OFFICIAL CONFERENCE PROCEEDINGS

The Washington DC Conference on the Social Sciences (WCSS2026)

April 15-20, 2026 | Walter E. Washington Convention Center,
Washington, DC, United States & Online

ISSN: 2760-7267

Organised by the International Academic Forum (IAFOR) in partnership with the IAFOR Research Centre at the Osaka School of International Public Policy (OSIPP) at The University of Osaka, Japan, and IAFOR's Global Partners.

iafor

"To Open Minds, To Educate Intelligence, To Inform Decisions"

The International Academic Forum provides new perspectives to the thought-leaders and decision-makers of today and tomorrow by offering constructive environments for dialogue and interchange at the intersections of nation, culture, and discipline. Headquartered in Nagoya, Japan, and registered as a Non-Profit Organization (一般社団法人), IAFOR is an independent think tank committed to the deeper understanding of contemporary geo-political transformation, particularly in the Asia Pacific Region.

INTERNATIONAL

INTERCULTURAL

INTERDISCIPLINARY

iafor

International Academic Board

Professor Anne Boddington, IAFOR, Japan (IAB Chair)
Dr Joseph Haldane, IAFOR & The University of Osaka, Japan
Professor Jun Arima, IAFOR & The University of Tokyo, Japan
Professor Virgil Hawkins, IAFOR Research Centre & The University of Osaka, Japan
Mr Lowell Sheppard, IAFOR & Never Too Late Academy, Japan

Professor Umberto Ansaldo, VinUniversity, Vietnam
Dr Susana Barreto, University of Porto, Portugal
Professor Grant Black, Chuo University, Japan
Dr Evangelia Chrysikou, Bartlett School of Sustainable Construction, University College London, United Kingdom
Professor Donald E. Hall, Binghamton University, United States
Professor Brendan Howe, Ewha Womans University, South Korea & The Asian Political and International Studies Association (APISA)
Dr James W. McNally, University of Michigan, United States & NACDA Program on Aging

WCE/WCSS2026 Conference Programme Committee

Professor Anne Boddington, IAFOR, Japan (IAB Chair)
Professor Laura R. Bronstein, Binghamton University, United States
Dr Thomas G. Endres, University of Northern Colorado, United States
Dr Joseph Haldane, IAFOR & The University of Osaka, Japan
Professor Donald E. Hall, Binghamton University, United States
Dr Mary Therese Perez Hattori, University of Hawai'i at Mānoa, United States
Dr Benjamin D. Huffman, University of Maryland, United States
Dr James W. McNally, University of Michigan, United States & NACDA Program on Aging

The Washington DC Conference on the Social Sciences 2026

Official Conference Proceedings

ISSN: 2760-7267

Date Published: June 26, 2026

Published by The International Academic Forum on the IAFOR Research Archive
URL: https://papers.iafor.org/

The International Academic Forum (IAFOR)
Sakae 1-16-26 2F
Naka Ward, Nagoya, Aichi
Japan 460-0008
iafor.org

Table of Contents

Global Citizenship Education in Africa: Perspectives of Expatriates in the United States

Sakiko Ochiai, Soka University of America, United States
Tomoko Takahashi, Soka University of America, United States

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

Despite rapid population growth in African countries, education systems face challenges, including insufficient resources, a shortage of qualified teachers, and the enduring effects of colonization on school policies and curricula. This study examined how young Africans perceive Global Citizenship Education (GCE), positing that it equips them with the essential knowledge and values needed to develop effective solutions. The research involved interviews with 11 African expatriates studying or teaching at a Southern California college, with a focus on GCE. The findings revealed that participants value GCE as a comprehensive approach that encourages contributions to society. They appreciate how it fosters open-mindedness, compassion, and critical thinking, which unite people beyond national boundaries. While GCE is rarely implemented in public schools across Africa, this study emphasizes its alignment with traditional African philosophies, such as Ubuntu. This suggests the potential to integrate GCE into current curricula, thereby enhancing education systems and addressing colonial legacies.

Keywords: global citizenship education (GCE), Africa, Ubuntu, colonialism, expatriates

iafor
The International Academic Forum
www.iafor.org

Introduction

Africa is a continent characterized by rapid growth and diversity, with rich cultures and an intriguing history. The birth rate in Africa is surging, with a median age of approximately 19 years (Green, 2023). It is expected that by 2100, more than half of all infants worldwide will be born in Sub-Saharan Africa (The Economist, 2024). As birth rates rise, providing high-quality education becomes increasingly important to equip the younger generation with the knowledge and values needed to promote a peaceful and equitable society and address complex global challenges.

Today, many African countries face low enrollment in upper secondary education, with over 50 percent of eligible students not attending (UNESCO, 2023; World Bank, 2020). At the same time, Africa grapples with the legacies of colonization. Despite progress and reforms, school curricula in Africa still reflect Eurocentrism and often overlook indigenous African knowledge (Esiobu, 2019). This trend reinforces Western privilege and superiority while promoting narratives that depict African people, cultures, and traditions as backward (Mamdani, 2016; Nyoni, 2019).

In this context, Global Citizenship Education (GCE) emerges as a valuable approach for enhancing educational quality and empowering people throughout Africa. To explore this idea, the study examined young Africans' opinions on GCE, assuming that GCE equips them with the vital knowledge and skills needed to develop solutions. Specifically, it focused on the viewpoints of expatriates involved with GCE in the United States (U.S.)—particularly students and faculty at a liberal arts college in Southern California that emphasizes GCE principles in its educational program.

Literature Review

Africa and Its Colonial Legacy

Africa is a vast continent with diverse cultures and ethnicities. It is the second-largest continent in the world, comprising many countries with rich and varied traditions, histories, and cultures (Smedley et al., 2025). The continent includes 54 countries and 1.4 billion people, with over 2,000 languages and several thousand ethnic groups practicing a variety of religions (Baker & Priadko, 2022; Smedley et al., 2025). In Northern Africa, Islam is predominantly practiced, whereas in Southern Africa, Christianity is more commonly followed, although the distribution is not clearly defined (Smedley et al., 2025).

African nations share cultural and historical ties rooted in colonization. In the 15th century, Portugal began exploring and establishing trade routes, including the slave trade, aided by advances in shipbuilding. From the late 16th century onward, Portugal, Spain, and the Dutch vied for control in Africa, while other European countries entered the competition to manage trade routes. This period saw a significant increase in the slave trade. In the 19th century, Europe shifted its focus to controlling land for agricultural production aimed at European markets, intensifying competition among European states (Geo History, 2018). In 1884, the Berlin Conference was convened to determine which European countries would annex which African colonies, thereby preventing conflict (River, 2019).

Colonization restricted access to resources, including water, sanitation, economic opportunities, and education in Africa. European powers exploited African colonies to manufacture goods, restricting them to producing only raw materials for export, such as cacao, while prohibiting the cultivation of food for local consumption. This restriction created dependence on imports from European countries for sustenance and weakened the local economy. Furthermore, raw materials were traded at low prices, while Africans were forced to purchase foreign commodities at excessively high prices, worsening the effects of starvation (Ocheni & Nwankwo, 2012). In the 1960s, with the rise of the anti-colonial movement, African colonies began to gain independence (Geo History, 2018). However, the prohibition on manufacturing local necessities forced African countries to continue importing food, preventing them from taking control of their economies even after independence (Azevedo, 2017).

Moreover, colonization used education to negatively affect the mindset of African people through assimilation methods aimed at controlling the colonies and preventing riots, all while maximizing the colonizers' benefits. The decree of May 10, 1924, that France created articulated,

> The essential goal of elementary education is to bring the greatest possible number of Indigenous people closer to us, to familiarise them with our language, our institutions, and our methods, and to lead them gradually towards economic and social progress by the careful evolution of their own civilization. (Moumouni, 1968, p. 45)

This highlights the purpose of education—to assimilate indigenous culture into that of the French and other colonizers. Colonizers used language and curricula to colonize minds. Those colonized were forced to use only the colonizer's language, and if they failed to master it, they were barred from post-secondary education (Esiobu, 2019). Speaking their mother tongue led to punishment and shame (Davids, 2018). Esiobu emphasizes, "Language is important in shaping the consciousness of society" (2019, p. 33). Restricting local languages erodes identities and cultures, especially when the official language is colonial. Beyond language, dress codes, hairstyles, and other identity-shaping behaviors were also restricted (Davids, 2018).

Notably, the curriculum was Eurocentric, focusing, for example, on the geography and history of Europe. The curriculum and pedagogical approach did not incorporate indigenous knowledge and failed to challenge colonial ideology (Tsegay & Bekoe, 2020). The content was also set at a low level, limiting opportunities for low-level jobs after graduation, such as clerical and administrative positions (Esiobu, 2019). This colonial education instilled a sense of inferiority and shame toward indigenous knowledge and culture, eroding pride (Utsey et al., 2015). Teachers taught that Western culture is superior and more progressive than African culture, which was considered backward (Tsegay & Bekoe, 2020). This sense of inferiority compelled the colonies to rely on the colonizers. The impact has persisted after "the political, economic, and structural control of Africa," still devaluing their culture and tradition (Esiobu, 2019, p. 39). Esiobu asserts, "Several decades after the end of colonialism, sub-Saharan Africa has not made much progress in liberating the education process from the clutches of imperialism and dependency" (p. 40).

Many African education systems continue to foster a sense of inferiority toward Western culture. Balogun and Woldegiorgis (2023) state that in higher education, a colonial mentality entails rejecting elements with African cultural origins and embracing those from Western countries, thereby marginalizing African epistemology. Utsey et al. (2015) conducted a quantitative study on the correlation between internalized colonialism and Ghanaian mental health. The study revealed that individuals with high levels of internalized colonialism, cultural inferiority, and colonial debt had lower self-esteem and higher levels of anxiety and depression. This finding indicates that people in Ghana still endure psychological distress due to colonial legacies. Colonizers created economic and mental dependency by controlling production and education, and those legacies persist in today's world.

Global Citizenship

The concept of Global Citizenship (GC) traces back to the ancient Greek Stoics, who identified themselves as world citizens and emphasized ethical responsibility, shaping the modern concept of GC. Although they did not use the term "global citizens," these philosophers highlighted qualities associated with it. Socrates considered himself a citizen of the world, aligning with the idea of GC, which expands awareness and concerns beyond one's nationality (Schattle, 2009). Similarly, Marcus Aurelius believed that humans need to "think and act as though we are members of the universal city of mankind" (Schattle, 2009, p. 6). Cicero regarded GC as self-identification combined with ethical responsibility, stating that one must "avoid inflicting harm on other human beings" and "allow others to benefit where this can be done at no cost to oneself" (Schattle, 2009, p. 6). This underscores the importance of contributing to others' happiness rather than their misfortune.

The contemporary concept of GC has various interpretations based on one's ideology. Neoliberalism views global citizens as travelers who engage in the global economy, politics, and society by applying their knowledge and skills. Radicalism defines global citizens as individuals who recognize how global systems create economic divisions and challenge entrenched structures of inequality. Transformationalism perceives global citizens as those who understand the dynamic and complex nature of globalization, rather than merely viewing it as a form of imperialism or the global economy (Shultz, 2007). Oxley and Morris (2013) categorized global citizens into two main types: the cosmopolitan type (political, moral, economic, and cultural global citizenship) and the advocacy type (social, critical, environmental, and spiritual global citizenship).

Unlike approaches that reduce GC to increased participation in the global economy and politics or to a perspective on global structure that leads to inequality, Ikeda (1996) focuses his philosophy of GC on humanistic perspectives. He emphasizes that global citizens think of and act toward others' well-being and world peace, regardless of how many languages and countries one has visited: "[global citizens] are eternal activists whose goal is to rid the world of human misery and enable all people to enjoy their right to happiness" (Harding & Ikeda, 2013, p. 227). This study thus defines GCE as education that fosters students who wish to contribute to alleviating human misery and to impart happiness, as they reflect on their behavior and nurture wisdom, courage, and compassion within themselves.

GCE in Africa

Although GCE should be a crucial topic for improving education in Africa, only a small number of studies on this subject have been conducted to date. According to a systematic review of GCE articles from 2005 to 2015 by Goren and Yemini (2017), only 2 of 90 articles focused on GCE in African primary and secondary education. The remaining 88 articles came from other continents, such as Europe and North America. Furthermore, there is a lack of research on expatriates' views and opinions on GCE. The scarcity of articles on GCE in Africa suggests that the concept is not widely adopted in African countries. In fact, Waghid's (2023) qualitative study found that only four of nine professors interviewed were familiar with the concept of GCE. Among those four interviewees, three held understandings shaped by Western-centric perspectives that recognize poverty as a problem but overlook social injustice and equity.

While GCE remains relatively uncommon across Africa, South Africa's democratic education resonates with GCE values, including interconnectedness, compassion, respect, openness, and humanity. The democratic constitutional changes in 1994 aligned education with six values: "the cultivation of equity, tolerance, multilingualism, openness, accountability, and honour" (Waghid, 2018, p. 99). Furthermore, the "Manifesto on Values, Education, and Democracy," announced in the context of post-apartheid educational reform, introduced ten additional values. These include "the nurturing of democracy, social justice and equity, equality, non-racism, and non-sexism, Ubuntu (human dignity and humaneness), an open society, accountability, the rule of law, respect and reconciliation" (Waghid, 2018, p. 99).

In his 2023 study, Waghid examines how two teachers in South Africa implemented GCE by allowing students to research and discuss local and global issues. Waghid (2023) highlights that this approach helps students understand the relationship between their identity and their surroundings. Although understanding of GCE in South Africa is limited, some teachers recognize the concept and are working to develop students' critical thinking and responsibility toward global affairs. However, the term GCE appears more common in South Africa than in other parts of the continent, as most articles focus on the South African education system.

Tsegay and Bekoe (2020) highlight that violence in Africa stems from a lack of GCE and indigenous knowledge. They suggest that GCE fosters peace by encouraging teachers to develop global citizens committed to peace. Waghid (2018) argues that GCE's mutual learning promotes dissonance, prompting deep, critical reflection and new perspectives. He states, "if only a disruptive dissonance would be cultivated in pedagogical encounters through such approaches to citizenship education, already a renewed hope in openness, transparency, and deliberative engagement would have been awakened" (p. 107). Similarly, Waghid (2023) emphasizes the importance of critical, self-reflective, and imaginative engagement by educators to resist or transform a colonized curriculum (p. 14). These points indicate that GCE can foster critical thinking, self-reflection, and the courage to embrace differences, contributing to decolonized curricula and peaceful societies. Davids (2018) also suggests that GCE, if genuinely engaged with differences and perspectives, can help decolonize states.

On the other hand, some critics argue that the concept of GCE hinders the development of patriotism and the teaching of their history and culture to students (Tsegay & Bekoe, 2020). They assert that colonization complicated ideas of identity and patriotism. They emphasize the critical role of teaching local perspectives for identity formation and the development of patriotism, rather than focusing solely on global education. However, Davies and Pike (2010) argue that this criticism stems from a superficial understanding and that GCE enables students to cultivate various identities while acknowledging that individual identity is tied to nationhood.

Three key points must be considered when implementing GCE in African countries. The initial step is to integrate global and local perspectives on human interactions into education, a process Waghid (2018) identifies as the first step toward its implementation in South Africa. Likewise, Tsegay and Bekoe (2020) emphasize integrating modern Western knowledge and approaches with indigenous African knowledge in the teaching context. This fosters students' understanding of human rights, respect for others, and democratic engagement (Waghid, 2018). This inclusion of local perspectives could help shape or reshape their identities while expanding their knowledge of the world beyond national boundaries.

The second point is to create “disruptive pedagogical encounters” (Waghid, 2018, p. 105). It is crucial to recognize students as capable and active members of the class, fostering mutual interaction (Tsegay & Bekoe, 2020). This student-centered class, which fosters dissonance, enables students to question and critically reflect on commonly held assumptions, ultimately leading to societal change. GCE also needs to provide opportunities for students to learn skills and knowledge on how to apply them in society (Tsegay & Bekoe, 2020).

The third point is to employ country-based GCE that incorporates indigenous knowledge, as well as African values and norms that resonate with GCE (Tsegay & Bekoe, 2020). In other words, GCE should adapt its form to each country’s context and use what African countries already possess to incorporate GCE into the curriculum. For instance, Waghid (2018) states that, for implementation in South Africa, it is necessary to use the value-based approaches to education that the current education system already employs.

One specific way to implement GCE, given the three considerations above, is to strengthen the teacher education program. As Tsegay and Bekoe (2020) argue from a teacher education perspective, transforming teacher education programs, where many future educators gather and learn, is an effective approach. Interviewees in Waghid’s (2023) research emphasized the importance of building a network for educators to share their experiences and implementations. Teacher education programs must foster teachers who can decolonize students’ colonial mentality and teach them to love all human beings while integrating African culture and indigenous knowledge into their instruction (Tsegay & Bekoe, 2020). GCE incorporates both global and local perspectives, fostering student-teacher engagement tailored to each country’s context. This approach is believed to promote student development, decolonize the colonial mindset, and contribute to a more peaceful society.

Present Study

Study Site

The present study examined the views and perceptions of GCE through the lens of expatriates from African countries currently experiencing GCE in the U.S.—those studying or teaching at a Southern California college and graduate school that actively integrates GCE into various aspects of the institution, hereafter referred to by the pseudonym “SCC.”

SCC aims to foster global citizens equipped with the skills to unite with others, navigate a turbulent world toward peace, and contribute to others’ happiness. Furthermore, SCC’s diverse student body enhances GCE. Over 50 percent of the total student body comprises international students, with a recent increase in students from Africa, particularly Ghana. Approximately 14% of first-year students at SCC in Fall 2024 come from Sub-Saharan countries, while 2.5% of fourth-year students are from the same regions. SCC also boasts professors from various backgrounds, including Africa, Asia, and South America. The diverse and dynamic student body and faculty enrich students’ social and learning experiences by incorporating multiple perspectives into discussions. SCC’s curriculum emphasizes interdisciplinary learning and broadening perspectives on the world.

Research Questions

This study examined how GCE could help empower and decolonize the mind in Africa. In this context, the study expected that African students and faculty who completed their high school education in their home countries and experienced GCE at SCC would offer valuable insights into the following research questions:

(1) Are the study participants aware of and familiar with GCE? If so, how do they perceive its value?
(2) Did they experience GCE in high school in their home country? If they did, how did the GCE influence them? If they did not, do they believe that implementing GCE is essential in their countries?
(3) Do they believe that people in Africa still grapple with a colonial mindset? If so, how might GCE help facilitate the decolonization of the mind?

Methodology

Participants

The participants were (1) eight first- and second-year students at SCC who attended high school in an African nation, and (2) three professors from an African nation teaching at SCC. Their demographic data are presented in Tables 1 and 2.

Table 1
Participants—Students

	Age	Sex	Country of birth	Years in the U.S.	College year	High school type	School size (# of students)
Student A	20	F	Tanzania	1.5	2nd	International Baccalaureate (IB)/Urban	15
Student B	26	M	Ghana	1.5	2nd	Boarding/ Suburban	2,000
Student C	25	M	Ghana	1.5	2nd	Public/ Urban	2,000
Student D	22	F	Ghana	0.5	1st	Public/ Suburban	6,000
Student E	20	F	Somaliland	2	1st	American/ Private/Rural	300
Student F	22	F	Nigeria	0.5	1st	Private/ Urban	300
Student G	25	F	Kenya	0.5	1st	Private/ Urban	500
Student H	22	M	Ghana	0.5	1st	Public/ Boarding	1,500+

Table 2
Participants—Professors

	Age	Sex	Country of birth	Years in the U.S.	High school type	School size (# of students)
Professor A	35	M	South Africa	1.5	Urban	1,600
Professor B	38	M	Ghana	14	Boarding/ Rural	4,000
Professor C	n/a	F	Nigeria	18	Urban	600

Data Collection Procedure and Analysis

The data collection procedure involved semi-structured one-on-one in-person interviews conducted in English. Each interview took approximately 40 to 60 minutes. The interviews explored the participants' diverse views and opinions on GCE in Africa based on their experiences in high school in Africa and at SCC in the U.S. A thematic analysis of the interview data was conducted, which involved reading through the transcripts, coding, and identifying key themes, followed by a detailed description of the findings.

Findings

African Expatriates' Perceptions of GCE

All participants were familiar with GCE and expressed positive attitudes toward it. Their general understanding was that GCE fosters students' ability to lead a contributive life for the betterment of the world and society. For them, it is an education that teaches students to apply their knowledge to benefit society while nurturing their compassion to work for the betterment of people and the world.

Some participants highlighted the importance of a contributive mindset and understanding interconnectedness, fostering awareness of others, society, and the environment. Others linked GCE to open-mindedness and acceptance of diverse opinions. Professor B described three GCE dimensions: 1) becoming truly human, 2) interacting with others, including strangers, and 3) reflective thinking. He emphasized acting with wisdom, courage, and compassion. For example, courage without wisdom and compassion can cause harm; thus, the core lies in how we use these attributes. GCE teaches interconnectedness, helping students relate their lives to others and act accordingly.

Although most student participants emphasized that GCE means leading a contributive life, Students G and H perceived GCE as more about acquiring skills, such as proficiency in different languages and global mobility, including cultural awareness. While Student H mentioned only skills, Student G also highlighted the importance of social responsibility, specifically using knowledge and skills to improve the world, a notion emphasized by the majority of interviewees.

Impact of GCE on Expatriates' Lives

All participants agreed that GCE has significantly impacted their lives in many ways. Overall, they view GCE as a comprehensive educational approach that extends beyond basic skill development and material gains. It motivates them to become better individuals, deepens their understanding of life's interconnectedness, enhances critical thinking, promotes open-mindedness, inspires societal change, and fosters a strong sense of purpose in their education. Student E explained that the GCE curriculum at SCC expanded her knowledge and broadened her perspectives by critically examining global affairs, providing a space for open discussion where students can collaborate with professors, and learning from the viewpoints of people from different countries. According to Student E, this approach helps her feel more connected to other parts of the world.

Students D and F reported that GCE had a positive impact on their personal growth, helping them become better individuals who can contribute to society. Student A said, "[GCE] helps me nurture what's inside me that still needs to make a difference. It encourages my growth and provides guidance on what to do." Student D noted that GCE enables her to believe in herself and strive to maximize her potential. These examples suggest that GCE empowers students to develop into better individuals and contribute to society. Professor C noted that GCE has the potential to shift the perception of the purpose of education from materialistic pursuits, such as obtaining good jobs, money, and status, to a commitment to world peace, including an understanding of life and a valuing of human life.

GCE Curricula in Africa

Regarding GCE in their home countries, three of the eight students reported experiencing GCE while attending an urban International Baccalaureate (IB) school or a private institution that offers similar educational opportunities. Student A emphasized that the high school education she received was a valuable opportunity that many could not afford due to high tuition costs. Student F, who attended a private high school, stated that it fostered a culture of care and compassion, instilling a sense of social responsibility that allowed students to believe in themselves and contribute to others' happiness.

Faculty participants argued that Africa already has an educational philosophy similar to GCE, such as *Ubuntu* and traditional culture. For instance, Professor B stated that African countries possess a culture of care, an understanding of interconnectedness, compassion, and an openness to learning about the world and others. He explained that these components originate from the Ubuntu spirit, i.e., "I am because we are," and represent the qualities of global citizens. Likewise, Professor C stated, "African countries, Nigeria not being an exception, have always had that idea of global citizenship and philosophy valuing community-based life, social responsibility, the interconnectedness of lives."

In contrast, most participants reported not having experienced GCE in their home countries. However, they agreed that GCE could empower students in Africa to adopt positive values and perspectives, ultimately contributing to a better society. For example, two students from Ghana described how implementing GCE might change people's mindsets about the purpose of education, shifting from nurturing students who focus solely on their own success to educating themselves and others in Ghana. They said that GCE could increase people's awareness of their surroundings, broaden their perspectives and knowledge, and help them see how their knowledge can be useful in society. Similarly, Students E and G expressed a desire to apply the knowledge gained through GCE to benefit their countries by exploring both national and global perspectives. They view GCE, which incorporates both local and global views, as a way for African students to analyze their countries and the world, then combine that knowledge to improve Africa and the planet.

Colonial Mindset and the Role of GCE

Most participants said the colonial mindset is more common among older generations but is fading, though some noted it still lingers. Student E from Somaliland, however, said they do not have a colonial mindset, taking pride in their identity and not feeling inferior to Whites, while acknowledging Western development.

Many noted that a positive shift is underway, driven by social media. Professor C mentioned increased use of Pan-African aesthetics, replacing Western dominance, alongside improvements in education and policy. Student C highlighted the benefit of all SCC students studying abroad to gain diverse perspectives. Overall, participants agreed that GCE would help overcome colonial mindsets, promote cross-border opportunities, and encourage critical thinking. Student A added that GCE could decolonize minds by teaching about global issues, highlighting exploitation by Western systems, and encouraging self-trust and critical questioning for personal growth and happiness.

Discussion

GCE as a Tool for Peace and Empowerment

This study found that expatriate participants from African countries view and value GCE as shaped by SCC's mission and values. Regardless of their age, country of origin, or type of high school education, participants were aware of and valued GCE, although most had not encountered it before arriving in the U.S. They viewed GCE as a tool to foster compassion in students and encourage them to contribute to the betterment of the world. While each participant mentioned more specific elements of GCE, everyone's understanding was grounded in the "contributive" aspect of GCE, as reflected in SCC's mission. This understanding aligns with ancient Greek Stoic philosophy, as exemplified by Cicero, who emphasized the importance of promoting others' happiness rather than sacrificing it (Schattle, 2009).

