NORTH AMERICAN UNIVERSITY

Sustainability & Responsibility

of Higher Education

May 10 - 12

WWW.NA.EDU

Conference Organizing Committee

Faruk Taban, Ph.D. *President of NAU; Committee Chair*
Serif Ali Tekalan, *Vice President for International Affairs, NAU; Committee Member*

Conference Organizing Sub-committees

Conference Communications and International Delegations
Ali Kucuk, *Continuing Education Coordinator, NAU; Committee Chair*
Kerime Sari, *Certifications Coordinator, Education Department, NAU; Committee Member*

Abstract and Paper Review Committee
Faruk Taban, Ph.D., *President of NAU; Committee Chair*
Selahattin Bekmez, Ph.D., *Chair, Department of Business Administration, NAU; Committee Member*
Karman Kurban, **Ph.D**., *Chair, Department of Education, NAU; Committee Member*
Ihsan Said, Ph.D., *Chair, Department of Computer Science, NAU; Committee Member*

Conference Proceedings Committee
Shweta Shroff, *Library Director, NAU; Committee Chair*
Faruk Taban, Ph.D., *President of NAU; Committee Member*

Conference Logistics
Ramazan Unalan, *Director, Residential Operations & Facilities Management, NAU*

Conference Banquet
Ali Kucuk, *Continuing Education Coordinator, NAU*

Marketing and Media
Abdulhalim Yusuf, *University Marketing, Communications and Relations (UMCR), NAU*

Sponsorships
Faruk Taban, Ph.D., *President of NAU; Committee Chair*
Teta Banks, Ph.D., *Director, Office of University Advancement and Development, NAU; Committee Member*

Sustainability and Responsibility of Higher Education

**Conference Proceedings of
North American University's 4th Annual International Conference (AIC)**

May 10-12, 2024

Editors
Shweta Shroff
Faruk Taban

North American University
11929 W Airport Blvd, Stafford, Texas 77477
info@na.edu | www.na.edu
2024

License

This work is licensed under Attribution-NonCommercial-ShareAlike 4.0 International. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-sa/4.0/

CONTENTS

North American University: Where the World Comes Together

Founded in 2010, North American University (NAU) is one of the newest universities located in Stafford, Texas, near the diverse metropolitan city of Houston which is full of opportunities. NAU is an international institution of higher learning committed to providing a nurturing environment for the systematic pursuit of academic excellence, professional and personal development, responsible citizenship, and global cultural competency. NAU is a private, non-profit, accredited, full-service college offering baccalaureate degree programs in four disciplines with several concentrations: Interdisciplinary Studies in Education, Computer Science, Business Administration, and Criminal Justice. NAU also offers six master's degree programs: M.Ed. in educational leadership, an M.Ed. in Curriculum and Instruction, M.Ed. in School Counseling (2), an MBA and an M.S. in Computer Science. NAU offers a student-centered learning environment where every student is valued and provided with opportunities to grow. NAU has an international staff and student body, representing over 60 countries. It currently has collaboration agreements with several universities globally.

FORWARD

Dear Participants and Contributors,

Welcome to North American University's 4th Annual International Conference in Houston, Texas.

This year's theme, "Sustainability and Responsibility of Higher Education," highlights the evolving role of education globally. Over the three days, scholars, educators, researchers, and policymakers will have an opportunity to exchange ideas, share best practices, and foster collaboration to advance higher education.

The program features keynote presentations, panel discussions, research papers, and workshops covering diverse topics. We are honored to have distinguished experts as keynote speakers, offering valuable insights into global education challenges and opportunities. Additionally, the conference provides ample networking opportunities to build connections and collaborations.

We thank our organizing committee, sponsors, and partners for their dedication. Your participation and engagement are vital to the success of this event.

We look forward to seeing you at the 5th NAU Annual International Conference in Houston.

Sincerely,

Faruk Taban, Ph.D.
President, North American University

OPENING REMARKS

Dear Guest,

Please feel most welcome to the 4th International Conference hosted by the North American University. It will surely be a great honor for us to have you on this occasion. I take this opportunity to thank in general all the participants present here on behalf of our university.

The Conference theme was "The Future of Higher Education in the Online Environment" back in 2021. In 2022, it was the "Internationalization of Higher Education" that became one of our scrutinized targets, and in 2023, our attention was attracted by "Global Challenges and Opportunities in Higher Education." This year, the meeting is called "Sustainability & Responsibility in Higher Education" in order to illustrate our readiness to build a future of harmony and changes for the sake of common benefits.

In the sustainability and responsibility section, we will be key in our discussion, especially since we are exchanging ideas and plans among the participants coming from all over. What we want at the end of this seminar is each participant going back with useful ideas to be implemented in his institution and country.

We also look forward to sharing the knowledge, experience, and advice in these areas to increase our understanding of how higher education can adapt and use the latest scientific methodologies and approaches to optimize them. Human-centered, these are efforts geared to maximize benefits to humanity while minimizing negative impacts, i.e., ensuring accessibility to all.

We take this moment to even appreciate the increase in the number of participating institutions each year and do hope this is the beginning of other similar events in your institutions.

While your stay will be brief, some of the experiences one can expect range from a trip to NASA in Houston to a gala dinner with an honored table in which you have the opportunity to meet some of the most respected people in Houston.

I once again welcome you with hope and faith in the reinvigorated ties that will inform our collaboration.

Thank you,

Prof. Dr. Serif Ali Tekalan
VP for International Affairs
North American University

From Barriers to Bridges: Cultivating Gender Diversity in STEM Fields

Ester Hasmeta
Student, Department of Computer Science, North American University, USA
ehasmeta1@na.edu

Aimaral Khaumyetbyek
Student, Department of Computer Science, North American University, USA
akhaumyetbyek@na.edu

Selahattin Bekmez, Ph.D.
Chair, Department of Business Administration, North American University, USA
sbekmez@na.edu

Abstract

It is well known fact that women face an underrepresentation in STEM fields due several factors such as lack of role models, un-conscious bias, socio-cultural factors, education systems, etc. In addition to these factors the 'imposter syndrome' also plays considerable role in this under-representation. This paper analyzes the gender gap in STEM fields and explores the influence of gender biases and stereotyping, particularly in early education and media, on women's career aspirations and opportunities in STEM. The goal of this effort is to provide guidance on how to improve diversity and close the gender gap in STEM fields. By using the recent data from reliable sources including Engineering UK, National Center for Science and Engineering Statistics and Stanford University, our analysis highlights the ongoing obstacles that women face in STEM fields. Based on data we focused, our paper discusses some policy suggestions need to be implemented by the officials to narrowing down the gender gap.

Keywords: STEM fields, Gender Gap, Women Inclusivity, Imposter Syndrome

Introduction

Females at a young age face an underrepresentation of women in STEM (Science, Technology, Engineering, and Mathematics) fields. We can notice that seeing as how the early ages of development even cartoons and anime mostly feature male protagonists, brings a mismatch between their image and the real opportunities STEM has to offer. In the STEM field, the underrepresentation of women in these professions is referred to as the gender gap. The gender gap, as stated to the National Girls Collaborative Project (NGCP), is a phenomenon where women are outnumbered by men to seek and engage in jobs in STEM disciplines. This problem is more than just a difference in numbers; it is a broader set of obstacles that prevent women from pursuing and succeeding in STEM – related fields.

Moreover, prejudices in educational and professional settings – both conscious and unconscious – contribute to the gender gap. Such biases can manifest in hiring processes,

workplace dynamics, and cultural norms, which makes it difficult for women to work or advance in these careers. Understanding these biases and making a commitment to removing the systemic barriers stopping women from participating fully in STEM fields are essential to closing the gender gap.

The goal of this paper is to identify workable strategies for closing the gender gap in STEM while considering both small and big biases that may impact women. By looking at different aspects of this problem and remaining up to date with the newest information, we plan to give practical insights that contribute to making STEM more inclusive for women as well as creating effective policy suggestions that can be implemented in this area.

Lack of role model and encouragement for women

Having role models in STEM fields is important for women, as they inspire, guide, and break down barriers, motivating us to succeed in careers traditionally led by males. A key problem that comes up in the study of the gender gap in STEM is the lack of female mentors and role models. A lack of recognizable women in STEM and early exposure to underrepresented media portrayals can have a negative impact on young girls' aspirations. This absence not only influences career aspirations but also undermines the confidence of desiring women, contributing to the broader challenge of gender imbalance in STEM careers. Marie Curie, a two-time Nobel winner, and Annie Easley, who overcame racial and gender barriers at NASA, represent the determination of women in STEM, paving the way for future generations and inspiring female professionals to break barriers in science and technology.

However, a report by Engineering UK concluded in 2021 exposes a concerning lack of awareness about engineering roles among 73% of 11–14-year-olds, 69% of parents, and 42% of teachers are uninformed about the roles and responsibilities of engineers (Engineering Brand Monitor, 2021). Statistics provided by Engineering UK highlight a problematic issue in the perception and knowledge surrounding engineering professions. All these demographics mentioned suggest a widespread gap in understanding what engineers do. This gap is concerning since it can directly affect women who are choosing to pursue STEM careers, specifically in engineering. One of the most important things we can understand from these finding is that there is a shortage of individuals entering STEM fields. The lack of awareness among young students, parents, and educators, can contribute to limited students choosing STEM careers. If individuals are now aware of the nature and possibilities within engineering professions, it becomes less likely for them to consider pursuing such paths.

Based on the report mentioned above, a higher percentage of girls (68%) than boys believe that there are more challenges to success in engineering. A number of demographic groups, such as people of color, those from wealthier socioeconomic situations, and people whose parents work in STEM professions, share this belief. This common belief illustrates a problematic aspect of the idea that engineering careers are less open or appropriate for women.

Another reason that affects the lack of encouragement for the females is the previous generation's gender gap since their parents have seen a greater representation of males in STEM fields and stereotypes related to that, they find it more difficult to encourage the girls from an

early age towards these kinds of careers. In countries where even the older generations are more opinionated on kids' choices, a career in a STEM related field is even seen as impossible for women to choose unless it is a career in Education or Medicine.

Finding mentors and role models is difficult due to the low percentage of women in engineering, who, according to a paper by Engineering UK, only make around 16.5% of roles in the UK. Thus, discouraging the females to pursue interests in science, technology, engineering, and mathematics. Addressing this lack of representation, a survey conducted in March 2023 in India by the famous brand OLAY from P&G found that 81% of young women gave up their STEM pursuits due to the absence of mentors and role models, bringing out the important role of such figures in shaping their career choices. So, what does this percentage mean? This high percentage (81%) specifies a significant negative impact. Lack of guidance and inspiration from role models appears to be a major factor contributing to the dropout rates among women in STEM. Additionally, 88% of participants from the same survey believe that the presence of someone who achieved a lot in their workplace would strongly motivate them to rejoin STEM careers.

Furthermore, diving deeper into the survey we noticed that the majority (91%) express that having a female role model plays an important part in sustaining interest in STEM professions. These figures demonstrate how important mentoring is and how significant role models are in helping women pursue careers in STEM (Borkar, 2023).

The research questions we are focusing on will be as follows:

(i) What influences women's underrepresentation in STEM fields?
(ii) How do gender biases impact women in STEM education and careers?
(iii) What strategies can increase gender diversity in STEM fields?

Unconscious/Conscious Gender Bias and Imposter Syndrome

Unconscious bias arises from our subconscious mind, automatically influenced by our past experiences, circumstances and culture, while conscious bias is the deliberate action. Because of this, certain groups of people benefit while other groups of people are penalized. Most of the time both unconscious and conscious biases are towards the minority group. U.S National Science Foundation has published a report using data from Census Bureau's Current Population Survey in 2022.

The STEM field is getting bigger and bigger and has shown a 20% increase in the last ten years. Women in STEM from 2011 to 2021 were increased from 9.4 million to 12.3 million in the USA, which was a great result. Despite these increases women barely made one-third of employees in STEM (*NSF - National Science Foundation*, 2023).

STEM professionals are crucial to the modern world's rapid development. Regretfully, not all engineers, medical scientists, sociologists, and information security analysts are seeing growth in their fields, despite the fact that the number of women in STEM fields is increasing. Since 1970, women have had a great increase in social science which is the only one above 50%

but this field is only 3% of STEM. Women have a steady increase only in life and physical science fields that are almost going to hit 50% of all life and physical workers. The STEM workforce's 80% is computer and engineering, but women in computer science only represent a quarter of computer workers (Martinez & Christnacht, 2021).

Between 1990 and 2021, there is a steady decrease of the women workforce. When it comes to engineering women workers only made 15% of engineering workers. Lastly, in field mathematics women have grown till 2010, but after this year it also seems to have decreased. Most important part of STEM jobs women are still vastly underrepresented, in the areas where there is a gender pay gap and higher math requirements. Is this because of the salary or is it because they are unqualified?

Figure 1: Percentage of Women in STEM Jobs: 1970 - 2021
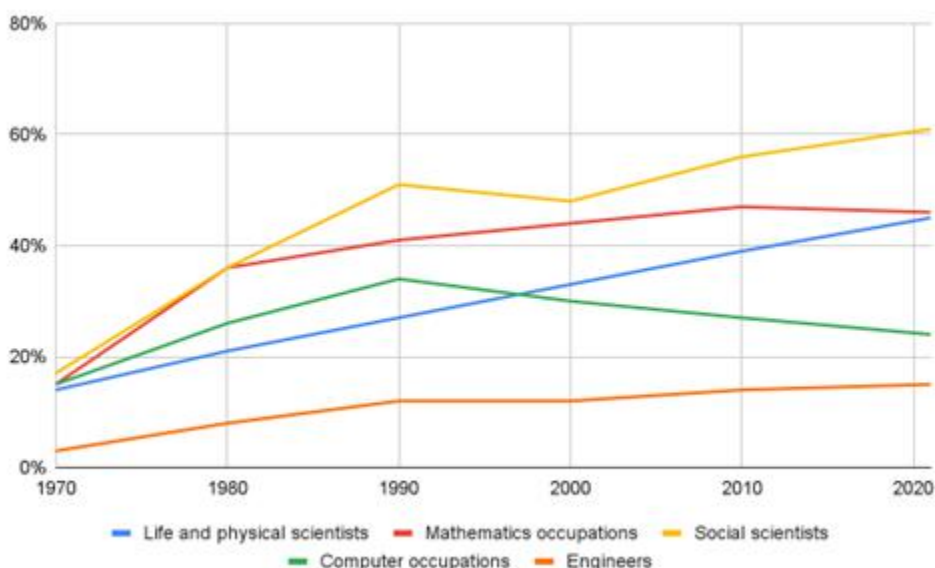
Data Source: U.S Census Bureau (2019); *U.S. Department of Labor* (2021)

Regrettably, there can still be issues with gender bias even when a woman is found to be the most qualified applicant for a position and the hiring process is started (Barrios et al., 2022). The entry level of the salary for a man is $4000 higher than a woman who has the exact same ability and potential (Binns, 2021). "The Enduring Grip of the Gender Pay Gap" by Kochhar, (2023) published in the Pew Research Center concluded that, for the past two decades the gender wage gap remained relatively stable. Women who are working in the US earn 82 cents for every dollar earned by men. Gender bias is evident even when looking at the financial side.

Figure 2: Median Annual Earning for Field of bachelor's degree by Sex: 2022
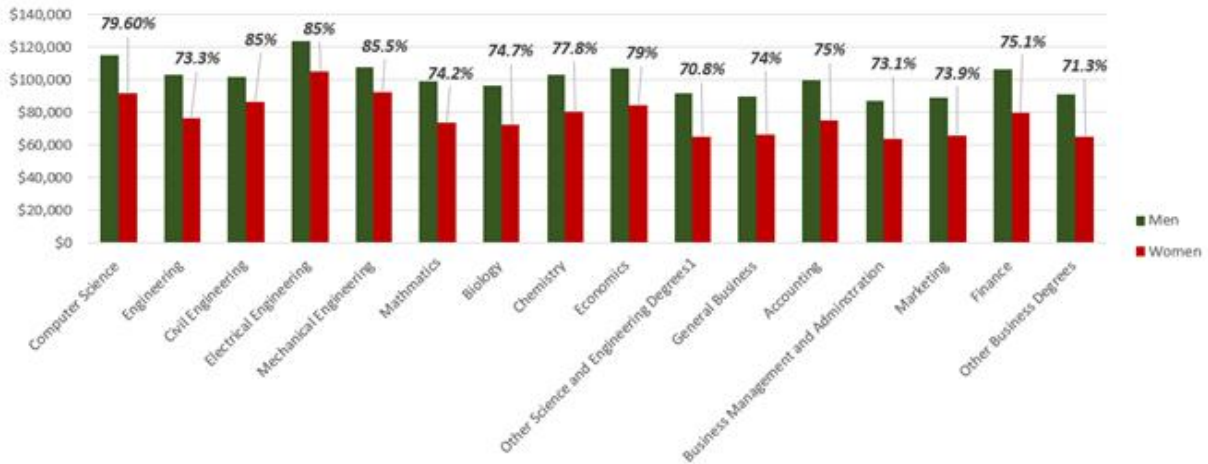
Data Source: U.S. Census Bureau (2022; American Community Service Tables 1_FOD (2023)

Men in computer science earn a median annual salary of $115,500, while women working in the same field earn around 79.6% of men's wage of around $91,990. This imbalance can be also noticed in other engineering fields as well, like electrical, and mechanical engineering where women earn respectively 85.0%, and 85.5% of men's wage. The stem fields with the narrowest gender gap seem to be engineering fields with women earning $92,380 or $105,200. The overall data show a trend on gender pay gap that regardless of the field, women's earnings are consistently lower than that of men. Unfortunately, there are fields of study where women's earnings are around 30% less than of the opposite gender, while the narrowest pay gap is 14.5%

Women made less money than males did, even with the same degrees and grade point averages, according to a National Science Foundation survey of 559 engineering and computer science graduates who had graduated and begun working. The researchers found that their lack of confidence is the root of the female wage gap (Sterling et al., 2020).

