitive impairment or people in a dependent or unequal relationship.</li> </ul>		No
<ul style="list-style-type: none"> <li>Research involving people who lack decision making capacity. All research that involves people who lack capacity or who, during the research project, come to lack capacity, must be approved by an “appropriate body” operating under the Mental Capacity Act, 2005.</li> </ul>		No
<ul style="list-style-type: none"> <li>Research involving human body parts, human tissues and/or human cells that come under the remit of the Human Tissue Act. <a href="http://www.hta.gov.uk/legislationpoliciesandcodesofpractice/legislation/humantissueact.cfm">http://www.hta.gov.uk/legislationpoliciesandcodesofpractice/legislation/humantissueact.cfm</a></li> </ul>		No
<ul style="list-style-type: none"> <li>Research using administrative data not in the public domain or secure data. Researchers or research centres using these data sets will need to be approved by the body supplying the data and keep data in secure areas (according to an agreed data management plan).</li> </ul>		No
<ul style="list-style-type: none"> <li>Research involving deception or which is conducted without participants’ full and informed consent at the time the study is carried out.</li> </ul>		No
<ul style="list-style-type: none"> <li>Research involving access to records of personal or sensitive confidential information, including genetic or other biological information concerning identifiable individuals.</li> </ul>		No
<ul style="list-style-type: none"> <li>Research which would or might induce psychological stress, anxiety or humiliation, or cause more than minimal pain or distress to either participants or researchers.</li> </ul>		No

<ul style="list-style-type: none"> <li>Research involving intrusive interventions or data collection methods, e.g. the administration of substances, vigorous physical exercise or techniques such as hypnotism. In particular, this is where participants are persuaded to reveal information they would not otherwise disclose in the course of their everyday lives or within public forums.</li> </ul>		No
<ul style="list-style-type: none"> <li>Research undertaken outside the UK, where there may be issues of local practice and political sensitivities.</li> </ul>		No
<ul style="list-style-type: none"> <li>Research involving respondents through social media <b>and</b> where sensitive issues are discussed (see guidelines on FREC website).</li> </ul>		No
<ul style="list-style-type: none"> <li>Research involving visual/vocal methods, where participants or other individuals may be identifiable in the visual images used or generated.</li> </ul>		No
<ul style="list-style-type: none"> <li>Research which may involve data sharing of confidential information beyond the initial consent given, e.g. where the research topic or data gathering involve a risk of information being disclosed that would require researchers to breach confidentiality conditions agreed with participants.</li> </ul>		No

#### **Appendix 4: EH SURVEY LETTER**

Dear EH Alumni,

I hope this letter finds you well. My name is Olukunbi Benedicta Fidel-Imoisili and I am currently pursuing my master's degree in environmental health at the University of the West of England (UWE). As part of my dissertation research, I am examining the employment barriers faced by international graduates of environmental health from UWE when seeking employment within UK local authorities.

The study, titled "Navigating Employment Barriers: The Work Crisis of International Environmental Health Graduates from UWE in the UK Local Authority Sector," aims to identify the specific challenges and barriers encountered by international graduates and to explore potential solutions to improve their employment prospects.

As a valued UWE alum with a degree in environmental health, your insights and experiences are crucial to this research. I am kindly requesting your participation in a brief survey designed to gather data on your job search experiences, challenges faced, and any barriers encountered during the application process with UK local authorities.

Your participation will involve completing an online survey, which should take no more than 5-10 minutes of your time. The information collected will be used solely for academic purposes and will be kept strictly confidential. Your personal identity will not be disclosed in any reports or publications resulting from this research.

To participate in the survey, please click on the following link:

[https://uwe.eu.qualtrics.com/jfe/form/SV\\_dnHhKUSbQ35q9ro](https://uwe.eu.qualtrics.com/jfe/form/SV_dnHhKUSbQ35q9ro)

Your feedback will provide invaluable insights into the employment barriers faced by international environmental health graduates and will contribute to developing strategies to support future graduates in their career journeys.

Thank you in advance for your time and contribution to this important research.