Participants recognized GCE as a holistic educational approach that goes beyond merely acquiring skills and material things. It encourages compassion, critical thinking, an understanding of interconnectedness, and openness to diversity. Based on their experiences, they expressed appreciation for GCE at SCC, noting that SCC's curriculum and diverse student body embody GCE and its principles. Despite demographic differences, most participants shared a similar understanding of GCE and viewed it positively, suggesting that this perspective is shaped by SCC's GCE curriculum.

Participants agreed that GCE helps broaden perspectives, unite people, and transform education, despite concerns about the loss of patriotism raised by Davies and Pike (2010). Students want to use GCE to benefit their countries, emphasizing critical thinking as a key outcome. This aligns with Waghid's (2018) view that GCE incites deep reflection, debate, and challenges to dominant narratives. Echoing Tsegay and Bekoe's (2020) assertion that GCE fosters peace and stability, one student argued that GCE can unite people across nations and races in the quest for peace amid violence and instability. Participants explained how GCE can support Africans more specifically. Some said it will help shift education from a materialistic focus to using knowledge for societal well-being. This means GCE encourages students to learn and act for others' benefit, promoting peace in African countries.

Participants agreed that GCE can help decolonize mindsets through collaboration, belief in potential, and student-centered pedagogy, which encourage the expression of opinions and critical questioning. Student H said GCE allows African students to learn from each other's cultures and work collaboratively, promoting cultural appreciation and helping overcome Western-African mental barriers. Another student noted that GCE helps children believe in themselves and overcome colonial mindsets. Jo and Cho (2018) found that GCE improved self-efficacy and self-esteem among Korean high school students.

Ubuntu for GCE Implementation

This study revealed the strong alignment between GCE and the African philosophy of Ubuntu. Signified as "I am, because we are," Ubuntu embodies moral values such as kindness, empathy, benevolence, respect, togetherness, openness, community responsibility, humility, and courage (Eze, 2018, para. 8; Mukwedeya, 2022). These values align with the core tenets of GCE, including collaboration, compassion, unity, a contributive life, interconnectedness, and open-mindedness, which the study participants identified as key characteristics of GCE. In addition, the decision-making process based on Ubuntu incorporates minority views to avoid exclusion (Mukwedeya, 2022), a theme also explored in GCE.

Participants noted that African countries already have the Ubuntu philosophy, and that GCE doesn't have to be the only tool for fostering a better society. An openness to learning about the world, other people, and strangers stems from the Ubuntu spirit. However, a few participants insisted that people in their countries are not interested in the broader world and are focused only on their own nations and communities. This indicates a decline in openness to the world, a quality inherent to Ubuntu. These examples show that traditional philosophies in education are being lost in the current education system, which is primarily influenced by Westernization and colonization. Mukwedeya (2022) argues:

> It is the state's role in most educational systems to map holistic curriculum, but indigenous way of knowing are marginalized. ... the parochialism is a result of the universalized western ways imposed on other societies through past colonization or current neo-colonialism at the expense of utilizing transformative indigenous knowledge. (p. 225)

This argument illustrates the marginalization of indigenous knowledge systems due to colonization, resulting in a narrow perspective, despite the importance of a holistic educational approach. In this context, where there is a significant threat of losing Ubuntu and traditional philosophies, its revitalization in an education system is essential, rather than implementing an entirely new curriculum, because similar values have existed.

Conclusion

This study primarily explored how GCE can promote empowerment in Africa and be implemented effectively. It showed that GCE in Africa can shift perceptions of education's purpose, inspire a desire to serve society, enhance students' critical thinking, encourage open-mindedness, broaden perspectives, and build unity beyond borders. The study recognized that revitalizing the Ubuntu spirit, which shares qualities with GCE, and incorporating elements currently missing from the African education system are effective approaches to implementing GCE.

This research has limitations, notably the small sample of eight students and three professors from six countries. Given Africa's diversity and size, future studies should include a broader, more diverse sample from across the continent. Moreover, further research should examine Ubuntu and its role in GCE. Exploring how the Ubuntu spirit manifests in today's education system and how to reinvigorate it in educational contexts could provide valuable insights.

Acknowledgments

The authors sincerely thank the study participants who volunteered and shared their insights into their practices and perspectives.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The authors acknowledge that Grammarly, an AI-assisted writing software, was used to proofread and refine the language of the manuscript. The usage was limited to correcting grammatical and spelling errors and rephrasing statements for accuracy and clarity. The authors further declare that, apart from Grammarly, no other AI or AI-assisted technologies have been used to generate content in writing the manuscript. The ideas, design, procedures, findings, analyses, and discussion are original and derived from the appropriate and systematic conduct of the research.

References

Azevedo, M. J. (2017). *Historical perspectives on the state of health and health systems in Africa, volume I: The pre-colonial and colonial eras*. Palgrave Macmillan Cham.

Baker, N., & Priadko, T. (2022). *Africa is not a country: The real story of one of the most diverse and complex regions on the planet*. https://www.abc.net.au/news/2022-08-19/africa-is-not-a-country-dipo-faloyin/101310916

Balogun, B. J., & Woldegiorgis, E. T. (2023). Combating colonial mentality within higher learning spaces: The case of sub-Saharan African universities. *African Journal of Teacher Education, 12*(2), 94–118. https://journal.lib.uoguelph.ca/index.php/ajote/article/view/7517

Davids, N. (2018). Global citizenship education, postcolonial identities, and a moral imagination. In I. Davies, L.-C. Ho, D. Kiwan, C. L. Peck, A. Peterson, E. Sant, & Y. Waghid (Eds.), *The Palgrave Handbook of Global Citizenship and Education* (pp. 193–207). https://doi.org/10.1057/978-1-137-59733-5_13

Davies, I., & Pike, G. (2010). Global citizenship education: Challenges and possibilities. In R. Lewin (Ed.), *The handbook of practice and research in study abroad: Higher education and the quest for global citizenship* (Chapter 5). Routledge.

The Economist. (2024). *By 2100, half the world's children will be born in sub-Saharan Africa*. The Economist. https://www.economist.com/graphic-detail/2024/04/16/what-a-baby-boom-means-for-africa

Esiobu, E. C. (2019). *Indigenous knowledge and education in Africa.* Springer Singapore. https://doi.org/10.1007/978-981-13-6635-2

Eze, M. O. (2018). *I am because you are*. UNESCO. https://courier.unesco.org/en/articles/i-am-because-you-are

Geo History. (2018, Dec 22). *Colonization of Africa — Summary on a map* [Video]. YouTube. https://youtu.be/Fbb7nbIUUEM?si=mNS8rMC--NuPpaix

Goren, H., Yemini, M. (2017). The global citizenship education gap: Teacher perceptions of the relationship between global citizenship education and students' socio-economic status. *Teaching and Teacher Education, 67*, 9–22. https://www.sciencedirect.com/science/article/abs/pii/S0742051X1730834X?via%3Dihub

Green, M. A. (2023). *Africa's median age is about 19. The median age of its leaders is about 63*. Wilson Center. https://www.wilsoncenter.org/blog-post/africas-median-age-about-19-median-age-its-leaders-about-63

Harding, V., & Ikeda, D. (2013). *America will be!: Conversations on hope, freedom, and democracy*. Dialogue Path Press.

Ikeda, D. (1996). *Thoughts on education for global citizenship*. Lecture delivered at Teachers College, Columbia University, New York, NY, June 13, 1996. https://www.daisakuikeda.org/sub/resources/works/lect/lect-08.html

Jo, M., & Cho, M. (2018). The effect of Global Citizenship Education on the psycho-social health of adolescents. *Asia-Pacific Journal of Convergent Research Interchange*. *4*(3), 93–105. https://doi.org/10.14257/apjcri.2018.09.10

Mamdani, M. (2016). Between the public intellectual and the scholar: Decolonization and some post-independence initiatives in African higher education. *Inter-Asia Cultural Studies*, *17*(1), 68–83. https://doi.org/10.1080/14649373.2016.1140260

Moumouni, A. (1968). *Education in Africa*. Praeger.

Mukwedeya, J. (2022). Peace and harmony through uBuntu in a globalized world. In Lumumba, A. N. (Eds.), *Comparative education for global citizenship, peace and shared living through uBuntu* (pp. 221–241). Brill. https://brill.com/display/book/9789004518827/BP000026.xml

Nyoni, J. (2019). Decolonising the higher education curriculum: An analysis of African intellectual readiness to break the chains of a colonial caged mentality. *Transformation in Higher Education*, *4*, 1–10. https://doi.org/10.4102/the.v4i0.69

Ocheni, S., & Nwankwo, B. C. (2012). Analysis of colonialism and its impact in Africa. *CSCanada, 8*(3), 46–54. http://dx.doi.org/10.3968/j.ccc.1923670020120803.1189

Olaniran, O. (2024). *What is sustaining colonial mentality in 21st-century Africa?* Medium. https://ololadejosephcyrusolaniran.medium.com/what-is-sustaining-colonial-mentality-in-21st-century-africa-14588f77e2f2

Oxley, L., & Morris, P. (2013). Global citizenship: A typology for distinguishing its multiple conceptions. *British Journal of Educational Studies*, *61*(3), 301–325. https://doi.org/10.1080/00071005.2013.798393

River, C. (2019). *The colonization and decolonization of Africa: The history and legacy of European imperialism across the African continent*. Charles River Editors.

Schattle, H. (2009). Global citizenship in theory and practice. In R. Lewin (Eds.), *The handbook of practice and research in study abroad higher education and the quest for global citizenship* (pp. 3–20). Routledge. https://doi.org/10.4324/9780203876640

Shultz, L. (2007). Educating for global citizenship: Conflicting agendas and understandings. *Alberta Journal of Educational Research*, *53*(3), 248–258. https://doi.org/10.55016/ojs/ajer.v53i3.55291

Smedley, A., Nicol, D. S., Gardiner, R. K., McMaster, D. N., Middleton, J. F., Clarke, J. I., Steel, R. W., Kröner, A., Mabogunje, A. L., & Dickson, K. B. (2025). Africa. Encyclopedia Britannica. https://www.britannica.com/place/Africa

Tsegay, S. M., & Bekoe, A. M. (2020). Global citizenship education and teacher education in Africa. In D. Schugurensky & C. Wolhuter (Eds.), *Global citizenship education in teacher education* (Chapter 7). Routledge.

UNESCO. (2023). *Q&A: How are African countries improving the quality of their education?* https://www.unesco.org/en/articles/qa-how-are-african-countries-improving-quality-their-education

Utsey, S. O., Abrams, J. A., Opare-Henaku, A., Bolden, M. A., & Williams, O. (2015). Assessing the psychological consequences of internalized colonialism on the psychological well-being of young adults in Ghana. *Journal of Black Psychology*, *41*(3), 195–220. https://doi.org/10.1177/0095798414537935

Waghid, Y. (2018). Global citizenship education: A Southern African perspective. In I. Davies, L. Ho., D, Kiwan. C. L. Peck., A. Peterson, E. Sant, & Y. Waghid (Eds.), *The Palgrave handbook of global citizenship and education* (pp. 97–109). Springer.

Waghid, Y. (2023). Teacher educators' pedagogical practices in global citizenship education using the soft vs. critical GCE framework. *Cogent Education, 10*(2), 1–19. https://doi.org/10.1080/2331186X.2023.2251757

World Bank. (2020). *Tertiary education in Sub-Saharan Africa*. https://www.wathi.org/sub-saharan-africa-tertiary-education-the-docs-world-bank-december-2020/

Contact email: ttakahashi@soka.edu

Local Governments' Role to Promote Industry in Post-developmental States: The Legacy of Developmental State in the Case of South Korea

Akio Nawakura, National Federation of Depopulated Municipalities in Japan, Japan

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

This study examines how local government in post-developmental East Asian states determine and implement industrial policies for their regional development. Classic scholarship on the East Asia's development argues that rapid growth since the 1960s was driven by centralized states that mobilized resources and guided industry. Since the 1990s–2000s, however, those countries decentralized authority and it raises a new question: how do provincial and municipal governments use their expanded powers for local economic development? By examining a single case study on a South Korean province's policy making on agriculture, this study argues that the local government in the post-developmental East Asia displays strong autonomy as the former developmental states showed.

Keywords: developmental state, South Korea, agriculture, decentralization, provincial government

iafor
The International Academic Forum
www.iafor.org

Introduction

This study asks how local government in post-developmental East Asian states determine and implement industrial policies for their regional development focusing on the legacy of former developmental states.

As broadly known, East Asian countries such as South Korea, Japan, Taiwan, and Singapore have achieved rapid economic growth since the 1960s. And, also broadly known, the states have played much role in promoting the miraculous growth in distributing socioeconomic resources, supporting the export of industrial products, and offering private enterprises some incentive to upgrade their productivity. From the perspective of public administration, those developmental states promoted industrialization under centralized government structure. South Korea, Taiwan, and Singapore were ruled by authoritarian regimes and local authorities were under regulation by the central one. Also in Japan, its administrative power was highly concentrated to the central government in Tokyo until the 1990s.

Since the 2000s, however, some of those Asian developmental states, particularly South Korea and Japan, have promoted decentralization of administrative power. While the states dominated the governmental power in the development age of the previous Century, provincial, prefectural, and municipal governments also hold the power in those countries today. In such post-developmental age, then, how do the local governments mobilize the granted administrative power in promoting regional industry? Do they behave similarly in the promotion as the states formerly did? Or do they act differently from the states? As an initial step to answer to those questions, the sections below review previous studies in related theme, set the hypothesis to be verified, and attempt a case study on a South Korea's province.

Previous Studies on East Asia's Developmental State

Since the 1980s, the rapid economic growth in East Asia has been one of the major topics in political economy study. Most previous studies on this topic commonly point out that the states have played major role in promoting industrialization of the region. Johnson (1986) described the growth of Japanese economy since the 1960s as "miracle" and argued that the Ministry of International Trade and Industry (The Ministry of Economy, Trade, and Industry since 2001) played the crucial role to mobilize socioeconomic resources to boost the nation's export. Amsden (1989) called South Korea "Asia's next giant," which meant the second industrialized country in Asia following Japan, and argued that the governmental organizations such as the Economic Planning Board (The Ministry of Economy and Finance since 2008) acted as the commander on the conglomerates such as Hyundai and Samsung to drive the export. Both two studies emphasized that the states played "developmental" role in promoting the nations' industrialization.

Since the 1990s, however, the two developmental states in Asia have experienced decentralization of administrative power from the central governments to the provincial, prefectural, and municipal ones. In the case of Japan, the central government transferred much part of its administrative control over prefectural and municipal governments by the Decentralization Promotion Act of 1999. In addition, the Ministry of Home Affairs, the symbol of the nation's centralized public administration, was reorganized to the Ministry of Internal Affairs and Communications in 2001 because of the nation's structural reform.

Also in South Korea, the central government has promoted administrative decentralization as Japan did. Local Government Act was fully revised under the Roh Moo-hyun government in 2004 and much administrative power such as road construction and education management was transferred to local governments. This means that the states are no longer the dominant players to mobilize public resources for the purpose of development.

Previous studies on local governance in post-developmental phase have mostly focused on the role of municipalities in social security, public health, and education in both Korea and Japan. Those studies argued that the provincial governments in South Korea tend to increase their budget for regional development in fiscal years just before gubernatorial elections every four years. Choi (2025), for example, described a clear pattern of provincial budget that the expenditure for social welfare, one of the major policy issues for South Korea's local governments, increases on fiscal years around the local elections and decreases after the ones. Also on Japan, some studies including Nawakura et al. (2025) argued that the prefectural and municipal governments have grown their own policy networks with business federations, agricultural cooperatives, and some other private actors to promote their local industry.

The previous studies, on the other hand, have pointed out that the local governments in the two post-developmental Asian countries have fiscally depended on grants by the central governments and have seen that the fiscal dependence has deterred the capacity of industrial policies by the local governments. Jeong et al. (2025), for example, pointed out that the grants and subsidies by South Korea's central government are an influential factor on the expenditure by local governments.

However, fiscal capacity does not fully determine the role of governmental authority in promoting industrialization. As Johnson (1986) and Amsden (1989) pointed out, governmental industrialization measures include not the distribution of financial resources but also (de)regulation, education and job training, and administrative guidance on private enterprises. It means that the local governments in post-developmental East Asian countries such as Korea and Japan can play some role in promoting industrialization in their regions.

Hypothesis and Case Selection: Path-Dependent Behavior of Local Government

As pointed out in the previous section, the role of local governments in the post -developmental Asian countries in terms of local/regional industrialization since the decentralization has been a research gap in political science and development studies. As seen in the guidance by the UNDP (2004), on the other hand, empowerment of local authorities by decentralization for socioeconomic development is today a consensus among researchers and donors. Reflecting the performance of official development assistance by the West, the achievement of development in Asian and African countries, and sociopolitical transparency in developing countries, local authorities including prefectural, provincial, and municipal governments are expected to play active role in terms of public policy than ever before. Therefore, it is an emerging task for political science and development studies to ask whether and how prefectural, provincial, and municipal governments act for local development.

This study sets a hypothesis that the local governments in the post-developmental Asian countries, particularly South Korea and Japan, have played the role of commanders for their own regional development for decades since the decentralization as the states previously did in the 20th Century. The hypothesis is based on the findings by previous studies which emphasize strong path dependence of developmental state in post-developmental stage. As Hellmann

(2020) points out, the East Asia's national governments such as South Korea and Japan are often influenced by the legacy of former developmental states in policy making and implementation. In South Korea's rural development, for example, the state's autonomy in policy making observed in the Saemaul Undong (the New Village Movement) in the 1970s has been sustained for decades and kept the Korean state away from farmers' lobbying in promoting internal urban-to-rural migration to secure human resources in agricultural sector in the age of aging and population decrease. Because the decentralization structural reform was planned, promoted, and implemented under the initiative of national governments in both two former developmental states, the policy know-how of the developmental states is expected to be shared among not only national bureaucrats but also local officers.

To verify the hypothesis above, this study selects agricultural human resource policies by South Korea's provincial governments in the 2020s. There are some reasons for this case selection. First, agriculture is an industrial sector which has common policy subjects in both developmental phase in the 20th Century and post-developmental one in the 21st Century. Since the beginning of the rapid industrialization in the mid-20th Century, agricultural sector in South Korea and Japan have continuously faced the subject of labor shortage due to rural-to-urban migration.

Second, South Korea has held relatively clear and simple policy structure in terms of agriculture compared with the other former Asian developmental state, Japan. As Yoshida (2012) described, Japanese agricultural policies since the 1950s have formed under highly complicated actor relations. While the Ministry of Agriculture, Forestry and Fishery oversees agricultural policies in the central government level, the legislative members of the ruling Liberal Democratic Party, particularly those are elected in rural constituencies, have frequently intervened to the Ministry's policy making. In addition, the Japanese Agricultural Cooperative has been politically active to increase subsidy for farmers, to raise the price of agricultural products, and prevent trade liberalization. Also, the Chamber of Agriculture, the organization by farmland holders have been a major actor. Compared with the Japanese policy making processes, on the other hand, the features of South Korea's agricultural policy making has been clearer and easy to be observed. The National Association of Agricultural Cooperative in Korea has been politically neutral. Though there are some nationwide farmers' associations in South Korea, they are private actors and have no legal prerogative in policy making processes.

Third, case study on province can cover the interaction with both central government and municipality. While provincial government is influenced by central government in determining and implementing regional industrial policy, it also influences on local one of municipal government. Therefore, the analysis on provincial government can cover not only its transaction with a larger authority, central government, but also that with smaller ones, municipality.

This study selects South Gyeongsang Province, a province located in the southeast part of the Korean Peninsula, as a case to be observed. Agriculture in the Province has similar features with the nation's agriculture both in terms of average farmland size per household (1.7ha), and most major agricultural product (rice). Differently from some other rural provinces such as Jeju, North Jeolla, and Gangwon, South Gyeongsang Province is not a special administrative province, which the central government transfers broader administrative power and fiscal resources.

The section below focuses on the policies on agricultural human resources by the government of South Gyeongsang Province since in the 2020s. In aging and decrease of rural population, the governmental authorities in South Korea, both central and local, promoted internal migration of urban dwellers to the nation's rural areas to secure workforces in agricultural sector in the 2010s. At the end of the 2010s, however, the scholars and officers recognized the problems of urban-to-rural migration: Though the newcomers in rural areas are active to produce high-value products such as orange, apple, watermelon, and honey, they show less interest in building relations with conventional farmers and producing traditional agricultural products such as rice (Yoon & Takayanagi, 2018; You & Lee, 2014). The governmental authorities in South Korea, therefore, shifted their agricultural human resource policies to secure workforces to be engaged in conventional farming in the latter half of the 2010s. The next section sees how the South Gyeongsang Province government launched and implemented agricultural human resource policies by reviewing literature such as newspaper articles and governmental press releases and interprets them based on narrative analysis.

A Case Study: Agricultural Policies by a South Korea's Provincial Government

As well as other provinces in South Korea, South Gyeongsang Province has promoted to accept urban-to-rural migration since the 2010s to secure human resources in rural areas. For that purpose, the provincial government spent more than KRW six billion from F/Y 2013 to F/Y 2019 for agricultural infrastructure, public facilities such as road and irrigation in rural areas, and financial assistance for new farmers migrated from urban areas (Kim, 2020). Because of the measures above and increasing expenditure in other policy fields, the provincial government deepened its dependence on the grants and subsidies by the central government. In the promotion of urban-to-rural migration, the provincial government, as well as municipal ones, also expended for advertisement events.

In addition to the reasons above, the pandemic crisis in the early 2020s decisively worsened the finance of the provincial government. As of 2023, local tax covered less than 30% of the annual revenue of the provincial government while the left 70% was covered by the grants by the central government (Gyeongnam Ilbo, 2025).

As a result of the 2022 local election, governor of the province changed. Kim Gyung-soo, incumbent governor belonging to a progressive party, lost and Park Wan-soo, former officer of the provincial government and a member of the National Assembly, won. Park has the experience of serving as the director of the Agriculture Bureau when he was an officer of the provincial government. He emphasized the necessity to revitalize rural industry including agriculture in the election campaign (Geoje Times, 2022).

After inaugurated to the governor, however, Park faced the subject to decrease the province's fiscal dependence on the central government. Yoon Seok-yeol, who won the presidential election in spring 2022, put his priority to decrease the fiscal deficit of the central government, which increased under former President Moon Jae-in. This indicated that the central government required the provincial government to raise the share of local tax in its fiscal revenue. Under these circumstances, Park Wan-soo sought the way to save the expenditure of the provincial budget, including that for agriculture, in F/Y 2023. In fall 2022, Park submitted the budget bill for F/Y 2023 to the provincial council. In the bill, the provincial government planned to expend KRW 520 billion for agricultural sector, only 70% level compared to other provinces.

While cutting the expenditure, the provincial government under Park put its priority of agricultural policy on promoting smart farming. While the promotion of urban-to-rural migration achieved the inflow of tens of thousands of urban dwellers to the province's rural areas, as seen above, the migrated farmers are concentrated in producing high-valued agricultural products. In order to secure the supply of conventional agricultural products such as rice in future, the provincial government promoted smart farming. In the F/Y 2024 budget, the provincial government raised its expenditure on training programs for smart farming by 25% compared to the previous year (Gyeongnam Ilbo, 2023).

The provincial government showed high autonomy in determining to cut expenditure and to shift to smart farming. While agricultural policy making if often influenced by farm lobby in the Western democracies such as the United States and the European Union (Hansen, 1995), the policy making process in the South Gyeongsang Province's case dominated by the governor and the provincial bureaucrats. The Busan and South Gyeongsang Province Branch of the Korea Peasant League (KPL), one of the major progressive farm lobby groups in South Korea, resisted on the provincial government to increase agricultural budget repeatedly from fall 2022 to summer 2025 pointing out that the provincial government's expenditure on agriculture was too little and more active response by the provincial government was required (Busan and South Gyeongsang Province Branch of the Korea Peasant League, 2025).

The protest by the farm lobby organization can be interpreted as complaint by incumbent farmers because the public support in agriculture concentrated on newcomers. In the promotion of smart farming, in other words, the provincial government increased the expenditure on training for farmers who tried to begin highly modernized agriculture based on artifact intelligence, drones, and scientific control on farmlands (Korea Eagle News, 2025). Though the training programs do not exclude incumbent farmers, it is hard for middle-aged farm operators to learn that new technology.

The KPL demanded the provincial government to increase agricultural budget not only for extension programs but also for farmers' allowance (Park, 2023). The KPL emphasizes public function of agriculture such as food supply, irrigation, and the protection of natural environment and insists that the farmers, both newcomers and incumbent, have the right to receive the allowance in exchange for the contribution to the public value. As of the end of 2023, however, the provincial government rejected the demand for the scarce finance and the KPL expressed "Serious disappointment" on the provincial government's response (Park, 2023). This indicates that the provincial government determined the restructuring of its agricultural expenditure without the pressure from farm lobby.

The Province Council members' objection to increase the expenditure for agriculture indicates that even local council members were not the inner-circle ones of the policy making by the provincial government. Differently from policy making processes in the Western democracies, the South Gyeongsang Province's decision making on agricultural policies can be seen as a top down one.

Also in implementing smart farm training programs, the provincial government showed high autonomy. In F/Y 2025 budget, the provincial government increased the expenditure by 20% than previous year on training programs for smart farming in the Provincial Institute of Agricultural Technology, the agricultural training organization operated by the provincial government (General Affairs Division of the Gyeongsangnam-do Agricultural Research and Extension Services, 2025). While the provincial government also supported the training programs in private organizations such as universities and agricultural cooperatives, the Provincial Institute launched the programs not only for farmers but also for the officers of municipal governments (General Affairs Division of the Gyeongsangnam-do Agricultural Research and Extension Services, 2025). In those programs, the municipal government officers as the trainees are expected to learn the know-how of smart farming and to act as trainers on farmers in their local training organizations. It means that the governmental sector, provincial and municipal governments, holds autonomous system to train farmers.