Figure 3: Percentile Plot Comparing Engineering Self-efficacy by Gender
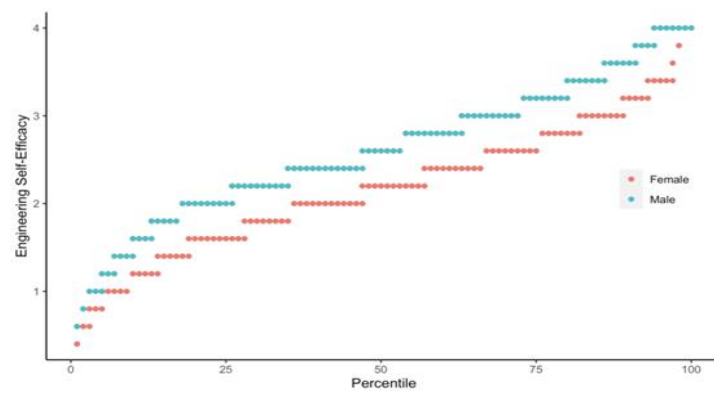
Source: Sterling et. al. (2020)

The study also found that women experience lower levels of confidence when working on projects, creating products, etc. In actuality, they were just as skilled as the male candidates. According to the Society for Industrial and Applied Mathematics, females' confidence in math and scientific classes in high school falls even when they take the same number of credits as boys and receive marginally better marks (*GlobeNewswire*, 2020).

The self-efficacy graph, or Figure 3, clearly demonstrates the disparity between male and female confidence levels in engineering, which can contribute to the prevalence of imposter syndrome among women in STEM fields. This phenomenon, where individuals doubt their accomplishments and fear being exposed as a 'fraud', can be particularly damaging.

A number of social, cultural, and organizational factors contribute to the widespread presence of this psychological pattern among women in STEM fields. The fact that women have a disadvantage in STEM fields is a major factor in imposter syndrome among these individuals. The lack may increase emotions of loneliness and a sense of not belonging, creating an environment that is favorable to imposter syndrome.

Imposter syndrome was first recognized in an important study conducted in 1978 by psychologists. The study focused on high-achieving women who were unable to accept their success and instead blamed it on outside factors like luck. The basis for understanding how impostor syndrome appears in women working in professional settings, particularly STEM fields, was established by this seminal study (Clance & Imes, 1978).

Imposter syndrome is also greatly influenced by cultural and societal conventions. The myth that women are less suited for STEM fields is frequently reinforced by societal assumptions about what occupations are appropriate for different genders. Because of this social pressure, women may begin to mistrust their own abilities and accomplishments, attributing their successes to chance or other causes rather than their own effort and expertise.

The data discussed above partially prove the existence of imposter syndrome in STEM fields as well. Thus, this topic needs to be analyzed in detail in future studies with sufficient data available.

Policy Suggestions to Achieve Equality

Since the gender differences in STEM fields continue to be an important obstacle to equality and creativity, this study suggests a variety of approaches to promote and assist women's involvement and accomplishment in these key fields. From overcoming prejudices and *"imposter syndrome"* to closing the gender wage gap, these examples pave the way for a deeper examination of how such strategies can address the difficulties faced by women in STEM fields. We offer up the opportunity for an in-depth discussion on putting into practice practical tactics to empower women in STEM disciplines by showcasing the possibilities of these projects.

To address the recognized problem of the lack of role models for women in STEM, we suggest starting a podcast channel that will be accessible on YouTube, Spotify, and other social media platforms. This podcast seeks to offer psychological support – such as stay-at-home

mothers- who are feeling discouraged or women who are not allowed to study by their families. In particular, our strategy involves bringing in successful women who have achieved success in STEM, including modern-day icons like Katalin Karikó – a biochemist and researcher, best known for her contributions to COVID – 19 vaccines and mRNA technology - and Mira Murati – the chief of technology officer at OpenAI the startup behind ChatGPT - to share their knowledge, engage in Q&A sessions with people present and provide useful advice for overcoming the particular difficulties that women in STEM fields face.

Recognizing the complex connections between underrepresentation, social stereotypes, and a variety of workplace cultures is essential to addressing imposter syndrome among women in STEM. It is necessary to support initiatives like mentorship programs, diversity and inclusion campaigns, and honoring women's accomplishments in STEM fields. It is vital to create an environment where women can achieve success without feeling like failures are beneath them in order for the STEM disciplines to realize their full potential.

It is evident from the informative data of Figure 3 on female students' self-efficacy in engineering, that developing a growth mindset at a young age is necessary. Our initiative suggests yearly fundraising activities aimed at helping senior high school girls who have a strong interest in STEM subjects but do not have the needed parental or financial support. The goal of this project is to offer scholarships that will not only lessen the financial burden of attending college but also give these young ladies a strong message of support and recognition. We believe in a more creative and varied future for the STEM industry by providing funding and directing it towards these students' educational pursuits. Additionally, we help these students to overcome socioeconomic barriers and reach their full potential in their chosen fields.

Looking at Figure 2, which displays the median yearly wages by sex in a variety of STEM professions, it is evident that women consistently face a salary disadvantage. A concise solution might be to create compensation structures that are transparent and to regularly examine salaries in order to guarantee equity. Closing this gap could be improved further by giving women an opportunity for negotiation and by supporting legislation that supports them. Furthermore, by developing projects to help women in STEM rise into higher-paying positions, the data's inequities might be directly addressed.

Additionally, to further support women's confidence and combat imposter syndrome in STEM, we propose the creation of a comprehensive website. We suggest building an extensive website to support women in STEM fields and help them overcome feelings of lack. Providing a range of professional development possibilities, including specialized workshops, intense bootcamps, and training sessions dedicated to women in STEM professions, this digital platform would act as a one-stop resource center. Acknowledging the psychological obstacles encountered by women, the website would additionally provide them with psychological assistance offerings, such as counseling and mentorship initiatives, with the objective of strengthening their self-esteem and feeling of acceptance in their specialized areas. The entire approach aims to give women in STEM fields the resources and encouragement they require to succeed both personally and professionally.

Concluding Remarks

This study aims to provide an in-depth analysis of the continuous gender gap in STEM areas, showing the complicated web of systemic obstacles that limit women's advancement and full participation. We determined the main causes of the gap by a thorough analysis of the body of research, which included deep cultural stereotypes, biases in schooling, and an absence of female role models in these fields. Our research showed how these obstacles have a major influence on young girls' interest in and confidence in pursuing STEM jobs. This impact is made even worse by a lack of choices for women to get support and mentorship in these fields.

We looked at efficient methods for removing these obstacles, showcasing various case studies and ongoing projects. These include the creation of mentorship programs that link ambitious women in STEM with experienced professionals, efforts to raise the profile of female role models in STEM, and educational changes that apply gender-neutral methods. We also discussed how digital platforms might serve as easily available tools and networks of support for women in STEM fields. We recommended the development of a specific website and podcast series to serve as a source of inspiration and guidance for upcoming generations.

We also talked about legal ideas that try to create a STEM workforce that is more diverse and equal. This involves encouraging open hiring procedures, putting requirements for diversity into place, and creating welcoming work environments that support the promotion and retention of women in STEM fields.

In summary, closing the gender gap in STEM fields needs a coordinated effort from every aspect of society and is not a permanent challenge. We can develop a STEM environment that is more inventive, diverse, and inclusive by putting the ideas presented in this paper into practice. Women gain from this, but it also enhances the sector as a whole and advances science and technology. It takes determination, creativity, and constant commitment to change to achieve gender equality in STEM fields. All our actions today will determine the diversity and success of the STEM workforce of tomorrow, ensuring that women have equal opportunities to contribute to and thrive in these important fields.

References

Barrios, Nayeli Stopani, et al. "The challenge of gender bias: experiences of women pursuing careers in STEM." *University of Nevada, Reno*, 8 April 2022, https://www.unr.edu/nevada-today/blogs/2022/the-challenge-of-gender-bias-in-pursuing-stem-careers. Accessed 22 February 2024.

Binns, Corey. "What's Behind the Pay Gap in STEM Jobs?" *Stanford Graduate School of Business*, 19 February 2021, https://www.gsb.stanford.edu/insights/whats-behind-pay-gap-stem-jobs. Accessed 19 February 2024.

"Boys are More Confident than Girls When it Comes to Math, Survey Shows." *GlobeNewswire*, 6 April 2020, https://www.globenewswire.com/news-release/2020/04/06/2012204/0/en/Boys-are-More-Confident-than-Girls-When-it-Comes-to-Math-Survey-Shows.htmlAccessed 19 February 2024.

Bureau, U. C. (2023, October 16). *2022 American Community Survey detailed field of degree and Median Annual Earnings Table package*. Census.gov. https://www.census.gov/data/tables/2022/demo/educational-attainment/acs-detailed-tables.html

Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice, 15*(3), 241–247. https://doi.org/10.1037/h0086006

Census Bureau, "Current Population Survey (CPS)." https://www.census.gov/programs-surveys/cps.html. Accessed 20 February 2024.

Current state of stem. Current State of STEM | National Girls Collaborative Project. (n.d.). https://ngcproject.org/statistics

"Diversity and STEM: Women, Minorities, and Persons with Disabilities 2023." *Diversity and STEM: Women, Minorities, and Persons with Disabilities 2023 | NSF - National Science Foundation*, 30 January 2023, https://ncses.nsf.gov/pubs/nsf23315/report/the-stem-workforce#:~:text=Compared%20with%20women%2C%20men%20make,(figure%202%2D3). Accessed 19 February 2024.

D.Sterling, Adina, et al. "The confidence gap predicts the gender pay gap among STEM graduates." *PNAS*, 16 November 2020, https://www.pnas.org/doi/full/10.1073/pnas.2010269117. Accessed 23 February 2024.

Engineeringuk. EngineeringUK. 2021, https://www.engineeringuk.com/media/318108/euk2708-parents-report-fv.pdf Accessed 23 January 2024.

Kochhar, Rakesh. "The Gender Wage Gap Endures in the U.S." *Pew Research Center*, 1 March 2023, https://www.pewresearch.org/social-trends/2023/03/01/the-enduring-grip-of-the-gender-pay-gap/. Accessed 19 February 2024.

Martinez, Anthony, and Cheridan Christnacht. "Women Making Gains in STEM Occupations but Still Underrepresented." *Census Bureau*, 26 January 2021, https://www.census.gov/library/stories/2021/01/women-making-gains-in-stem-occupations-but-still-underrepresented.html. Accessed 23 February 2024.

Neha Borkar / SPOTLIGHT / Oct 20, 2023. (2023). *#stemthegap: Know about olay India's impactful efforts to increase female representation in stem - times of India*. The Times of India. https://timesofindia.indiatimes.com/spotlight/stemthegap-know-about-olay-indias-impactful-efforts-to-increase-female-representation-in-stem/articleshow/104587679.cms#:~:text=In%20March%202023%2C%20Olay%20India, models%20capable%20of%20inspiring%20success.

"The Gender Gap in STEM: Still Gaping in 2023." *MIT Professional Education*, https://professionalprograms.mit.edu/blog/leadership/the-gender-gap-in-stem/. Accessed 21 February 2024.

"Women In STEM Statistics: Progress and Challenges." *Stem Women*, 30 August 2023, https://www.stemwomen.com/women-in-stem-statistics-progress-and-challenges. Accessed 22 February 2024.

U.S. Department of Labor "Percentage of women workers in science, technology, engineering, and math (STEM).", https://www.dol.gov/agencies/wb/data/occupations-stemAccessed 23 February 2024.

Brief Biography of Authors

Ester Hasmeta is a Department of Computer Science student and a member of the ACM-Women Club at North American University, Texas, USA.

Aimaral Khaumyetbyek is a Department of Computer Science student and a member of the ACM-Women Club at North American University, Texas, USA.

Dr. Selahattin Bekmez received his Baccalaureate degree in Public Finance from Ankara University in 1992, his master's degree in economics from Louisiana State University in 1996 and his Ph.D. degree in 2001. He also worked as a Postdoctoral researcher at the University of Idaho for three years after receiving his Ph.D. He has more than 25 years of teaching, research, and department, college, and university-wide service experience in different state/private universities in different countries. Prior to North American University, he taught economics at Mugla University, Gaziantep University, Izmir University of Economics in Turkey; Union College, Cleveland State University, and Stevens Institute of Technology in the USA; and worked as researcher in Fondazione Eni Enrico Mattei in Venice-Italy between 2006 and 2007 as well as serving in various university-wide/nation-wide committees and administrative positions. Dr. Bekmez involved in various projects and grants, and published several books and many articles in peer reviewed journals. He is also a recipient of Distinguished Research Award from Allied Academies in Las Vegas in 2003. He was writing a column for national newspapers and

attending the TV programs as commentator in Turkey. His research interests are Game Theory, General Equilibrium Modelling, Energy economics and Housing Markets. Currently, he is serving as Business Administration Department Chair at North American University.

Rising Workforce Demands in Allied Health Amid Baby Boomer Influence: Sustainable Higher Education Meeting the Challenge

Zakir Hossain, MD, MPH, MBA
Former Faculty, University of Texas MDACC, USA
Consultant, Educator & Research Professional
zakhos86@gmail.com

Abstract

The aging population, particularly the Baby Boomer generation, has significantly increased the demand for healthcare services due to chronic diseases, thereby amplifying the need for a robust workforce in allied health professions. This paper examines the escalating demands on the allied health sector attributed to the demographic shift and explores the pivotal role of sustainable higher education in addressing these challenges. Sustainable higher education models, encompassing innovative curriculum designs, interdisciplinary collaborations, and technology integration, emerge as pivotal strategies to meet the evolving demands of the allied health sector (e.g., Nursing, Respiratory therapy, Physical therapy, etc.). By fostering adaptable professionals equipped with the requisite skills and knowledge, sustainable higher education endeavors not only mitigate the workforce shortages, but also contribute to enhancing the quality and accessibility of healthcare services for aging populations. This paper underscores the imperative for educational institutions, policymakers, and stakeholders to prioritize investments and reforms in higher education (Bridge program, Certification program) to ensure the long-term sustainability of the allied health workforce in meeting the needs of an aging society.

Keywords: Workforce, Allied Health, Baby boomers, Chronic disease, Sustainable education, Nursing, Bridge program, Certification program, Education & Training

Introduction

The demographic landscape across the globe is undergoing a profound transformation, characterized by a significant increase in the proportion of elderly individuals, particularly attributed to the aging Baby Boomer generation. This demographic shift has substantial implications for healthcare systems worldwide, as it correlates with a surge in the prevalence of chronic diseases and a subsequent rise in the demand for healthcare services. Allied health professions, including Nursing, Respiratory Therapy, Physical Therapy, and others, play a critical role in meeting these evolving healthcare needs. However, the escalating demands on the allied health sector necessitate a proactive response to ensure the availability of a competent and well-prepared workforce. In this context, sustainable higher education emerges as a fundamental mechanism to address the challenges posed by the aging population and mitigate workforce shortages in allied health professions (Gorman, 2019).

Escalating Demands on Allied Health Sector

Demographic Shift and Chronic Disease Burden

Aging Population: The Baby Boomer generation, born between 1946 and 1964, constitutes a massive portion of the population in many countries. As this cohort ages, the demand for healthcare services rises, driven by the increasing prevalence of chronic conditions associated with aging.

Population Projections: Quantitative analysis of population projections provides valuable insights into the magnitude of the demographic shift and its implications for the healthcare workforce. For example, according to the United Nations Department of Economic and Social Affairs, the global population aged 65 and over is expected to more than double by 2050, from 703 million in 2019 to 1.5 billion in 2050. United Nations, Department of Economic and Social Affairs, Population Division (2019).

The aging population, particularly the Baby Boomer generation, has led to a notable increase in the prevalence of chronic diseases such as cardiovascular disorders, diabetes, and respiratory ailments. As individuals age, they become more susceptible to chronic conditions, resulting in a higher demand for healthcare services [i.e., nursing]. This demographic shift has exerted significant pressure on the allied health sector, necessitating a larger workforce with specialized skills to cater to the diverse healthcare needs of aging populations (World Health Organization).

Workforce Shortages and Quality of Care

The escalating demands on the allied health sector have exacerbated existing workforce shortages, compromising the quality and accessibility of healthcare services. Shortages of qualified professionals in key allied health disciplines pose challenges in meeting patient care demands, leading to increased workloads, burnout among healthcare workers, and compromised patient outcomes. Addressing these shortages and enhancing the capabilities of the allied health workforce are imperative to ensure the delivery of high-quality and patient-centered care to aging populations (Institute of Medicine).

Occupational Growth Rates: Analyzing occupational growth rates in allied health professions offers insights into the specific areas experiencing the highest demand. Data from the Bureau of Labor Statistics (BLS) in the United States, for instance, indicate that employment in healthcare occupations is projected to grow 15 percent from 2019 to 2029, much faster than the average for all occupations. Within allied health, occupations such as registered nurses, physical therapists, and respiratory therapists are expected to see particularly high demand.

Regional Disparities: Quantitative analysis can also reveal regional disparities in workforce demand within allied health professions. For example, rural areas often face shortages of healthcare professionals compared to urban areas, leading to challenges in providing equitable access to healthcare services. (Bureau of Labor Statistics, 2022).

Role of Sustainable Higher Education

Innovative Curriculum Designs

Sustainable higher education models prioritize the development of innovative curriculum designs tailored to address the specific needs of aging populations. These curricula incorporate geriatric care principles, disease management strategies, and patient-centered approaches to equip allied health professionals with the necessary competencies to effectively address the healthcare needs of elderly individuals. By integrating real-world experiences, simulations, and interprofessional education opportunities, these curricular innovations enhance the practical skills and critical thinking abilities of students, preparing them for the complexities of modern healthcare practice (Hooker, 2017).

Graduation Rates: Quantitative analysis of graduation rates from allied health education programs provides insights into the supply of new professionals entering the workforce. By tracking graduation rates over time, policymakers and educational institutions can assess the capacity of the educational pipeline to meet the growing demand for allied health professionals.

Licensure Pass Rates: Analyzing licensure pass rates among graduates of allied health programs offers insights into the quality of education and preparedness of new professionals for practice. Higher pass rates may indicate effective educational programs that adequately prepare students for licensure examinations and subsequent employment (Health Resources and Services Administration, 2021).

Interdisciplinary collaboration

Collaboration across disciplines is essential for delivering comprehensive and coordinated care to aging populations. Sustainable higher education & training promote interdisciplinary collaborations among allied health professions, as well as with other healthcare disciplines and community stakeholders. By fostering teamwork, communication, and mutual respect, these collaborations enhance the effectiveness of healthcare delivery and promote holistic approaches to patient care. Interprofessional education initiatives, such as joint training programs and interdisciplinary clinical rotations, provide students with valuable opportunities to learn from and collaborate with peers from diverse backgrounds, preparing them for collaborative practice in interprofessional healthcare teams.