Should you have any questions or require further information, please feel free to contact me at [Olukunbi2.Fidel-Imoisili@live@uwe.ac.uk](mailto:Olukunbi2.Fidel-Imoisili@live@uwe.ac.uk) or my supervisor at [Abbi.Hilton@uwe.ac.uk](mailto:Abbi.Hilton@uwe.ac.uk).

Sincerely,

Kunbi

## **Appendix 5: LOCAL AUTHORITY LETTER**

Dear Local Authority,

I hope this letter finds you well. My name is Olukunbi Benedicta Fidel-Imoisili and I am currently pursuing my master's degree in environmental health at the University of the West of England (UWE). As part of my dissertation research, I am investigating the employment barriers faced by international graduates of environmental health from UWE when seeking employment within UK local authorities.

The study, titled "Navigating Employment Barriers: The Work Crisis of International Environmental Health Graduates from UWE in the UK Local Authority Sector," aims to identify the specific challenges and barriers encountered by international graduates and to explore potential solutions to improve their employment prospects.

Your local authority's role as a key employer in the environmental health sector makes your insights and experiences invaluable to this research. I am writing to request your participation in a brief interview to discuss the challenges and barriers your organization faces in employing international graduates of environmental health from UWE.

The interview will focus on various aspects of the recruitment process, including the recognition of international qualifications, visa and work authorization issues, and any other obstacles that may impact the hiring of international graduates. The information collected will be used solely for academic purposes and will be kept strictly confidential. The identity of your organization will not be disclosed in any reports or publications resulting from this research.

I would appreciate the opportunity to speak with you at your earliest convenience. The interview can be conducted via a virtual meeting platform, depending on your preference. Please let me know a suitable time and date for the interview, or feel free to contact me directly at [Olukunbi2.Fidel-Imoisili@live.uwe.ac.uk](mailto:Olukunbi2.Fidel-Imoisili@live.uwe.ac.uk) to arrange the details.

Your participation will provide crucial insights into the employment barriers faced by international environmental health graduates and will contribute to developing strategies to support both employers and graduates in overcoming these challenges.

Thank you in advance for your time and contribution to this important research. Should you have any questions or require further information, please do not hesitate to contact me or my supervisor at [Abbi.Hilton@uwe.ac.uk](mailto:Abbi.Hilton@uwe.ac.uk).

Sincerely,

Olukunbi Benedicta Fidel-Imoisili

## **Appendix 6: Information Sheet**

I am conducting a Research at the University of the West of England (UWE) on the employment barriers faced by international graduates of environmental health from UWE when seeking employment within UK Local Authorities.

The study, titled "Navigating Employment Barriers: The Work Crisis of International Environmental Health Graduates from UWE in the UK Local Authority Sector," aims to identify the specific challenges and barriers encountered by international graduates and to explore potential solutions to improve their employment prospects.

As a valued UWE alum with a degree in environmental health, your insights and experiences are crucial to this research. I am kindly requesting your participation in a brief survey designed to gather data on your job search experiences, challenges faced, and any barriers encountered during the application process with UK local authorities.

Your participation will involve completing an online survey, which should take no more than 5-10 minutes of your time. The information collected will be used solely for

academic purposes and will be kept strictly confidential. Your personal identity will not be disclosed in any reports or publications resulting from this research and you reserve the right to withdraw at any point whilst filling this survey before submission, no questions asked.

For further questions, kindly contact the principal researcher, Olukunbi Benedicta Fidel-Imoisili at [Olukunbi2.Fidel-Imoisili@live.uwe.ac.uk](mailto:Olukunbi2.Fidel-Imoisili@live.uwe.ac.uk) or my supervisor, Abbi at [Abbi.Hilton@uwe.ac.uk](mailto:Abbi.Hilton@uwe.ac.uk).

Thank you.

## **Appendix 7: Consent Form**

By agreeing to participate, you confirm the following:

- I have read and understood the information in the participant information sheet.
- I have read and understood the data protection privacy notice that has been given to me.
- I have been allowed to ask questions about the study.
- I have had my questions answered satisfactorily by the research team.
- I agree that anonymized quotes may be used in the final report of this study.
- I understand that my participation is voluntary and that I am free to withdraw at any time until the data has been anonymized, without giving a reason.