The farmers' associations such as the KPL were critical of the provincial government's policies to concentrate financial resources on smart farming and continued their lobbying on the provincial officers. In sessions of the Provincial Council, several council members elected from rural constituencies asked the executive officials whether the provincial government increased amount agricultural budget as the farm lobby requested (Gyeongnam Domin Ilbo, 2025). The directors of the Agricultural Bureau of the provincial government, however, emphasized how the financial resources of the provincial government was scarce and substantially rejected to accept the farmers' demand.

In September 2025, Park declared that the provincial government would increase its agricultural budget in F/Y 2026 (E-News Today, 2025). In a financial document released prior to the Park's speech, the provincial government showed the plan to increase its expenditure not only on training programs for smart farming but also on the allowance on individual farmers, which the KPL demanded. Finally, the provincial government’s agricultural budget in F/Y 2026 recorded more than KRW one thousand billion which increased by over 4% from the previous year (Korea Eagle News, 2025).

Though the provincial government accepted some parts of the request by the farm lobby, it should be seen as a result of the change in the national politics rather than as a fruit of the lobby. Following a coup plot in December 2024, President Yoon Suk-yeol was impeached by the Constitutional Court. Lee Jae-myung, a candidate nominated by the progressive Democratic Party, won the presidential election June 2025. After his inauguration as the President, Lee revised the central government's financial policies to increase the expenditure on socioeconomic fields drastically (Ministry of Finance, 2025). Agriculture was not exceptional. The central government's F/Y 2026 budget increased its expenditure on agriculture by 7% compared to the one of the previous year, including the raising of the farmers allowance from KRW300,000 to KRW 600,000 per household annually (E-News Today, 2025). Though the provincial governments depend on the subsidies and grants by the central one financially, in other words, it can be seen to encourage the local authorities' autonomy in policy making.

Conclusion, Its Meaning, and Future Subjects

This study asked how local governments in post developmental East Asian countries determine and implement their regional development policies. The developed East Asian countries such as South Korea and Japan have promoted decentralization in their post-development phase since the 1990s. As the legacy of developmental states' methods such as governmental autonomy in policy making is often observed in their central governments, however, the local authorities of those countries are expected to follow the way of the former developmental states in their regional development policies today. Based on this recognition, this study select South Gyeongsang Province's policy making style in agricultural sector as a case and reviewed how the provincial government determine its agricultural policies in the 2020s.

The case study indicates that the provincial government showed high autonomy in agricultural policy making. Though the farm lobbying group KPL has demanded to increase agricultural budget and raise the allowance for incumbent farmers since 2022, the provincial government promoted smart farming as a core of its agricultural policies. Also in the process of its implementation, the provincial government increased its expenditure on smart farming training in the public training organization rather than collaborating with various private actors. While the provincial government depends on the central government in terms of finance, it shows autonomy and leadership to promote agriculture in the age of aging and population decrease.

This study, however, is just a single case study on agricultural policies. Also in terms of research method, this paper employed only narrative analysis based on literature review. Quantitative analysis on broader policy fields, qualitative analysis employing interview on officials, and the analysis on the other decentralizes post developmental state, Japan, remained as future subjects.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The author declares that M365 Copilot, an AI-assisted software, was used only in correcting grammatical and spelling errors. The author also declares that no other AI technologies have been used in the writing process of this paper.

References

Amsden, A. (1989). A*sia's Next Giant: South Korea and Late Industrialization.* Oxford University Press.

Busan and South Gyeongsang Province Branch of the Korea Peasant League. (2025, April 10). '*Seongmyeongseo*' [Official Statement]. Facebook. https://www.facebook.com/pkjunnong/posts/

Choi, J. (2025). A Study on the Political Characteristics of Local Government Heads and Budget Execution: Focusing on the 25 Autonomous Districts of Seoul. *Journal of Local Administration Studies, 39*(3), 93–122.

E-News Today. (2025, September 12). *Park Wan-soo Gyeongnamgo Jisa 2026 Nyeon Buteo Nongeoupin Sudang Insang Gyaoljeong* [Governor Park Wan-soo to Determine to Raise Farmers Allowance from 2026]. https://www.enewstoday.co.kr/news/articleView.html?idxno=2328671

General Affairs Division of the Gyeongsangnam-do Agricultural Research and Extension Services. (2025). *2025nyeondo Sechul Yesanseo* [Expenditure of the F/Y 2025 Budget]. https://www.gnares.go.kr:8444/File/Download.do?dir=board&savename=20250110_341909131436&realname=%EB%86%8D%EC%97%85%EA%B8%B0%EC%88%A0%EC%9B%90%EC%98%88%EC%82%B0%EC%84%9C%282025%EB%85%84+%EB%B3%B8%EC%98%88%EC%82%B0%29.pdf

Geoje Times. (2022, April 14). *Park Wan-soo, Bokji Nongeochon Gongyak Balpyo* [Park Wan-soo to Show His Pledge on Welfare, Agriculture, and Fishery]. https://www.geojetimes.co.kr/news/articleView.html?idxno=118113

Gyeongnam Domin Ilbo. (2025, May 13). *Gyeongnam-doihoi Nongeomin Sudang Insang Deung Nongeomin Jiwon Wigyeon Jeshi* [The South Gyeongsang Province Council to Suggest the Support for Farmers and Fishermen by Raising Allowance etc.]. https://www.idomin.com/news/articleView.html?idxno=937219

Gyeongnam Ilbo. (2023, November 22). *Gyeongnam, 2024nyeondo Yesanan 12jo 570eok Won Pyeonseong* [South Gyeongsang Provincial Government to Present KRW 12.57 trillion as the 2024 Budget]. https://www.gnnews.co.kr/news/articleView.html?idxno=539674

Gyeongnam Ilbo. (2025, March 3). *Gyeongnam-do Jaejeong Jalip-do Sopok Sangseunghan 33.1%* [South Gyeongsang Province Slightly Raises Its Fiscal Autonomy to 33.1%]. https://www.gnnews.co.kr/news/articleView.html?idxno=605681

Hansen, J. M. (1995). *Gaining Access: Congress and the Farm Lobby, 1919-1981.* University of Chicago Press.

Hellmann, O. (2020). 'South Korea's Democracy and the Legacies of the Developmental State' in Croissant and Hellmann (eds), *Stateness and Democracy in East Asia*. Cambridge University Press.

Jeong, J., Kim, G., & Jo, W. (2025). *Jung-ang Jeongbu Yeosani Jijache Yesangwa Sahoijeok-Gyeongje Seollipe Michin Yeonghyang [*The Influence of Central Government's Finance on Local Governmental Budget and Social Economy]. Korean Institute on Cooperative Studies.

Johnson, C. (1986). *MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925-1975*. Stanford University Press.

Kim, H. (2020). *Doshiwa Nongchoni Hamkke Haneun Gyeongsangnam-do* [Cooperation between Urban and Rural Areas in South Gyeongsang Province] https://blog.naver.com/greenmagazine-rda/223753680584

Korea Eagle News. (2025, May 14). *Park Wan-soo Gyeongnam-do-Jisa 'Nongeoubedo Robot, Inggong Jineung Jeokgeuk Doiphaeya'* [South Gyeongsanbg Province Governor Park Wan-soo to Insist to Introduce Robot and AI to Agriculture Actively]. https://www.koreaeaglenews.com/news/articleView.html?idxno=83691

Korea Eagle News. (2025, December 4). *Gyeongsangnam-do 2026nyeon Jeongbu Yeosan Gukbi 11jo 6,789eok* [The Governmental Grants on South Gyeongsang Province Record KRW 11.6789 billion]. https://www.koreaeaglenews.com/news/articleView.html?idxno=93061

Ministry of Finance. (2025). *2026nyeon Yesanan* [Budget Bill F/Y 2026]. Ministry of Finance of the Republic of Korea.

Nawakura, A., Okazaki, M., Okuda, H., Zushi, N., Taguchi T., Yokota, J., Heo, M., & Ichida, T. (2025). *Kaso Chiiki Ni Okeru Chiiki-Sangyo No Keisho To Hatten Ni Kansuru Chosa Kenkyu Hokokusho* [The Report of the Study on Regional Industry and Its Development in Population Shrinking Regions]. National Federation of Depopulated Municipalities in Japan.

Park, M. (2023). *'Gyeongnam Nongmin-danche 'Naenyondo Nogneop Yesan-Jeonchaek Silmang'* [Farmers' Group in South Gyeongsang Province 'We Are Disappointed in Next Year's Agricultural Budget and Policies']. Daum News One. https://v.daum.net/v/20231127161119279?f=p

UNDP. (2004). *Decentralised Governance for Development: A Combined Practice Note on Decentralisation, Local Governance and Urban/Rural Development.* United Nations Development Programme.

Yoon, D., & Takayanagi, N. (2018). 'Kankoku Ni Okeru Kinosha No Tokucho To Jimotojumin Tono Kankei [Characteristics of Urban to Rural Return Migration of Farming Families in Korea and their Social Relations: A Case Study of Miryang in South Gyeongsang Province]. *The Journal of Rural Studies,* (127), 43–59.

Yoshida, O. (2012). *Jiminto Noseishi: 1955-2009* [History of Liberal Democratic Party's Agricultural Politics: 1955-2009]. Taisei Publishing.

You, H., & Lee, Y. (2014). Kankoku Ni Okeru Kino-Kisonsha No Tokucho Ni Kansuru Kenkyu [Study on The Return to the Rural People's Feature in Korea Farm Village]. *The Congressional Proceedings of the Japanese Society of Irrigation, Drainage, and Rural Engineering 2014,* 148–149.

Contact email: republic_of_korea_1948@hotmail.com

Quiet Tears, Strong Minds: Emotional Negotiation of Indonesian Muslim Women Navigating Transnational Life in Australian Higher Education

Ana Nurhasanah Surjanto, Monash University, Australia

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

This article explores the emotional negotiations experienced by Indonesian Muslim women pursuing doctoral programs (PhD) as they transition from Indonesia to Australia. It highlights how these scholars navigate grief, homesickness, and identity tensions throughout their transnational educational journeys within Australian higher education. Grounded in feminist sociology, the study employs Institutional Ethnography (IE) as both a methodological and an analytical approach, complemented by an intersectional feminist framework of Islamic and transnational perspectives. IE begins from the standpoint of women's everyday experiences, examining how institutional policies and texts shape their academic and emotional lives. Data were collected through semi-structured interviews with Indonesian Muslim women PhD students from diverse faculties in Australia and were analysed critically. As an insider, I engaged with participants as a researcher, community leader and ethnographer, which enabled me to gain deeper insight into their lived realities. The findings reveal that institutional mechanisms such as doctoral milestones, progress reports, and counselling protocols profoundly influence students' emotional well-being. These women constantly balance the intellectual rigours of research with the invisible emotional work of sustaining belonging, identity, and faith within a culturally unfamiliar system. Framing emotional labour as both survival and resistance, this study demonstrates how Indonesian Muslim women scholars enact agency and resilience within Western academia, which often marginalises their experiences. Ultimately, the research contributes to reimagining international doctoral education by consolidating the strength, complexity, and lived realities of Muslim women navigating global academic spaces.

Keywords: Indonesian Muslim women, transnational life, emotional negotiation, international education, institutional ethnography, feminist sociology

iafor
The International Academic Forum
www.iafor.org

Introduction

It was just past midnight in Australia, and I sat at my desk with half-read journal articles open on one screen and the blinking cursor of my unfinished thesis chapter on the other. My phone buzzed with a video call from home. On the screen, I saw my mother in Indonesia holding the phone close, her voice laced with worry as she told me she was feeling unwell. I wanted to cry, but I held back my tears. I still had a workshop in the morning, a supervisory meeting to prepare for, and revisions due by the end of the week. Quietly, I ended the call, wiped my tears, and turned back to the chapter.

This quiet moment, repeated in different forms and at other times, is emblematic of the invisible emotional negotiations that many Indonesian Muslim women, like me, endure while undertaking doctoral study abroad. Our journeys are often framed through the lens of academic performance or cultural adjustment, but beneath the surface lie deep, ongoing tensions between care, grief, faith, and resilience. The demands of doctoral research do not pause when our families fall ill, when we miss weddings or funerals, or when we struggle with isolation in a foreign land. These experiences are not mere one-time episodes; they are daily negotiations that persist throughout the PhD trajectory (Surjanto, 2026).

For many international students, the initial excitement of studying abroad is quickly tempered by the realities of cultural dissonance. Everyday practices, such as navigating unfamiliar food, adjusting to different classroom dynamics, or interpreting subtle social cues, can become sources of stress. Culture shock is not a single event but a recurring experience, resurfacing in moments of misunderstanding or exclusion. For Indonesian Muslim women, this often includes negotiating visibility in spaces where religious practices, such as prayer or fasting during Ramadan, are misunderstood or overlooked (Surjanto, 2026). These challenges compound the academic pressures of doctoral study, creating a layered emotional burden that is rarely acknowledged in institutional discourses of student wellbeing (Fredericks, 2025; Hendrickson et al., 2011; Hirai et al., 2015).

Alongside culture shock, grief, and homesickness emerge as persistent companions in transnational doctoral life. The inability to be physically present during family milestones, births, illnesses, or funerals creates a sense of absence that weighs heavily on students' emotional worlds. Phone calls and video chats provide connection but cannot replace the embodied presence of care. Homesickness is not simply missing home; it is the ache of dislocation, the quiet grief of being away from one's community, language, and rituals. For Indonesian Muslim women, this grief is often mediated through faith, with prayer and spiritual reflection serving as anchors in moments of loss (Surjanto, 2026). Yet, the emotional labour of balancing academic expectations with transnational caregiving responsibilities remains largely invisible within the structures of higher education (Fisher, 2017; Hastowohadi et al., 2025; Thurber & Walton, 2012).

This article explores how Indonesian Muslim women PhD students in Australian higher education navigate the emotional weight of transnational life. It considers how faith-based practices, community support, and acts of self-care enable resilience, while also examining the structures and expectations within academia that render such labour invisible. Drawing on my reflections and the shared stories of fellow students, this paper offers a situated analysis of emotional labour in international doctoral education from an intersectional feminist lens.

Literature Review

International education has become a pivotal aspect of the global academic landscape, reflecting broader trends in globalisation and cross-cultural exchange. Knight (2004) defined the term international education as referring to the global aspects of higher education. For some, this term denotes a series of international activities that encompass educational programs and institutions that cross national boundaries, either through the mobility of students and academics or through transnational education (TNE) offerings (Kostogriz, 2015). The key parameters defining this field include the physical mobility of students and academics, collaborative research and academic partnerships, and the establishment of branch campuses overseas (Knight, 2004; Kostogriz, 2015). For others, international higher education implies the internationalisation of the curriculum, incorporating global perspectives into course content to prepare students for a connected world, or to graduate research students for their engagement with transnational projects, thereby generating international and local impact (Kostogriz & Ata, 2015).

In recent years, international higher education has seen significant growth, with more students seeking academic opportunities abroad. International student enrolments in Australia have shown a significant upward trend, with a notable increase observed recently (Australian Government Department of Education, 2024). Furthermore, the number of Indonesian students who have come to Australia to study reached 24,000 in 2024 (Australian Embassy in Indonesia, 2025). Besides economic considerations, the rise of global universities reflects the growing importance of cross-border education in developing global competencies and enhancing cultural understanding among students (Altbach & Knight, 2007). This is particularly evident in countries like Australia, where international students play a significant role in the education sector, driven by a globalised economy.

Within this broader landscape, the Indonesian government has strategically invested in international education through the Indonesia Endowment Fund for Education (LPDP) scholarship program. Established in 2013 under the Ministry of Finance, LPDP is Indonesia's largest scholarship scheme, designed to support postgraduate study both domestically and internationally. Its mission is explicitly tied to the vision of Indonesia Emas 2045 (Golden Indonesia 2045), the centenary of independence, when Indonesia aims to become a globally competitive nation (LPDP, 2026).

LPDP seeks to cultivate a "golden generation" of future leaders, innovators, and scholars who will contribute to national development by mastering global knowledge, building international networks, and returning to Indonesia to strengthen its intellectual and professional capacity (LPDP, 2023). For Indonesian students in Australia, LPDP scholarships provide not only financial support but also a symbolic mandate, positioning recipients as agents of national progress whose academic journeys are linked to Indonesia's long-term goals of prosperity, equity, and global recognition (National Development Planning Agency [Bappenas], 2024).

Although the overall trend of international higher education growth is apparent, the experience of relocating internationally for education can be both exciting and intimidating for students. International students often face difficulties, such as being away from their families and home country and adapting to new cultural and academic environments (Alqudayri & Gounko, 2018). Smith and Khawaja (2011) argue that international students, particularly those from collectivist societies, face persistent challenges, including homesickness, cultural dissonance, and the psychological toll of being far from their support systems. Furthermore, women students from

Muslim backgrounds encounter complex challenges encompassing academic, sociocultural, and psychological dimensions (Rafie & Gossai, 2025; Sarip, 2024). These challenges are magnified for women from majority-Muslim countries who must navigate both external academic expectations and internalised gendered obligations to remain strong, adaptable, and emotionally composed (Hassan, 2025; Rafie & Gossai, 2025). Thus, these layered challenges highlight that international students' experiences, especially those of Muslim women, cannot be understood through a single lens. They demand an intersectional feminist framework that captures the interplay of gender, religion, culture, and academic positioning, providing a more nuanced analysis of their emotional and institutional negotiations.

Intersectional Feminist Framework

This study employs an intersectional feminist framework that combines intersectionality, Islamic and transnational feminism, to understand how Indonesian Muslim women PhD students emotionally navigate their doctoral journeys in Australia. Together, these frameworks enable a contextualised, critical, and holistic reading of emotion not as an individual trait, but as a product of social location, institutional regulation, and ethical agency.

Building on Crenshaw's (1991) foundation, Collins (2019) expanded intersectionality into a comprehensive critical social theory. In *Intersectionality as Critical Social Theory* (2019), Collins conceptualises a "matrix of domination" operating across four interrelated domains of power: structural, disciplinary, hegemonic, and interpersonal. Structural power refers to institutional arrangements such as immigration regimes, scholarship conditions, and university governance structures that shape access to mobility and resources. Disciplinary power operates through bureaucratic mechanisms such as milestone reviews, publication metrics, supervisory meetings, and institutional monitoring of doctoral progress. Hegemonic power circulates through dominant cultural norms, such as expectations of secular professionalism, productivity, and the figure of the "ideal" doctoral subject, while interpersonal power manifests in everyday interactions, including microaggressions, racialisation, Islamophobic assumptions, and gendered expectations.

In addition, Islamic feminism provides a necessary counter-narrative to dominant Western feminist discourses by foregrounding faith-based epistemologies and Muslim women's agency. Scholars such as Wadud (1999), Barlas (2002), and Anwar (2018) emphasise that Islam can serve as an ethical source for gender justice, challenging Orientalist stereotypes that reduce Muslim women's piety to submission. Islamic feminism highlights how practices such as *sabr* (patience), *du'a* (prayer), and *tawakkul* (trust in God) function as moral and emotional resources, enabling Muslim women to resist patriarchal norms and navigate institutional exclusion. For Indonesian Muslim women in doctoral programs, these practices provide emotional strength and ethical grounding amidst academic pressure and cultural alienation, reframing faith as a source of empowerment rather than constraint.

While transnational feminism, developed by scholars such as Mohanty (2003), critiques Western-centric feminist assumptions and situates women's struggles within global circuits of capitalism, migration, and colonial legacies. Mohanty's influential essay *Under Western Eyes* (1988) highlights how Western feminist scholarship often constructs the "Third World woman" as a singular, powerless category, while her later work in *Feminism Without Borders* (2003) calls for attention to the micropolitics of context, subjectivity, and struggle. For Indonesian Muslim doctoral students in Australia, transnational feminism is particularly relevant, as their academic mobility is embedded within global inequalities in higher education, funding systems, and intellectual authority. This perspective situates their experiences within broader structures of global knowledge production, revealing how Euro-American traditions continue to dominate scholarly spaces and marginalise voices from the Global South.

Despite their strengths, each framework carries limitations. Intersectionality risks dilution when reduced to identity enumeration rather than structural critique (Cho et al., 2013), and Collins' (2000) matrix of domination, while conceptually rich, offers limited methodological guidance for tracing power relations in everyday practices. Islamic feminism, though vital in centring faith-based epistemologies, is often marginalised within secular feminist scholarship, raising questions about the recognition of religious knowledge as legitimate. Transnational feminism, while critical of Western universalism, can overemphasise macro-structural analyses at the expense of embodied, everyday negotiations of identity and space, and does not always foreground religious epistemologies. Taken together, these limitations highlight the need for methodological integration. Therefore, Institutional Ethnography (IE) is employed as the methodological framework to operationalise these theoretical insights. IE enables the tracing of how structural, disciplinary, hegemonic, and interpersonal relations of power are coordinated through institutional texts, policies, and practices in Australian higher education. In this way, theory and method are brought into dialogue: intersectionality, Islamic feminism, and transnational feminism frame the analysis, while IE provides the tools to map how these relations are activated and reproduced in the everyday academic lives of Indonesian Muslim women PhD students.

Institutional Ethnography (IE)

Introduction to IE

Institutional Ethnography (Smith, 2005) offers a methodological and analytical entry point into understanding how institutional structures organise people's lives. Developed by Smith (2005), IE is rooted in feminist sociology and begins from people's everyday experiences, working outward to trace the institutional and discursive forces that shape those experiences. Central to IE is the concept of textually mediated social organisation, how texts such as institutional policies, guidelines, forms, regulations, and emails coordinate actions and shape lived realities (Smith, 2005). By tracing how texts are activated and circulated within institutional settings, IE uncovers the often-invisible mechanisms of power that structure people's lives.

Smith emphasises that IE is not merely descriptive but critical, aiming to reveal how institutions reproduce inequalities and maintain social control (Rankin, 2017; Smith, 2005). IE resists abstract theorising disconnected from lived realities and instead foregrounds the standpoint of marginalised individuals, in this case, Muslim women in international doctoral education. In this study, IE is employed to examine how emotional experiences of Indonesian Muslim women, often regarded as private, are shaped by institutional texts and discourses. For example, the invisibility of Eid holidays or the absence of Muslim-friendly wellbeing services within student support policies produces emotional disjuncture between students' lived needs and the institutional imaginaries of an "ideal student." IE allows us to map such disjunction and examine how emotional labour is coordinated across academic, bureaucratic, and personal domains.

Methodological Approach and Emotional Standpoint

This study adopts IE not just as an analytical lens but also as a methodological approach. Rooted in feminist sociology, IE begins from the standpoint of people whose lives are shaped by institutions and seeks to uncover how institutional texts and discourses organise everyday experiences (Smith, 2005). Rather than treating emotion as private, IE allows us to examine how emotions are entangled with power and structure, and are produced, mediated, or silenced through institutional relations.

The entry point of this inquiry is the emotional experiences of Indonesian Muslim women pursuing a PhD in Australia. Their narratives reveal what Smith (2005) calls problematic moments where lived experience does not align with institutional expectations. These moments included breaking down in prayer while revising chapters or feeling isolated during Eid, when peers are unaware that the day is supposed to be a holiday.

Data Collection

Three primary forms of data were collected. First, semi-structured interviews were conducted with Indonesian Muslim women PhD students, focusing on emotional experiences, institutional encounters, and coping strategies. These interviews were audio-recorded and transcribed verbatim to ensure accuracy and depth of analysis.

Second, informal conversations with participants' consents were undertaken. As an insider researcher, community leader, and ethnographer, I engaged in ongoing conversations with the participants. These interactions provided real-time insights into emotional states, collective care practices, and spiritual reflections, offering a more nuanced understanding of lived experiences.

Third, field notes and textual artefacts were gathered. Notes were taken in university spaces, prayer rooms, student events, and community gatherings. Institutional texts such as student support policies, wellbeing guidelines and program handbooks were also collected to trace how institutional discourses intersect with lived experiences.

Data Analysis

Analysis followed IE's mapping strategy, in which the first step involved identifying problematic or emotional disjuncture in which lived realities diverged from institutional expectations. Textual analysis was then conducted to examine how institutional texts, including policies, forms, and communications, coordinated actions and shaped emotional experiences.

Standpoint mapping was used to trace connections between individual narratives and broader institutional structures, highlighting how emotional labour was organised across academic, bureaucratic, and personal domains. Finally, iterative coding and memoing were employed. Thematic coding helped identify recurring patterns of emotional negotiation, while reflexive memos situated the researcher's positionality within the analytic process.

Ethical Consideration

Given the sensitivity of emotional narratives, ethical protocols were carefully followed. Informed consent was obtained from all participants, and confidentiality was maintained through the use of pseudonyms. Reflexive awareness of insider and outsider positionality was crucial, as the researcher shares a cultural and religious background with participants. Attention was also paid to power dynamics in the ethnographic approach, ensuring that participants' voices remained central and were not overshadowed by the researcher's dual role.

Autoethnographic Reflexivity

As both a researcher and ethnographer, my positionality shaped access and interpretation. Reflexive journaling was employed to critically examine how my dual role influenced data collection and analysis. This reflexivity aligns with IE's feminist commitment to transparency and accountability, ensuring that the research process remains ethically grounded and methodologically rigorous.