Technology Integration

Technology plays a pivotal role in enhancing the efficiency, effectiveness, and accessibility of healthcare services for aging populations. Sustainable higher education endeavors emphasize the integration of technology into allied health curricula to prepare professionals for the digital healthcare landscape. Telehealth, remote monitoring devices, electronic health records, and other technological innovations offer opportunities to extend healthcare services beyond traditional care settings and facilitate patient engagement and self-management. By incorporating training in health informatics, telemedicine, and digital health technologies, sustainable higher education programs equip allied health professionals with the

skills and competencies needed to leverage technology for improving patient outcomes and enhancing the delivery of care to aging populations.

Mitigating Workforce Shortages

Based on demographic trends, workforce demand projections, and educational pipeline analysis, researchers can forecast future shortages of allied health professionals. These projections provide valuable insights for policymakers, educational institutions, and healthcare organizations to develop strategies to address workforce shortages and ensure the delivery of quality healthcare services.

Policy Recommendations

Quantitative analysis can inform evidence-based policy recommendations aimed at addressing workforce shortages and enhancing the sustainability of the allied health workforce. These recommendations may include increasing funding for allied health education programs, expanding scholarship opportunities for students, incentivizing practice in underserved areas, and promoting interdisciplinary collaboration in healthcare delivery. It is imperative for university policymakers to embrace and implement allied health programs in response to these escalating demands.

Bridge Programs.

Sustainable higher education initiatives offer bridge programs to address workforce shortages by facilitating the transition of individuals from other fields into allied health professions. Bridge programs provide accelerated pathways for career changers and individuals with relevant experience to acquire the necessary qualifications and credentials for allied health careers (U.S. Department of Health and Human Services).

Certification Programs.

Certification programs offer opportunities for existing healthcare workers to upskill and specialize in high-demand areas within allied health disciplines. By expanding access to education and training opportunities, these programs enhance the diversity and capacity of the allied health workforce, thereby mitigating shortages and improving the overall quality of healthcare services for aging populations (National Academies of Sciences).

Conclusion

The aging population poses significant challenges to the allied health sector, necessitating a proactive and multifaceted approach to address workforce shortages and meet the evolving healthcare needs of elderly individuals. Sustainable higher education models, encompassing innovative curriculum designs, interdisciplinary collaborations, and technology integration, emerge as pivotal strategies to prepare a competent and resilient allied health workforce capable of delivering high-quality and patient-centered care to aging populations. By prioritizing investments and reforms in higher education, including bridge programs and certification programs, educational institutions, policymakers, and stakeholders can ensure the long-term sustainability of the allied health workforce and enhance the quality and accessibility of

healthcare services for aging societies. The quantitative analysis serves as a cornerstone in comprehending the escalating demand for allied health professionals and its ramifications on healthcare systems globally. By examining demographic trends, workforce projections, and educational pipeline data, researchers can identify areas of need and develop targeted strategies to address workforce shortages and adopt allied health professionals' programs in higher education. Given these escalating demands, it is crucial for university policymakers to wholeheartedly adopt and implement allied health programs.

References

Bureau of Labor Statistics. (2022). Occupational Outlook Handbook: Healthcare Occupations. https://www.bls.gov/ooh/healthcare/home.htm

Gorman, T. (2019). Higher Education's Role in Responding to Demographic Change. American Council on Education.

Health Resources and Services Administration. (2021). The U.S. Nursing Workforce: Trends in Supply and Education. https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/Nursing-Fact-Sheet.pdf

Hooker, R. S., & Cipher, D. J. (2017). Allied Health Workforce Development: Needs and Opportunities in a Changing Health Care Environment. Health Affairs.

Institute of Medicine (US) Committee on Quality of Health Care in America. (2001). Crossing the Quality Chasm: A New Health System for the 21st Century. Washington (DC): National Academies Press (US).

National Center for Health Workforce Analysis. (2017). Supply and Demand Projections of the Nursing Workforce: 2014-2030.

National Academies of Sciences, Engineering, and Medicine. (2016). Assessing Progress on the Institute of Medicine Report. The Future of Nursing. Washington, DC: The National Academies Press.

United Nations Department of Economic and Social Affairs. (2019). World Population Ageing 2019

U.S. Department of Health and Human Services, Health Resources and Services Administration. (2020). National Center for Health Workforce Analysis.

World Health Organization. (2015). World Report on Ageing and Health. Geneva: WHO Press.

Brief Biography of the Author

Dr. Zakir Hossain boasts over twenty years of extensive experience in the field of Medicine, assuming roles as a Physician, Teaching Faculty (inclusive of the University of Texas System, UTMDACC), Consultant, and Research and Development Specialist in clinical trials. His journey began with the attainment of his medical degree from Mymensingh Medical College, followed by postgraduate degrees, fellowships, training, and working experiences at renowned institutions both nationally and internationally, including Mayo Clinic in Rochester, MN, Texas Heart Institute in Houston, BCM, and McGovern Medical School at the University of Texas. Adding to his impressive credentials, Dr. Zakir holds an MBA from North American University. He serves as a distinguished speaker at Texas Medical Center and various institutions within the

USA and overseas. Alongside his professional commitments, he remains dedicated to serving the underprivileged community in the greater Houston area through his involvement in a charitable medical clinic. Beyond his philanthropic endeavors, Dr. Zakir finds joy in horse riding, a passion he pursues fervently alongside his professional endeavors.

Students' Cohesion and Voice Engagement Dynamics in Nigerian University Classrooms

Ikmat Olanrewaju Junaid, Ph.D.
Senior Research Fellow, Institute of Education, University of Ibadan, Nigeria
driojunaid@gmail.com, io.junaid.ui.edu.ng

Charles Oghenerume Onocha, Ph.D.
Professor, Institute of Education, University of Ibadan, Nigeria
onicha2013@gmail.com, co.onocha.ui.edu.ng

Abstract

Recent complaints from employers of labor about graduates of Nigerian Universities is their unemployability. Although, several studies have been carried out on factors responsible for effective teaching and learning in the classroom, it seems much have not been carried out on students' cohesion and voice engagement in Nigerian university classrooms, which calls for critical investigation, in order to ensure the achievement of predetermined educational goals at the university level. The researchers therefore, investigated students' cohesion and voice engagement dynamics in Nigerian universities' classrooms with a view to enhancing effectiveness in teaching and learning contexts in higher institutions. The study adopted a descriptive survey research design, from four public universities – two Federal and two State, and the total of 1,679 undergraduates were randomly selected. A survey that was designed and validated was used for data collection and the data collected was analyzed using Partial Least Square Structural Equation Modeling PLS-SEM. Results indicated that a significant causal relationship exists between students' cohesion and self-esteem $\beta=0.195$, $t=2.017$, $p<0.05$) and self-efficacy ($\beta=0.35$, $t=3.11=2$, $p<0.05$). Voice engagement has a causal linkage with students' self-concept ($\beta=0.54$, $t=5.85$, $p<0.05$) and self-esteem ($\beta=0.72$, $t=10.36$), $p<0.05$). Among recommendations is that teaching strategies that foster students' interaction and collaboration in forms of cohesion and voice engagement to develop holistic personality (self-efficacy, self-concept, and self-esteem) in students should be adopted by university lecturers.

Keywords: Students' cohesion, Voice engagement, Self-efficacy, Self-esteemed, Self-concept, Nigerian university classroom dynamics, Employability.

Introduction

Effective instruction is a lifelong process that fosters deep learning as it engenders reflection, development, integration and self-direction. Hardré and Kollmann (2013), posit that in order to achieve sustainable learning, the teaching-learning process at the tertiary level should have the following features: collaborative and social learning, collaborative and team-based learning, and problem solving instructional activity. Collaborative and social learning on one hand plays significant roles in students' learning and development, promotes personal and peer success while collaborative and team-based learning on the other hand deepens intellectual development, increases mutual-source, competence, feedback and stimulates meta-cognitive

awareness among others. However, problem-solving instructional activity incorporates problem-based and other related-activities. Hence, there is the need for lecturers to link teaching with learning approaches at appropriate levels of instruction (Lawal & Apanpa, 2013; Churchill, Ferguson, Godinho, Johnson, Keddie, Letts, Mackay, McGill, Moss, Nagel, Nicholson & Vick, 2017; Shamin, Muhammad, Muhammad & Seyd, 2019).

Students' cohesion dynamics

Thornton, Miller & Perry (2020), identify some aspects of classroom dynamics that a lecturer may work on in order to influence the chemistry of the group, and make it more 'bonded' as: the cohesiveness of the class, variety of interactions within the classroom and the amount of empathy group members have for one another. The cohesiveness of the class implies that groups of students, conscious of what they have in common, are brought together. Here, shared experiences, values, and objectives of the task lie in the hearts of group members. Lecturers can foster this awareness with activities that identify such commonalities, and use them to enhance learning (Brophy & Good, 2017). Variety of interactions within the classroom shows that a classroom that has a flexible approach to how its members communicate with one another is likely to have a more inclusive and participative climate, while the amount of empathy group members have for one another implies that successful group activities involve members compromise in order to support one another. The significance of this, is the notion of learner cohesion in the teaching context. Cohesion can be more specifically explained as the tendency for a group to be in unity while working towards achieving a goal or to satisfy the emotional needs as it brings out self-efficacy, self-concept and self-esteem of members of a group (Carron & Brawley, 2000).

According to Forsyth (2010), cohesion is a multifaceted process and can be broken down into four main components: social relations, task relations, perceived unity, and emotions. Forsyth further stressed that members of strongly cohesive groups are more inclined to participate readily and to stay with the group. Similarity of group members has a different influence on group's cohesiveness. In addition, a similar background makes it more likely that students share similar views on various issues, including group objectives, communication methods and the type of desired leadership (Dyaram & Kamalanabhan, 2005). In general, higher agreement among members on group rules and norms results in greater trust and less dysfunctional conflict, which in turn, strengthens both emotional and task cohesiveness in higher institutions of learning.

Students' cohesion and self-efficacy

Self-efficacy is a construct that was first introduced by Albert Bandura in 1977 through a seminal publication of "self-efficacy: towards a unifying theory of behavioral change" (Abesha, 2012). Bandura (1977) posited that behaviors are affected by the interaction between the individual and the environment, where consequences are produced (Akubuiro, 2004). Thus, self-efficacy becomes a person's individual perceptions that may perhaps change one's behavior, which, in turn, will often determine the outcome in classroom interactions. According to Bandura (1977), self-efficacy refers to a belief about a person's ability to successfully perform a behavior,

Academic self-efficacy for a student might refer to his or her perceived belief that a "high cumulative Grade Point Average (GPA) will in turn, lead to an expectancy outcome, like induction into a cohesion in the classroom due to his sustained level of effort" (Maciejewski, 2004; Chang, 2021). Self-efficacy in academics pertains to students' perceived capability to manage his/her learning behavior, to master academic materials and to fulfill academic expectations (Matsushima & Shiomi, 2003). A good sense of self-efficacy and self-esteem provides the resilience for creative individuals to persist in pursuing an objective even after being rejected many times (Pajares and Graham, 1999).

Students' cohesion and self-esteem

Another way to help university students achieve academic success is to develop positive self-esteem. Self-esteem seems to affect a student's ability to learn, work in a group and behave in the classroom environment. Self-esteem also seems to affect motivation and cohesion during classroom interactions. While not all students with low self- esteem will perform poorly academically, past studies have shown that low self-esteem can lead to less academic success (Lyons, 2012). It is imperative to research the influence of self-esteem on learning and behavior of higher institution students. Literature establishes the fact that self-esteem can affect students' abilities to make and keep friends which also can have an impact on their academic achievement. Due to behavioral problems and the natural tendencies, students compare themselves with others and those with exceptionalities may have low self-esteem from lack of success in school, sports, and friendships (Lyons, 2012).

Students' self-esteem is not constant, it changes depending on the messages received from others (Schweiger, 2008) as well as self-perceptions of oneself (Roman, Cuestas & Fenollar, 2008). Those that do compare themselves may also feel that other students think less of them due to their learning challenges which can also lead to a decrease in self-esteem. Reijntjes, Thomaes, Boelen, van der Schoot, Castro & Telch (2011) found that some students felt low self-esteem when others disapproved of them in a cohesive group. It seems to be a circular effect as low self-esteem affects learning, hence, leads to failure in academics and the perception of how others feel about one (Guerra, Williams & Sadek, 2011). Similarly, Romain, Cuestas & Fenollar (2008), found a strong link between self-esteem and deep processing, as well as effort, and came to the conclusion that high self-esteem is important in learning. In the same vein, Hootstein (2002) suggests that there is a link between self-esteem and academic self-concept while Kort-Butler and Hagewen (2010) on the contrary found that students with low self-concept and those with high self-concept performed basically the same on achievement tests.

Students' cohesion and self-concept

Self-concept is the sum total of a person's knowledge and understanding of his or herself. The influence of self-concept on students' academic performance has been considered an educationally significant variable that has long engaged the interest of educators and dominated the focus of many studies at the lower level of education (primary and secondary education) but not so at the higher education level (Coleman and Webber, 2007). This interest stems from the belief that students with high or positive self-concept tend to be higher academic achievers than those with low or negative self-concept (Kim & Lorsbach, 2005). Positive self-concept, for

instance, is valued as a goal of education and socialization and is frequently regarded as a potential facilitator of motivation and the achievement of desired outcome such as academic performance. Hence, self-concept attracts countless empirical studies in and outside Nigeria. According to Marsh, (2002), Mustapha (2008) and Brass (2008), their studies have agreed with each other's conclusion that self-concept is associated with many positive achievements and social behavior.

Students' voice engagement dynamics

Students' voice engagement in the classroom and lecturers' improved efforts, have sought to reposition university students as actors with situated knowledge that can contribute important insights to the teaching-learning process (Fielding & Moss, 2011). Besides, Mitra (2009), asserted that the term voice engagement is used to refer to those pedagogies in which students have the opportunity to influence decisions that will shape their performance and those of their mates, either in or outside of classroom settings. Whereas, Diep, Zhu, Struyven & Blieck (2016) posited that most curricula and pedagogy seek to change students in some ways: either through the accumulation of new knowledge, shifting of perspectives, or the alteration of behaviors. Hence, students' voice engagement dynamics and programme, position students as the agents of change. In this way, students' voice engagement is about agency. At its core, students' voice is the antithesis of depersonalized, standardized, and homogenized educational experiences because it begins and ends with the thoughts, feelings, visions, and actions of students themselves (Fielding, 2006). In this era of digitalization, the practice of elevating students' voice might seem counter-cultural, but given the importance of agency, autonomy, and self-regulation in students' learning, it is really rather commonsensical (Schmuck & Schmuck, 2001). Furthermore, through students' voice engagement dynamics, students are provided with opportunities to express themselves.

While trying to acknowledge the pattern of classroom dynamics in Nigerian university classrooms, taking into consideration the global best practices, in respect of university students' perspectives on their academic environments and classroom dynamics, it is imperative to integrate students' cohesion and voice engagement dynamics into the teaching learning process in Nigerian university classrooms. The dynamics of the lecture room has consequently undergone radical changes and addressing such changes requires serious consideration of these because of what both students and their lecturers stand to gain.

Recent complaints from employers of labor about graduates of Nigerian Universities is that the majority of university graduates are not employable (Okebukola, 2002). The employers claim that the graduates lack paramount skills required in the world of work, as the few considered for employment are not articulated and do not have team spirit, which suggests an obvious dwindling in the level of students' learning and at the same time query the effectiveness of lecturers handling courses at this level of education and if care is not taken, may have grave consequence on the entire society (Obowu-Adutchay, Mkpae & Onifade, 2013). Although several studies have been carried out on factors responsible for effective teaching and learning in the classroom it seems much work has not been carried out on students' cohesion and voice engagement in Nigerian university classrooms. This calls for critical investigation, in order to ensure the achievement of predetermined educational goals at the university level. The

researchers therefore investigated students' cohesion and voice engagement dynamics in Nigerian universities' classrooms with a view to enhance effectiveness in teaching and learning context in higher institutions.

Research Questions

Based on the problems identified, the study provided answers to the following research questions:
1. What is the pattern of cohesion dynamics among students in Nigerian university classrooms?
2. What is the magnitude and direction of the relationship between cohesion, voice engagement, self-concept, self-esteem and students' self-efficacy?
3. To what extent does cohesion and voice engagement influence undergraduates':
    i. self-concept?
    ii. self-esteem?
   iii. self-efficacy?

Method

Design and Sample Participants

This is a cross-sectional study of survey type. This design was considered because the study only explained the pattern of cohesion and voice engagement among university undergraduates without any form of variable manipulation. The population of the study comprises University undergraduates in Nigerian universities. Out of six geopolitical zones in Nigeria, two zones were randomly selected. Two universities (one Federal and one state) were also selected from each of the selected geopolitical zones. The undergraduates from the selected universities were sampled and their sample size was 1,679 students. A total of 48.7% of the respondents were from the North Central while 51.3% were from the Southwest geopolitical zone. Also, 53.0 percent of the respondents are males while 47.0% are females.

Instrumentation

The instrument used for the data collection exercise was designed and titled "Students' Cohesion and Voice Engagement Dynamics Questionnaire" (SCVEDQ). The instrument elicits responses on five constructs which are students' cohesion (SC= 4 items), self-efficacy (SE= 6 items), self-concept (SEC= 5 items), self-esteem (SEE= 6 items), and students' voice engagement (SVE= 7 items) respectively.

Reliability of the Instrument

Validation exercise was conducted on 100 student samples after necessary corrections had been made. The reliability coefficients were established using Partial Least Square Structural Equation Modeling (PLS-SEM). The result revealed the coefficient of Cronbach alpha, Composite reliability, and Average Variance Extracted for the constructs of the instrument. The coefficients are presented in the Table 1.

Table 1: Reliability of the Instrument

Construct	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average Variance Extracted (AVE)
SC	0.827	0.832	0.885	0.658
SE	0.711	0.758	0.809	0.531
SEC	0.706	0.776	0.802	0.630
SEE	0.753	0.801	0.688	0.681
SVE	0.767	0.792	0.701	0.661

From the result, the Cronbach alpha reliability and composite reliability coefficients of the constructs range from 0.7 to 0.8 as against the benchmark of 0.70. The AVE which is a measure of construct validity ranges from 0.53 to 0.68 as against the benchmark of 0.5 shows that the items in the instrument measure the construct they were designed to measure. The discriminant validity of the instrument is presented in Table 2. Fornell Lacker's approach to establishing the discriminant validity of the instrument was used and the result was interpreted based on the intercorrelation coefficients.