By clicking "Agree," I confirm that I agree to take part voluntarily in this anonymous survey and agree that the survey results may be used for this research purpose.

- ☐ Agree
- ☐ Disagree

## **Appendix 8: SURVEY QUESTIONS**

### **SURVEY QUESTIONS FOR UWE INTERNATIONAL ENVIRONMENTAL HEALTH GRADUATES**

#### **Demographic Information:**

1. What is your nationality?
2. In which year did you graduate from UWE with a degree in Environmental Health?
3. What is your current employment status?
4. If employed, what is your current job title and sector?

#### **Job Search Experience:**

5. How long did it take you to find a job in the Environmental Health field after graduating from UWE?  
Less than 3 months  
3-6 months  
6-12 months  
More than a year  
Still looking
6. How many job applications did you submit to local authorities in the UK?  
0-5  
6-10  
11-20  
More than 20

#### **Challenges and Barriers:**

7. What were the main challenges you faced when applying for Environmental Health positions with local authorities? (Select all that apply)  
Lack of work experience  
Visa restrictions  
Recognition of qualifications

Competition with local graduates

Limited job openings

Driving experience or license requirements

Other (please specify)

8. Did you face any difficulties related to visa requirements or work permits in your job search?

Yes

No

9. To what extent do you believe that being an international student affected your job search in the Environmental Health field?

Not at all

Slightly

Moderately

Significantly

Extremely

**Driving Experience and Licence:**

10. Do you possess a valid UK driving licence?

Yes

No

11. If you do not have a UK driving licence, do you hold a valid driving licence from another country?

Yes

No

12. How important do you think having a UK driving licence is for securing a job in the Environmental Health field with local authorities?

Not important

Slightly important

Moderately important

Very important

Extremely important

13. Have you encountered job requirements specifying the need for a UK driving licence during your job search?

Yes, frequently

Yes, occasionally

Rarely

Never

**Experiences with Local Authorities:**

14. Did you receive feedback from local authorities regarding your job applications? If so, was the feedback generally:

Positive

Neutral

Negative

15. How supportive were local authorities in providing information and resources for job applications and interviews?

Very supportive

Somewhat supportive

Neutral

Somewhat unsupportive

Not supportive at all

**Skills and Qualifications:**

16. Do you feel that your degree from UWE adequately prepared you for a career in Environmental Health in the UK?

Strongly agree

Agree

Neutral

Disagree

Strongly disagree

17. What additional skills or qualifications do you think would have improved your job prospects with UK local authorities?

**Personal Experiences and Suggestions:**

18. Can you describe any specific experiences or challenges you faced during your job search in the Environmental Health field?

19. What suggestions would you offer to UWE or local authorities to help improve the employment prospects of future international graduates in Environmental Health?

20. Is there anything else you would like to share about your job search experience as an international Environmental Health graduate from UWE?

**Appendix 9: LOCAL AUTHORITY INTERVIEW QUESTIONS**

1. What are the primary qualifications and skills you look for during recruitment into environmental health roles?

2. What is your general perception of international Environmental Health graduates compared to local graduates?

3. Have you previously employed international graduates in the field of Environmental Health? If yes, please detail any experiences with their performance and integration into your team?

4. How do you assess and verify international graduates' qualifications, and what difficulties do you encounter in the process?

5. How do you describe the impact of visa and immigration regulations on your hiring decisions about international graduates?

6. In your hiring process, what is the importance of language proficiency, and which specific languages are you looking to hire for?

7. How do you evaluate the cultural integration of international graduates within your organization?
8. What is the range of professional development opportunities and training, if any, for new employees, especially those who are international graduates?
9. What type of support does the organization provide to help international graduates integrate into the UK workforce and be successful?
10. What are some of the main challenges you face when recruiting international graduates for environmental health?
11. What are some changes or recommendations that you would like to implement to make the hiring process easier and more effective for international graduates?
12. How does your organization approach the need for diversity and inclusion, and how do international graduates fit into this strategy?