Textual Analysis

Tracing Emotional Regulation Through Institutional Texts

Institutional Ethnography (IE) positions texts not as passive documents but as active agents that coordinate people's everyday lives within institutional frameworks (Smith, 2005). In Australian higher education, institutional texts operate as mediators that shape the emotional lives of students, often regulating or rendering invisible emotional experiences that do not align with dominant assumptions embedded within policy and administrative discourse. This section examines three sets of institutional texts, including student support guidelines, counselling forms, and university newsletters, to uncover how these documents organise emotional life, normalise affective responses, and marginalise others.

Student Support Guidelines

The Australian higher education system's student support documentation, particularly in the realm of mental health, reflects a commitment to wellbeing, but the guidelines often presume a neutral, universal subject. Mental health resources are frequently framed within a biomedical or psychological discourse grounded in Western clinical norms. Despite the multicultural composition of the student body, the guidelines tend to lack culturally or religiously specific accommodations. Emotional experiences tied to spiritual distress, religious observance, or culturally embedded coping mechanisms are either decontextualised or omitted altogether. As active texts, these guidelines produce a normative model of emotional distress, typically individual, internal, and amenable to clinical intervention, thereby rendering collective, spiritual, or culturally nuanced expressions of emotional struggle as peripheral or invisible within the institutional apparatus (Orygen, 2020; TEQSA, 2023).

Counselling Forms

Counselling intake forms serve as a site where students are initiated into the university's mental health regime. These forms, standardised across services, embed Western psychological frameworks in their very structure. Diagnostic categories, symptom checklists, and questions about mood and cognition assume familiarity with particular ways of articulating distress. This textual standardisation operationalises a form of affective legibility: students whose emotional experiences do not fit into predefined categories may find their distress invalidated or misrecognized. For example, students from collectivist cultures who express distress in somatic or relational terms may encounter forms that offer no space for such articulation. The intake forms function as gatekeeping texts, aligning help-seeking behaviour with institutional norms of what counts as "recognisable" emotional suffering (Chummun, 2025; Comas-Díaz, 2012; Constantine & Sue, 2005).

University Newsletters

University newsletters, while ostensibly neutral and informational, also regulate the affective rhythms of student life through the timing and content of institutional messaging. Announcements of critical academic milestones, such as thesis submission deadlines, enrolment confirmations, or policy changes, often fail to consider the emotional and logistical impact of significant cultural or religious observances. For instance, scheduling high-stakes deadlines during Ramadan or on Eid can place additional strain on Muslim students, forcing them to navigate overlapping demands of religious practice and academic compliance. In this way, such texts silently prioritise secular and Western temporalities, reproducing emotional marginalisation through administrative oversight (Betancourt Basallo & Cortés Moreno, 2023; Jamal Al-deen, 2019).

Findings and Discussion

Tears as Tactic: Emotional Expressions as Self-Care and Boundary Setting

In the interviews, participants described moments when they quietly cried, often in the solitude of their bedrooms, during late-night revisions, or after receiving feedback from their supervisors. These tears were not framed as breakdowns but as intentional acts of self-release. "I cried, and this made me relieved, so I could continue writing," one participant, Dahlia, explained. Rather than viewing emotion as weakness, these expressions served as a silent tactic of self-care and boundary setting in environments that often valorise stoicism and productivity.

Another participant noted that crying was a way to reclaim agency in a system that often demanded emotional suppression. One woman, Rafflesia, described tears as "a pause button, it was like when I took a break for a while, then I prayed," allowing her to resist the relentless pace of doctoral life. This articulation resonates with Islamic feminist perspectives that position emotional expression as relational to spirituality, where practices such as *dua* (prayer) and *sabr* (patience) transform vulnerability into ethical strength (Barlas, 2002; Mahmood, 2005).

At the same time, these narratives align with Mohanty's (1988, 2003) critique of Western academic norms, which often privilege rationality, productivity, and secular professionalism while marginalising affective and spiritual modes of resilience. Mohanty argues that such norms are not neutral but political, reinforcing hierarchies of knowledge that render non-Western emotional practices invisible.

Digital Embrace: Social Media as Sites of Collective Healing and Coping

Social media, often dismissed as mundane digital chatter, emerged in this study as critical spaces for collective emotional support. Women shared updates on thesis progress alongside du'a (prayers), reminders to stay healthy, and emojis expressing exhaustion or hope. Participants emphasised that these platforms were not merely functional but deeply affective. "When I saw my friends' response and comment on the post, I felt less alone," Edelweiss reflected. The emotional labour of checking in with one another, asking, "Are you okay?" and "Did you eat?", acted as a buffer against the isolating nature of transnational academic life.

Digital interaction thus became a coping mechanism, aligning with feminist perspectives on how women use technology for emotional solidarity and resilience in transnational contexts (Baer, 2016; Chun et al., 2019).

From an IE lens, this digital practice can be read as a text-mediated relation that coordinates emotional life across transnational spaces (Mohanty, 2003; Smith, 2005). Social media posts, comments, and chats function as "active texts" that organise care and solidarity, enabling Indonesian Muslim women PhD students to resist the institutional isolation of Western academia. Rather than being peripheral, this digital exchange is integral to how emotional labour is socially organised, revealing circuits of care that extend beyond the university's formal wellbeing structures. IE highlights how these everyday digital practices are not incidental but part of a broader institutional landscape, where students create alternative infrastructures of support to counter the gaps in official wellbeing guidelines.

One participant, Acasia, described her joy upon receiving a simple message, "Ramadan karim to you" followed by "Eid mubarak." Such exchanges illustrate how digital spaces become infused with religious and cultural meaning, transforming routine communication into acts of spiritual solidarity. From an Islamic feminist perspective, these digital spaces embody *hijrah*, not only as physical migration but as a movement into new affective and spiritual terrains (Juliansyahzen, 2023). In migrating to digital platforms, women reconfigure their emotional and spiritual practices, embedding *sabr* (patience), *tawakkul* (trust in God), and *dua* into online exchanges (Barlas, 2002; Mahmood, 2005). Additionally, by transforming social media into spaces of encouragement and collective care, Indonesian Muslim women PhD students enact a feminist ethic of solidarity that challenges both orientalist stereotypes of Muslim women's passivity (Mohanty, 2003) and institutional norms that privilege secular, individualised models of wellbeing (Baer, 2016; Chun et al., 2019).

Faith in Action: Prayer Before Milestones as a Ritual of Emotional Preparation

Participants described how spiritual practices provided a sense of grounding amidst academic pressure. Before presenting the milestone review, one of the participants, Lavender, shared her experience: "Every time before my PhD milestones, I recited Qur'anic verses, contacted my parents to request *doa restu* (blessings), including pre-submitting milestone documents." This resonates with Anwar's (2009) lens, which frames faith not only as a personal belief but as a socially embedded practice that sustains resilience and ethical self-formation. Faith, in this sense, becomes a relational resource, connecting students to family, community, and divine presence, while simultaneously functioning as a strategy for navigating institutional demands.

Another participant, Mawar, explained, "I prayed before meeting with my supervisors and when opening the feedback email." Another, Puspa, described reciting the verses in the Qur'an, Surah Al-Inshirah (94:5), "So, surely with hardship comes ease" during milestone preparations. These practices offered emotional regulation, strengthened purpose, and created a sense of divine accompaniment. They challenge secular assumptions that render religiosity irrelevant or regressive in academic settings (Barlas, 2002; Mahmood, 2005). Prayer becomes a feminist act of reclaiming agency, positioning faith as a source of empowerment rather than submission (Surjanto, 2026). This finding also resonates with Gilliat-Ray (2010), who highlights prayer as a form of embodied resilience among Muslim students in Western institutions.

Further, through an IE lens, these practices can be understood as text-mediated relations that organise emotional life within academic structures (Smith, 2005). Milestone reviews, feedback emails, and supervisory meetings are institutional texts that carry authority and regulate doctoral progress. By embedding prayer and Qur'anic recitation into these moments, Indonesian Muslim women doctoral students reconfigure the institutional script, inserting spiritual practices into spaces otherwise dominated by secular academic norms. In doing so, they create alternative circuits of care and resilience that resist the invisibility of faith within university wellbeing frameworks.

Conclusion

This study reveals that for Indonesian Muslim women PhD students in Australia, emotional negotiation is not simply an individual stress response; it is a political and institutional practice. Their quiet tears, whispered prayers, and digital networks are acts of survival and resistance within a system that often fails to recognise the diversity of international doctoral scholars. Their experiences urge us to reconsider how institutions frame mental health, academic progress, and care. Student well-being services must move beyond clinical models to include culturally and spiritually informed practices. Educational policies should acknowledge that milestone stress intersects with faith rituals and caregiving burdens, particularly during events such as Ramadan or Eid. By bringing visibility to the emotional labour of transnational Muslim women, this article contributes to the broader call for intersectional and inclusive reforms in higher education. Emotion, in this context, is not just affect; it is action. It sustains academic labour while quietly subverting the institutional ideals of neutrality and disembodiment. Recognising these invisible labours is the first step toward transforming academia into a space where diverse scholars can thrive, emotionally, spiritually, and intellectually.

Acknowledgements

I gratefully acknowledge the support of the Indonesia Endowment Fund for Education (LPDP) Scholarship, which has enabled my doctoral research and study in Australia. This article forms part of my larger PhD project, and I am deeply thankful to Professor Alex Kostogriz, Professor Ruth Jeanes and Dr Tanya Davies for their invaluable guidance, support, and supervision throughout the study. I also extend my gratitude to Monash University for supporting my conference participation, which has enriched the development of this research.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

I acknowledge the use of Microsoft Copilot (https://copilot.microsoft.com/) to refine the academic language and accuracy of my own work. I significantly adapt and critically modify the content generated by this tool to accurately reflect my unique style and voice. Consequently, I take full responsibility for the final content of this document, noting that it represents my original ideas and adheres to academic integrity and quality requirements.

References

Alqudayri, A., & Gounko, T. (2018). International students' challenges in a new academic environment: A case study in a Canadian university. *Journal of International Students, 8*(2), 884–903. https://doi.org/10.32674/jis.v8i2.103

Altbach, P. G., & Knight, J. (2007). The internationalization of higher education: Motivations and realities. *Journal of Studies in International Education, 11*(3–4), 290–305. https://doi.org/10.1177/1028315307303542

Anwar, E. (2009). *Gender and self in Islam.* Routledge.

Anwar, E. (2018). *A genealogy of Islamic feminism: pattern and change in Indonesia*. Routledge, Taylor & Francis Group.

Australian Embassy in Indonesia. (2025). *Indonesian students in Australia statistics*. Government of Australia.

Australian Government Department of Education. (2024). *International student enrolments in Australia*. Department of Education.

Baer, H. (2016). Redoing feminism: Digital activism, body politics, and neoliberalism. *Feminist Media Studies, 16*(1), 17–34. https://doi.org/10.1080/14680777.2015.1093070

Barlas, A. (2002). *"Believing women" in Islam: Unreading patriarchal interpretations of the Qur'an*. University of Texas Press.

Betancourt Basallo, L. F., & Cortés Moreno, A. M. (2023). *Successful communications for student mental health and wellbeing*. London School of Economics.

Cho, S., Crenshaw, K. W., & McCall, L. (2013). Toward a field of intersectionality studies: Theory, applications, and praxis. *Signs: Journal of Women in Culture and Society, 38*(4), 785–810. https://doi.org/10.1086/669608

Chummun, T. (2025). *Counselling international students: Intercultural therapy*. Counselling Directory.

Chun, W. H. K., Friedland, J., & Paul, M. (2019). Digital solidarities, communication, and feminist politics. *Communication and Critical/Cultural Studies, 16*(2), 85–100. https://doi.org/10.1080/14791420.2019.1599060

Collins, P. H. (2019). *Intersectionality as critical social theory*. Duke University Press.

Collins, P. H. (2000). B*lack feminist thought: Knowledge, consciousness, and the politics of empowerment* (2nd ed.). Routledge.

Comas-Díaz, L. (2012). *Multicultural care: A clinician's guide to cultural competence*. American Psychological Association.

Constantine, M. G., & Sue, D. W. (2005). *Strategies for building multicultural competence in mental health and educational settings*. Wiley.

Crenshaw, K. W. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review, 43*(6), 1241–1299. https://doi.org/10.2307/1229039

Fisher, S. (2017). *Understanding homesickness: A review of the literature*. Educational Review.

Fredericks, S. (2025). Navigating mental health challenges in international university students: Adapting to life transitions. *Frontiers in Psychiatry, 16*, 1574953.

Gilliat-Ray, S. (2010). *Muslim students in British universities: Religious identity and practice*. Routledge.

Hassan, S. (2025). Female Arab international students negotiate their identities. *Journal of International Students, 15*(3), 203–226. https://doi.org/10.32674/jis.v15i3.5678

Hastowohadi, S., Ma'rifatulloh, S., & Widiantari, M. M. (2025). Exploring intercultural competence: A case study of an Indonesian Muslim doctoral student in Australia. *Journal of International Students, 15*(3), 263–278.

Hendrickson, B., Rosen, D., & Aune, R. K. (2011). An analysis of friendship networks, social connectedness, homesickness, and satisfaction levels of international students. *International Journal of Intercultural Relations, 35*(3), 281–295.

Hirai, R., Frazier, P., & Syed, M. (2015). Psychological and sociocultural adjustment of international students: A meta-analysis. *Journal of International Students, 5*(3), 278–297.

Jamal Al-deen, T. (2019). Agency in action: Young Muslim women and negotiating higher education in Australia. *British Journal of Sociology of Education, 40*(5), 598–613.

Juliansyahzen, M. I. (2023). Ideologization of hijrah in social media: Digital activism, religious commodification, and conservative domination. *Millah: Journal of Religious Studies, 22*(1), 155–180. https://doi.org/10.20885/millah.vol22.iss1.art6

Knight, J. (2004). Internationalization remodeled: Definition, approaches, and rationales. *Journal of Studies in International Education, 8*(1), 5–31. https://doi.org/10.1177/1028315303260832

Kostogriz, A. (2015). Transnational education and the politics of knowledge. *Asia Pacific Journal of Education, 35*(1), 1–14. https://doi.org/10.1080/02188791.2014.924390

Kostogriz, A., & Ata, A. (2015). Globalisation and transnational education policy. *International Education Journal: Comparative Perspectives, 14*(2), 1–12.

Lembaga Pengelola Dana Pendidikan (LPDP). (2023). *Indonesia Emas 2045: Perlunya mempersiapkan SDM, industrialisasi, dan kewirausahaan* [Golden Indonesia 2045: The Need to Prepare Human Resources, Industrialization, and Entrepreneurship]. Ministry of Finance of the Republic of Indonesia. https://lpdp.kemenkeu.go.id/en/informasi/berita/indonesia-emas-2045-perlunya-mempersiapkan-sdm-industrialisasi-dan-kewirausahaan/

Lembaga Pengelola Dana Pendidikan (LPDP). (2026). *LPDP strengthens scholarship transformation to cultivate Indonesia's top talents toward 2045*. Lembaga Pengelola Dana Pendidikan, Ministry of Finance of the Republic of Indonesia.

Mahmood, S. (2005). *Politics of piety: The Islamic revival and the feminist subject*. Princeton University Press.

Mohanty, C. T. (1988). Under Western eyes: Feminist scholarship and colonial discourses. *Feminist Review, 30*(1), 61–88. https://doi.org/10.1057/fr.1988.42

Mohanty, C. T. (2003). *Feminism without borders : decolonizing theory, practicing solidarity*. Duke University Press. https://doi.org/10.1515/9780822384649

National Development Planning Agency [Bappenas]. (2024). *Rencana Pembangunan Jangka Panjang Nasional (RPJPN) 2025–2045: Visi Indonesia Emas 2045* [National Long-Term Development Plan (RPJPN) 2025–2045: Golden Indonesia 2045 Vision]. Ministry of National Development Planning.

Orygen. (2020). *Australian University Mental Health Framework*. Orygen.

Rafie, S., & Gossai, R. (2025). *Female Muslim student experiences in higher education: A narrative inquiry*. Springer.

Rankin, J. (2017). *Conducting institutional ethnography: A guide to theory and practice*. Routledge.

Sarip, J. D. (2024). Obtaining higher education: Status, issues, and challenges among Muslim women students in Iligan City. *International Seminar on Islamic Education and Peace Proceedings, 5,* 635–664. https://ejournal.uniramalang.ac.id/isiep/article/view/8697/4919

Smith, D. E. (2005). *Institutional ethnography: A sociology for people*. AltaMira Press.

Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations, 35*(6), 699–713. https://doi.org/10.1016/j.ijintrel.2011.08.004

Surjanto, A. N. (2026). Chapter by chapter, prayer by prayer: An Indonesian Muslim woman's autoethnography of faith, labour, and learning in Australian higher education. In *Proceedings of the Southeast Asian Conference on Education 2026* (pp. 211–222). The International Academic Forum (IAFOR). https://doi.org/10.22492/issn.2435-5240.2026.18

TEQSA. (2023). *Guidance note: Diversity and equity*. Tertiary Education Quality and Standards Agency.

Tertiary Education Quality and Standards Agency (TEQSA). (2021). *Forward impact of COVID-19 on Australian higher education*. TEQSA.

Thurber, C., & Walton, E. (2012). Homesickness and adjustment in university students. *Journal of American College Health, 60*(5), 415–419.

Wadud, A. (1999). *Quran and woman: rereading the sacred text from a woman's perspective* (2nd ed.). Oxford University Press.

Contact emails: ana.surjanto@monash.edu
anasurjanto@gmail.com

Cross-Cultural Study on Work-Life Balance and Mental Health: India vs. USA

Alka Patil, University of Mumbai, India

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

This study examines how employees in India and the United States balance personal and professional responsibilities and the impact of this balance on their mental health. Drawing on survey data from 800 full-time employees—400 per country—the research compares cultural, workplace, and social factors that shape psychological well-being in two contrasting societies. Indian workers face pressure from long office hours, family obligations, and limited institutional support, while US workers, though benefiting from greater workplace flexibility, contend with high-performance expectations and a digitally driven culture that fosters chronic stress and burnout. Across both contexts, mental health awareness, managerial support, and flexible working arrangements emerge as critical determinants of well-being. Statistical analysis confirms a strong positive relationship between work-life balance and mental health ($r = 0.62$, $p < 0.01$), moderated by cultural orientation and mediated by organisational support. The study recommends culturally sensitive organisational interventions—including employee wellness programmes, remote work provisions, and access to counselling—and argues that workplace mental health is a global concern requiring both evidence-based policy reform and a culture of organisational care.

Keywords: work-life balance, mental health, cross-cultural study, India, USA, employee well-being

Introduction

Work-life balance (WLB) and its relationship to mental health has emerged as one of the most pressing concerns in academic research and organisational practice during the 21st century. Major structural forces—globalisation, digitalisation, and transforming family structures—have fundamentally altered how employees manage the boundary between professional duties and personal life. The World Health Organisation (WHO, 2022) identifies good mental health as foundational to personal well-being, productivity, and social harmony, yet rising levels of workplace stress continue to compromise the health of millions of employees worldwide. The COVID-19 pandemic (2020–2022) intensified this problem: the rapid shift to remote work eroded the already fragile demarcation between home and office, giving rise to new forms of psychological strain in both developing and developed economies.

India and the United States offer two of the most instructive contrasts on this issue. As a developing economy with deep collectivist traditions, India regards family and community bonds as primary sources of meaning and life satisfaction. The economic liberalisation that followed 1991, and the subsequent expansion of the information technology (IT) sector, transformed the Indian workplace—bringing longer working hours, intensified competition, and a measurable increase in employee stress levels. Rajadhyaksha and Smita (2004) found that Indian professionals regularly find themselves caught between escalating career demands and entrenched family obligations, a collision that produces emotional fatigue and burnout. Yet India's strong informal support systems—extended family networks and community ties—continue to serve as meaningful buffers against psychological distress.

The United States, by contrast, is an archetypal individualistic society that prizes personal independence, career accomplishment, and self-reliance. Over the past two decades, American organisations have expanded their investment in mental health infrastructure: flexible work arrangements, wellness programmes, and employee assistance programmes (EAPs) have become increasingly standard (APA, 2023). Nevertheless, Gallup (2021) reported that approximately 60% of US full-time workers experience daily job stress—among the highest levels recorded in a decade—demonstrating that institutional provision does not automatically translate into employee well-being. The digital always-on culture and relentless performance expectations continue to generate burnout across sectors.

Comparing these two nations is theoretically significant. Based on Hofstede's (2010) Cultural Dimensions Theory, India (score: 48) and the US (score: 91) occupy opposite ends of the individualism–collectivism spectrum. This cultural divergence shapes how employees define occupational success, respond to stress, seek support, and set boundaries between work and personal life. An American worker may feel entitled to decline after-hours communication for the sake of mental health; an Indian counterpart may feel social and professional pressure to remain available out of a sense of duty and collective obligation. Understanding these differences—and the policies that can bridge them—is the core motivation of the present research.

Literature Review

Conceptualising Work-Life Balance and Mental Health

The concept of work-life balance has evolved considerably over three decades of organisational research. Greenhaus and Allen (2011, p. 17) offer a widely cited definition: WLB is “the degree to which individuals are equally engaged and satisfied with their work and non-work roles." This formulation highlights that balance is not merely about time allocation but encompasses psychological engagement and satisfaction—making WLB an inherently multidimensional construct. The WHO (2022) has progressively foregrounded mental health as a central workplace issue, characterising work-related stress as a leading contributor to anxiety, depression, and burnout globally. The empirical connection between WLB and mental health is well established: imbalance produces elevated psychological strain, reduced job satisfaction, and diminished organisational commitment, while balance is associated with greater emotional resilience, life satisfaction, and productivity (Greenhaus & Allen, 2011).

Evidence From Western Contexts

Research based in the United States consistently documents widespread work-related stress and its mental health consequences. The APA (2023) found that more than 77% of US employees experience work-related stress on a weekly basis and that nearly 57% report that workplace demands adversely affect their mental health. Gallup (2021) reported that 60% of full-time US workers experience daily stress—a ten-year high. Reed's (2021) comprehensive meta-analysis of studies conducted between 2000 and 2020 confirmed a strong inverse correlation between WLB and burnout, depression, and anxiety; employees in flexible working arrangements reported approximately 32% fewer burnout symptoms. These findings underscore that flexibility is not a peripheral benefit but a structural determinant of psychological health.

The cultural backdrop against which these patterns unfold is important. Hofstede's (2010) Individualism-Collectivism model identifies the US as among the world's most individualistic cultures, characterised by an emphasis on personal achievement, independence, and self-sufficiency. This orientation tends to intensify overcommitment and performance pressure. Although mental health awareness has grown significantly since the 2010s—with organisations adopting mental health days, EAPs, and resilience training—the proliferation of digital communication tools has simultaneously made it harder to disengage from work, sustaining chronic stress even among employees with formal wellness support (Gallup, 2021).

Evidence From India and Asian Contexts

Empirical research on WLB and mental health in India has expanded substantially since the mid-2000s. Rajadhyaksha and Smita (2004) were among the first to document the tensions experienced by Indian professionals as a consequence of rapid economic change: their study found significant role conflict, emotional exhaustion, and burnout among corporate employees in Mumbai and other metropolitan centres. Ratnesh et al. (2019), drawing on a cross-cultural review of Asian countries including India, identified long working hours, constant availability expectations, and blurred organisational boundaries as the dominant WLB challenges, with gender disparities further magnifying these difficulties for women who are expected to function as primary caregivers.

Pandya et al. (2022) identified a structural weakness in India's institutional response: most workplace mental health interventions are reactive—focused on counselling and awareness—rather than preventive. Systemic measures such as workload redesign, flexible scheduling, and policy-mandated rest periods remain rare in the Indian corporate context. Clinical evidence corroborates this assessment. Savarimalai et al. (2023) found that 64% of mental health professionals at a tertiary neuropsychiatry centre in India had below-average WLB scores, with significant negative correlations between WLB and perceived stress ($r = -0.53$, $p < 0.001$), demonstrating that even psychologically informed workers remain structurally vulnerable. Hofstede (2010) notes, however, that collectivist societies can generate meaningful resilience through family interdependence and social cohesion, partially compensating for institutional deficiencies.

Cross-Cultural Insights and Research Gaps

Hofstede's (2010) cultural indices—US individualism score: 91; India: 48—confirm that these two societies approach work, identity, and well-being in fundamentally different ways. American workers are more likely to advocate for personal boundaries, expect hybrid work options, and seek professional mental health services. Indian workers, shaped by collectivist norms, may subordinate individual needs to group or family expectations, delaying help-seeking and internalising stress. Mental health stigma in India further compounds this pattern, leading to under-reporting and delayed intervention (Pandya et al., 2022). In the US, stigma persists primarily in male-dominated industries such as finance and construction, but the broader cultural conversation around mental health has shifted markedly in the past decade (Gallup, 2021).

Gender inequalities cut across both contexts. In the US, dual-income households and institutionalised childcare mitigate, though do not eliminate, the unequal distribution of domestic labour. In India, deeply embedded patriarchal expectations mean that professional women disproportionately bear the psychological costs of role conflict (Ratnesh et al., 2019). Despite the volume of Western research on WLB and mental health, direct cross-cultural comparisons between India and the US remain rare. Few studies formally incorporate cultural variables such as filial piety, organisational hierarchy, or collective identity into empirical models, leaving a significant explanatory gap that the present research addresses (Pandya et al., 2022).