Table 2: Validity of the Instrument

Construct	SC	SE	SEC	SEE	SVE
SC	0.811				
SE	0.45	0.656			
SEC	0.408	0.619	0.68		
SEE	0.517	0.482	0.613	0.606	
SVE	0.448	0.379	0.594	0.510	0.579

The underlying principle of Fornell Lacker's approach is that the intercorrelation coefficient of a construct with itself should be greater than its intercorrelation coefficient with other constructs. From the result, the intercorrelation coefficient between SC and itself (0.811) is greater than its intercorrelation coefficient between SC and SE (0.45) or other constructs down the column.

Data Analytical

Data collected were analyzed using descriptive and inferential statistics tools such as frequency, percentage, mean, graph, and PLS-SEM. The outer and inner model PLS-SEM was built based on the number of constructs considered in the study. The Bootstrapping procedure was used for instrument validation (establishing the reliability and validity of the instrument) while the path algorithm was used to estimate the direct and indirect effects of the constructs. All statistical significance was assessed using 95% confidence intervals.
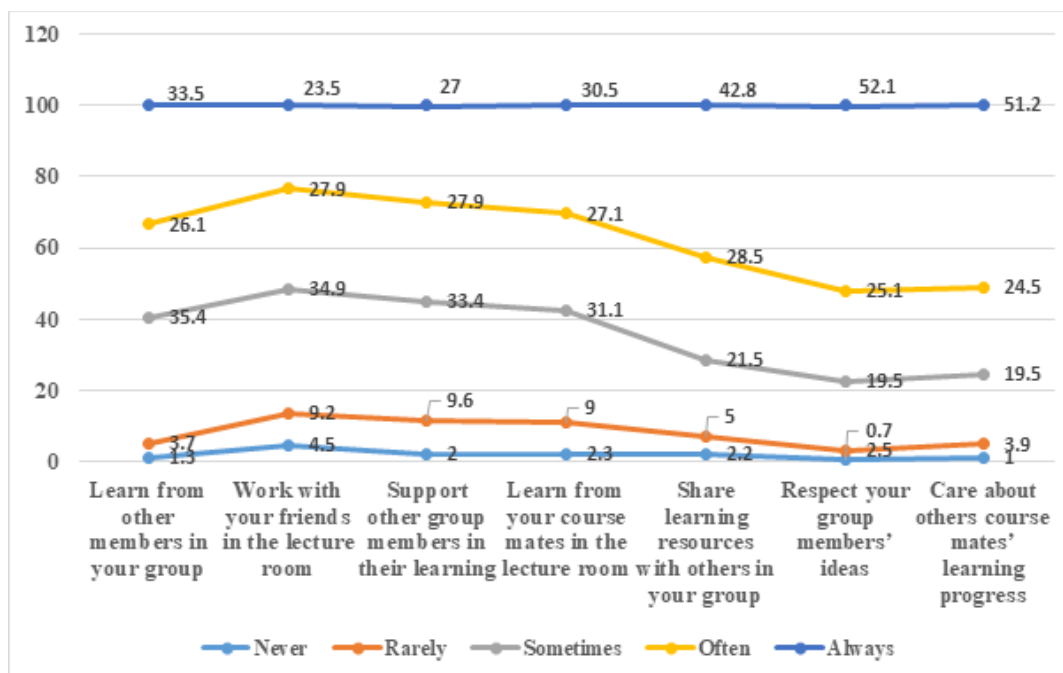
Results and Discussion

The research questions raised in the study were answered in inline and in the order by which they were raised.

Result of Cohesion Dynamics among Students in Nigerian University Classrooms

The pattern of cohesion dynamics was assessed among the sample undergraduates, the result was presented graphically in Figure 1.

Figure 1: Pattern of Students Cohesion among Nigerian University Students

From the result, inference can be made that most of the students show a high level of cohesion as their interactions depict, they always learn from other members of the group and care about others' learning progress. The result in Table 3 shows the pattern of linear relationship among the variables in the study.

**Table 3: Result of Pattern of Relationship between Cohesion, Voice engagement, Self-concept, Self-esteem, and Students' Self-efficacy**

Construct	SC	SE	SEC	SEE	SVE
SC	1				
SE	.267**	1			
SEC	.265**	.588**	1		
SEE	.371**	.385**	.409**	1	
SVE	.234*	0.016	.323**	.343**	1

Pearson product moment correlation was used to estimate the magnitude and the direction of relationship among the variables in the study. The result revealed that students' cohesion has positive and significant relationships with SE (r=0.267, p<0.05), SEC (r=0.265, p<0.05) and SEE (r=0.37, p<0.05). The result further revealed that Students' Voice Engagement SVE has a positive and significant relationship with SEC (r=0.323, p<0.05) and SEE (r=0.34, p<0.05) but was significantly related with SE (r=0.016, p>0.05). The result implies that increase in voice engagement and cohesion among students will lead to corresponding increase in students' self-esteem and self-concept.

Result on the Causal Relationship between Voice Engagement, Students' Cohesion, Interest, Self-Efficacy, and Self-esteem

The result presented in Figure 3 shows the estimates of the outer and inner models of the construct in the study. The model has the Root Mean Square Error Approximation (RMSEA) of 0.051 as against the benchmark of 0.05 and the Comparative Fit Index (CFI) of 0.87 as against the benchmark of 0.90 which implies that the constructs in the model accounted for 87.0% of the total variance in the model.
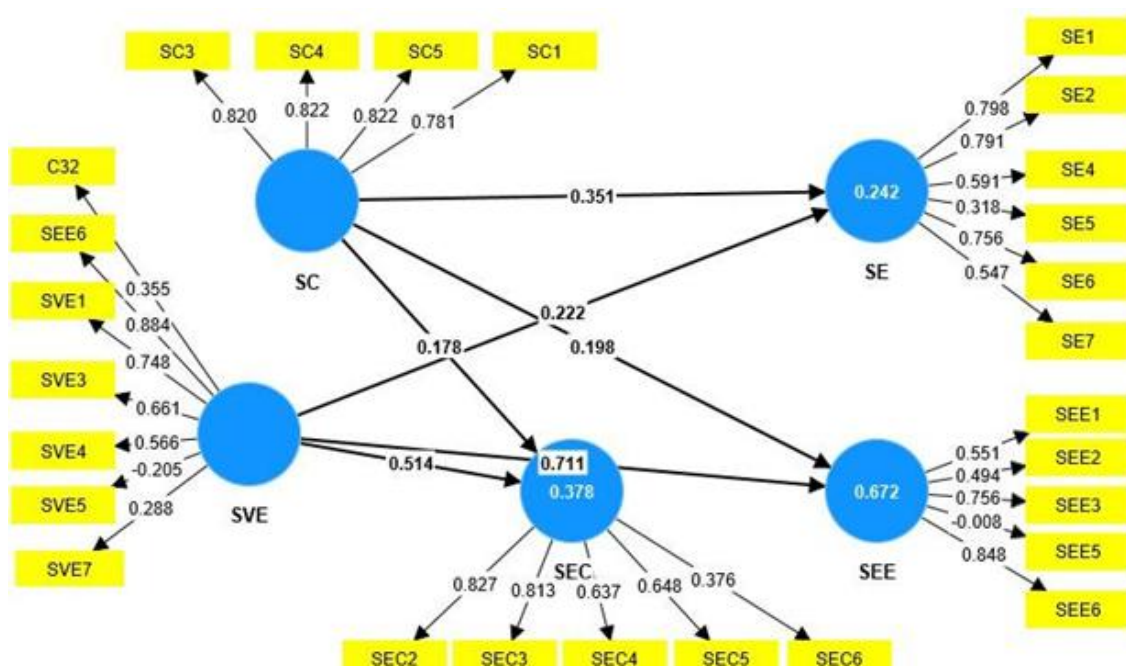
Figure 2: Outer and Inner PLS-SEM Model for the Relationship between Cohesion, Voice Engagement and Self-concept, Self-esteem, and Self-efficacy

After the model has been developed and the estimation was done, items that are negatively correlated or had extremely low factor loadings were deleted, and the model was re-estimated through the path algorithm. To establish the causal relationship in the model, the bootstrapping method was used, and the estimated path coefficients were presented in Table 4.

Table 4: Estimate of Path Coefficients in the Model

Path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
SC -> SE	0.351	0.36	0.113	3.118	0.002
SC -> SEC	0.178	0.169	0.097	1.822	0.068
SC -> SEE	0.198	0.195	0.098	2.017	0.044
SVE -> SE	0.222	0.234	0.13	1.703	0.089
SVE -> SEC	0.514	0.538	0.088	5.854	0.00
SVE -> SEE	0.711	0.721	0.069	10.365	0.00

The result revealed that student cohesion (SC) has significant causal effects on student self-efficacy (SE) ($\beta=0.35$, t=3.11=2, $p<0.05$), and Students' self-esteem (SEE) ($\beta=0.195$, t=2.017, $p<0.05$) whereas the causal effect of students' cohesion is not significant on students' self-concept (SEC) ($\beta=0.17$, t=1.82, $p<0.05$). Also, the causal effect of students' voice engagement (SVE) was significant on SEC ($\beta=0.54$, t=5.85, $p<0.05$) and SEE ($\beta=0.72$, t=10.36), $p<0.05$) whereas it was not significant on SE ($\beta=0.234$, t=1.703, $p>0.05$). This implies that students' cohesion significantly influences students' self-esteem and self-efficacy but cannot influence self-concept whereas students' voice cohesion influences self-esteem and self-concept but cannot influence self-efficacy.

Discussion

Based on the findings of the study, it could be concluded that cohesion among undergraduates is necessary to develop self-efficacy and self-esteem. This is probably because interaction among students could foster the courage to relate with others outside their comfort zone and also skill transfer. This result aligns with the report of Lyons (2012) who submitted that absence of cohesion will not only lead to poor academic performance, but low self-esteem can also lead to less academic success. Also, Harmer (2007), reported that group' cohesion promotes unitary and encourages similar attitudes to progress so that the individual would eventually be immune to laziness and a feeling of alienation from peers. However, the influence of cohesion was not significant on students' self-concept probably because undergraduates' cohesion in the study areas was associated with bullying and other suppressing practice. This contradicts the findings of Mustapha (2008) that positive cohesion is associated with many positive achievements and social behavior.

The result also shows that students' voice engagement influences students' self-esteem and self-concept but not self-efficacy in the study area. The result could be because most of the interaction patterns among students are in forms of voice engagement. Therefore, there is a high likelihood of self-esteem and self-concept which may not necessarily translate to self-efficacy. This result aligns with the finding of Sternke (2010) who reported that the development of self-concept mainly occurs through constant interactions between students' innate personal attributes, their physical and social environment, which graduate into their voice engagement dynamics in the classroom teaching and learning process. The fact voice engagement could lead to the development of self-esteem and self-concept support the report of Fielding (2006) that voice is

the antithesis of depersonalized, standardized, and homogenized educational experiences because it begins and ends with the thoughts, feelings, visions, and actions of students themselves.

Conclusion and Recommendation

Based on the findings of the study, it is concluded that student's interaction in forms of cohesion and voice engagement can lead to holistic development of the whole individual that is technically equipped (self-efficacious), adequately informed (self-conceptions) and emotionally balanced (self-esteemed). The effects of cohesion and voice engagement have causal linkages with personality of students which could enhance their learning and give them orientation in their future career. Therefore, education stakeholders should develop curriculum in such a way that will foster interaction and embrace cohesion and voice engagement among learners, and learner-learning facilitators alike. Innovative teaching that embraces collaborative learning among learners should be fostered among learners by teachers.

References

Abesha, A. G. (2012). Effects of Parenting Styles, Academic Self-Efficacy Achievement Motivation on the Academic Achievement of University Students in Ethiopia. Unpublished Ph. D. Thesis. Edith Cowan University.

Chang, Y. C. (2021). Interpersonal relationship, self-efficacy and learning motivation of the high school students in guangzhou. Multicult. Educ. 7, 97–107. doi: 10.5281/zenodo.5168780

Akubuiro, E. J. (2004). *Students 'attitude towards Science and academic self-concept.* University of Calabar Publishing House.

Bandura, A. (1977). Self-Efficacy: Towards a Unifying Theory of Behaviour Change. *Psychological Review*, 84, 191-215.

Bong, M., Cho, C., Ahn, H. S., and Kim, H. J. (2012). Comparison of self-beliefs for predicting student motivation and achievement. *J. Educ. Res.* 105, 336–352. doi: 10.1080/00220671.2011.627401

Brass, R. C. (2008). Poor academic performance and its effect on emotional stability of grade 4 students. Hispanic Journal of Behavioural Sciences 4(8) 1444-1448.

Brophy, J. E., & Good, T. L. (2017). Teacher-student relationships: Causes and Consequences. Holt, Rinehart & Winston.

Carron, A.V.; Brawley, L.R. (2000). "Cohesion: Conceptual and measurement issues". Small Group Research. 31 (1): 89–106. doi:10.1177/104649640003100105.

Churchill, R., Ferguson, P., Godinho, S., Johnson, N.F., Keddie, A., Letts, W., Mackay, J., McGill, M., Moss, J., Nagel, M.C., Nicholson, P. & Vick, M. (2017). Teaching: Making a difference. Milton, QLD: John Wiley & Sons.

Diep, A. N., Zhu, Ch., Struyven, K., and Blieck, Y. (2016). Who and What contributes to student satisfaction in different blended learning modalities? *Br. J. Educ. Technol.* 48, 473–489. doi: 10.1111/bjet.12431.

Dyaram, L. & Kamalanabhan T. J. (2005). "Unearthed: The Other Side of Group Cohesiveness" (PDF). J. Soc. Sci. 10 (3): 185–190.

Fielding, M. (2006). "Leadership, Radical Student Engagement and the Necessity of Person-centred Education." International Journal of Leadership in Education. 9, 4:61 – 69.

Fielding, M., & Moss, P. (2011). Radical education and the common school: A democratic alternative. London & New York: Routledge.

Forsyth, D.R. (2010). "Components of cohesion". *Group Dynamics, 5th Edition. Wadsworth: Cengage Learning.* p. 118–122.

Hardre, P., & Kollmann, S. 2013. Dynamics of Instructional and Perceptual Factors in Instructional Design Competence Development. *Journal Of Learning Design, 6*(1): 60. doi:10.5204/jld.v6i1.106

Harmer, J. (2007). Motivating the Unmotivated. British Council.

Hootstein, E. W. (2002). Enhancing student motivation: Make learning interesting and relevant. Education, 114(3), 475-478. Retrieved from www.questia.com

Kim, J. A. & Lorsbach, A. W. (2005). Writing Self-Efficacy in Young Children Issues for the Early Grades Environment. *Learning Environment Research,* 8, 157 – 175.

Kort-Butler, L. A., & Hagewen, K. J. (2010). School-based extracurricular activity involvement and adolescent self-esteem: A growth-curve analysis. Paper presented at The 2009 annual meeting of the society of social problems, San Francisco, CA.

Lawal, O. O. & Apanpa, O.S. (2013). Journal of Global Literacies, Technologies, and Emerging Pedagogies Volume 2, Issue 1, October 31, 2013, pp. 1-13.

Leminen, A. (2002). Self-concept of children in special and regular education. An unpublished report submitted in partial fulfillment as a requirement for pro gradu research in the Department of Special Education at the University of Jyväskylä.

Lyons, A. (2012). Self-esteem and learning disabilities. Retrieved from http://www.ldail.org/esteem.cfm.

Maciejewski, P. K. (2004). The role of self-efficacy on interactions on Adults. *The British Journal of Psychology* 176:373-378.

Marsh, H. W. (2002). A multidimensional physical self-concept. A construct validity approach to theory, measurement and research psychology.

Matsushima, R. & Shiomi, K. (2003).Social self-efficacy and interpersonal stress in adolescence. *Social Behaviour and Personality.*4, 115-128.

Mitra, D.L. (2009). "Student Voice and Student Roles in Education Policy Reform." In D. Plank, G. Sykes, & B. Schneider, eds. AERA Handbook on Education Policy Research. London, UK: Routledge. 40Motivation, Engagement, and Student Voice: The Students at the Center Series. 45 - 53

Mustapha, S.K. (2008). An ethnic comparison of students 'academic performance is federal institutions. Kasuagu. Journal of Quality Education. 4, 3: 89-98.

Obowu-Adutchay, V. Mkpae, S. G. and Onifade, A. K. 2013. Input – Process – Product Quality in Graduate Preparation. Nigerian *Journal of Educational Research and Evaluation.* Special Edition 12:45-52.

Okebukola, P. 2002. The Status of University Education in Nigeria: A Report Presented to the National Summit on Higher Education. Abuja: Nigeria.

Pajares F. & Schunk, D. H. (2001)..Self-efficacy, self-concept and academic achievement .In J. Aronson & D. Cordova (Eds).*Psychology of Education: Personal and Interpersonal forces*. New York Academic Press. 256 -259.

Reijntjes, A., Thomaes, S., Boelen, P., van der Schoot, M., de Castro, B. O., & Telch, M. J. (2011). Delighted when approved by others, to pieces when rejected: Children's social anxiety magnifies the linkage between self- and other- evaluations. The Journal of Child Psychology and Psychiatry, 52(7), 774-781.

Roman, S., Cuestas, P. J., & Fenollar, P. (2008). An examination of the interrelationships between self-esteem, others' expectations, family support, learning approaches and academic achievement. Studies in Higher Education, 33(2), 127-138. Retrieved from ERIC (EJ788602).

Shamin, A., Muhammad, H., Muhammad, A. & Seyd, A. G. (2019). The Impact of Teacher-Student Interaction on Student motivation and Achievement. European Academic Research- Vol. VII, Issue 2.

Schmuck, R., & Schmuck, P. (2001). Group Processes in the Classroom. New York: McGraw-Hill.

Smith, M. (2007). An investigation of self-concept in children with learning difficulties. An unpublished research report submitted to the Faculty of Education, University Witwatersrand, Johannesburg, in partial fulfillment of the requirements for the degree of Master of Education (Psychology in Education).

Sternke, J.C. (2010). Self-concept and Self-esteem in adolescents with learning disabilities. A research paper submitted in partial fulfillment of the requirements for the Masters of Science in Education Degree in School Psychology.

Thornton, Claire, Miller, Phillip and Perry, Kelly (2020). The impact of group cohesion on key success measures in higher education. Journal of Further and Higher Education, 44 (4). pp. 542-553. ISSN 0309-877X.

Brief Biography of Authors

Dr. Ikmat Olanrewaju Junaid, a Senior Research Fellow at the Institute of Education, University of Ibadan, earned her First Degree (1988), Master (1991) and Ph.D. (2010) in Educational Evaluation all from the University of Ibadan. Her teaching career commenced with

the Oyo State Teaching Service Commission, spanning from 1991 to 2007, when she transitioned to the Institute of Education where she currently serves as a core academic staff. She actively engages in teaching and training research students at the postgraduate level within the Institute of Education and has supervised over fifty Masters and Doctoral students. She is a member of various learned societies and her expertise extends to education processes, quality assurance, and sustainability.

Prof. Charles Oghenerume Onocha holds a BSc/Ed., Master and Ph.D in Educational Assessment and Evaluation all from the University of Ibadan. He started as a Junior Research Fellow in the Institute of Education, University of Ibadan in 1982 and rose to become a Professor in October, 1996. A former Director of Monitoring and Evaluation Universal Basic Education Programme Abuja, and the Deputy Executive Secretary (Technical Services) Universal Basic Education Commission Abuja. He has more than 70 documented works to his credit and successfully supervised hundreds of Master's and Doctoral students. His interests are in the field of curriculum and programme evaluation, assessing students learning outcomes and teacher effectiveness.

Sustainability and Responsibility of Higher Education: The Kyrgyz Republic

Telegey Malabekova
Director, Development at F. Frankl Scientific Research Center of the Kyrgyz National
University, Kyrgyzstan
telegeey@gmail.com

Abstract

The higher education landscape in the Kyrgyz Republic epitomizes a dynamic ecosystem wherein sustainability and responsibility intertwine. This article delves into the multifaceted dimensions of higher education in the country, elucidating the challenges and opportunities shaping its trajectory. It emphasizes the imperative for institutions to balance economic viability with social and environmental consciousness, advocating for a holistic approach to education fostering academic excellence alongside societal welfare and environmental stewardship.

Introduction

Nestled at the crossroads of Central Asia, the Kyrgyz Republic has witnessed remarkable transformations in its higher education sphere. The burgeoning demand for tertiary education mirrors the populace's quest for knowledge-driven progress. However, this surge is juxtaposed with complexities ranging from economic constraints to political uncertainties, posing challenges to institutional sustainability. Concurrently, there's a burgeoning awareness of institutions' responsibility to cultivate not only academic prowess but also social and environmental awareness.

Challenges and Opportunities

The sustainability of higher education in the Kyrgyz Republic hinges on diverse factors including financial viability, regional collaboration, and adaptability to global shifts. Economic strains, exacerbated by global events, necessitate a reevaluation of funding mechanisms and resource management strategies. Additionally, the imperative for international engagement becomes evident as institutions aim not just to survive but to thrive in an interconnected world. Responsibility in higher education transcends traditional boundaries, encompassing societal impact and environmental stewardship. Institutions are tasked with nurturing graduates equipped with technical proficiency and imbued with civic duty and global citizenship. This responsibility extends to preserving cultural heritage and ecological balance, encapsulating the essence of sustainable development.

Initiatives Towards Sustainability and Responsibility

In response to challenges, Kyrgyzstani higher education institutions have launched various initiatives to bolster sustainability and responsibility. These initiatives span community engagement, sustainable campus practices, and interdisciplinary curricula. By embedding

sustainability principles across teaching, research, and operations, institutions aim to cultivate an environment conducive to holistic learning and social responsibility.

Case Studies and Best Practices

Exemplary case studies from leading institutions like the American University of Central Asia (AUCA) and the Kyrgyz National University (KNU) underscore innovative approaches to sustainability and responsibility. AUCA's initiatives encompass energy conservation, waste management, and impactful community outreach. For instance, AUCA has implemented comprehensive energy-saving measures, including the installation of solar panels and energy-efficient lighting systems across its campus. These initiatives not only reduce the university's carbon footprint but also serve as educational tools, fostering awareness among students and staff about the importance of energy conservation. Furthermore, AUCA's robust waste management program involves recycling initiatives, composting facilities, and campaigns to reduce single-use plastics, contributing to a cleaner and greener campus environment.

Similarly, KNU has demonstrated a proactive commitment to environmental education by integrating sustainability principles into its curriculum. Through interdisciplinary courses and research projects, students at KNU engage with real-world environmental challenges and explore innovative solutions. For example, the university offers courses on sustainable agriculture, renewable energy, and environmental policy, equipping students with the knowledge and skills to address pressing environmental issues facing the Kyrgyz Republic and beyond. Additionally, KNU's campus serves as a living laboratory for sustainability, with initiatives such as green buildings, water conservation measures, and biodiversity conservation projects. By immersing students in hands-on learning experiences, KNU fosters a culture of environmental stewardship and empowers future leaders to drive positive change in their communities.

These case studies exemplify how higher education institutions in the Kyrgyz Republic are embracing sustainability and responsibility as core values. By implementing innovative initiatives and integrating sustainability into teaching, research, and campus operations, institutions like AUCA and KNU are not only preparing students for the challenges of the 21st century but also leading by example in building a more sustainable and resilient society. Through collaboration and knowledge sharing, these institutions inspire others to follow suit, catalyzing a collective effort towards a more sustainable future for the Kyrgyz Republic and beyond.

Resilience and Adaptability

Despite the myriad challenges confronting higher education institutions in the Kyrgyz Republic, their resilience and adaptability shine through as commendable attributes. These institutions exhibit a remarkable capacity to weather storms, embrace change, and innovate in response to evolving circumstances. In navigating the complex landscape of the 21st century, Kyrgyzstani universities demonstrate a forward-looking approach characterized by policy reforms, technological integration, and a paradigm shift towards inclusivity and sustainability. One aspect of their resilience lies in the agility with which they respond to economic fluctuations and funding constraints. By diversifying revenue streams, optimizing resource allocation, and forging strategic partnerships, higher education institutions mitigate the impact of financial

uncertainties while capitalizing on emerging opportunities. Moreover, they proactively seek alternative sources of funding, including philanthropic donations, research grants, and corporate sponsorships, to sustain their operations and invest in future growth.

Technological integration emerges as another cornerstone of resilience for Kyrgyzstani universities. Recognizing the transformative potential of digital technologies in enhancing teaching, learning, and administrative processes, these institutions embrace innovation to stay competitive in a rapidly evolving educational landscape. From the adoption of online learning platforms and virtual classrooms to the implementation of data analytics and artificial intelligence tools, universities harness technology to optimize educational outcomes, improve operational efficiency, and expand access to quality education.

Furthermore, Kyrgyzstani higher education institutions exhibit a profound commitment to inclusivity and diversity, fostering an environment where all students, regardless of background or circumstance, can thrive. By promoting equitable access to education, providing support services for underrepresented groups, and celebrating cultural diversity, universities cultivate a sense of belonging and empowerment among their student body. This inclusive ethos not only enriches the educational experience but also contributes to social cohesion and national unity. In parallel, a paradigm shift towards sustainability permeates the ethos of Kyrgyzstani universities, reflecting a broader global trend towards environmental consciousness and responsible stewardship. From green campus initiatives and eco-friendly infrastructure projects to sustainability-focused research and community engagement efforts, higher education institutions prioritize environmental sustainability as a core value. By integrating sustainability principles into their operations and curriculum, they prepare students to become agents of positive change who are equipped to address pressing environmental challenges and contribute to the transition toward a more sustainable future.

In conclusion, the resilience and adaptability demonstrated by higher education institutions in the Kyrgyz Republic underscore their capacity to thrive in the face of adversity and uncertainty. By embracing change, leveraging technology, promoting inclusivity, and prioritizing sustainability, these institutions position themselves as catalysts for positive societal transformation. As they navigate the complexities of the 21st century, Kyrgyzstani universities remain steadfast in their commitment to excellence, innovation, and social responsibility, poised to shape a brighter future for generations to come.

Brief Biography of the Author

Dr. Telegey Malabekova received her bachelor's degree in law from the American University of Central Asia and a degree in Business Law from Kyrgyz National University. She is currently the Director of Development at the Scientific Research Center of the Kyrgyz National University in Kyrgyzstan. Her responsibilities include promoting and implementing research projects and conducting research on issues related to the sustainable development goals of Kyrgyz National University in the area of artificial intelligence, digital economy, and globalization.

Socio-philosophical Analysis of the Spiritual Values Among the Youth in Kazakhstan

Maxat Mussabekov
Professor, Maqsut Narikbayev University, Astana, Kazakhstan
Doctoral Candidate in Social Philosophy, Kazakh National Pedagogical University, Kazakhstan
maksat1981_82@mail.ru

Abstract

This paper provides a socio-philosophical analysis of the spiritual values among the youth in Kazakhstan, examining how these values have evolved amidst the complexities of modernization and globalization. The research investigates the intrinsic nature of values, their cultural and historical significance, and the specific characteristics of the youth as a distinct social stratum. By integrating theories from psychology, sociology, and social philosophy, the study identifies shifts in value orientations due to socio-economic changes, revealing a transition from collective to individualistic paradigms influenced by Western ideologies. The paper underscores the crucial role of the state in shaping the ideological framework of the youth, thereby safeguarding national values against the diluting effects of global cultural trends.

Keywords: Youth, spiritual values, Kazakhstan, socio-philosophical analysis, modernization, Cultural Identity, Global Influence

Introduction

In the rapidly globalizing world, the spiritual values of youth have become a focal point of socio-philosophical research, particularly in nations navigating the complex transition from traditional to modern societies. Kazakhstan, a post-Soviet state, presents a unique case study due to its strategic geopolitical position and its rich cultural heritage juxtaposed with its ambitious modernization agendas. This paper explores the spiritual values of Kazakhstani youth, investigating how these values are being transformed under the influences of globalization, modernization, and cultural shifts.

The relevance of this study lies in its capacity to illuminate the ways in which young people in Kazakhstan are reconciling their inherited cultural identities with the onslaught of global cultural flows. This is particularly pertinent as Kazakhstan continues to develop its national identity in a world increasingly dominated by cultural homogenization. The youth's spiritual values offer insights into broader societal changes, their aspirations, and their worldviews, which are crucial for policy-making and educational reforms aimed at fostering a cohesive yet open society.

This research is guided by the thesis that the spiritual values of Kazakhstani youth are significantly influenced by the dual forces of global cultural trends and national revival movements, creating a unique blend of values that could redefine their social and cultural landscape. To explore this thesis, the paper is structured as follows: after this introduction, a

literature review will outline previous work in this field and identify gaps the current study aims to fill. The methodology section will describe the approach and tools used to gather and analyze data. Subsequent sections will present the analysis, discuss the findings in relation to existing literature, and conclude with implications and recommendations for future research.

By dissecting the transformation of spiritual values among the youth in Kazakhstan, this study aims to contribute to the broader discourse on cultural identity and value systems in transitional societies, offering insights that may apply to similar contexts globally.

Literature Review

The exploration of spiritual values among youth, particularly within the context of globalization, has been an area of keen interest in socio-philosophical research. This section reviews existing literature on the spiritual values of youth in various cultures, assesses the impact of globalization on these values, and identifies gaps that this study aims to address.

Spiritual Values among Youth Across Cultures

Research into the spiritual values of youth reveals diverse manifestations depending on cultural, socioeconomic, and political contexts. In Western societies, there has been a notable shift from traditional religious adherence to a more personal, individualistic approach to spirituality (Smith & Denton, 2005). Contrastingly, in the Middle East and parts of Asia, youth spiritual values often remain closely tied to traditional religious practices and community norms (Hassan & Kausar, 2017). Studies suggest that in transitional societies like Kazakhstan, youth are navigating between these extremes, balancing traditional values with modern influences (Jones, 2010).

Impact of Globalization on Youth Identity and Value Systems

Globalization has played a pivotal role in shaping the identities and value systems of young people. The proliferation of digital media has exposed youth to a wide array of cultural and ideological influences, often leading to a reassessment of traditional values (Castells, 2010). Giddens (1991) argues that globalization induces a 'disembedding' of social norms, where traditional markers of identity such as nationality, ethnicity, and religion become less significant. This phenomenon is evident in the evolving spiritual values of Kazakhstani youth, who are increasingly exposed to global cultural trends.

Gaps in Existing Research

While there is substantial literature on how globalization affects youth values in general, there is a noticeable scarcity of focused studies on post-Soviet states like Kazakhstan, where societal transformation has a unique trajectory shaped by both Soviet heritage and rapid modernization (Kendirbai, 2018). Moreover, much of the existing research tends to generalize Central Asian youth without considering the specific socio-cultural dynamics of individual countries. This study seeks to fill these gaps by providing an in-depth analysis of the spiritual

values of Kazakhstani youth, considering both the legacy of the Soviet influence and the impact of contemporary global forces.

Methodology

The methodology employed in this research is designed to explore the spiritual values of youth in Kazakhstan, with a specific focus on how these values have been influenced by global cultural trends and national identity formation processes. This study utilizes a mixed-methods approach, combining qualitative and quantitative research techniques to provide a comprehensive analysis of the topic.

Theoretical Framework

The theoretical framework underpinning this study is grounded in the concept of cultural hybridity, which posits that individual identity and value systems are formed through a dynamic process of cultural interaction and adaptation (Bhabha, 1994). This framework is particularly relevant to the study of Kazakhstani youth, who find themselves at the intersection of traditional Kazakh culture, Soviet heritage, and Western influences. The framework aids in understanding how global and local forces converge to shape the spiritual values of this demographic.

Data Collection Methods

Data for this study was collected through three primary methods:

Surveys.
A structured questionnaire was administered to a sample of 300 young adults aged between 18 and 25 years, across three major cities in Kazakhstan—Almaty, Astana, and Shymkent. The survey included both closed and open-ended questions to gauge the participants' spiritual beliefs, practices, and their perceptions of cultural influences.

In-depth Interviews.
To gain deeper insights, 30 semi-structured interviews were conducted with selected survey participants. These interviews allowed for a more nuanced exploration of individual attitudes and the personal significance of spiritual values.

Literature Review.
An extensive review of existing literature on the subject provided a secondary data source, enriching the primary data and helping situate the findings within the global context.

Analytical Methods

Quantitative data from the surveys were analyzed using statistical software to identify patterns and correlations in the responses. This analysis provided a broad overview of the spiritual values landscape among Kazakhstani youth. Qualitative data from the interviews were transcribed and analyzed using thematic analysis, which involved coding the data and identifying key themes related to the influence of globalization and national identity on spiritual values.

Justification of Methodology

The choice of a mixed-methods approach is justified by the need to understand both the breadth and depth of the research question. While the quantitative data from the surveys provide a macroscopic view of the trends in spiritual values among the youth, the qualitative interviews offer microscopic insights into the personal experiences and meanings that individuals attach to these values. This methodological triangulation enhances the reliability and validity of the findings, ensuring a robust understanding of the complex interplay between global influences and local traditions in shaping spiritual values.

Analysis

The analysis of the collected data reveals a complex interplay of global influences, traditional values, and state policies shaping the spiritual values of youth in Kazakhstan. This section presents the findings, explores the transformation of these values, and discusses the various factors influencing them.

Findings from the Research

Survey results indicate that a significant portion of Kazakhstani youth retains a strong attachment to traditional spiritual values, with over 70% of respondents expressing frequent participation in cultural rituals and practices inherited from their ancestors. However, there is also a noticeable openness to global cultural influences, as evidenced by the 65% of participants who reported that exposure to global media has altered their perceptions of spirituality and ethics.

Interviews further elucidate these findings, with many young adults expressing a hybrid approach to spirituality, where traditional beliefs are interwoven with modern, often Western, ideals. This hybridity is not seen as contradictory but rather as a pragmatic adaptation to the contemporary globalized environment.

Transformation of Spiritual Values

The transformation of spiritual values among Kazakh youth is markedly influenced by several factors. Firstly, the legacy of secularism from the Soviet era continues to impact the religious landscape, with many young people adopting a secular approach to spirituality. Secondly, the resurgence of national identity and Kazakh cultural revival post-independence has fostered a reconnection with pre-Soviet spiritual traditions.

Quantitative analysis shows a correlation between educational attainment and spiritual openness. Youth with higher education levels are more likely to incorporate global spiritual concepts into their value system, suggesting that education is a key factor in shaping the adaptability of spiritual values.

Influence of Global and Local Factors

Globalization emerges as a significant factor influencing spiritual values, with access to the internet and international media exposing youth to diverse worldviews and practices. This exposure has led to a greater acceptance of diverse spiritual ideologies, ranging from Eastern philosophies to Western spiritual movements.

Local factors, particularly family and community, play a crucial role in grounding youth in traditional values. Interviews highlighted that family discussions and community events are primary avenues through which traditional spiritual values are transmitted and reinforced.

Role of Educational and Governmental Institutions

Educational institutions are pivotal in shaping the spiritual values of youth, serving as arenas for both the transmission of traditional values and the introduction of global perspectives. The curriculum often includes elements of Kazakh history and culture alongside modern, secular ideologies, creating a balanced exposure to both local and global influences.

Governmental policies also influence spiritual values through the promotion of national identity and the regulation of religious practices. Programs aimed at boosting national pride are intertwined with efforts to promote tolerance and openness towards other cultures, shaping a national narrative that embraces both tradition and modernity.

Discussion

The findings of this study shed light on the evolving spiritual landscape among the youth in Kazakhstan, revealing a unique synthesis of traditional and global influences. This discussion interprets the implications of these findings, compares them with existing literature, and explores their potential impact on policy and society.

Implications of Findings

The research highlights a significant trend towards spiritual hybridity among Kazakhstani youth, characterized by an integration of global cultural influences into traditional spiritual frameworks. This trend implies a shift towards more individualized forms of spirituality, which may lead to a more pluralistic and tolerant spiritual outlook. Such a transformation can have profound implications for social cohesion, as it suggests a move away from a monolithic cultural identity towards a more diversified and inclusive understanding of spirituality.

Comparison with Existing Literature

Comparatively, the findings align with global trends identified in studies such as those by Smith and Denton (2005), who document a similar shift towards individualized spirituality in American teenagers. However, unlike the Western context where this often leads to secularization, in Kazakhstan, it manifests as a blend of secular and traditional spiritual elements. This difference underscores the unique cultural dynamics of post-Soviet societies, where

traditional values still play a significant role in shaping identity, as discussed by Jones (2010) in the context of Kyrgyzstan.