Table 1
Comparative Summary: India vs. United States

Aspect	India	United States
Cultural Orientation	Collectivist, family-centred	Individualist, self-oriented
WLB Challenges	Long hours, role conflict, weak policy support	Burnout, digital overwork
Mental Health Awareness	Increasing but stigmatised	Mainstream, institutionalised
Support Systems	Family-based support	Professionalised support
Policy Maturity	Uneven and emerging	Advanced and structured

Research Methodology

Research Design and Setting

This study employs a comparative cross-sectional design integrating quantitative measurement with descriptive analysis. A cross-sectional approach was chosen because it permits systematic comparison of multiple variables across two cultural contexts at a single point in time without requiring longitudinal follow-up (Creswell, 2018). The research follows a deductive model guided by Hofstede's (2010) Cultural Dimensions Theory and Greenhaus and Allen's (2011) work-family balance framework, moving from theoretical propositions to empirical testing.

The study targeted urban full-time employees in four sectors—information technology (IT), education, healthcare, and banking—chosen for their cross-national comparability and for the significant changes in work practices these industries experienced following the COVID-19 pandemic (Gallup, 2021). Indian sample cities were Mumbai, Bengaluru, Hyderabad, and Delhi; US cities were New York, San Francisco, Chicago, and Houston. These locations were selected for their multicultural workforces, high concentrations of multinational organisations, and representativeness of contemporary corporate dynamics in each country.

Population, Sampling, and Data Collection

The target population comprised full-time employees aged 25–55 in corporate or institutional settings. Stratified random sampling was employed to ensure proportional representation across gender, age group, and occupational sector, thereby minimising sampling bias (Saunders et al., 2019). Following Krejcie and Morgan's (1970) power-analysis guidelines—which recommend a minimum of 384 respondents for adequate statistical sufficiency—the study targeted 400 participants per country, for a total sample of $N = 800$.

Data were collected between February and June 2025 via a structured self-administered online questionnaire distributed through corporate HR networks and LinkedIn professional groups. Ethical approval was obtained from the affiliated university's Institutional Review Board (IRB) in January 2025. All participants provided informed consent online prior to completing the survey, and anonymity was assured throughout. Of 852 total responses received, 52 were excluded due to incomplete data, yielding a final usable sample of 800.

Instruments

The questionnaire comprised four sections. Section A collected demographic information including age, gender, marital status, number of dependants, job tenure, and work sector. Section B operationalised work-life balance using the Work-Family Balance Scale (Carlson et al., 2000), an 18-item instrument covering three domains—time balance, involvement balance, and satisfaction balance—with previously reported Cronbach's $\alpha = 0.89$. Section C assessed mental health using the General Health Questionnaire-12 (GHQ-12; Goldberg & Williams, 1988), a widely validated 12-item screening tool for stress, anxiety, and general well-being, with international reliability coefficients consistently in the range of $\alpha = 0.82$–0.90 (WHO, 2022). Section D measured cultural orientation using an adapted 10-item version of Hofstede's (2010) Individualism–Collectivism Index, assessing attitudes toward group work, self-reliance, and social harmony.

Reliability coefficients for the present sample were: WLB Scale $\alpha = 0.91$; GHQ-12 $\alpha = 0.86$; Cultural Orientation Scale $\alpha = 0.84$. Confirmatory factor analysis (CFA) conducted via AMOS Version 25 confirmed acceptable model fit across all constructs (CFI > 0.90; RMSEA < 0.08).

Data Analysis

Quantitative data were analysed using SPSS Version 28 for descriptive statistics and inferential tests, and AMOS Version 25 for structural equation modelling. Hypothesis testing employed: independent samples t-tests to compare WLB and mental health mean scores between Indian and US respondents; Pearson correlation analysis to establish the direction and magnitude of inter-variable relationships; hierarchical regression analysis to assess the moderating role of cultural orientation and the mediating role of organisational support; and one-way ANOVA to examine differences across demographic sub-groups including gender and marital status. A significance threshold of $p < 0.05$ was applied throughout.

Results

Descriptive Statistics

US respondents reported significantly higher mean scores for both WLB (M = 3.84, SD = 0.58) and mental health (M = 3.46, SD = 0.63) compared to their Indian counterparts (WLB: M = 3.12, SD = 0.67; mental health: M = 2.71, SD = 0.75). Organisational support scores also diverged markedly (India: M = 3.05, SD = 0.72; USA: M = 3.78, SD = 0.64). Indian respondents displayed stronger collectivist cultural orientations (M = 2.89, SD = 0.71) compared to US respondents (M = 4.22, SD = 0.58). These patterns are consistent with Gallup (2021) and Rajadhyaksha and Smita (2004), who found that employees in individualistic Western societies typically exercise greater autonomy over their schedules and receive more structured organisational support, both of which contribute to better psychological well-being.

Table 2
Descriptive Statistics by Country

Variable	Country	Mean (M)	SD	Interpretation
Work-Life Balance	India	3.12	0.67	Moderate balance
Work-Life Balance	USA	3.84	0.58	Higher balance
Mental Health (GHQ-12, reversed)	India	2.71	0.75	Moderate well-being
Mental Health (GHQ-12, reversed)	USA	3.46	0.63	Higher well-being
Organisational Support	India	3.05	0.72	Moderate
Organisational Support	USA	3.78	0.64	Strong
Cultural Orientation (Ind. Score)	India	2.89	0.71	Collectivist leaning
Cultural Orientation (Ind. Score)	USA	4.22	0.58	Strongly individualist

Note. GHQ-12 scores were reverse-coded for interpretive clarity; higher scores indicate better mental health.

Correlation Analysis

Pearson correlations revealed a strong positive relationship between WLB and mental health ($r = 0.62$, $p < 0.01$), confirming that higher WLB is associated with better psychological well-being across both national samples. Organisational support correlated significantly with both WLB ($r = 0.57$, $p < 0.01$) and mental health ($r = 0.49$, $p < 0.01$), supporting its role as a mediating variable in the WLB–mental health relationship. Cultural orientation correlated positively with both WLB ($r = 0.41$, $p < 0.01$) and mental health ($r = 0.35$, $p < 0.01$), indicating that individualistic orientations are associated with more positive outcomes on both dimensions. These results support Hypothesis 1 and are consistent with Greenhaus and Allen (2011) and Mensah et al. (2020), who found that balanced work–family integration increases life satisfaction and attenuates psychological stress.

Country-Level Comparison

Independent t-tests confirmed statistically significant differences between India and the US on all measured dimensions (WLB: $t = 8.74$, $p < 0.001$; mental health: $t = 7.68$, $p < 0.001$; organisational support: $t = 6.55$, $p < 0.001$; cultural orientation: $t = 9.22$, $p < 0.001$), supporting Hypothesis 2. US employees reported stronger WLB, mental health outcomes, and access to organisational support. Indian workers, while displaying stronger collectivist values, had considerably less access to formal mental health infrastructure. These findings align with Hofstede's (2010) observation that individualistic workplaces foster personal autonomy and achievement orientation, whereas collectivist workplaces are characterised by loyalty, social interdependence, and a tendency to conflate professional and familial obligations.

Regression, Moderation, and Mediation Analysis

Hierarchical regression analysis confirmed that WLB is a significant predictor of mental health across the combined sample ($\beta = 0.53$, $t = 12.45$, $p < 0.001$). Organisational support emerged as a partial mediator of this relationship ($\beta = 0.21$, $p = 0.001$), indicating that the positive effects of WLB on mental health are partly channelled through the availability of supportive workplace structures. Cultural orientation functioned as a significant moderator ($\beta = -0.19$, $p = 0.002$): the strength of the WLB–mental health relationship was greater among US respondents ($\beta = 0.62$) than Indian respondents ($\beta = 0.44$), meaning that the psychological benefits of balance are more pronounced in individualistic settings where personal well-being is culturally sanctioned. These results confirm Hypotheses 3 and 4, and are consistent with findings by Ratnesh et al. (2019) and Savarimalai et al. (2023).

Gender Differences

Significant gender-based differences in WLB were observed in the Indian sample (male $M = 3.25$ vs. female $M = 2.94$, $p = 0.004$) but not in the US sample (male $M = 3.85$ vs. female $M = 3.73$, $p = 0.078$). Indian women reported lower WLB primarily due to the intersection of dual-role pressure—managing both professional responsibilities and disproportionate household and caregiving duties—compounded by limited organisational support (Rajadhyaksha & Smita, 2004). In the US, institutionalised family-friendly policies such as parental leave and hybrid work models appear to attenuate gender-based WLB disparities, though they do not eliminate them entirely. These findings confirm Hypothesis 5.

Discussion

The findings collectively demonstrate that cultural context is a central determinant of how employees experience and manage the interface between work and personal life. US respondents benefit from individualistic values that normalise boundary-setting, self-advocacy, and professional mental health support. Indian respondents, operating within a collectivist framework, draw meaningful psychological support from social networks and family ties, but face heightened role conflict when professional demands collide with cultural expectations of family obligation and communal duty (Triandis, 1995). This dynamic resonates with Hofstede's (2010) observation that collectivist societies tend to privilege social belonging over individual self-care—a disposition that can paradoxically sustain psychological distress even within tightly knit communities.

The role of organisational support stands out as particularly consequential. Only 37% of employers in the Indian sample provided formal mental health assistance, compared to 68% in the US sample—a gap that mirrors the structural disparity Gallup (2021) and Pandya et al. (2022) have documented. For Indian women, the convergence of cultural caregiving expectations, limited workplace flexibility, and insufficient institutional support creates a compound psychological burden (Savarimalai et al., 2023). American family-friendly corporate practices—parental leave, hybrid models, EAPs—provide meaningful mitigation of comparable pressures, consistent with the theoretical arguments of Greenhaus and Allen (2011).

Post-pandemic transformations further complicate the picture. Hybrid work models in the US have generally increased employee autonomy and reduced commuting stress, but have also introduced new risks of social isolation and boundary erosion among remote workers. In India, where remote work infrastructure and digital literacy vary more widely, many employees continue to experience blurred work–home boundaries without the psychological resources necessary to manage them effectively. WHO (2022) has cautioned that remote work without adequate psychological support can amplify, rather than relieve, stress—a warning that the present data validate and that policymakers in both countries should heed.

Policy Implications and Recommendations

The evidence from this study supports a shift in how workplace mental health is governed: from a discretionary corporate benefit to an enforceable labour standard. The following recommendations are addressed to organisations, policymakers, and future researchers.

For Organisations

Organisations in both countries should institutionalise mental health leave, flexible and hybrid working arrangements, and structured wellness programmes as baseline provisions rather than exceptional benefits. HR practices must be designed with cultural sensitivity: Indian firms can draw on US models of mental health normalisation and awareness campaigns, while American multinationals operating in India should consider family-inclusive leave policies and community-oriented support structures that align with collectivist values. Gender-inclusive practices—universal parental leave, on-site or subsidised childcare, and protected promotion pathways for employees returning from caregiving leave—are particularly critical in the Indian context. Managers across both countries should receive mandatory training in trauma-informed leadership, empathetic work distribution, and the creation of psychologically safe environments (WHO, 2022).

For Policymakers

India's National Mental Health Programme (1982) requires substantive revision to incorporate workplace-specific provisions applicable to the private sector. Mandatory mental health audits for medium and large enterprises—modelled on existing occupational health and safety inspections—would convert corporate mental health obligations from aspirational commitments to legally enforceable requirements. The US Mental Health Parity and Addiction

Equity Act (2008) offers a useful legislative template for ensuring equitable insurance coverage for mental health conditions.

A statutory Right to Disconnect—analogous to legislation enacted across France, Ireland, and several other European countries—would establish legally enforceable limits on after-hours digital communication. This is particularly urgent for India's IT sector, where ten-to-twelve-hour working days are commonplace, and for US employees who report chronic emotional exhaustion linked to constant digital availability (APA, 2023; Greenhaus & Allen, 2011).

Conclusion

This cross-cultural study confirms that work-life balance is a robust and significant predictor of employee mental health, and that the nature and magnitude of this relationship are shaped by cultural context, gender dynamics, and the quality of organisational support available. US employees benefit from greater institutional infrastructure and a cultural framework that validates personal well-being, while Indian employees draw resilience from social and family networks but face structural role overload, limited policy protection, and persistent mental health stigma. Neither model is complete: the US suffers from digital overwork, chronic performance pressure, and inadequate reach for workers without access to formal wellness programmes, while India has yet to develop the policy architecture necessary to address systemic workplace stress.

The study's hypotheses were all supported: WLB and mental health are positively and significantly correlated across both national samples (H1); US employees report higher WLB and better mental health outcomes than their Indian counterparts (H2); cultural orientation significantly moderates the WLB–mental health relationship (H3); organisational support mediates this relationship (H4); and gender significantly impacts WLB in India but not in the US (H5).

Future research should pursue longitudinal designs to track post-pandemic adaptation in work-life norms, extend the sample to additional cultural contexts such as East Asia and Europe, examine sector-specific dynamics in healthcare and the gig economy, and adopt mixed-methods approaches combining validated psychometric scales with in-depth qualitative interviews. By narrowing the empirical gap between Western and non-Western research traditions, this study advances a global evidence base for culturally inclusive, policy-driven approaches to workplace mental health.

References

American Psychological Association. (2023). *Work and well-being survey: Mental health in the workplace.* APA.

Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and initial validation of a multidimensional measure of work–family conflict. *Journal of Vocational Behavior, 56*(2), 249–276. https://doi.org/10.1006/jvbe.1999.1713

Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Gallup. (2021). *State of the global workplace report 2021.* Gallup, Inc.

Goldberg, D., & Williams, P. (1988). *A user's guide to the general health questionnaire.* NFER-Nelson.

Greenhaus, J. H., & Allen, T. D. (2011). Work–family balance: A review and extension of the literature. *Journal of Management, 37*(1), 17–55. https://doi.org/10.1177/0149206310365853

Hofstede, G. (2010). *Cultures and organizations: Software of the mind* (3rd ed.). McGraw-Hill.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607–610. https://doi.org/10.1177/001316447003000308

Mensah, A. Z., Asante, F., Nuamah, M. A., & Oteng, B. (2020). Work–life balance and self-reported health among working adults in Europe: A gender and welfare state regime comparative analysis. *BMC Public Health, 20,* Article 1052. https://doi.org/10.1186/s12889-020-09139-w

Pandya, A., Khanal, N., & Upadhyaya, M. (2022). Workplace mental health interventions in India: A rapid systematic scoping review. *Frontiers in Public Health, 10,* Article 800880. https://doi.org/10.3389/fpubh.2022.800880

Rajadhyaksha, U., & Smita, J. (2004). Work–life balance in South East Asia: The Indian experience. *South Asian Journal of Management, 11*(1), 108–127.

Ratnesh, M., Ali, A., & Sinha, A. R. (2019). Determinants of work–life balance: A cross-cultural review of selected Asian countries. *Space and Culture, India, 7*(1), 223–225. https://doi.org/10.20896/saci.v7i1.478

Reed, C. (2021). The impact of work–life balance on mental health and job satisfaction: A comprehensive review and meta-analysis. *Journal of Public Health & Environment, 4*(2), Article 96. https://doi.org/10.14302/issn.2641-4538.jphe-21-3877

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.

Savarimalai, R., Christy, J., Bhaskarapillai, B., Damodharan, D., & Sekar, K. (2023). Work–life balance among mental health professionals in a tertiary care neuropsychiatry centre in India. *Industrial Psychiatry Journal, 32*(2), 354–360. https://doi.org/10.4103/ipj.ipj_233_22

Triandis, H. C. (1995). *Individualism and collectivism.* Westview Press.

World Health Organization. (2022). *Mental health and work: Impact, issues, and good practices.* WHO.

Evaluating the Effectiveness of Cyber Cognitive Attacks: A Sentiment-Based Approach

Bonnie Rushing, University of Colorado Colorado Springs, United States
William Hersch, United States Air Force Academy, United States
Kora Gwartney, University of Colorado Colorado Springs, United States
Shouhuai Xu, University of Colorado Colorado Springs, United States

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

Cyber cognitive attacks are a growing threat, yet their effectiveness remains difficult to measure systematically. We introduce the Cyber Cognitive Attack Effects Chain—Resonance (affective engagement), Proliferation (spread), and Influence (impact)—and propose a lightweight, data-driven method linking sentiment, topic, and engagement metrics. Resonance is operationalized via headline sentiment, while proliferation is captured through engagement percentiles, enabling tail-aware comparisons of narrative spread. Applying this framework to the FakeNewsNet–PolitiFact dataset (1,056 articles), we find that false narratives are more emotionally polarized, skew more negative, and achieve substantially higher median engagement than real news, indicating broader and more consistent virality. Topic–sentiment interactions reveal high-risk pockets (notably false–health and false–celebrity) that amplify spread, while real political content dominates aggregate engagement through a small number of highly amplified items. These patterns align with DISARM execution tactics, providing quantitative support for Maximise Exposure (TA17) and Deliver Content (TA09). The framework generalizes across datasets and offers practical implications for detection and defense, including sentiment-first triage and topic-aware monitoring of high-variance narratives. We conclude by outlining limitations and directions for extending measurement to downstream influence.

Keywords: social media, affective computing, security, cognitive attacks, disinformation

iafor
The International Academic Forum
www.iafor.org

Introduction

Emotion-laden falsehoods now travel faster and farther than truth on social platforms, creating real harms in public health, politics, and online safety. Large empirical studies show that false news propagates “farther, faster, deeper, and more broadly” than true news, with affectively charged content, especially anger and fear, driving shares and attention (Cervone et al., 2024; Duch, 2021; Vosoughi et al., 2018). Adversaries exploit this psychology with coordinated amplification, bots, and recommender-system dynamics, tactics cataloged by DISARM under goals to maximise exposure and drive online harms (Bontridder & Poullet, 2021; DISARM Foundation, 2024). The consequences are concrete: health misinformation distorts risk perception and behavior (Wang et al., 2019), mainstream platforms can algorithmically surface false vaccine narratives (Juneja & Mitra, 2021), and politicized narratives reshape online discourse and mobilization (Stieglitz & Dang-Xuan, 2013). Framed as “cognitive warfare,” these campaigns intentionally target attitudes, decisions, and collective cognition (Claverie & du Cluzel, 2024; Rushing & Xu, 2026).

Yet despite growing doctrine and anecdotal evidence, the field lacks standardized, data-driven measures that tie emotional framing to observed spread.

We address this gap with a measurable *effects chain* and lightweight metrics linking sentiment to virality. Our three-phase *Cyber Cognitive Attack Effects Chain* includes *Resonance → Proliferation → Influence*, and we quantify how sentiment and topical framing relate to spread. Using tweet counts as a behavioral proxy for proliferation, we test whether emotionally extreme (especially negative) language is associated with higher virality and whether certain topic–sentiment combinations are especially potent.

Specifically, we study: (i) how sentiment differs between false and real narratives; (ii) how sentiment correlates with virality; (iii) which topic–sentiment pairs yield the greatest spread; and (iv) how these observables map to DISARM Execution (PO3) tactics. In this paper, we operationalize *Resonance* and *Proliferation*; *Influence* (belief/behavior change) requires longitudinal or off-platform outcomes and is out of scope.

Contributions

We make two contributions. (1) A reusable methodology anchored in a three-phase *effects chain*, *Resonance* (sentiment), *Proliferation* (engagement), *Influence* (impact), with simple, cross-platform measurements. (2) An empirical case study on FakeNewsNet–PolitiFact[1] that quantifies sentiment and topic effects on spread, identifies high-risk topic–sentiment pockets, and proposes a concise *Resonance–Proliferation Score* (RPS) for triage.[2]

Background and Related Work

Research relevant to the effectiveness of cyber cognitive attacks generally falls into four interconnected areas.

[1]https://github.com/KaiDMML/FakeNewsNet
[2]Video summary available at https://www.youtube.com/watch?v=Xwf_GZ-BRB0

Influence Campaign Lifecycle Models

Influence campaign models, such as cyber kill chains and DISARM (DISARM Foundation, 2024), offer structured ways to categorize cyber cognitive operations through phases defined by specific tactics, techniques, and procedures (TTPs). However, these frameworks often lack quantitative support using real-world engagement data and do not formalize the influence process. To address this gap, we define a novel three-phase *Cyber Cognitive Attack Effects Chain*, composed of *Resonance*, *Proliferation*, and *Influence*. This effects chain models how emotionally charged content hooks audiences (Resonance), spreads through digital ecosystems (Proliferation), and alters perception or behavior (Influence). Our approach draws conceptually from the "ABCs of Influence" model by François (2019), which identifies core influence goals: Affecting attitudes (A), influencing Behavior (B), and shaping Cognition (C). We operationalize these goals using sentiment analysis and engagement metrics, quantifying affect through emotional polarity, behavior through retweet volume, and cognitive impact through sustained narrative engagement. By bridging conceptual frameworks like DISARM and the ABCs with empirical measures, our methodology enables scalable, cross-platform assessment of cognitive attack effectiveness.

Narrative Virality and Emotional Engagement

Studies in narrative virality and memetics emphasize the role of emotional resonance in driving the online propagation of content. Previous work is largely qualitative and highlights that narratives leveraging strong emotional cues, particularly negative emotions like fear, anger, or outrage, demonstrate increased viral potential and deeper audience engagement (Cervone et al., 2024; Duch, 2021; Hutto & Gilbert, 2014). Krishnan and Sitaraman (2013) investigated the effectiveness of disinformation through a large-scale measurement study on the effectiveness of video ads. Their findings suggest that deeper interactions, such as sustained attention or click-through behavior (e.g., retweets), are the preferred indicators of user engagement and intent, aligning with our use of tweets and retweets as a proxy for cognitive attack effectiveness.

Platform Manipulation and Exposure Maximization

The literature on platform manipulation examines how malicious actors exploit online platforms to maximize the reach and persistence of cyber cognitive attacks. Common techniques include coordinated posting, amplification via bot networks, AI use, hashtag flooding, and exploitation of algorithmic recommendation systems (Caramancion, 2023; DISARM Foundation, 2024; Juneja & Mitra, 2021). While these manipulative tactics have been well-documented conceptually, empirical studies using systematic datasets remain relatively sparse. Our work expands this literature by empirically assessing how such manipulation aligns with emotional sentiment and topic framing to enhance narrative effectiveness.

FakeNewsNet and PolitiFact

We use the *FakeNewsNet* PolitiFact dataset, which labels news as *real* or *fake* based on professional fact-checks by the nonpartisan organization PolitiFact.[3] Unlike other datasets (e.g., *BuzzFeedNews*, *FacebookHoax*, *BS Detector*), FakeNewsNet includes rich features such as social context, temporal metadata, and tweet-level diffusion patterns (Shu et al., 2018). Each

[3]https://www.politifact.com/article/2018/feb/12/principles-truth-o-meter-politifacts-methodology-i/

article is linked to corresponding tweet IDs, enabling analysis of narrative spread on social media. Prior studies have used this dataset for false narrative detection, linguistic analysis, and modeling user credibility (Shu et al., 2018; Su et al., 2023a; Su et al., 2023b). We extend this work by applying sentiment and topic analysis to examine how emotional framing and thematic focus affect the spread, and thus the effectiveness, of real versus false narratives on Twitter.

By integrating and expanding on these research streams, our study provides a quantifiable assessment of cyber cognitive attack effectiveness, explicitly linking sentiment analysis and topical framing to measurable engagement outcomes on social media platforms.

Methodology

Our methodology is a reusable analytical framework for evaluating cognitive attack effectiveness using measurable indicators of resonance and proliferation. Later, we apply the methodology to the *FakeNewsNet* dataset, focusing on sentiment analysis, topic classification, and engagement metrics.

Terminology. Throughout, we refer to PolitiFact-labeled *fake* items as **False** and to PolitiFact-labeled *true* items as **Real**.

Research Questions (RQs)

These research questions guide our investigation.

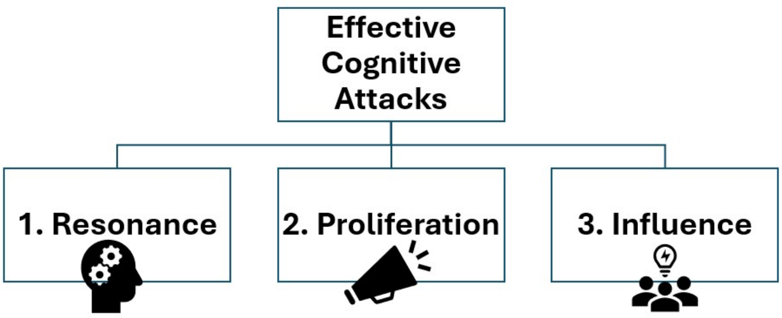
RQ1 (Resonance – Sentiment Framing): Do cyber cognitive attack narratives differ significantly in emotional sentiment from verified real news narratives?

RQ2 (Proliferation – Virality): How does emotional sentiment correlate with the virality of false versus real news narratives on social media?

RQ3 (Sentiment–Topic Interaction): Which topical categories (e.g., politics, health, celebrity) exhibit the strongest interaction between emotional sentiment and narrative virality?

RQ4 (Framework Support): How can empirical sentiment and engagement data be used to provide quantitative support for the DISARM Execution (PO3) tactics?

Figure 1
Cyber Cognitive Attack Effects Chain



This conceptual model illustrates the three critical stages of cognitive attack success: (1) Resonance, in which emotionally charged or sentiment-rich content captures attention and triggers cognitive biases; (2) Proliferation, where the narrative is amplified through sharing behaviors such as retweets and (3) Influence, where the content ultimately alters perceptions, decisions, or behaviors in alignment with the attacker's objectives.

Metrics

We define a three-phase *Cyber Cognitive Attack Effects Chain*: **Resonance** (affective signal inferred from text sentiment), **Proliferation** (behavioral spread measured by engagement), and **Influence** (downstream impact on beliefs/behavior, typically requiring longitudinal or off-platform data). This paper operationalizes the first two phases and treats *Influence* as future work.