Moreover, the role of education in fostering openness to diverse spiritual perspectives resonates with Giddens' (1991) theory of modernity, which suggests that increased access to information broadens individuals' worldviews and facilitates reflexivity in personal and collective identity formation.

Potential Impact on Policy and Society

The findings suggest several potential impacts on policy and society. Firstly, the adaptability of youth spiritual values to global influences calls for educational policies that promote critical thinking and multicultural awareness. Such policies could help young people navigate the complexities of a globalized world without losing touch with their cultural roots.

Secondly, the importance of family and community in maintaining traditional values highlights the need for community engagement initiatives that reinforce these ties, potentially through cultural festivals, intergenerational dialogues, and community-based education programs.

Lastly, the government's role in shaping the national narrative around spirituality and identity suggests that policies should aim to balance national pride with openness to global diversity. This could involve revising national education curricula to include global spiritual philosophies and ethics as a way of preparing youth for global citizenship.

Conclusion

This study has explored the complex interplay of traditional and global influences on the spiritual values of youth in Kazakhstan. Key findings indicate a pronounced trend towards spiritual hybridity, where traditional Kazakh spiritual practices are being integrated with global cultural elements. This synthesis suggests an evolving spiritual identity that is both rooted in tradition and open to global influences, reflecting broader patterns of cultural hybridity observed in other post-Soviet contexts.

Reflection on Study Limitations

While this research provides valuable insights, it also faces several limitations. The sample, focused on major urban centers, may not fully represent the experiences of youth in rural areas, who might have different exposure to global influences and a stronger attachment to traditional practices. Additionally, the reliance on self-reported data could introduce bias in how participants perceive and report their spiritual values.

Suggestions for Further Research

Future research could expand on this study by including a more diverse geographic sample that encompasses both urban and rural perspectives. Longitudinal studies could also

provide deeper insights into how spiritual values evolve over time in response to ongoing global and local changes. Moreover, examining the impact of specific global media and educational content on spiritual values could offer more targeted insights for policy-making.

This study's findings contribute to the broader understanding of how young people in transitional societies negotiate their spiritual identities in the face of globalization. It underscores the need for policies that support cultural education and promote a balanced integration of global and traditional values, fostering a cohesive yet open society.

References

Bhabha, H. K. (1994). The Location of Culture. Routledge.

Castells, M. (2010). The Rise of the Network Society. Wiley-Blackwell.

Giddens, A. (1991). Modernity and Self-Identity: Self and Society in the Late Modern Age. Stanford University Press.

Hassan, R., & Kausar, D. R. (2017). Perceptions of spiritual education among youth: The case of Malaysia. Journal of Moral Education, 46(3), 241-253. https://doi.org/10.1080/03057240.2016.1238379

Jones, L. (2010). Spiritual identities among post-Soviet youth: The case of Kyrgyzstan. International Sociology, 25(6), 798-820. https://doi.org/10.1177/0268580910379501

Kendirbai, G. (2018). Cultural transformation among Kazakhstani youth. Central Asian Survey, 37(1), 134-149. https://doi.org/10.1080/02634937.2018.1430196

Smith, C., & Denton, M. L. (2005). Soul Searching: The Religious and Spiritual Lives of American Teenagers. Oxford University Press.

Brief Biography of the Author

Maxat Mussabekov is a doctoral candidate in Social Philosophy at the Kazakh National Pedagogical University, under the supervision of Professor A. K. Abisheva. His academic work focuses on the transformation of societal values in the context of globalization, with a special emphasis on youth and identity formation in post-Soviet states. Maxat has published several papers on the subject of youth studies and cultural transformations and is an active participant in international sociology and philosophy conferences.

Social Responsibility and Sustainability: The Changing Mission of Higher Education

Elif Derya Ozdemir, Ph.D.
Turkish teacher, SDU University, Kazakhstan
elif.ozdemir@sdu.edu.kz

Abstract

The article examines the basic principles of higher education and the involvement of universities in achieving sustainable development goals on a global scale. A complete overview is given of the fundamental principles of higher education - academic freedom and academic responsibility, which form the value basis of classical education in its historical period of development. In modern conditions, these principles are increasingly reflected in the activities of universities related to their key role in solving economic, social and environmental problems. Universities are increasingly declaring social responsibility and proving this through their decisions in the face of a social crisis.

Keywords: Higher education, university, sustainability, development, academic integrity

Introduction

At the beginning of 2020 the higher education system truly became the beginning of grandiose changes: In a few days 95% of students have switched to remote or hybrid training format[1]. The new coronavirus infection undermined the classical foundations of higher education, having created barriers to implementation developed for centuries of learning models, and with a high degree of probability could lead to complete suspension training. So were V period military actions, natural disasters, and epidemics: universities closed or moved to other safe areas. In spring 2020 the threat of closing universities for quarantine was quite realistic and, if this it happened 30-40 years ago, a similar outcome would have been inevitable. But universities all over the world, including Russian ones, despite difficulties, continued implementation of educational processes to remote format to help students continue their education, and graduates to complete it. In this decision, also those actions, which were directed at supporting communities pre-applicants, and students undoubtedly show the social responsibility of universities and their contribution to the sustainable development of society.

Considering the role highest schools in the current decade, it can be argued that universities all over the world have a moral obligation to make a more significant contribution to achieving the Goals of sustainable development UN – through conducting scientific research at the regional level, national and global levels, increasing quality of education, creation of fair and inclusive educational environment, development internationalization and networking, digital transformation higher education, conservation values socially responsible no behavior. Events in 2020 related to COVID-19, demonstrate the necessity from- draw lessons from the experience gained in reacting efforts to make universities more capable of quickly adapting to new challenges of an unstable ness external environment.

Review of literature and research

Last thing the decade was marked by a large number of initiatives aimed at solving global problems of sustainable development. All more often the implementation of the proposed initiatives is associated with the participation we eat the higher school, which takes upon itself the answer responsibility for participation in decisions regarding economic, social, and environmental problems.

In modern conditions, accompanied by deep technological transformations, escalating environmental problems, non-transient attack coronavirus infections new requirements for market labor to level, and the quality of development of competencies graduates, a deep rethinking is taking place in the mission of higher education [2]. Universities received sufficient academic freedom in the formation of a range of educational programs grams and their content, must realize that freedom always comes with responsibility [12]. We admit that academic freedom and academic responsibility always were accompanying categories, But nowadays, the degree of their conjugation becomes very significant – she predetermines the size contribution of the educational organization to the solution problems of civil society [3].

According to the concept of academic freedom, a teacher has the right to create and disseminate knowledge, communicate ideas and present facts without external coercion or restriction, without corresponding repression or persecution. Possible restrictions are in the internal environment of the university and manifest themselves through the evaluative opinion of colleagues regarding the originality, significance and rigor of academic knowledge, scientific ideas and results. At the same time, the emphasis on academic freedom does not deny the responsibility for modernity and timeliness of knowledge acquisition, high quality, sufficiency for personal development and professional development, demand by students and the employer community [4]. These requirements have always been imposed on knowledge, but in the conditions of the knowledge economy, they certainly increase many times over [5].

Issues of academic responsibility addressed through universities' "third mission" are also central to the activities of the UK Citizens' Universities Network, an international consortium on Higher Education, Civic Responsibility and Democracy. Universities' research to address society's challenges is at the heart of the Global Research Council's 2019 Statement of Principles, Meeting Social and Economic Impact Expectations [7]. It should be emphasized that "research influence" in no way refers to those accepted in an academic environment, indicators of a scientist's success, such as citation indices, number of publications in international scientometric databases (Scopus, Web of Science), impact factor of journals, etc. Society is interested in the real contribution of universities to improving the quality of life, as well as determining the role of ongoing research in finding adequate and prompt responses to social challenges. Universities' responsiveness to the needs and demands of society is both a moral imperative and a strategy that deserves our full support.

Research Methodology

One of the ways universities are responding to social issues is the rapid response they have taken to the COVID-19 pandemic. First of all, these are restrictive measures to prevent the

spread of infection concerning the teaching staff and students - the transfer of the educational process to a remote mode [11]. On the one hand, the regime of limiting contacts of participants in the educational process was indeed extremely important to counter the spread of the new coronavirus infection and preserve health, but with the other is that the degree of readiness of the teaching staff to work remotely may directly indicate the significance of their contribution to solving the social crisis situation. With regret, we can state that attempts by teachers to use face-to-face teaching technologies in distance learning did not lead to planned results, but the skills of mastering distance educational technologies (hereinafter referred to as DET) and methods of their application in the format of online education a large proportion of teachers were not proficient. Thus, 70% of US university teachers 8 in the pre-pandemic period did not conduct classes in a distance format and did not have distance learning skills.

In Kazakhstan, 60% of teachers who rated their level of DET proficiency at 3.2 points out of 5 were classified in this category. At the same time, the number of remote mediators educational technologies in Kazakhstani universities are noted at the level of 25% (Fig. 1) - they account for positive expectations from the quality of online learning.
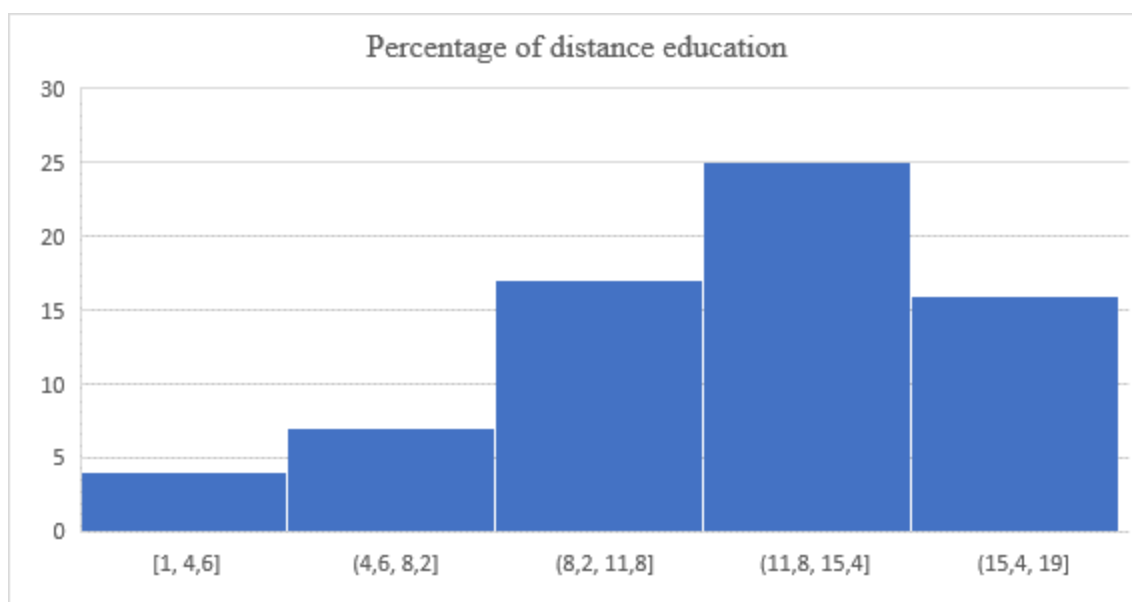

Fig. 1. Distribution of teachers of Kazakhstani universities by degree of proficiency in distance education

Results and discussion

It should be noted that the majority of teachers at Kazakhstani universities have a negative attitude towards the transition to an online format training, even as an element of a hybrid training format, and this is due, first of all, to high labor intensity methodological preparation and intensity academic work (this is the opinion of 88% of teachers), the unpreparedness of some universities (15% of the total) for electronic communication between teachers and students, as well as a statement of the low motivation of students (27% of student respondents) to self-organize to master educational programs and the presence of a number of

social problems among them 10. The main reasons for the negative characteristics of the distance learning format are presented in Fig. 2, positive – in Fig. 3.
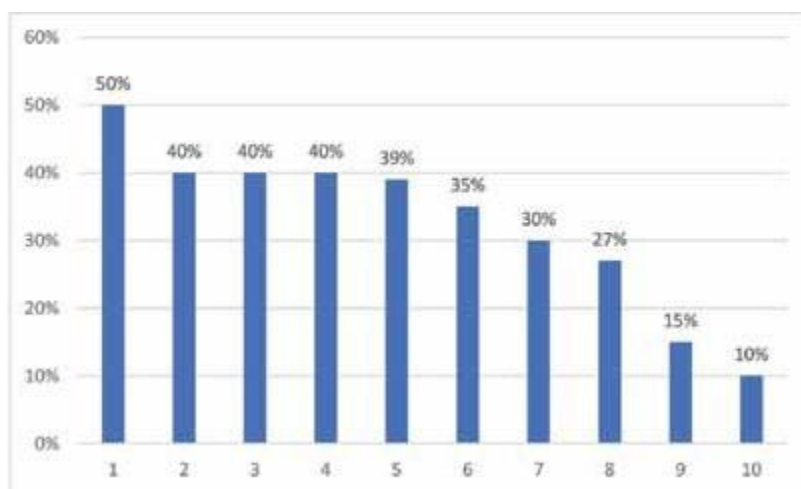
1 – more difficult to end the session, 2 – lack of face-to-face communication with teachers and fellow students, 3 – lost their job, 4 – the study load has increased significantly, 5 – it is more difficult to study at home, 6 – it is difficult to ask questions online, 7 – experience discomfort when turning on the webcam in class, 8 – it is more difficult to independently study educational material, 9 – forced to quit school, 10 – did not have appropriate equipment for distance learning

Fig. 2. Negative characteristics of the distance learning format from students
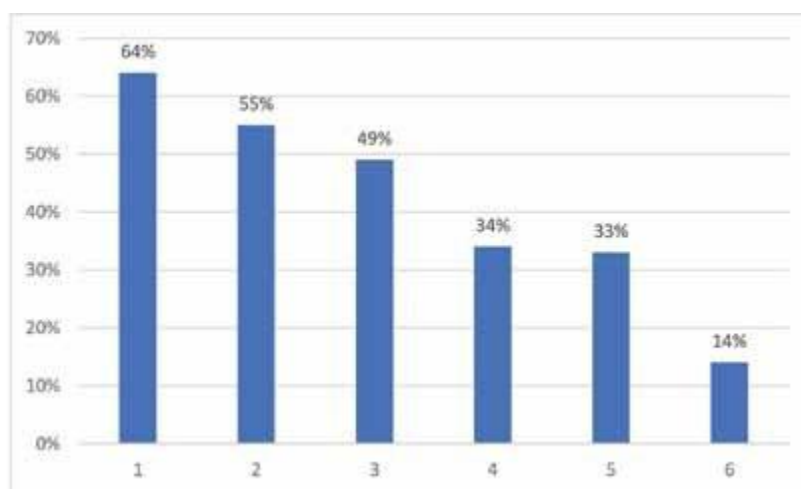
1 – more time to sleep, 2 – less fatigue from studying, 3 – more free time, 4 – remote format is no less effective than face-to-face, 5 – I like the remote format better than the traditional one 6 – complete satisfaction with distance learning

Fig. 3. Positive characteristics of the distance learning format from students

At the beginning of the transfer of the educational process to a distance format, more than 10% of students did not have the equipment necessary for remote learning, and for students from

low-income groups this proportion reached 30%. In this regard, the Ministry of Science and Higher Education developed recommendations for social support for such a group of students, with each university providing the most accessible forms of support independently (students were given computers, laptops or financial compensation for their purchase). In addition, 40% of students suspended their work activities, which significantly reduced their livelihoods. Social support for students was the adoption of measures for their employment at their universities - such an experiment was carried out in 5 universities, in which 5 thousand people were hired. In addition, most universities independently made decisions to soften the terms of payment for tuition, for example, in the form of installments or deferred payments, refusal to index tuition fees in the next academic year, and also canceled the fee for living in a dormitory for the period of the introduction of the distance learning form, paid for travel to the parents' place of residence. In this regard, an initiative was adopted that includes 5 key aspects:

1) implementation of the concept of sustainable development in all areas of its activities and processes;
2) increasing the competence of students, teachers and staff in the field of sustainable development;
3) supporting a wider range of scientific research, including interdisciplinary research, in response to global challenges;
4) working with global partners to provide innovative solutions and leverage technology;
5) support for open science to promote constructive cross-border collaboration to solve specific problems.

Thus, today universities cannot remain on the periphery of problems that concern global humanity; in the modern knowledge economy, they go beyond their borders and find themselves at the epicenter of global events in the struggle for the well-being of society. It becomes obvious that the missions of modern universities around the world are filled with aspects of the development of scientific technologies and the creation of a progressive scientific and educational environment aimed at rational management of the Earth's limited resources, providing the living population and future generations with the knowledge and ideas necessary for the sustainable development of all humanity.

Conclusion

Universities, as bearers of unique advantages in generating knowledge and producing scientific results, possessing tools for identifying the interests of stakeholders and strengthening partnerships with them in solving pressing problems, must consolidate their key role in building a sustainable future on the principles of academic freedom and academic responsibility, solidarity and cooperation. At the present stage of modification of the classical form of education, associated with the influence of infection and the emerging opportunities of digital solutions in mastering educational content, the issue of academic responsibility for the quality of mastering educational programs is complemented by issues of social responsibility to stakeholders, primarily internal ones - teachers and students. The experience of implementing educational programs remotely made it possible to formulate the necessary decisions that should be taken into account when switching to a hybrid learning format, which is so actively discussed in the context of the ongoing pandemic.

Firstly, the development of a new model of the educational process, called hybrid or combined, should occur without losing the values accumulated in the classical form of education, which should primarily include the direct interaction of teachers and students during classroom lessons. The traditional classroom format (under appropriate epidemiological conditions) should extend to practical and laboratory classes that develop practice-oriented competencies, scientific work and social activities; Lectures can be conducted remotely. The asynchronous element of learning involves students completing assignments prepared by teachers, which can be supplemented by the use of online simulators and training in online courses hosted on open educational online platforms. Each university must develop an optimal teaching model that corresponds to the available resources, the specifics of educational programs and the situation of restrictive measures, if any are introduced by the regulator.

Secondly, the success of a hybrid form of education should include the readiness of teachers to implement digital technologies and master digital didactics. To do this, a personal diagnosis of teachers should be carried out on their proficiency in digital technologies in order to develop an individual approach to advanced training in the field of digital didactics or to implement digital mentoring.

Thirdly, the need to improve the digital literacy of teachers is determined not only by the transition to a hybrid teaching model, but also by a number of other reasons, including:
- eliminating the gap between "digital" students and "non-digital" teachers, which will make it possible to move to one "wave" of mastering planned competencies;
- individualization of learning, including the possibility of implementing individual learning paths for certain categories of students (gifted, working, family, with disabilities, etc.);
- optimization of the educational process, allowing to create a set of methods that are the most productive for achieving maximum scientific and educational results with minimal effort and time in given conditions;
- development of new educational programs in order to ensure their relevance to the complex current situation and its development trends, compliance with the needs of a wide range of stakeholders (students, employers, government, etc.), implementation of strategic development plans for universities.

Fourthly, the development of digital infrastructure, the accelerated expansion of digital resources and tools, the creation of a methodological base for digital didactics, generalization and analysis of the best digital educational practices with the possibility of their replication in the educational process and methodological support for teachers, evidence-based research on the effectiveness of digital technologies in mastering educational content are required.

The proposed measures are fully consistent with the student-centric approach and humanitarian values in education, the principles of academic freedom and academic responsibility, which form the basis of the university's internal social responsibility.

Bibliography

1. Barablina S.V., Mehrishvili L.L. Social responsibility: the role of higher educational institutions. *Bulletin of international organizations: education, science, new economics*. 2012. T. 7. No. 1. P. 203-218. URL: https://www.elibrary. ru/item.asp?id=17348391&

2. Kudryashova E.V., Sorokin S.E. The "third mission" of universities as a subject of scientific analysis. *Bulletin of Vyatka State University*. 2020. No. 2(136). pp. 17-24. https://doi. org/10.25730/VSU.7606.20.020

3. Golovko I.V. The third mission of the university and the model of multi-user governance for regional development. *Comparative politics. Russia*. 2018. Vol. 9. No. 1. P. 5-7. URL: https://www.elibrary.ru/item. asp?id=32562735

4. State program for the development of education in Kazakhstan for 2011-2020. *Decree of the President of Kazakhstan* dated December 7, 2010 No. 1118. - Astana. Akorda.

5. *Bakytzhan Zhumagulov on the modernization of the education system*, official website of the Prime Minister of the Republic of Kazakhstan "Primeministerkz". URL: http://www.primeminister.kz/page/bakytzhan-zhumagulov-o-modernizatsii-sistemy-obrazovanija?lang=ru (access date: 01/05/2014).

6. *Number and wages of workers in the Republic of Kazakhstan*.12 series, Employment and wages. Astana: Agency of the Republic of Kazakhstan on Statistics, January 2014. pp. 19-26.

7. *EIU based on OECD and EIU data* (2010). URL: http://thelearningcurve.pearson.com/data-bank/education-input-indicators/indicator/TSUSMAX

8. Number and wages of workers by type of economic activity of the Republic of Kazakhstan. *Employment and wages*, 13 series. Astana: Agency of Statistics of the Republic of Kazakhstan, December 2010. P. 36.

9. Labor Code of Kazakhstan. *Decree of the President of Kazakhstan* dated May 15, 2007, No. 251-III ZRK (with amendments and additions as of April 23, 2014). - Astata: Akorda.

10. Rules for the appointment and payment of social benefits, as well as determining its size, *Decree of the Government of the Republic of Kazakhstan* dated December 28, 2007, No. 1339. URL: http://adilet.zan. kz/rus/docs/P070001339

11. Law of Kazakhstan "On the republican budget for 2012-2014". *Decree of the President of Kazakhstan* dated November 24, 2011 No. 496-IV, Astana: Akorda. URL: http://www.zakon. kz/4460382-prezidentom-rk-utverzhden-zakon-o.html (date of access: 04/10/2014).

Brief Biography of the Author

Dr. Elif Derya Ozdemir is from Almaty, Kazakhstan. She works as a Turkish teacher at SDU University, Kazakhstan. Her PhD is from International Burch University, her master's degree is from SDU University, and she received her bachelor's degree from Korkyt Ata Kyzylorda University. She is passionate about teaching and mentoring and feels fortunate to have students pursuing their Master's and PhD degrees at International Burch University. She enjoys sharing her knowledge and helps others grow academically and personally.

Enhancing Scholarly Discourse: Addressing Gaps and Critiquing Perspectives in "Bolashak" Study Abroad Program

Talgat Zhussipbek, Ph.D.
Vice-Rector for Academic Affairs, Karaganda Buketov University, Kazakhstan
talgatjusipbek@gmail.com

Galamat Arebayev
Tutor, Theoretical and Applied Linguistics Department, Aktobe Zhubanov University, Kazakhstan
galamatarebaev@gmail.com

Talgat Yechshzhanov, Ph.D.
Director, Institute of Education, Astana International University, Kazakhstan
talbiotech@gmail.com

Dana Kalzhanova
Lecturer of General Linguistics and Literature Department, Sh. Ualikhanov Kokshetau University, Kazakhstan
dana.kalzhanova07@gmail.com

Abstract

This paper offers a preliminary exploration of the "Bolashak" '500 Scholars' program, distinct from traditional exchange study abroad programs, through the lens of Transformative Learning Theory (TLT). Primarily based on an extensive literature review, it aims to establish the relationship between Study Abroad, TLT, and the Bolashak internship program. The Bolashak scholarship program, initiated by the Kazakhstani government, plays a pivotal role in promoting international education and human capital development. While existing studies have delved into the benefits and challenges of study abroad programs, there remains a notable gap in research focusing specifically on the experiences of adult professionals, particularly scholars, participating in internship programs under the Bolashak initiative. This paper addresses this gap through a thorough literature review, analyzing existing scholarly works, policy analyses, and theoretical frameworks. It examines various aspects of the Bolashak internship program, including objectives, selection processes, communication mechanisms, funding structures, and outcomes for scholars. By critically synthesizing the existing literature, this paper offers insights into the potential benefits, challenges, and areas for improvement within the Bolashak internship program. Furthermore, it explores the theoretical underpinnings of TLT and its relevance to exchange study abroad programs, discussing how such experiences provide opportunities for transformative learning and personal growth. Through continued examination and analysis, this paper aims to elucidate the interplay between exchange study abroad programs, the Bolashak initiative, and TLT.

Introduction

Study abroad programs have long been acknowledged as transformative experiences transcending borders and cultures, fostering personal, academic, and professional growth (Nada & Legutko, 2022; Strange & Gibson, 2017). As Morgan (2010) aptly suggests, "travel has the potential to act as a powerful vehicle for transformative education," emphasizing how international experiences can profoundly influence individual development and understanding. The Bolashak scholarship program, established three decades ago, holds the highest esteem among international educational initiatives in Kazakhstan, offering exceptional students opportunities to study at top global universities and shaping the nation's future leaders through education abroad. Bolashak provides scholarships across various study levels and categories, notably launching the "Bolashak" '500 Scholars' program in 2021, following President Tokayev's address to the people of Kazakhstan on September 1, 2020. Like the renowned Fulbright program in the United States, Bolashak aims to enhance human capital development by providing talented researchers and scholars with opportunities for higher education and knowledge exchange abroad (Bolashak.Gov.Kz, n.d.). This paper aims to address the gap in the literature concerning adult professionals, particularly scholars, participating in study and internship programs abroad, such as the Bolashak scholarship program. Through a comprehensive literature review and the application of TLT, it seeks to deepen our understanding of the transformative potential of international educational experiences and inform policymakers and program administrators about areas for improvement and strategies to enhance the effectiveness and impact of such programs.

Literature review

Imagine a classroom without walls, where learning transcends borders and cultures. This is the essence of 'study abroad', which encapsulates higher education programs held outside a student's home country (Iskhakova & Bradly, 2022). These transformative experiences are often facilitated through exchange programs, language immersion opportunities, or direct enrollment at foreign universities. The concept of study abroad has garnered significant attention in academic literature, with scholars exploring its various dimensions and implications. One example of adult education abroad is the fully funded Bolashak scholarship program, established by the Kazakhstani government in 1993. Like the US-based Fulbright program, which offers opportunities for researchers to work abroad as visiting scholars, Bolashak has emerged as a pivotal educational and economic driver in Kazakhstan. It achieves this by sending scholars to other countries, such as the USA, as exchange scholars, fostering international collaboration and knowledge exchange (Perna et al., 2015). The 'Bolashak' has undergone significant changes and improvements, transitioning from bachelor's degree scholarships to a target method of training and expanding internship programs since 2012 (see Table 1).

Table 1

1993	1994-2004	2011	2012	2014	2016
The 'Bolashak' International scholarship was established on November, 5 1993.	In the period 1994-2004 the number of 780 scholarships had been awarded to study in 13 countries.	Bachelor's degree scholarships were terminated. Program - target method of training introduced.	Since 2012 internship programs has been expanded with the categories for engineering, medical and teaching staff.	At the 8 International Going Global Conference in Miami 2014, the 'Bolashak' scholarship has been the best one among 11 academic mobility programs.	The 'Bolashak' scholarship has been granted to 11 727 Kazakhstan citizens for study in 200 best universities in 33 countries.

Source: Center for International Programs (http://bolashak.gov.kz as cited in Bersimbayeva et al., 2017).

Like many international study abroad initiatives, Bolashak aims to enhance human capital development by providing talented Kazakhstani people with opportunities for higher education abroad (Holloway et al., 2012; Jonbekova, 2024; Sagintayeva & Jumakulov, 2015). However, existing literature predominantly focuses on degree-seeking students' experiences, overlooking the potential benefits and challenges faced by adult professionals, including scholars, participating in exchange programs. While studying abroad offers numerous benefits, including personal and academic growth, it is important to acknowledge that this experience also entails challenges. However, scholarly attention to these challenges, particularly concerning non-student professionals, appears to be limited in the literature. While this question has been indirectly addressed, its exploration remains limited, particularly in the literature specific to Kazakhstan. Much of the existing literature on Kazakhstan tends to focus on firsthand experiences, such as the contributions of scholarship holders at organizational and societal levels (Jonbekova et al., 2023) or the employability of study-abroad program graduates (Abeuova & Muratbekova-Touron, 2019; Azhgaliyeva et al., 2017) or, more recently, the social impacts of internship programs (Jonbekova, 2024). However, it is essential to engage with both the broader literature on education abroad and previous research specifically on the Bolashak program to provide a comprehensive understanding for a general audience.

Despite the availability of several types of education abroad funded under the Bolashak program, literature has not engaged these focuses by addressing the distinction specifically related to the '500 scholars' program. Furthermore, the literature exhibits a discernible lack of critical perspective in certain publications, where rigorous examination and evaluation of underlying assumptions, alternative viewpoints, and methodological limitations appear insufficient (Bersimbayeva et al., 2017; Nessipbayeva, 2015). This tendency to focus only on positive aspects of the Bolashak program undermines the robustness and depth of scholarly discourse on the topic, overlooking for example the complexities organizational moments of the selection process and the difficulties experienced by program participants.

Degree programs differ from internship programs based on a range of factors such as objectives, formats, lengths of studies, and institutional structures (Wood, 2023). Due to the

differences between degree programs and internship programs, it is crucial to view these study-abroad experiences as distinct entities rather than interchangeable (Aubrey, 2023). For instance, Mencet & Gabdyssalyk (2023) fails to clearly differentiate two programs with no detailed information about the nature, duration, or objectives of these internships. This lack of emphasis on the internship component may lead readers to overlook its significance within the broader scholarship program. In addition, the article by using the terms interchangeably may inadvertently contribute to a misunderstanding of the Bolashak program's structure and objectives. Given the disparities between degree programs and internship programs, it is imperative to consider these two types of study abroad experiences separately rather than interchangeably.

Benefits of Internship Abroad

Study abroad programs are increasingly seen as essential for preparing students for international professional roles and improving their cultural awareness (Tran, 2020), personal and professional development (Cañibano & Woolley, 2015). They also provide greater opportunity for employment (Scellato et al., 2015) as well as the social change (Jonbekova, 2024), class analysis in studies of student mobility (Holloway et al., 2012). Moreover, study abroad experiences contribute to improved employment prospects (Azhgaliyeva et al., 2017) and offer insights into political perspectives (Chankseliani, 2018; Del Sordi, 2018). These and other aspects were discussed by Varela (2017) adopting a classification by Kraiger et al., (1993) which divides learning into cognitive, affective, and behavioral outcomes. Cognitive outcomes include language acquisition and cultural learning, while affective outcomes focus on changes in participants' attitudes towards multicultural settings. Behavioral outcomes relate to skill development in intercultural competence, emphasizing participants' ability to adapt to local customs and exhibit culturally appropriate behaviors. These benefits span across different domains and have significant implications for personal, academic, and professional development.

Firstly, study abroad experiences contribute to academic enrichment by exposing participants to diverse pedagogical approaches and subject matter (King & Frederick Sweitzer, 2014). Immersion in a different educational system allows students to gain new insights, perspectives, and methodologies that may not be available in their home institutions. This exposure enhances their academic knowledge and fosters critical thinking skills (Van Vechten, 2021). Additionally, study abroad experiences often lead to enhanced language proficiency (Kaçar, 2021; Leaver & Campbell, 2023) Being immersed in a foreign language environment provides students with many opportunities to practice and improve their language skills in real-life contexts. This linguistic immersion is particularly effective in accelerating language learning and fluency. In the context of Kazakhstan, where there is a promotion of a trilingual policy (Karabassova, 2020), this opportunity will enhance the language proficiency of scholarship holders. Furthermore, study abroad experiences facilitate the development of cross-cultural competency (Iskhakova & Bradly, 2022). Interacting with individuals from diverse cultural backgrounds fosters intercultural understanding, empathy, and communication skills. This cross-cultural exposure equips students with the ability to navigate diverse cultural contexts effectively, an essential skill in today's interconnected world. However, this interpretation contrasts with that of Hoven & Walenkamp, (2015) who argue that "a stay abroad did not, or

hardly contribute to the international competencies of students." Moreover, in the preliminary study of the same research, students did not perceive themselves as being more proficient in English upon their return compared to their proficiency levels prior to departure.

Secondly, study abroad experiences promote increased adaptability and resilience (Dresen et al., 2019). Living and studying in a foreign country often present students with various challenges and obstacles, such as cultural differences, language barriers, and homesickness. Overcoming these challenges builds resilience and adaptability, enhancing students' capacity to thrive in unfamiliar environments. Additionally, study abroad experiences offer opportunities for students to expand their social and professional networks (Marijuan & Sanz, 2018). Interacting with peers, faculty members, and professionals from diverse backgrounds enables students to build lasting connections and establish a global network of contacts. These networks can be valuable for future academic collaborations, career opportunities, and personal growth.

Finally, study abroad experiences are associated with improved employment prospects in a globalized job market (Abeuova & Muratbekova-Touron, 2019). Employers increasingly value candidates with international experience, cross-cultural competency, and language proficiency. Study abroad experiences demonstrate a candidate's adaptability, cultural sensitivity, and willingness to embrace new challenges, making them more competitive in the global job market.

Overall, research has extensively explored the multifaceted benefits of study abroad experiences from various perspectives, including those of students, educators, employers, and policymakers. These benefits underscore the transformative impact of study abroad experiences on individuals' personal, academic, and professional development, highlighting the importance of international education in today's interconnected world.

Transformative Learning Theory and Study Abroad

Transformative Learning Theory, proposed by Mezirow (2018), offers a valuable framework for understanding the potential transformative effects of study abroad experiences, particularly in professional contexts. While previous research has explored the application of this theory in various educational settings (Chwialkowska, 2020), including study abroad programs, limited attention has been paid to its relevance in the context of professional training for adult learners, such as researchers (Nada & Legutko, 2022).

Transformative learning, a process that leads to profound personal growth and change, is not limited to a particular environment; it can manifest in various contexts (Morgan, 2010). Whether an individual is in one physical location, or another does not dictate the possibility of transformation, nor does it guarantee its inevitability. However, it is observed that learners are often more receptive to experiencing disorientation and engaging in critical reflection when they find themselves outside their familiar cultural and societal settings. This is seen as the result of "exposure to diversity and of the geographical and emotional distance from the home environment" (Brown, 2009, p.517). Such circumstances can allow learners to experience new habits, languages, routines, customs, infrastructures, and people before returning home to try and

make sense of what they experienced. It is no surprise that scholars agree that study abroad creates a learning environment prime for transformative learning journeys (Nada & Legutko, 2022; Strange & Gibson, 2017).

As a result, study abroad experiences serve as a prime testing ground for emerging adults to confront and reassess their deeply ingrained values and belief systems. Through exposure to and immersion in the values and belief systems of others, individuals are challenged to broaden their perspectives, question their assumptions, and undergo transformative shifts in their understanding of themselves and the world around them. By examining the transformative potential of study abroad experiences through the lens of TLT, this study seeks to contribute to a deeper understanding of the learning process and outcomes for adult professionals engaged in international educational endeavors.

Previous Research and Discourse related to the Bolashak Internship Program

Existing literature on the Bolashak internship program predominantly consists of non-empirical discussions or qualitative analyses lacking comprehensive research methodologies (Bokayev et al., 2020). Moreover, critiques regarding the program's selection process, communication mechanisms, focus on quantity over quality, funding mechanisms, and lack of systematic evaluation remain unaddressed. Specifically, there is a dearth of research focusing on the experiences and outcomes scholarship holders, particularly researchers, participating in the Bolashak program.

Firstly, the selection process has come under scrutiny, especially at the final interview stage. It is observed that committee members responsible for decision-making may lack uniformity in background or perspective. This diversity sometimes leads to the posing of inappropriate questions to applicants and biased decisions based on subjective opinions.

Secondly, a lack of constant communication with students has been identified as a significant issue within the Bolashak program. While the Bolashak center assigns specific staff members to oversee stipend holders in particular countries or regions, these staff members often prioritize administrative tasks over addressing students' concerns or problems. This disconnect between students and program administrators can hinder support mechanisms and exacerbate challenges faced by scholars during their study abroad experiences. Consequently, this miscommunication may lead to problems such as disconnection and even a brain drain (Oosterbeek & Webbink, 2011). This disillusionment could potentially lead to a loss of talented individuals seeking opportunities elsewhere, contributing to a brain drain phenomenon. Therefore, addressing the issue of communication gaps within the Bolashak program is crucial not only for fostering a supportive environment for scholars during their study abroad experiences but also for retaining talent and preventing brain drain.