Definition 1 (Effective Cyber Cognitive Attack). *Content that resonates emotionally, proliferates through sharing, and ultimately influences perceptions or behavior in line with the attacker's goals.*

Definition 2 (Resonance). *The narrative's affective pull, inferred quantitatively from sentiment polarity/strength (e.g., VADER compound) as a proxy for an emotional hook.*

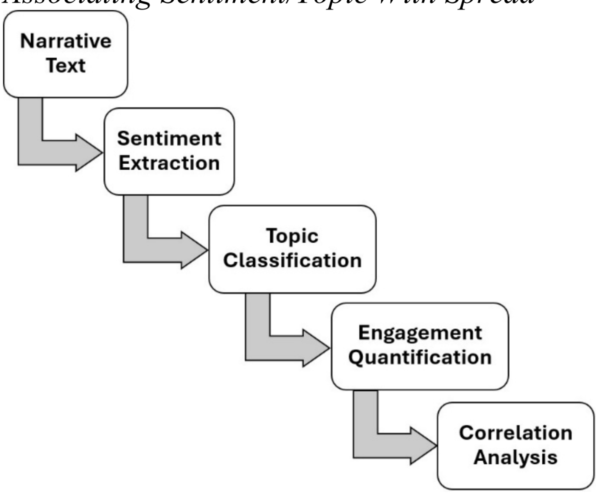
Definition 3 (Proliferation). *The extent of spread, measured by engagement (e.g., tweet/retweet counts) at the article level.*

Definition 4 (Influence). *Downstream impact on beliefs or actions; hardest to measure without surveys, field data, or natural experiments.*

Generalizable Methodology

The framework applies wherever text, a veracity/risk label, and engagement exist. It standardizes three elements: (i) **Resonance** via sentiment polarity/strength; (ii) **Proliferation** via article-level engagement; (iii) **Influence** reserved for settings with longitudinal or off-platform outcomes. Standardization enables cross-dataset comparisons, tail-aware monitoring, and topic-specific triage.

Figure 2
Four Steps: (1) Sentiment Extraction; (2) Topic Tagging; (3) Engagement Aggregation; (4) Associating Sentiment/Topic With Spread



Applicable Dataset Criteria

To apply this methodology, a dataset should contain the following attributes: (i) Labeled narratives (e.g., true/false, benign/deceptive), (ii) Text content suitable for sentiment analysis, (iii) Engagement metrics (e.g., shares, likes, retweets), and (iv) Optional: Topical context or metadata (e.g., tags, categories).

Methodology Steps

The methodology employs four steps to categorize and analyze narrative texts, as depicted in Figure 2: 1. *Sentiment Extraction*: Apply rule-based (e.g., VADER) or ML-based sentiment models to narrative text to generate polarity scores. 2. *Topic Classification*: Categorize narratives by domain (e.g., health, politics, celebrity) to analyze sentiment-topic interactions. 3. *Engagement Quantification*: Aggregate share/retweet/reaction metrics as proxies for narrative proliferation. 4. *Correlation Analysis*: Examine relationships between sentiment intensity and engagement to infer cognitive resonance and spread dynamics.

Statistical Analysis

We complement descriptive summaries with three inferential components: (i) Pearson's χ^2 tests of independence compare sentiment distributions across veracity classes (reporting Cramér's V) (Agresti, 2013); (ii) tweet counts are modeled via a negative binomial (NB) regression with log link (Cameron & Trivedi, 2013; Hilbe, 2011; McCullagh & Nelder, 1989); (iii) tail behavior is examined via quantile regressions at $\tau \in \{0.5, 0.75, 0.9\}$ (Koenker, 2005; Koenker & Bassett, 1978).

Where families of hypotheses arise, we control the false discovery rate (FDR) using the Benjamini–Hochberg procedure (Benjamini & Hochberg, 1995).

NB Regression

Let Y_i denote the tweet count for article i, and let $\text{Fake}_i \in \{0, 1\}$ indicate veracity (1 = fake). Under the NB2 parameterization, $Y_i \sim NB(\mu_i, \alpha)$ with $E[Y_i] = \mu_i$ and $Var(Y_i) = \mu_i + \alpha\mu_i^2$, where $\alpha > 0$ is the over-dispersion parameter. We model the expected tweet count using a log-link negative binomial regression:

$$\log \mu_i = \beta_0 + \begin{bmatrix} \text{Fake}_i & \mathbf{S}_i^\top & \mathbf{T}_i^\top & (\text{Fake}_i\,\mathbf{S}_i)^\top & (\text{Fake}_i\,\mathbf{T}_i)^\top \end{bmatrix} \begin{bmatrix} \beta_F \\ \boldsymbol{\beta}_S \\ \boldsymbol{\beta}_T \\ \boldsymbol{\beta}_{S\times F} \\ \boldsymbol{\beta}_{T\times F} \end{bmatrix}. \quad (1)$$

We report coefficients as incidence rate ratios (IRR = e^β) with robust standard errors. In words, we model the expected tweet count $\mu_i = E[Y_i]$ with a log link. Exponentiating coefficients gives IRR: for a given category, $e^\beta > 1$ means higher expected tweets than the baseline, $e^\beta < 1$ means lower.

Sentiment Binning

We compute VADER's compound sentiment score for each text, which ranges from −1 (most negative) to +1 (most positive). Following standard practice (Hutto & Gilbert, 2014), we bin items as *positive* if compound ≥ 0.05, *negative* if compound ≤ −0.05, and *neutral* otherwise. To assess sensitivity, we perturb the positive/negative cutoffs by ±0.02 and obtain substantively unchanged results.

Sentiment Source (Titles Only)

We compute sentiment from article titles (headlines) rather than full text. This choice targets the decision surface at share time: a large, unbiased measurement study of Twitter traffic found that 59% of links shared were never clicked by the sharer, implying that, for many users, the headline is the only linguistic stimulus encountered before propagation (Gabielkov et al., 2016). Headlines are also intentionally engineered and experimentally shown to shape engagement at scale (Matias et al., 2021). Cognitive research further shows that headlines pre-frame interpretation, bias memory and inferences, and can produce durable misbelief even when article bodies are read (Ecker et al., 2014). Because emotion (especially high-arousal affect) predicts virality, we operationalize affect via headline sentiment at this stage (Berger & Milkman, 2012). We use VADER, a rule-based sentiment model validated on short, social-media–style texts and robust to punctuation, casing, boosters, and negation patterns common in headlines (Hutto & Gilbert, 2014).

Limitations (Scope of Inference)

Title-only sentiment does not capture in-article nuance or rhetorical structure; accordingly, we interpret our results as predictors of Proliferation (sharing) rather than persuasion, and report robustness checks below.

Robustness and Sensitivity

- *Subset concordance:* On a subset with body text available, correlate headline vs. lead-paragraph sentiment; report sign agreement and Pearson/Spearman r.
- *Model stability:* Refit core models using (i) lead-paragraph sentiment and (ii) the mean of headline+lead; verify qualitative conclusions unchanged.
- *Publisher style controls:* Add outlet/domain fixed effects to reduce confounding by editorial tone.
- *Threshold sensitivity:* Vary VADER bin cutoffs by ±0.02 and report unchanged directionality.

Engagement Definition and Outlier Policy. We define article-level engagement as the total number of associated tweets/retweets provided by FakeNewsNet for that article (including zeros), aggregated at the article level without normalization. Outliers are excluded in figures only, using Tukey's IQR rule (Tukey, 1977) (values $< Q1 - 1.5 \cdot IQR$ or $> Q3 + 1.5 \cdot IQR$), computed within each {veracity, sentiment} cell. In total, 175 (16.57%) observations were flagged and removed.

Case Study: PolitiFact Dataset

To demonstrate the usefulness of our methodology, we apply it to the *FakeNewsNet* PolitiFact dataset (Shu et al., 2018), which includes 1,056 labeled news articles (624 real, 433 false) and their associated tweet engagement metrics. The articles are dated from 2010–2018 (median date is July 2, 2018). Articles are verified as *real* or *false* by nonpartisan PolitiFact fact-checkers (Shu et al., 2018; Su et al., 2023a; Su et al., 2023b) and contain associated tweet IDs and engagement (retweet) counts. We use only public tweet IDs and article metadata as distributed by FakeNewsNet; no additional user data were collected.

Sentiment Analysis Implementation

We use VADER (Hutto & Gilbert, 2014) and its compound score (−1 to +1) as our polarity measure, given its calibration for short, informal text and robust performance on social content; extending to neural models is future work.

Topic Classification Implementation

Articles are tagged into *politics*, *health*, *celebrity*, or *other* via simple keyword rules (e.g., politics: *election, congress, trump/biden*; health: *vaccine, virus, pandemic*). The goal is interpretable buckets for interaction analysis, not exhaustive taxonomy. This lightweight heuristic approach enables scalable and interpretable topical labeling suitable for analyzing large, pre-labeled datasets such as FakeNewsNet (Shu et al., 2017; Vosoughi et al., 2018; Wang et al., 2019).

Narrative Effectiveness Metrics

We operationalize the effectiveness of cyber cognitive attacks using a quantifiable metric: the number of tweets and retweets associated with each news article. Prior work in information diffusion and online influence measurement has validated retweet volume as a proxy for narrative proliferation (Stieglitz & Dang-Xuan, 2013; Vosoughi et al., 2018).

Analytical Tools

All analysis used standard Python libraries.[4] Anonymized code and scripts sufficient to reproduce all figures/tables will be provided in the supplemental artifact for review.

Analysis and Findings

Addressing RQ1: Emotional Sentiment Differences

RQ1: Do cyber cognitive attack narratives differ significantly in emotional sentiment from verified real news narratives? *(Resonance – Sentiment Framing)*

We compare VADER-binned polarity (negative/neutral/positive) by veracity to test whether false items are more emotionally extreme.

[4]Implemented with pandas, nltk, and matplotlib Python libraries.

Table 1
Sentiment Distribution by Veracity (VADER). VADER Thresholds: ≥ 0.05 Positive, ≤ −0.05 Negative, Else Neutral. Percentages Are Row-Wise

News Type	n	%	n	%	n	%	n
False	198	45.8	162	37.5	72	16.7	432
Real	94	15.1	412	66.0	118	18.9	624
Total	292	26.4	574	51.8	190	17.2	1,056
	Negative		Neutral		Positive		Total

Key insights from Table 1:

- **False narratives** have more than double the number of negative articles compared to real news.
- **Real news** tends to be more neutral in tone, with 412 out of 624 (66%) articles falling in the neutral sentiment range.
- This suggests that **negative emotional tone is more characteristic of cognitive attacks.**

Insight 1. *False narratives exhibit greater emotional polarization than real news, confirming the use of sentiment-laden language as a cognitive trigger. This supports the first stage (Resonance) in our Cognitive Attack Effects Chain, where emotional framing primes audiences for deeper engagement.*

Addressing RQ2: Sentiment and Narrative Virality

RQ2: How does emotional sentiment correlate with the virality of false versus real news narratives on social media? *(Proliferation – Virality)*

We relate sentiment bins to article-level tweet counts to assess whether emotional extremity, especially negative valence, corresponds to greater spread, and whether this differs by veracity.

Negative Sentiment Engagement Patterns. The proportion of tweet engagement tied to negatively valenced article titles differs starkly. Within the false tweets, 28.8% of tweets come from negative-sentiment articles (vs. 8.6% of real news tweets).

Insight 2. *False narratives rely on negative sentiment nearly 3× more to drive engagement. This aligns with cognitive security research showing that emotionally provocative and negatively valenced content spreads more rapidly, especially when false.*

Aggregate Virality Patterns: Total tweets (all articles)— False: 165,352; Real: 418,164. Average tweets per article— False: 265.2; Real: 464.2. Median tweets per article— False: 40.0; Real: 4.0.

Insight 3. *Although real news has higher total and average tweet volume, false narratives are shared more consistently, with a median tweet count nearly 10× higher. This suggests that false narratives drive broader mid-level engagement, while real news depends on a few high-performing stories.*

Engagement distributions are right-skewed with heavy upper tails: a small minority of articles accounts for a large share of exposure. Consequently, we report medians and upper quantiles (75th/90th) alongside means, using tail-aware models (Koenker, 2005; Koenker & Bassett, 1978).

Figure 3

Tweet Engagement by Sentiment Level for Real vs. False Narratives. False Narratives Consistently Show Higher Median Tweet Counts Across All Non-neutral Sentiment Levels

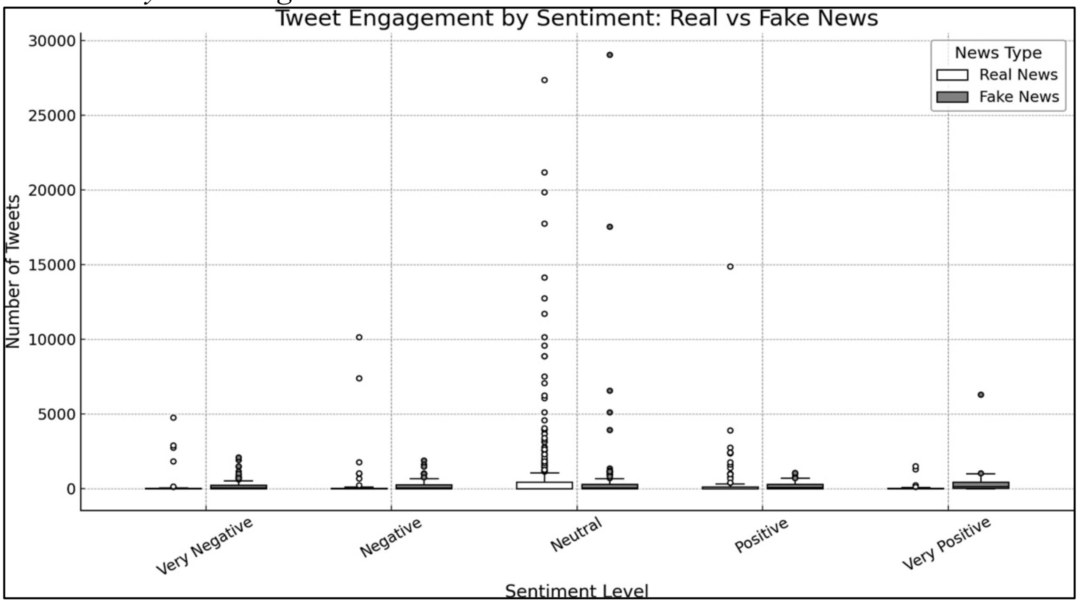
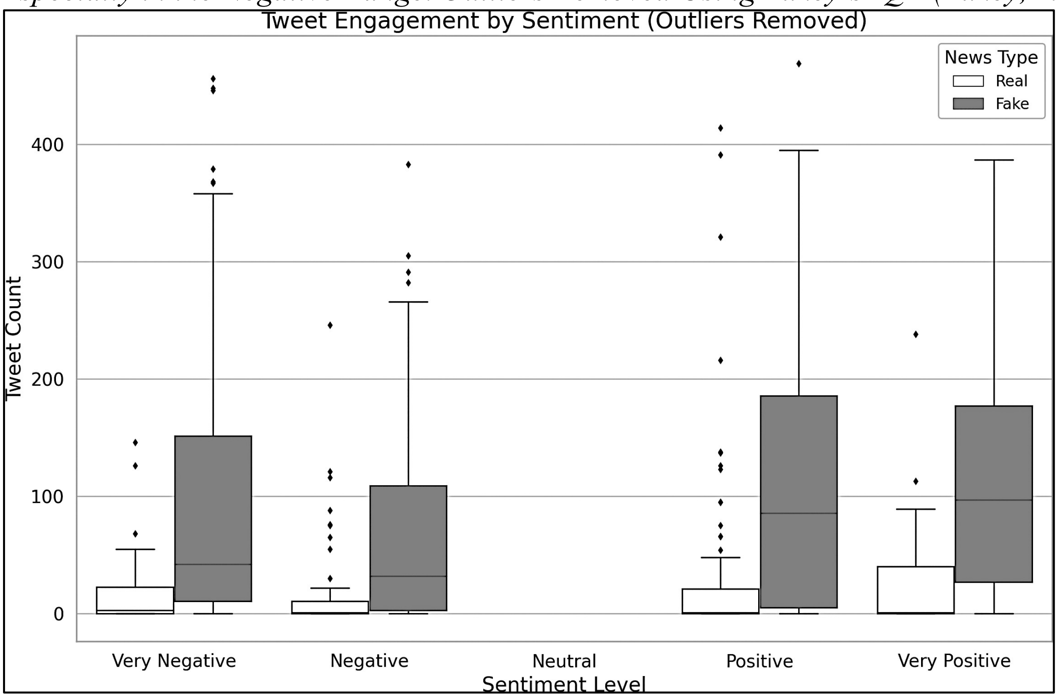


Figure 4

Tweet Engagement by Sentiment (Neutral Sentiment and Outliers Removed). Each Point Represents an Article, Comparing Tweet Counts for Real and False Narratives Across Sentiment Bins (Neutral Excluded for Clarity). Dark Gray Points (False) Cluster Higher, Especially in the Negative Range. Outliers Removed Using Tukey's IQR (Tukey, 1977)



Most Polarized Narratives. Tables 2 (real news) and 3 (false narratives) list the top five most emotionally polarized article titles, ranked by absolute compound VADER sentiment scores. Notably, false articles often feature sensational or conspiratorial themes, such as political death hoaxes or state violence, while real articles focus on contentious but fact-based reporting.

Table 2
Top 5 Most Polarized Real News Articles (PolitiFact-Labeled "Real")

Rank	Title	Sentiment Score
1	*Hannity says Obama won't even use the term "war on terror"*	−0.8591
2	*Call 'Islamic terrorism' what it is: a threat to freedom*	−0.8402
3	*Georgia crisis triggers war of words on White House campaign trail*	−0.8402
4	*Barack Obama says Mitt Romney condemned coal-fired power plants*	−0.8020
5	*Most heroin in U.S. now comes across Mexican border, not from Afghanistan*	−0.7960

Table 3
Top 5 Most Polarized False News Articles (PolitiFact-Labeled "Fake")

Rank	Title	Sentiment Score
1	*Russian source behind Trump dossier killed in mystery helicopter crash*	−0.9423
2	*Could Trump Win The Nobel Peace Prize? Peace in Korea Could Make It Happen*	0.9423
3	*Donald Trump Dead From A Fatal HEART ATTACK! — White House In Chaos*	−0.9173
4	*82-Year-Old Who Killed A Muslim In Self-Defense Cleared Of All Charges*	−0.9081
5	*Seattle Police Begin Gun Confiscations: No Law Broken, No Warrant, Just Guns Gone*	−0.9042

Addressing RQ3: Sentiment–Topic Interaction

RQ3: Which topical categories (e.g., politics, health, celebrity) exhibit the strongest interaction between emotional sentiment and narrative virality? *(Proliferation – Sentiment–Topic Interaction)*

We examine topic–sentiment interactions by averaging engagement within {topic, sentiment, veracity} cells to identify high-risk pockets that amplify spread. Topics were classified into politics, health, celebrity, or other, covering 41.3% (436/1,056) of the dataset.

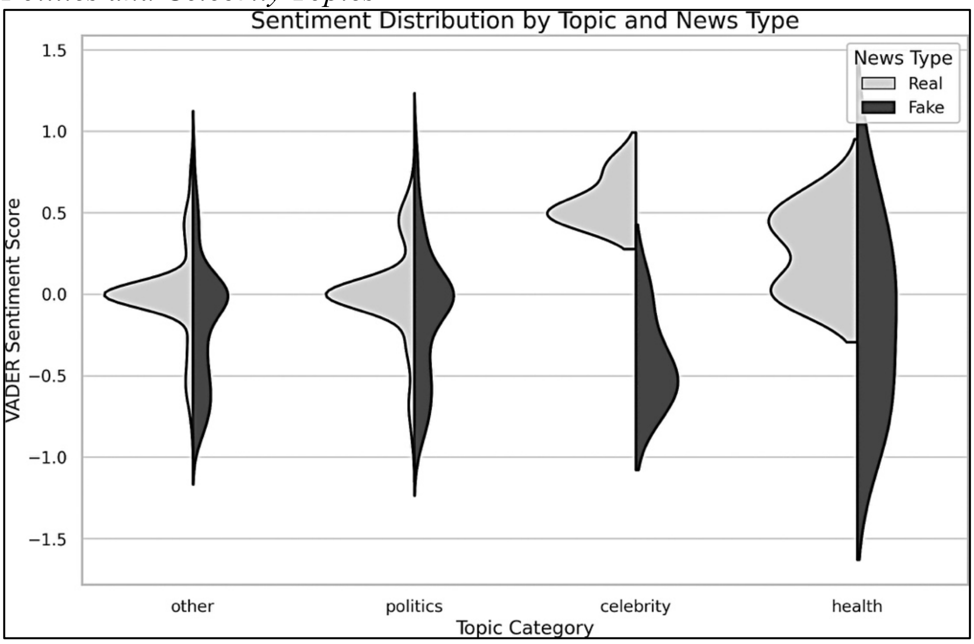
Table 4
Sentiment by Topic and Veracity (VADER). † Small n; Interpret With Caution

Label	Topic	Mean	Median	Std	Count
False	Celebrity†	−0.409	−0.494	0.283	4
False	Health	−0.161	0.000	0.558	7
False	Other	−0.189	0.000	0.388	251
False	Politics	−0.126	0.000	0.408	170
Real	Celebrity†	0.565	0.494	0.142	4
Real	Health	0.270	0.382	0.251	15
Real	Other	−0.001	0.000	0.268	369
Real	Politics	0.009	0.000	0.283	236

Engagement by Topic. Average tweet count per article, including zero-tweet items: Politics — Real: 845.25; False: 178.54. Health — Real: 82.00; False: 441.17. Celebrity — Real: 0.00; False: 465.00. Other — Real: 642.81; False: 457.05.

Insight 4. *False narratives outperform real news in health and celebrity topics, likely due to emotional, sensational, or conspiratorial framing. Real political news earns the highest average engagement overall, suggesting a concentration of mainstream amplification.*

Figure 5
Sentiment Distribution Across Topic Categories in Real and False Narratives Headlines. False Narratives Exhibit a Broader and More Negative Sentiment Spread, Particularly in Politics and Celebrity Topics



Key Takeaways:

- **Emotion + Topic = Virality.** Emotionally extreme disinformation, especially in health and celebrity categories, correlates with higher tweet engagement.

- **Real news dominates political engagement,** but false narratives maintain broader traction in emotionally volatile domains.
- **False narratives amplify sentiment variance,** reinforcing their potency in the Proliferation stage of the Cognitive Attack Effects Chain.

Addressing RQ4: Framework Support via Empirical Signals

RQ4: How can empirical sentiment and engagement data be used to provide quantitative support for the DISARM Execution (PO3) tactics? *(Framework Support)*

DISARM (DISARM Foundation, 2024) enumerates attacker tactics but offers limited quantitative support. Our dataset enables an operational crosswalk from observed signals (sentiment extremity, engagement/virality, topic–sentiment interactions) to DISARM's Execution (PO3) tactics.

Table 5
Crosswalk: DISARM PO3 Tactics and Associated Empirical Proxies

Tactic (ID)	Observable Proxy/Evidence
TA17: Maximise Exposure	Higher medians and heavy upper tails in tweet counts across non-neutral sentiment bins (Table 1; Figs. 3, 4).
TA09: Deliver Content	Topic–sentiment "pockets" with outsized engagement (false–health/celebrity); see Fig. 5 and topic-level averages.
TA18: Drive Online Harms	High-engagement fear/conspiracy/victimization frames among polarized false items (Tables 2, 3).
TA08: Pump Priming	Requires temporal diffusion traces, not testable here.
TA11: Persist	Requires longevity/evading moderation, not testable here.
TA10: Drive Offline Activity	Requires off-platform linkage, not testable here.

Insight 5. *Our sentiment and virality measures provide quantitative support for Maximise Exposure (TA17) and targeted Deliver Content (TA09), and are consistent with Drive Online Harms (TA18) in how polarized false narratives mobilize affective themes. Temporal and off-platform tactics (TA08, TA10, TA11) remain promising targets for future datasets with timestamps and event linkages.*

Discussion

This work advances the measurement of cyber cognitive attacks by (i) formalizing a three-phase *Cyber Cognitive Attack Effects Chain*: *Resonance → Proliferation → Influence*, and (ii) demonstrating with real data that sentiment is a scalable correlational signal for the first two phases. Across RQ1–RQ3, we find that false narratives exhibit greater emotional polarization than real news, that negative sentiment accounts for a disproportionate share of their engagement, and that topic–sentiment "pockets" (e.g., false × health/celebrity × negative) are especially virality-prone. These patterns align with the ABCs of Influence—Affect, Behavior, Cognition—and empirically support parts of DISARM's execution-phase tactics.

Resonance-Proliferation Score (RPS)

The Resonance–Proliferation Score (RPS) operationalizes the first two stages of our effects chain in a single, bounded, interpretable metric. By multiplying sentiment extremity (resonance) by a topic-normalized engagement percentile (proliferation), RPS highlights items that are both emotionally potent and unusually viral for their topic. Because proliferation is percentile-based, the score is robust to heavy-tailed engagement and comparable across topics and time.

For article i, let $s_i \in [-1, 1]$ be the VADER compound score and y_i the tweet count. Let $\tau_i \in$ {politics, health, celebrity, other} denote its topic.

Resonance

$$E_i = |s_i| \in [0,\ 1]. \qquad (2)$$

Optionally upweight negative valence via

$$E_i(\gamma) = \gamma \max\{0,\ -s_i\} + (1-\gamma)\max\{0,\ s_i\}, \quad \gamma \in [0,\ 1],$$

with $\gamma = 0.7$ by default (*chosen a priori; tuning γ is left to future work*).

Proliferation (Topic-Normalized Percentile)

Using a mid-rank empirical CDF within topic:

$$P_i = \frac{\#\{j \in G_{\tau_i} : y_j < y_i\} + 0.5\ \#\{j \in G_{\tau_i} : y_j = y_i\}}{n_{\tau_i}} \in (0,\ 1]. \qquad (3)$$

(If $n_{\tau_i} = 1$, set $P_i = 1$.)

Score

$$\mathrm{RPS}_i = E_i \cdot P_i \in [0,\ 1]. \qquad (4)$$

High values thus require both strong sentiment (resonance) and unusually high, topic-relative spread (proliferation).

Group Comparison and Thresholding

$$\mathcal{A}_{\mathrm{RPS}} = \frac{\mathrm{median}(\mathrm{RPS}_i \mid \mathrm{False})}{\mathrm{median}(\mathrm{RPS}_i \mid \mathrm{Real})}. \qquad (5)$$

To flag high-risk items, choose a threshold θ as the 90th percentile of RPS among Real articles and alert when $\mathrm{RPS}_i \geq \theta$.

In words, RPS multiplies sentiment extremity (resonance) by a topic-normalized engagement percentile (proliferation), so high values flag emotionally charged items that spread unusually widely for their topical peer group.

Implications for Detection and Defense

Our findings suggest concrete levers for defenders seeking to prioritize monitoring and early intervention. *Sentiment-first triage:* Because false narratives lean heavily on negative valence, a low-latency filter that surfaces spikes in negative polarity variance can act as a resonance alarm. *Targeted watchlists by topic:* The strongest proliferation occurs within specific sentiment–topic pockets. Maintaining dynamic watchlists (e.g., health, celebrity) and flagging sentiment shifts inside those domains improves precision and reduces analyst load. *Proliferation diagnostics:* Use distribution-sensitive indicators (median, 75th/90th percentiles, tail share) to detect abnormal spread early. *Content response strategy:* Because resonance is affective, counter-messaging should avoid mirroring outrage. Interventions that de-escalate emotion, foreground uncertainty, and provide concise, credible alternatives are more likely to disrupt the resonance→proliferation link. *Human-in-the-loop:* Automated sentiment/topic flagging should feed analyst workflows that assess coordination signals and policy context before enforcement or labeling. The push to operationalize misinformation risks in the generative-AI era motivates measurable affective signals (e.g., sentiment polarity) as early indicators of persuasive content (Zhou et al., 2023).

Connecting Theory to Operations: ABCs and DISARM

The effects chain operationalizes the ABCs: *Affect* (Resonance) captured via sentiment polarity/variance; *Behavior* (Proliferation) captured via sharing metrics; *Cognition* (Influence) requiring longer-horizon or off-platform evidence. Mapping these observables to DISARM's PO3 tactics, our measurements provide quantitative support for Maximise Exposure (TA17) and targeted Deliver Content (TA09), and are consistent with patterns expected under Drive Online Harms (TA18). Tactics that require temporal traces or offline linkage (Pump Priming (TA08), Persist (TA11), Drive Offline Activity (TA10)) remain promising but untested in our dataset.

RPS Triage Dashboard

Purpose and Users

The dashboard prototype depicted in Figure 6 supports content-moderation analysts and threat-intel reviewers who must quickly triage emerging narratives. It ranks items with a lightweight, interpretable signal—the Resonance–Proliferation Score (RPS), defined as sentiment extremity × topic-normalized spread, motivated by evidence that emotionally charged content spreads faster and farther online (Cervone et al., 2024; Duch, 2021; Vosoughi et al., 2018). The goal is to operationalize doctrine (e.g., DISARM execution goals and cognitive-warfare aims) with transparent, data-driven cues (Claverie & du Cluzel, 2024; DISARM Foundation, 2024; François, 2019).

Interaction Model

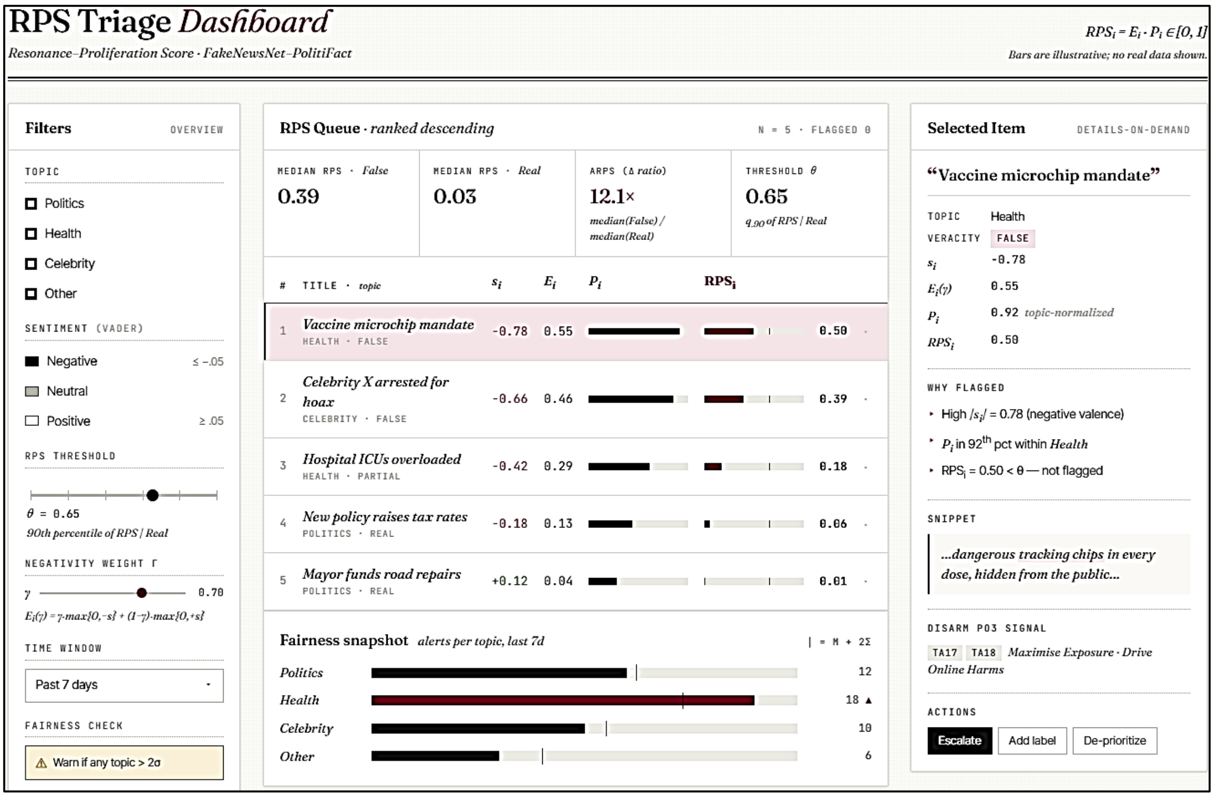
The layout follows an overview–filter–details flow to reduce cognitive load in scan-and-commit workflows: the left panel offers low-latency filters (topic, sentiment) and a threshold slider anchored to the 90th percentile of Real items. The center panel lists items with compact preattentive encodings: $|s_i|$ from VADER, topic-normalized percentile P_i, and the composite RPS. The right panel provides details-on-demand (snippet and "why flagged"), supporting accountable triage tied to observable features.

Fairness and Safety Cues

A fairness snapshot warns when alerts cluster within a topic (e.g., > 2σ from baseline). This widget serves as a pragmatic cue for auditing skew in exposure or moderation focus (Caramancion, 2023; Juneja & Mitra, 2021).

Figure 6

Prototype RPS Triage Dashboard. Left: Filters (Topic, Sentiment, RPS Threshold). Center: Ranked Queue With Per-Item Si, |Si|, Topic-Normalized Percentile Pi, and RPS. Right: Details and Explanation for the Selected Item. Bars Are Illustrative; No Real Data Are Shown



Methodological Considerations and Robustness

Heavy-tailed engagement warrants robust summaries (medians, quantiles) and tail-aware alerts. Construct validity improves by triangulating sentiment (lexicon/model, subjectivity, moral emotions) (Koenker, 2005). Confounders include coordinated amplification, account size/verification, exogenous events, and algorithm changes; future models should add timing/network controls. Sensitivity checks (winsorization, zero-tweet removal, alternative binnings/classifiers) yield consistent qualitative conclusions.

Generalizability and Scope

The case study is U.S.-centric and time-bounded, but the methodology is platform-agnostic wherever text, labels, and engagement exist. Multilingual settings and platform affordances may shift baselines; cross-language/platform evaluation is future work.

Research Agenda

Next steps include: adding timestamps for diffusion/pump-priming and persistence; integrating coordination/community structure and cross-platform flows; linking to downstream outcomes via natural experiments or policy shocks; testing countermeasures (labels, friction, re-ranking) with A/B designs; and enriching affect models beyond polarity (discrete emotions, moral foundations, toxicity).

Ethical and Policy Considerations

Operationalizing sentiment for defense must balance safety with expression. Risk controls include transparent criteria for flags, narrow scopes tied to measurable harms, audits for disparate impact, and appeal pathways. Research reproducibility (code, metrics, and pre-registered analyses where possible) further reduces overreach and supports policy trust.

Reproducibility and Ethics. We analyze only public data. No attempt was made to deanonymize users. Code and analysis scripts will be made available upon acceptance to support reproduction of results.

Limitations

The FakeNewsNet dataset lacks certain metadata (e.g., timestamps, retweet destinations, user-level details) that could further enhance our understanding of narrative dynamics. The dataset largely reflects disinformation and engagement patterns from the 2016–2018 period, limiting real-time generalizability without more recent data. Our methodology relies on PolitiFact as a baseline for “true” or “false” narrative labels; this data primarily comprises US-based topics and posts, limiting the scope of the research.

Additionally, this paper primarily covers the proliferation (spread) of emotional online content and does not examine the end goal of attackers—specifically, the susceptibility, perception, and behavioral changes of users who encounter the messaging. These projects remain future research goals.

Conclusion

This paper introduced a generalizable methodology for measuring cyber cognitive attack effectiveness and a three-phase *Cyber Cognitive Attack Effects Chain*: *Resonance → Proliferation → Influence*. Applying the framework to the FakeNewsNet PolitiFact corpus, we showed that false narratives are more emotionally polarized than real news, rely disproportionately on negative valence, and achieve substantially higher median engagement—evidence of heavy upper tails in their diffusion. We further identified topic–sentiment pockets (notably false–health/celebrity–negative) associated with outsized virality, and mapped these empirical signals to DISARM execution tactics, providing quantitative support for Maximise Exposure (TA17) and targeted Deliver Content (TA09), with patterns consistent with Drive Online Harms (TA18).

Practically, our results suggest sentiment-first triage and topic-aware watchlists, coupled with tail-sensitive monitoring (medians/quantiles rather than means), as feasible levers to disrupt the resonance→proliferation link early. Methodologically, the framework is platform-agnostic and can be replicated wherever text, basic engagement signals, and labels are available.

Overall, by aligning doctrinal models (DISARM, ABCs) with measurable observables (sentiment and engagement), this work offers a defensible path from theory to operations for proactive, data-driven cognitive defense.

Author's Note

The views expressed are those of the author and do not reflect the official policy or position of the US Air Force, Department of War, or the US Government.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The author declares that Grammarly, an AI-assisted writing software, was used to proofread and refine the language of the manuscript. The usage was limited to correcting grammatical and spelling errors and rephrasing statements for accuracy and clarity. The author further declares that, apart from Grammarly, no other AI or AI-assisted technologies have been used to generate content in writing the manuscript. The ideas, design, procedures, findings, analyses, and discussion are originally written and derived from appropriate and systematic conduct of the research.

References

Agresti, A. (2013). *Categorical data analysis* (3rd ed.). Wiley.

Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society. Series B (Methodological), 57*(1), 289–300.

Berger, J., & Milkman, K. L. (2012). What makes online content viral? *Journal of Marketing Research, 49*(2), 192–205.

Bontridder, N., & Poullet, Y. (2021). The role of artificial intelligence in disinformation. *Data & Policy, 3*(3), e32.

Cameron, A. C., & Trivedi, P. K. (2013). *Regression analysis of count data* (2nd ed.). Cambridge University Press.

Caramancion, K. M. (2023). Harnessing the power of ChatGPT to decimate mis/disinformation: Using ChatGPT for fake news detection. In *2023 IEEE World AI IoT Congress (AIIoT)* (pp. 42–46).

Cervone, C., Thompson, R., Votta, F., & Tucker, J. A. (2024). Memes, emotional engagement, and politics. *Research and Politics, 11*(2), 1–11.

Claverie, B., & du Cluzel, F. (2024). “Cognitive warfare”: The advent of the concept of “cognitics” in the field of warfare. In *STO-MP-HFM-361: Cognitive Warfare. NATO Science and Technology Organization*. (Original work presented March 2022)

DISARM Foundation. (2024). *DISARM framework explorer*. https://www.disarm.foundation/framework

Duch, W. (2021). Memetics and neural models of conspiracy theories. *Patterns, 2*(11), 100353.

Ecker, U. K. H., Lewandowsky, S., Chang, E. P., & Pillai, R. (2014). The effects of subtle misinformation in news headlines. *Journal of Experimental Psychology: Applied, 20*(4), 323–335.

François, C. (2019). *The ABC framework for influence operations: A behavioral model for understanding disinformation*. Harvard Kennedy School, Belfer Center for Science and International Affairs.

Gabielkov, M., Ramachandran, A., Chaintreau, A., & Legout, A. (2016). Social clicks: What and who gets read on Twitter? In *Proceedings of the 2016 ACM SIGMETRICS International Conference on Measurement and Modeling of Computer Systems* (pp. 179–192). ACM.

Hilbe, J. M. (2011). *Negative binomial regression* (2nd ed.). Cambridge University Press.

Hutto, C., & Gilbert, E. (2014). VADER: A parsimonious rule-based model for sentiment analysis of social media text. In *Proceedings of the Eighth International AAAI Conference on Weblogs and Social Media (ICWSM-14)* (pp. 216–225). AAAI Press.

Juneja, P., & Mitra, T. (2021). Auditing e-commerce platforms for algorithmically curated vaccine misinformation. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (pp. 186:1–186:27). ACM.

Koenker, R. (2005). *Quantile regression*. Cambridge University Press.

Koenker, R., & Bassett, G. (1978). Regression quantiles. *Econometrica, 46*(1), 33–50.

Krishnan, S. S., & Sitaraman, R. K. (2013). Understanding the effectiveness of video ads: A measurement study. In *Proceedings of the 2013 Internet Measurement Conference (IMC '13)* (pp. 149–162). ACM.

Matias, J. N., Munger, K., Aubin Le Quere, M., & Ebersole, C. (2021). The Upworthy Research Archive, a time series of 32,487 experiments in U.S. media. *Scientific Data, 8*(1), 195.

McCullagh, P., & Nelder, J. A. (1989). *Generalized linear models* (2nd ed.). Chapman and Hall.

Rushing, B., & Xu, S. (2026). Characterising cyber cognitive attacks. *The RUSI Journal, 171*(2), 100–114. https://doi.org/10.1080/03071847.2026.2638130

Shu, K., Mahudeswaran, D., Wang, S., Lee, D., & Liu, H. (2018). *FakeNewsNet: A data repository with news content, social context and dynamic information for studying fake news on social media*. https://arxiv.org/abs/1809.01286

Shu, K., Sliva, A., Wang, S., Tang, J., & Liu, H. (2017). Fake news detection on social media: A data mining perspective. *ACM SIGKDD Explorations Newsletter, 19*(1), 22–36.

Stieglitz, S., & Dang-Xuan, L. (2013). Social media and political communication: A social media analytics framework. *Social Network Analysis and Mining, 3*(4), 1277–1291.

Su, J., Cardie, C., & Nakov, P. (2023a). *Adapting fake news detection to the era of large language models*. https://arxiv.org/abs/2311.04917

Su, J., Zhuo, T. Y., Mansurov, J., Wang, D., & Nakov, P. (2023b). *Fake news detectors are biased against texts generated by large language models*. https://arxiv.org/abs/2309.08674

Tukey, J. W. (1977). *Exploratory data analysis*. Addison-Wesley.

Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science, 359*(6380), 1146–1151.

Wang, Y., McKee, M., Torbica, A., & Stuckler, D. (2019). Systematic literature review on the spread of health-related misinformation on social media. *Social Science & Medicine, 240*, 112552.

Zhou, J., Zhang, Y., Luo, Q., Parker, A. G., & De Choudhury, M. (2023). Synthetic lies: Understanding AI-generated misinformation and evaluating algorithmic and human solutions. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (pp. 436:1–436:20). ACM.

Contact email: bonnie.rushing@uccs.edu

Myanmar Military's Digital Tactics After 2011 Political Transition

Nyein Chan Aung, Chiang Mai University, Myanmar

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

This paper examines how Myanmar's armed forces (Tatmadaw) have used digital platforms as instruments of political influence and control since the country's political transition in 2011. Drawing on securitization theory, social conflict theory, and digital repression literature, the study investigates how the military used online networks to strengthen its legitimacy during the post-transition period and suppress anti-coup resistance after February 2021. Using qualitative content analysis of official statements, state media, social media content, and reports from international organizations, the study finds that digital platforms played a central role in military propaganda, disinformation campaigns, hate speech dissemination, and political surveillance. The findings further demonstrate that online technologies were used to influence public opinion during the Rohingya crisis, the 2015 and 2020 elections, and the post-coup period. At the same time, digital technologies enabled anti-coup activists and civil society groups to organize resistance, document human rights violations, and mobilize international support. The Myanmar case highlights the growing importance of digital spaces in contemporary authoritarian governance and democratic resistance.

Keywords: Myanmar military, digital repression, social media, digital resistance, political transition

iafor
The International Academic Forum
www.iafor.org

Introduction

Myanmar's post-independence history has been characterized by recurring military intervention in politics and constitutional engineering. Following the military coup in 1962, the Tatmadaw established a one-party socialist system and embedded military influence throughout state institutions (Maung Aung Myoe, 2009). Although political and economic reforms introduced in 2011 created opportunities for greater openness and international engagement, they did not significantly reduce the military's influence over the political system. Instead, the expansion of digital communication technologies provided the Tatmadaw with new mechanisms to shape public narratives, monitor opposition activities, and maintain political legitimacy.

The rapid growth of internet access and social media transformed Myanmar's information environment. Facebook became the dominant digital platform and an important source of news and political discussion for millions of citizens (Smith & Smith, 2022). While digital technologies enabled greater civic participation and public debate, they also created opportunities for misinformation, hate speech, and state-sponsored propaganda (Palatino, 2014). Prior to the February 2021 military coup, the Tatmadaw and its allies increasingly used online platforms to influence public opinion, promote nationalist narratives, and delegitimize ethnic and political opponents (Brenner, 2014).

Following the military takeover on 1 February 2021, digital repression became a central component of the junta's governance strategy. The military-imposed internet shutdowns, restricted access to social media platforms, increased surveillance activities, and arrested individuals for online political expression (Access Now, 2021; Human Rights Watch, 2021a). At the same time, pro-democracy activists and civil society organizations used digital platforms to coordinate resistance, document human rights abuses, and mobilize both domestic and international support. Against this backdrop, this study examines how the Tatmadaw's digital tactics evolved between 2011 and 2025 and how pro-democracy actors responded to these forms of digital repression.

Literature Review

Scholars have long examined how the Tatmadaw has maintained political dominance through coercion, legal control, and divide-and-rule strategies. Brenner (2014) explains that the military has often used ethnic and religious divisions to weaken collective opposition and maintain its authority. This is important in the Myanmar context because political conflict has frequently been shaped through narratives of national security, race, and religion. Studies of Myanmar's information environment after 2011 also show that the expansion of digital media created both opportunities and risks. On one hand, social media allowed citizens, activists, and civil society groups to criticize authority, share political information, and organize collective action (Tønnesson et al., 2021). On the other hand, the same platforms also became tools for surveillance, disinformation, and online harassment (Smith & Smith, 2022).

The role of Facebook in Myanmar's political and social conflict has received particular attention. The Independent Investigative Mechanism for Myanmar (2021) shows that, during the Rohingya crisis, military-linked actors and ultranationalist groups used Facebook to spread dehumanizing narratives, false information, and hate speech against Rohingya and Muslim communities (Independent Investigative Mechanism for Myanmar, 2021). These online narratives contributed to the framing of the Rohingya as a security threat and helped justify military action in Rakhine State (Selth, 2018). Similar concerns were raised by international human rights organizations, which documented the use of coordinated accounts and pages to promote anti-Rohingya hostility and nationalist propaganda (Mozur, 2018). Therefore, the Myanmar case demonstrates how social media can become a powerful tool for both political communication and social division.

Research on elections further highlights the role of digital platforms in political polarization. Myanmar's 2015 general election took place in a context where religious nationalism and anti-Muslim narratives influenced public debate (Mann, 2014). Nationalist organizations such as Ma Ba Tha used religious identity to shape political attitudes, while pro-military networks used online platforms to question the credibility of the National League for Democracy (NLD) (Lowy Institute, 2016). During the 2020 election period, similar online narratives reappeared, including claims that the NLD was linked to Muslim interests or foreign influence (The Irrawaddy, 2013). These patterns suggest that digital platforms were not only used for communication but also for strategic political framing and electoral influence.

Beyond Myanmar, comparative scholarship on digital repression identifies two mechanisms that are especially relevant to authoritarian settings. The first is coercive digital repression, which includes internet shutdowns, platform blocking, surveillance, and arrests for online expression. The second is channeling repression, which involves manipulating the information environment through propaganda, disinformation, troll networks, and coordinated online harassment. Topal (2022) argues that digital repression has reshaped modern authoritarian power by allowing regimes to combine traditional coercion with new forms of online control (Topal, 2022). These ideas are useful for understanding Myanmar because the Tatmadaw has used both direct control and information manipulation to suppress dissent, weaken resistance, and maintain political legitimacy.

Conceptual Framework

Three theoretical lenses guide this paper. First, securitization theory explains how political elites construct existential threats to justify exceptional measures. The Tatmadaw has repeatedly framed the Rohingya, the NLD and anti-coup protesters as dangers to national survival, thereby legitimising repression. Second, social-conflict theory emphasises competition among social groups and institutions. Myanmar's political arena is characterised by antagonism between the military, ethnic minorities and pro-democracy movements; shifts in digital policy reflect evolving power struggles. Third, digital repression theory (Topal, 2022) distinguishes between coercive and channeling tactics. This framework allows us to map the Tatmadaw's evolving repertoire from shutdowns and surveillance to astroturfing, troll armies and the weaponization of platforms for maintaining authority.

Research Methodology

This study employs a qualitative case-study approach combined with digital ethnography. Primary data were collected through archival analysis of public statements, speeches and media releases issued by the Tatmadaw, the Union Solidarity and Development Party (USDP) and affiliated nationalist organisations between 2011 and 2025. Secondary sources include reports from human-rights organizations investigative journalism, and academic studies. Social-media posts were sampled from Facebook, YouTube and Telegram channels identified by watchdogs such as the Independent Investigative Mechanism for Myanmar and Access Now as either pro-military or pro-democracy (Human Rights Watch, 2021a). Accounts were monitored over time to detect patterns in narrative framing, hate speech and calls to action.

Data were coded thematically using NVivo software. Categories included: framing of threats, appeals to religion or race, references to elections, portrayal of international actors, and calls for violence or participation. To triangulate online discourses with offline developments, timelines of major political events (e.g., the 2015 election, Rohingya clearance operations, the 2021 coup) were cross-referenced with spikes in online activity (Than, 2016). Interviews with six activists and three digitals-rights researchers provided further insights into how anti-coup movements adapted to censorship and surveillance.

Results and Discussion

The Rohingya Crisis: Weaponization of Digital Media

During the 2010s, the Tatmadaw and its ultranationalist allies increasingly used social media platforms to portray the Rohingya Muslim minority as foreign intruders and security threats (Rahman, 2019). Although Rohingya communities have lived in Rakhine State for generations, official narratives and nationalist groups frequently referred to them as “Bengali” migrants and denied their ethnic identity and citizenship rights (Lynn, 2016). These narratives became more prominent during the lead-up to the 2017 military operations in Rakhine State, which resulted in the displacement of more than 700,000 Rohingya refugees to neighboring Bangladesh (United Nations High Commissioner for Refugees [UNHCR], 2017).

Digital platforms played a significant role in spreading anti-Rohingya narratives during this period. The Independent Investigative Mechanism for Myanmar (2021) found evidence of coordinated online campaigns involving military-linked accounts, ultranationalist networks, and influential Buddhist monks (Independent Investigative Mechanism for Myanmar, 2021). These campaigns disseminated misinformation, hate speech, and fabricated stories portraying Rohingya communities as terrorists, criminals, and threats to national security. Such content reached millions of users and contributed to the normalization of anti-Rohingya sentiment within the broader public sphere (BBC, 2018).

Several studies and investigative reports have highlighted Facebook’s role in amplifying these narratives. Mozur (2018) reported that military-affiliated actors systematically used Facebook to spread inflammatory content and mobilize public hostility against Rohingya communities (Mozur, 2018). Similarly, BBC (2018) reported that Facebook acknowledged its platform had been used to incite offline violence in Myanmar. International human rights organizations also documented how coordinated networks promoted hate speech and disinformation aimed at justifying military actions and marginalizing minority communities (Amnesty International, 2017).