Thirdly, concerns have been raised regarding the program's focus on quantity over quality. The Bolashak center appears to prioritize numerical targets, such as the number of scholars sent abroad, rather than ensuring the quality of participants' experiences. As mentioned in the article, "It is necessary to increase the efficiency of scientific internships under the Bolashak program, which currently remains quite low," emphasizing the importance of

enhancing the effectiveness of scientific internships within the Bolashak program to maximize their impact (Isabayeva, 2023). While internships typically involve hands-on research or practical experience guided by mentors or professors, the Bolashak program often entails structured classroom settings, potentially limiting scholars' opportunities for in-depth engagement in their research areas or field-specific projects. This discrepancy may hinder scholars' ability to fully leverage their expertise and integrate into their respective fields upon returning to Kazakhstan.

Fourthly, funding mechanisms within the Bolashak program have drawn criticism. For instance, an outspoken statement made by Senator Lukin (Chairperson of the Commitee of the Committee on International Relations, Defense and Security) sparked lively discussions and garnered significant attention from the public (Tengrinews.kz, 2023). Some argue that allocating funds based on university rankings results in exorbitant tuition fees (Dubovaya, 2023). Furthermore, it has been noted that certain Russian state universities were added to the Bolashak list despite not meeting the center's regulations, which stipulated that only top-250 higher institutions could be included (Alimova, 2022). This approach may overlook potentially more cost-effective options and limit access to certain majors or institutions. The fact that some faculties may be ranked much higher than the overall university ranking casts doubt on the validity of the selection of proposed higher institutions by the Bolashak center. The General Prosecutor's Office announced its intention to verify the targeted utilization of funds for the Bolashak program; however, the results have not yet been announced (Inform.kz, 2023).

Finally, there is a perceived lack of proper analysis of labor market conditions and the impact of Bolashak scholars on the economy or specific sectors upon their return. Despite the program's longstanding presence, there is a dearth of systematic evaluation regarding graduates' contributions and the extent to which they are able to apply their expertise in their respective fields (Kurmanov, 2023). Furthermore, the absence of comprehensive analysis regarding labor market conditions and the impact of Bolashak scholars upon their return exacerbates the issue. Senator Lukin asserts that Bolashak recipients deliberately exploit the program for emigration purposes. (Marabayeva, 2023). Factors such as salary disparities and limited career advancement opportunities further contribute to this phenomenon. Thus, addressing this gap in evaluation and understanding the scholars' contributions upon their return is essential for both optimizing the program's impact and mitigating the risk of 'brain drain.' In addition to highlighting the perceived lack of proper analysis of labor market conditions and the impact of Bolashak scholars on the economy or specific sectors upon their return, it is essential to consider how the application of TLT theory can address these concerns. By utilizing TL theory as a framework for our study, we aim to explore not only the immediate outcomes of Bolashak internships but also the long-term transformative effects on scholars' professional trajectories. Through in-depth analysis grounded in TL principles, we seek to uncover the underlying factors contributing to the observed deficiencies in program evaluation and scholars' integration into the domestic workforce.

Piloting

The initial phase of the study involved conducting two interviews with participants, revealing the need for a revised interview format. Consequently, the research team decided to

transition to a format involving one interviewer, one note-taker, and the interviewee to optimize data collection. This adjustment aimed to facilitate more meaningful dialogue while ensuring accurate documentation of insights shared during the interviews. Additionally, the interview process provided an opportunity to refine and streamline the interview questions, eliminating redundancies and adjusting the order to better align with the flow of conversation. Furthermore, it allowed for the assessment of the overall interview timing, ensuring that it allowed for comprehensive exploration of the research topics within a reasonable timeframe. By adopting a format that promotes more meaningful dialogue and accurate documentation, we aim to create an environment conducive to transformative reflection and growth for both participants and researchers. This adjustment aligns with TL principles by providing opportunities for deep exploration and critical reflection, facilitating the emergence of new insights and perspectives. Moreover, the refinement of interview questions and assessment of interview timing further support the overarching goal of promoting transformative learning within our research process. By continuously adapting our methods to enhance participant engagement and comprehension, we strive to maximize the transformative potential of our study outcomes.

Conclusion

In conclusion, this paper highlights the need for further research focusing on adult professionals, particularly researchers, participating in study and internship/training abroad programs, such as the Bolashak scholarship program. By addressing this gap in the literature and applying TLT to examine the transformative potential of international educational experiences, this study aims to contribute to a more comprehensive understanding of the benefits, challenges, and outcomes of exchange study abroad. Additionally, by critically evaluating the Bolashak internship program and highlighting both its benefits and critiques, this study seeks to inform policymakers and program administrators about areas for improvement and potential strategies for enhancing the program's effectiveness and impact. By identifying areas for enhancement and proposing potential strategies to optimize the program's effectiveness, this research seeks to maximize the positive impact of international educational endeavors on the development of skilled professionals in our global community.

References

Abeuova, D., & Muratbekova-Touron, M. (2019). Global talent management: Shaping the careers of internationally educated talents in developing markets. *Thunderbird International Business Review*, *61*(6), 843–856. https://doi.org/10.1002/tie.22085

Alimova, Y. (2022, February 24). *«Демонстрация лояльности к России». Почему Токаев меняет назарбаевский «Болашак»? ("A Display of Loyalty to Russia: Why is Tokayev Changing Nazarbayev's 'Bolashak' Program?")*. Azattyq. https://rus.azattyq.org/a/31716242.html

Aubrey. (2023, November 16). *Global insights: Studying abroad or interning abroad?* https://capital-placement.com/blog/studying-abroad-vs-interning-abroad/

Azhgaliyeva, D., Belitski, M., Jumasseitova, A., & Kalyuzhnova, E. (2017). The impact of government-sponsored education abroad on entrepreneurship: case study Bolashak scholarship. *Human Capital and Professional Education*, *1*(21), 37–47. www.reading.ac.uk/centaur

Bersimbayeva, A., Bersimbayev, Y., & Uruzbayeva, N. (2017). Bolashak International Scholarship as a Breakthrough Innovative Project of Education System in the Republic of Kazakhstan. *International Journal of Economic Perspectives*, *11*(1), 199–205.

Bokayev, B., Torebekova, Z., & Davletbayeva, Z. (2020). Preventing brain drain: Kazakhstan's presidential "bolashak" scholarship and government regulations of intellectual migration. *Public Policy and Administration*, *19*(3), 25–35. https://doi.org/10.5755/J01.PPAA.19.3.27764

Brown, L. (2009). THE TRANSFORMATIVE POWER OF THE INTERNATIONAL SOJOURN. An Ethnographic Study of the International Student Experience. *Annals of Tourism Research*, *36*(3), 502–521. https://doi.org/10.1016/j.annals.2009.03.002

Cañibano, C., & Woolley, R. (2015). Towards a socio-economics of the brain drain and distributed human capital. *International Migration*, *53*(1), 115–130. https://doi.org/10.1111/imig.12020

Chankseliani, M. (2018). The politics of student mobility: Links between outbound student flows and the democratic development of post-Soviet Eurasia. *International Journal of Educational Development*, *62*, 281–288. https://doi.org/10.1016/j.ijedudev.2018.07.006

Chwialkowska, A. (2020). Maximizing Cross-Cultural Learning From Exchange Study Abroad Programs: Transformative Learning Theory. In *Journal of Studies in International Education* (Vol. 24, Issue 5, pp. 535–554). SAGE Publications Inc. https://doi.org/10.1177/1028315320906163

Del Sordi, A. (2018). Sponsoring student mobility for development and authoritarian stability: Kazakhstan's Bolashak programme. *Globalizations*, *15*(2), 215–231. https://doi.org/10.1080/14747731.2017.1403780

Dresen, C. K., Wilmes, M. L., Sullivan, K. R., & Waterbury, T. A. (2019). Building Resilience Through Strengths-Based Learning During Graduate Study Abroad: An Exploratory Study. *Journal of Experiential Education*, *42*(3), 297–310. https://doi.org/10.1177/1053825919861414

Dubovaya, M. (2023, February 8). *Генпрокуратура проверит, как расходуются средства, выделенные на программу "Болашак" (The General Prosecutor's Office will examine how the funds allocated to the 'Bolashak' program are being spent.)* . Informburo.Kz . https://informburo.kz/novosti/genprokuratura-proverit-kak-rasxoduyutsya-sredstva-vydelennye-na-programmu-bolasak

Holloway, S. L., O'Hara, S. L., & Pimlott-Wilson, H. (2012). Educational mobility and the gendered geography of cultural capital: the case of international student flows between Central Asia and the UK. *Environment and Planning A: Economy and Space*, *44*, 2278–2294. https://doi.org/10.1068/a44655

Hoven, R. F. M. van den, & Walenkamp, J. H. C. (2015). *Study or internship abroad and the acquisition of international competencies*. The Hague University of Applied Sciences.

Inform.kz. (2023, February 8). *Целевое использование средств по программе обучения «Болашак» проверят в РК (The Targeted Utilization of Funds for the "Bolashak" Education Program Will Be Examined in Kazakhstan)*. Astana Kazinform. https://www.inform.kz/ru/celevoe-ispol-zovanie-sredstv-po-programme-obucheniya-bolashak-proveryat-v-rk_a4033043

Isabayeva, S. (2023, April 23). *Программа «Болашак»: мало пользы, зато много понтов и коррупции? (The Bolashak program: little benefit, but a lot of show-off and corruption?)*. https://qmonitor.kz/society/5048

Iskhakova, M., & Bradly, A. (2022). Short-Term Study Abroad Research: A Systematic Review 2000-2019. *Journal of Management Education*, *46*(2), 383–427. https://doi.org/10.1177/10525629211015706

Jonbekova, D. (2024). Government scholarships for international higher education: pathways for social change in Kazakhstan. *Higher Education*, *87*, 761–777. https://doi.org/10.1007/s10734-023-01034-8

Jonbekova, D., Serkova, Y., Mazbulova, Z., Jumakulov, Z., & Ruby, A. (2023). How international higher education graduates contribute to their home country: an example from government scholarship recipients in Kazakhstan. *Higher Education Research and Development*, *42*(1), 126–140. https://doi.org/10.1080/07294360.2021.2019200

Kaçar, I. G. (2021). A case study of turkish pre-service teachers of english in an international exchange program: ELF and WE perspectives. *Eurasian Journal of Applied Linguistics*, *7*(1), 435–457. https://doi.org/10.32601/ejal.911484

Karabassova, L. (2020). Understanding Trilingual Education Reform in Kazakhstan: Why Is It Stalled? In D. Egéa (Ed.), *Education in Central Asia. Education, Equity, Economy* (Vol. 8, pp. 37–51). Springer. https://doi.org/10.1007/978-3-030-50127-3_3

King, M. A., & Frederick Sweitzer, H. (2014). Towards a Pedagogy of Internships. In *Journal of Applied Learning in Higher Education* (Vol. 6).

Kraiger, K., Ford, J. K., & Salas, E. (1993). Application of Cognitive, Skill-Based, and Affective Theories of Learning Outcomes to New Methods of Training Evaluation. *Journal of Applied Psychology*, *78*(2), 311–328. https://doi.org/10.1037/0021-9010.78.2.311

Kurmanov, B. (2023, December 15). *Программа «Болашак»: что не так с её выпускниками (The Bolashak Program: What's Wrong with Its Graduates?)*. Ulys Media. https://ulysmedia.kz/analitika/24211-programma-bolashak-chto-ne-tak-s-eio-vypusknikami/

Leaver, B. Lou, & Campbell, C. (2023). The Transformative Power of the Study Abroad Experience. *L2 Journal*, *15*(2), 129–144. https://doi.org/10.5070/L215260151

Marabayeva, B. (2023, November 9). *Стипендиаты "Болашак" используют программу для эмиграции - сенатор Лукин (Senator Lukin alleges that Bolashak scholarship recipients are using the program for emigration purposes.)*. Inbusiness.Kz. https://inbusiness.kz/ru/last/stipendiaty-bolashak-ispolzuyut-programmu-dlya-emigracii-senator-lukin

Marijuan, S., & Sanz, C. (2018). Expanding Boundaries: Current and New Directions in Study Abroad Research and Practice. *Foreign Language Annals*, *51*(1), 185–204. https://doi.org/10.1111/flan.12323

Mencet, M. S., & Gabdyssalyk, R. (2023). How can distance learning offer opportunities for developing countries? Case of Turkey and Kazakhstan. *Entrepreneurship and Sustainability Issues*, *10*(3), 231–253. https://doi.org/10.9770/jesi.2023.10.3(16)

Mezirow, J. (2018). Transformative learning theory. In *Contemporary Theories of Learning* (Vol. 2, pp. 114–128). https://doi.org/10.4324/9781315147277-8

Morgan, A. D. (2010). Journeys into transformation: Travel to an "other" place as a vehicle for transformative learning. In *Journal of Transformative Education* (Vol. 8, Issue 4, pp. 246–268). https://doi.org/10.1177/1541344611421491

Nada, C. I., & Legutko, J. (2022). "Maybe we did not learn that much academically, but we learn more from experience" – Erasmus mobility and its potential for transformative learning.

International Journal of Intercultural Relations, *87*, 183–192.
https://doi.org/10.1016/j.ijintrel.2022.03.002

Nessipbayeva, O. (2015). The Bolashak Program in Building A Democratic and Prosperous
Society. *Procedia - Social and Behavioral Sciences*, *191*, 2275–2279.
https://doi.org/10.1016/j.sbspro.2015.04.325

Oosterbeek, H., & Webbink, D. (2011). Does Studying Abroad Induce a Brain Drain?
Economica, *78*(310), 347–366. https://doi.org/10.1111/j.l468-0335.2009.00818.x

Perna, L. W., Orosz, K., & Jumakulov, Z. (2015). Understanding the human capital benefits of a
government-funded international scholarship program: An exploration of Kazakhstan's
Bolashak program. *International Journal of Educational Development*, *40*, 85–97.
https://doi.org/10.1016/j.ijedudev.2014.12.003

Sagintayeva, A., & Jumakulov, Z. (2015). Kazakhstan: Kazakhstan's Bolashak Scholarship
Program. In G. Mihut, P. G. Altbach, & H. d. W. Wit (Eds.), *Global Perspectives on
Higher Education* (pp. 143–146). SensePublishers. https://doi.org/10.1007/978-94-6351-
161-2_31

Scellato, G., Franzoni, C., & Stephan, P. (2015). Migrant scientists and international networks.
Research Policy, *44*(1), 108–120. https://doi.org/10.1016/j.respol.2014.07.014

Strange, H., & Gibson, H. J. (2017). An investigation of experiential and transformative learning
in study abroad programs. In *Frontiers: The Interdisciplinary Journal of Study Abroad:
Vol. XXIX*.

Tengrinews.kz. (2023, November 9). *Тысяча нарушений и убыточная политика. Сенатор
раскритиковал "Болашак" (A Thousand Violations and Unprofitable Policies: Senator
Criticizes 'Bolashak')*. Tengrinews. https://tengrinews.kz/kazakhstan_news/tyisyacha-
narusheniy-ubyitochnaya-politika-senator-516321/

Tran, L. T. (2020). Teaching and engaging international students: People-to-people connections
and people-to-people empathy. *Journal of International Students*, *10*(3), xii–xvii.
https://doi.org/10.32674/jis.v10i3.2005

Van Vechten, R. B. (2021). A Review of the Literature: Internships and Best Practices. In
Political Science Internships: Towards Best Practices. (pp. 11–30).

Varela, O. E. (2017). Learning outcomes of study-abroad programs: A meta-analysis. *Academy
of Management Learning and Education*, *16*(4), 531–561.
https://doi.org/10.5465/amle.2015.0250

Wood, S. (2023, March 13). *A Guide to Different Types of College Degrees*. U.S.News and
World Report. https://www.usnews.com/education/best-colleges/articles/a-guide-to-
different-college-degrees

Brief Biography of Authors

Dr. Talgat Zhussipbek currently holds the esteemed Vice-Rector for Academic Affairs position at Karaganda Buketov University. He earned his Ph.D. in Education from the University of Sheffield (Sheffield, UK) in 2019. Following this achievement, he embarked on a journey at Suleyman Demirel University in September 2019, where he held pivotal roles including Head of the Department of Language Education and Dean of the Faculty of Education and Humanities for two years. A passion for qualitative studies in secondary education, inclusive education, gender in education, and educational development fuels Talgat's academic pursuits. Before pursuing his doctoral studies, he dedicated himself to nurturing the minds of gifted students as an English as a Second Language instructor in secondary schools. Currently, Talgat is enriching his academic journey at Michigan State University, where he serves as an exchange scholar, furthering his knowledge and expertise in the field of education.

Galamat Arebayev is an accomplished and dedicated tutor of Theoretical and Applied Linguistics Department at Aktobe Zhubanov university. He holds a Bachelor's degree in Kazakh Philology and a Master's degree in Arts both from Aktobe Zhubanov University. Galamat specializes in teaching Kazakh language as a second language to university students. At present he is a visiting scholar at Michigan State University, aiming to get a professional experience in the field of Education and to use the methods and techniques in his future teaching process.

Dr. Talgat Yechshzhanov embarked on his academic journey with a Ph.D. from Eurasian National University in 2011, laying the foundation for his subsequent achievements. Following this, he served as a Senior Lecturer in the Biotechnology and Microbiology Department at his alma mater from 2011 to 2013, mentoring and inspiring students while contributing significantly to research. Transitioning to leadership roles, from 2017 to 2018, Dr. Yechshzhanov led as the Head of the Science Education Department at Suleyman Demirel University, implementing innovative strategies to enhance science education. This was preceded by his role as Dean of the Faculty of Education and Humanities at the same university from 2018 to 2020, where he shaped the academic landscape and promoted interdisciplinary collaboration. Since August 2020, Dr. Yechshzhanov has served as the Director of the Institute of Education at Astana International University, spearheading initiatives to elevate educational standards and promote cutting-edge teaching methodologies.

Dana Kalzhanova is a lecturer of General Linguistics and Literature Department at Sh. Ualikhanov Kokshetau University. She holds a Bachelor's degree in Foreign languages and a Master's degree in Pedagogy and Psychology from Sh. Ualikhanov Kokshetau University. Dana teaches foreign languages and is passionate about education, which has led her to pursue further professional development as a visiting scholar at Michigan State University. There, she aims to integrate innovative methods and techniques into her teaching practice.

SPONSORS

Ibn Sina Foundation

RAINDROP FOUNDATION

HOUSTON AIRPORT SYSTEM

EBSCO

FADI'S

ABU OMAR HALAL

CLUTCH CITY CLUCKERS

OMAR KASANI
CERTIFIED PUBLIC ACCOUNTANT

NORTH
AMERICAN
UNIVERSITY

**11929 West Airport Blvd.
Stafford, Texas, 77477**

www.na.edu/internationalconference