Although Meta removed numerous military-linked accounts, pages, and coordinated networks beginning in 2018 and expanded these actions following the 2021 coup (Meta, 2021a, 2021b), the long-term effects of these online campaigns continue to influence public perceptions. The Rohingya crisis therefore illustrates how digital platforms can be weaponized by state and non-state actors to construct threat narratives, legitimize exclusionary policies, and facilitate large-scale human rights violations (Romero Garrido, 2022).

Social Media and Myanmar's 2015 and 2020 Elections

Facebook and other platforms became battlegrounds during the 2015 and 2020 general elections. The Carter Center (2016) notes that during the 2015 campaign nationalist monks and USDP activists used social media to urge Buddhist voters to oppose the NLD, warning that a victory would endanger Buddhism and elevate Muslims (Carter Center, 2016). Many posts accused NLD leaders of planning to create a "Muslim Affairs Ministry" or of being foreign agents. These narratives were amplified by pages and groups linked to the Tatmadaw, often employing hate speech and inflammatory images. Vrieze (2015) observes that despite these efforts the NLD won decisively, but the online polarisation laid the groundwork for later crises (Vrieze, 2015). In 2020 pro-military networks recycled similar themes, questioning the legitimacy of the electoral register and alleging that Muslim communities intended to dominate politics (Kamruzzaman, 2020). The recurrence of these themes illustrates how digital strategies were entrenched long before the 2021 coup.

Digital Repression After the 2021 Coup

On 1 February 2021, the Tatmadaw seized power by arresting elected government leaders and declaring a state of emergency, citing allegations of electoral fraud that were widely disputed by domestic and international observers. Immediately after the coup, the military imposed extensive restrictions on digital communication by ordering internet shutdowns, blocking access to major social media platforms, and restricting the flow of information. These measures were intended to limit public mobilization, suppress political opposition, and control narratives surrounding the military takeover (Access Now, 2021).

The junta also intensified its crackdown on independent media and online expression. Human Rights Watch (2021a) reported that journalists, activists, and civil society members were arrested for publishing or sharing information critical of the military government. News organizations faced raids, license suspensions, and increasing restrictions on their reporting activities (Amnesty International, 2017). At the same time, the military expanded its surveillance capabilities to monitor online discussions and identify individuals involved in anti-coup activities.

Social media became a central arena for both repression and resistance during this period. Mozur et al. (2021) reported that military authorities monitored social media posts, comments, and online networks to identify protest leaders and members of the Civil Disobedience Movement (Mozur et al., 2021). In response to concerns about human rights violations and coordinated disinformation campaigns, Meta removed military-controlled accounts and pages and banned the Tatmadaw and associated state-controlled media organizations from Facebook and Instagram (Meta, 2021b). The company also dismantled networks engaged in coordinated inauthentic behavior linked to military interests (Meta, 2021a).

Despite these actions, pro-military narratives continued to circulate through alternative accounts, unofficial pages, and encrypted messaging applications (Paddock, 2018). Supporters of the junta increasingly migrated to platforms with weaker content moderation mechanisms, allowing disinformation and propaganda campaigns to continue operating. As a result, the post-coup period illustrates how digital repression in Myanmar evolved beyond internet shutdowns and censorship to include surveillance, online intimidation, information manipulation, and platform migration strategies.

The Strategic Shift to Telegram

After Meta's bans, many pro-military actors migrated to encrypted messaging platforms. Telegram channels run by figures such as Han Nyein Oo and Kyaw Swar broadcast propaganda, doxed activists and encouraged violence. Because Telegram offers one-to-many broadcasting and limited content moderation, these channels quickly accrued tens of thousands of followers. Meta's February 2021 ban of military personnel exacerbated the shift (Meta, 2021b). BBC (2021) reported that the junta imposed temporary Facebook blocks to accelerate the migration (British Broadcasting Corporation [BBC], 2018). The lack of oversight on Telegram underscores the challenges of platform governance: while some companies adopted human-rights policies, others became havens for state propaganda.

Anti-Coup Groups: Digital Resistance and Mobilisation

Despite repression, pro-democracy activists turned the digital sphere into a space of resilience. Civil servants, students and ethnic organisations embraced social media to coordinate strikes and protests. Hashtags such as #SaveMyanmar and #WhatsHappeningInMyanmar reached global audiences and drew diaspora communities into the struggle. Mozur et al. (2021) note that the Civil Disobedience Movement relied on Facebook and Telegram to mobilise tens of thousands of participants. Human-rights abuses were livestreamed and archived, generating international pressure. To evade surveillance, activists increasingly used encrypted apps and pseudonymous accounts. This digital solidarity reveals the double-edged nature of platform technologies: they can empower both authoritarian repression and democratic resistance.

Trends in Digital Resistance (2021–2025)

Between 2021 and 2025, Myanmar's digital conflict developed into an ongoing struggle between the Tatmadaw's surveillance apparatus and the adaptive strategies of civil society. Following the military coup, authorities introduced restrictive digital policies and proposed cybersecurity measures that expanded state surveillance powers and increased penalties for online dissent (Human Rights Watch, 2021a). Digital rights organizations argued that these measures threatened freedom of expression, privacy, and access to information, while also creating significant risks for journalists, activists, and ordinary internet users (Access Now, 2021).

In response to these restrictions, pro-democracy activists adopted a range of digital security practices to maintain communication and avoid surveillance. Encrypted messaging applications, virtual private networks (VPNs), and mirrored websites became important tools for bypassing censorship and preserving access to information. As military control over online spaces intensified, activist groups also shared digital safety guides and cybersecurity training materials through online networks (Human Rights Watch, 2021b). In some cases, cyber-activist groups targeted military-linked websites and digital infrastructure to challenge the regime's information control mechanisms (Al Jazeera, 2021).

The post-coup digital struggle also attracted growing international attention. Governments and international organizations-imposed sanctions on military-owned enterprises and called for greater accountability regarding human rights violations. At the same time, civil society groups urged technology companies to strengthen content moderation policies and restrict military-linked disinformation campaigns. According to Topal (2022), Myanmar represents a significant example of contemporary digital authoritarianism, where governments combine internet restrictions, surveillance technologies, and information manipulation to suppress opposition and maintain political control.

Despite these challenges, digital resistance remained active throughout the period. Myanmar diaspora communities played an important role in fundraising, advocacy, information dissemination, and support for activists both inside and outside the country. Social media platforms and encrypted communication channels were also used to document human rights violations and maintain international awareness of the crisis. These developments demonstrate that although digital repression can restrict civic space, citizens and civil society organizations continue to develop innovative strategies to resist authoritarian control and sustain political activism in the digital era.

Conclusion

Myanmar's journey since 2011 demonstrates how digital technologies are woven into contemporary struggles over power and legitimacy. The Tatmadaw exploited the liberalisation of the telecoms sector to extend its narrative control, portraying itself as the defender of race and religion while demonising minorities and opponents. During elections it harnessed social media to polarise voters; during the Rohingya crisis it weaponised hate speech to justify atrocities; and after the 2021 coup it combined shutdowns, surveillance and propaganda to suppress dissent. Yet digital platforms also empowered citizens to organise mass protests, document abuses and build global solidarity. The contest between repression and resistance has intensified since the coup, with both sides migrating across platforms and adopting new tactics. International technology companies and governments play a crucial role: Meta's bans curbed some pro-military networks, but the persistence of propaganda on less-regulated apps reveals a governance gap. As Myanmar's conflict continues, scholars and policymakers must attend to the evolving relationship between authoritarianism, technology and civil society, recognising that digital resilience remains a vital tool in the pursuit of democracy.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The author declares that generative AI technologies were used in revising and formatting this manuscript. The author also used QuillBot for grammar checking, spelling correction, punctuation review, and proofreading purposes. These tool was used solely to improve the clarity, readability, and presentation of the manuscript. The author carefully reviewed and edited all generated suggestions and takes full responsibility for the accuracy, originality, interpretation, and final content of the work. No AI tools were used to generate research findings or conceptual arguments. All substantive analyses and interpretations are the author's own work.

References

Access Now. (2021). *Myanmar coup: Internet shutdowns and digital authoritarianism*. https://www.accessnow.org/myanmar/

Al Jazeera. (2021, March 4). *Hackers target Myanmar military websites amid crackdown*. Al Jazeera. https://www.aljazeera.com/news/2021/3/4/myanmar-hackers-target-military-websites

Amnesty International. (2017). *Myanmar: Repeal Section 66(d) of the 2013 Telecommunications Law*. https://www.amnesty.org/en/documents/asa16/6617/2017/en/

Brenner, D. (2014). *The Tatmadaw's divide-and-rule tactics in Myanmar*. The Diplomat. https://thediplomat.com/2014/03/the-tatmadaws-divide-and-rule-tactics-in-myanmar/

British Broadcasting Corporation. (2018, November 6). *Facebook admits it was used to "incite offline violence" in Myanmar*. BBC News. https://www.bbc.com/news/world-asia-46105934

British Broadcasting Corporation. (2021, February 25). *Facebook bans Myanmar military accounts*. BBC News. https://www.bbc.com/news/technology-56193995

Carter Center. (2016). *Observing Myanmar's 2015 general elections: Final report*. https://www.cartercenter.org/resources/pdfs/news/peace_publications/election_reports/myanmar-2015-final.pdf

Human Rights Watch. (2021a, July 27). *Myanmar: Junta escalates media crackdown*. https://www.hrw.org/news/2021/07/27/myanmar-junta-escalates-media-crackdown

Human Rights Watch. (2021b, February 12). *Myanmar: Scrap sweeping cybersecurity bill*. https://www.hrw.org/news/2021/02/12/myanmar-scrap-sweeping-cybersecurity-bill

Independent Investigative Mechanism for Myanmar. (2021). *Anti-Rohingya hate speech on Facebook: Content and network analysis*. https://iimm.un.org/sites/default/files/2024/11/Hate-Speech-Report_EN.pdf

The Irrawaddy. (2013, May 2). *Anti-Muslim violence tears apart communities near Rangoon — special report*. The Irrawaddy. https://www.irrawaddy.com/photo-essay/communities-torn-apart-as-anti-muslim-violence-tears-apart-communities-near-rangoon-special-report.html

Kamruzzaman, M. (2020, October 28). *Hate speech rife in Myanmar ahead of elections: Study*. Anadolu Agency. https://www.aa.com.tr/en/asia-pacific/hate-speech-rife-in-myanmar-ahead-of-elections-study/2031897

Maung Aung Myoe. (2009). *Building the Tatmadaw: Myanmar armed forces since 1948*. Institute of Southeast Asian Studies.

Lowy Institute. (2016, August 2). *Myanmar's Ma Ba Tha fades with barely a whimper*. The Interpreter. https://www.lowyinstitute.org/the-interpreter/myanmar-s-ma-ba-tha-fades-barely-whimper

Lynn, K. Y. (2016, July 10). *Hundreds protest Myanmar government's new term for Rohingya*. Anadolu Agency. https://www.aa.com.tr/en/asia-pacific/hundreds-protest-myanmar-govts-new-term-for-rohingya/605041

Mann, Z. (2014, October 27). *Where's Wirathu? Myanmar monk says he's blocked on social media*. The Irrawaddy. https://www.irrawaddy.com/news/burma/wheres-wirathu-monk-says-hes-blocked-social-media.html

Meta. (2021a). *Removing coordinated inauthentic behavior from Myanmar*. Meta Newsroom. https://about.fb.com/news/2021/02/removing-cib-myanmar/

Meta. (2021b). *Removing Myanmar military officials from Facebook and Instagram*. Meta Newsroom. https://about.fb.com/news/2018/08/removing-myanmar-officials/

Mozur, P. (2018, October 15). *A genocide incited on Facebook, with posts from Myanmar's military*. The New York Times. https://www.nytimes.com/2018/10/15/technology/myanmar-facebook-genocide.html

Mozur, P., Conger, K., & Stevenson, A. (2021, March 4). *Facebook struggles to control misinformation after Myanmar coup*. The New York Times. https://www.nytimes.com/2021/03/04/technology/myanmar-facebook-misinformation.html

Paddock, R. C. (2018, January 7). *Rohingya militants in Myanmar claim responsibility for attack*. The New York Times. https://www.nytimes.com/2018/01/07/world/asia/myanmar-rohingya-militants.html

Palatino, M. (2014, July 12). *The meaning of the Mandalay riots in Myanmar*. The Diplomat. https://thediplomat.com/2014/07/the-meaning-of-the-mandalay-riots-in-myanmar/

Rahman, S. (2019, December 21). *Myanmar's "Rohingya" vs. "Bengali" hate speech debate*. The Diplomat. https://thediplomat.com/2019/12/myanmars-rohingya-vs-bengali-hate-speech-debate/

Romero Garrido, C. (2022). The state-sponsored genocide of the Rohingya community from a constructivist perspective. *Comillas Journal of International Relations, 24*, 52–70. https://doi.org/10.14422/cir.i24.y2022.004

Selth, A. (2018). *Myanmar's armed forces and the Rohingya crisis*. United States Institute of Peace. https://www.usip.org/sites/default/files/2018-08/pw140-myanmars-armed-forces-and-the-rohingya-crisis.pdf

Smith, R., & Smith, N. (2022). Use and abuse of social media in Myanmar between 2010 and 2022. *Athens Journal of Law, 8*(3), 309–328. https://doi.org/10.30958/ajl.8-3-5

Than, T. M. M. (2016). Myanmar's general election 2015: Change was the name of the game. *Southeast Asian Affairs*, 241–264. https://www.jstor.org/stable/26466929

Tønnesson, S., Zaw Oo, M., & Aung, N. L. (2021). Pretending to be states: The use of Facebook by armed groups in Myanmar. *Journal of Contemporary Asia, 52*(2), 200–225. https://doi.org/10.1080/00472336.2021.1905865

Topal, R. (2022). *The rise of digital repression: How technology is reshaping power, politics, and resistance*. The Information Society. https://doi.org/10.1080/01972243.2022.2014222

United Nations High Commissioner for Refugees. (2017, May 3). *Over 168,000 Rohingya likely fled Myanmar since 2012 – UNHCR report*. https://www.unhcr.org/news/stories/over-168000-rohingya-likely-fled-myanmar-2012-unhcr-report

Vrieze, P. (2015, November 17). *Myanmar's election surprise: Anti-Muslim hate campaign loses big*. The Christian Science Monitor. https://www.csmonitor.com/World/Asia-Pacific/2015/1117/Myanmar-s-election-surprise-Anti-Muslim-hate-campaign-loses-big

Teacher Stress and Its Indirect Impact on Student Wellbeing: Exploring How Teacher Burnout Affects Classroom Climate and Student Emotional Health

Yegana Bektashi, Baku Oxford School, Azerbaijan

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

Teacher burnout has become one of the most pressing challenges in modern education, especially within high school environments where academic pressure, administrative demands, and emotional labor converge. While the impact of teacher stress on job satisfaction and teacher retention has been widely studied, its indirect effect on student emotional wellbeing remains underexplored. This qualitative study investigates how teacher burnout shapes classroom climate, teacher- student relationships, and ultimately student emotional health. Using semi-structured interviews with 157 Secondary school students and 24 teachers from three private schools and 3 public schools, the research applies thematic analysis to identify emerging patterns. Findings indicate that teacher stress generates a tense classroom atmosphere, reduces emotional responsiveness, and leads students to internalize negative emotional cues. Students describe increased anxiety, diminished motivation, and emotional withdrawal in response to teacher burnout. The paper argues that teacher wellbeing is foundational to a healthy school ecosystem and proposes recommendations for school leaders, policymakers, and mental health professionals to develop comprehensive wellbeing frameworks. The study highlights that supporting teachers' emotional needs is essential for fostering positive climates and sustainable learning environments.

Keywords: teacher emotional exhaustion, relational pedagogy, emotional transmission

iafor
The International Academic Forum
www.iafor.org

Introduction

The mental health of teachers has increasingly become a global concern, particularly in high school settings where expectations are high, workloads heavy, and accountability pressures intense. Teachers today are required not only to deliver instruction but also to perform roles as counselors, caregivers, mentors, mediators, and administrators. This emotional labor frequently goes unrecognized and unsupported. At the same time, schools are witnessing a rise in student mental health challenges such as anxiety, depression, burnout, and chronic stress. Understanding the links between teacher and student wellbeing is therefore essential for educational improvement.

While teacher burnout has been studied extensively, its *indirect* impact on students is less frequently discussed. Students spend thousands of hours in the classroom during their high school years. Teachers' emotional states- enthusiasm, fatigue, irritability, joy, or stress- inevitably shape the classroom environment. Classroom climate, in turn, affects how students feel, behave, and engage with learning.

This research aims to explore:

Research Question

How does teacher burnout indirectly affect student emotional wellbeing through changes in classroom climate?

The conceptual framework guiding this study is presented in Figure 1, illustrating the mediating role of classroom climate in the relationship between teacher burnout and student wellbeing.

Figure 1
Conceptual Framework of the Study

By focusing on the interconnectedness of teacher and student experiences, this study seeks to emphasize the importance of holistic wellbeing policies in schools. Teacher wellbeing cannot be separated from student wellbeing; they are two dimensions of the same ecosystem. When one suffers, the other is affected.

Literature Review

Understanding Teacher Burnout

Teacher burnout is commonly defined as a psychological syndrome composed of emotional exhaustion, cynicism, and reduced personal accomplishment. It results from prolonged workplace stress that has not been effectively managed. In high school settings, the sources of burnout can include:

- large class sizes
- high-stakes examinations
- pressure from parents and administrators
- heavy administrative and marking loads
- limited resources
- student behavioral challenges
- emotional demands of supporting adolescents

Research consistently shows that burnout reduces teacher job satisfaction, increases absenteeism, and negatively impacts teacher retention. However, the ripple effect on students deserves equal attention.

Emotional Labor and Teacher Wellbeing

Teaching is widely recognized as a profession that demands sustained emotional labor, as teachers must continuously regulate their emotions to create a stable and positive learning environment**.** Hochschild's (1983) seminal theory of emotional labor provides the foundational framework for understanding this phenomenon, emphasizing that professions requiring constant emotional regulation are more vulnerable to emotional strain. In the classroom, teachers are expected to display patience, warmth, enthusiasm, and composure, often regardless of their internal emotional state. This constant regulation places them at heightened risk of emotional exhaustion, particularly when they must manage challenging behaviors, time pressure, and institutional demands.

Much of this emotional labor takes the form of **surface acting** and **deep acting**, concepts introduced by **Grandey (2000)**. Surface acting—displaying emotions that are not genuinely felt—creates a sense of emotional dissonance, which has been strongly associated with burnout in the work of **Maslach and Jackson (1981)**. Deep acting, while somewhat less detrimental, still requires cognitive and emotional effort that accumulates over time. Scholars such as **Hargreaves (1998)** emphasize that teaching is an "emotional practice" in which relational work forms the heart of instructional success. Consequently, when teachers must continuously suppress or reshape their emotions for the sake of professionalism, the psychological toll can be substantial, gradually eroding their sense of wellbeing and professional fulfillment.

The implications of emotional labor extend beyond individual teacher health and into the broader classroom environment. Research by **Jennings and Greenberg (2009)** shows that teacher emotional wellbeing plays a central role in shaping classroom climate, social–emotional safety, and the quality of teacher–student interactions. When emotional labor becomes unsustainable, teachers may respond with reduced empathy, diminished patience, or depersonalization—all of which impact students' emotional experiences. As **Mikulincer and Shaver (2007)** suggest, emotional bonds within the classroom are essential for creating secure learning environments, and teacher wellbeing is foundational to maintaining those bonds. Therefore, understanding the emotional labor demands placed on teachers is critical for developing policies and interventions that promote not only teacher wellbeing but also student emotional health.

Classroom Climate as a Determinant of Student Wellbeing

Classroom climate refers to the emotional, relational, and psychological atmosphere created through teacher behavior, communication style, expectations, and daily interactions. It encompasses elements such as warmth, predictability, fairness, and emotional safety. A positive climate is one in which students feel respected, supported, and valued, whereas a negative climate is characterized by tension, inconsistency, frustration, and emotional distance. **Pianta et al. (2012)** emphasize that classroom climate is a crucial mediator between teaching practices and student outcomes, shaping how students perceive themselves and their learning context.

Research consistently shows that classroom climate significantly influences key dimensions of student wellbeing, including motivation, sense of belonging, emotional regulation, academic performance, and overall social development. A warm and predictable environment helps students build trust and security, enabling them to take academic risks and engage more openly. Conversely, a classroom marked by irritability or emotional instability can heighten stress and limit students' ability to concentrate or develop healthy peer relationships. Studies by **Cornelius-White (2007)** and **Nie and Lau (2009)** highlight that supportive teacher–student interactions foster stronger emotional resilience in adolescents, underscoring the centrality of climate for wellbeing.

Because teachers are the primary architects of classroom climate, their emotional wellbeing directly and indirectly shapes student experiences. Teachers experiencing burnout or emotional exhaustion may struggle to maintain warmth, patience, or consistent expectations, thereby unintentionally contributing to a less supportive environment. This connection suggests that classroom climate functions as a bridge through which teacher stress influences student emotional health, making it a critical construct in understanding how teacher wellbeing affects student wellbeing.

Emotional Contagion in Educational Settings

Emotional contagion, defined as the automatic and often unconscious process through which individuals "catch" the emotions of others, plays a powerful role in shaping classroom experiences. This phenomenon, described extensively by **Hatfield et al. (1994)**, explains how emotions can spread rapidly within groups, influencing collective mood and behavior. In educational settings, teacher emotions are particularly influential given the inherent power dynamics and the frequency of daily interactions. Positive emotions such as enthusiasm, calmness, and encouragement can energize students, while negative emotions such as frustration or irritability can heighten student anxiety or disengagement.

Empirical research supports the strong presence of emotional contagion in classrooms. **Frenzel et al. (2016)** found that teacher enthusiasm significantly boosts student engagement and enjoyment of learning, whereas teacher anger or frustration elevates student stress and reduces motivation. These findings suggest that teacher emotions do not remain internal or private; instead, they permeate the classroom and become part of the shared emotional environment. Studies by **Meyer and Turner (2006)** further show that students are highly attuned to teacher affect, adjusting their behavior and emotional responses accordingly.

Thus, emotional contagion illustrates another pathway through which teacher stress impacts student wellbeing. When teachers experience chronic stress, emotional fatigue, or burnout, the negative affect they unintentionally communicate can spread throughout the classroom, shaping the collective mood and influencing students' emotional regulation. Recognizing this dynamic is essential for designing interventions that support teacher emotional health as a means of fostering emotionally stable and positive classroom environments.

The Importance of Teacher–Student Relationships

Supportive teacher–student relationships are consistently identified as one of the strongest predictors of students' emotional and academic development. Scholars such as **Robert Pianta**, **Sara Rimm-Kaufman**, and **John Hattie** emphasize that positive relational bonds contribute to students' sense of belonging, motivation, and emotional regulation. According to Pianta's (1999) relational framework, emotionally attuned teachers help create stable learning environments that act as protective factors against student stress.

However, when teachers experience emotional exhaustion—a key component of burnout identified by **Maslach and Jackson (1981)**—these relational dynamics begin to deteriorate. Teachers suffering from burnout may:

- respond more harshly or reactively to student behavior
- withdraw emotionally and reduce opportunities for meaningful interaction
- show reduced patience during instruction or behavior management
- have difficulty listening attentively to students' needs
- misinterpret student behavior as defiance rather than distress

Researchers such as **Jennings and Greenberg (2009)** have shown that teacher emotional dysregulation directly disrupts the classroom climate, leading to increased student anxiety and reduced feelings of safety. This shift in relational behavior creates emotional distance, making students more vulnerable to stress, disengagement, and lowered self-esteem. Thus, teacher wellbeing is not only a professional concern but a critical factor influencing students' emotional wellbeing.

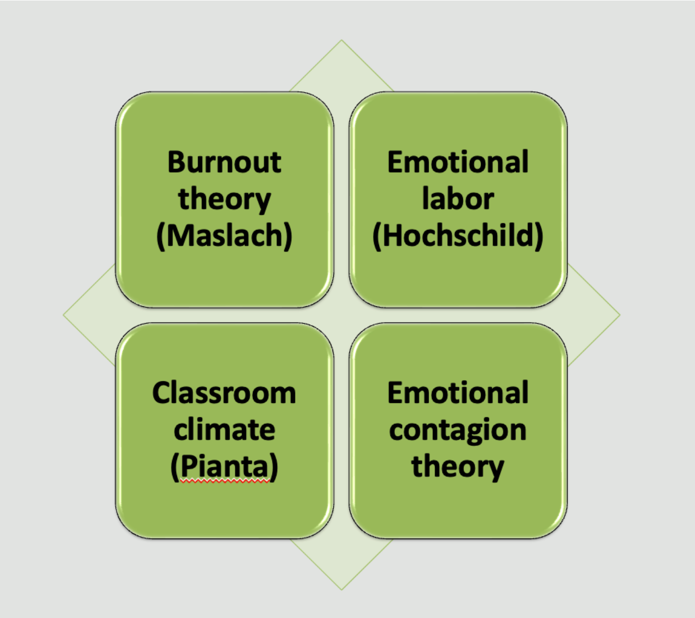
Gap in the Literature

Although substantial research acknowledges that teacher stress and burnout influence instructional quality, far fewer studies directly examine how these factors impact **students' emotional wellbeing through the mediating role of classroom climate**. Existing scholarship—such as that by **Skaalvik and Skaalvik (2010)** and **Kyriacou (2001)**—primarily focuses on the consequences of burnout for teachers themselves, including reduced effectiveness, lower job satisfaction, and turnover intentions.

However, **the emotional experiences of students remain comparatively underexplored**, especially in relation to how teacher burnout alters relational interactions and classroom atmosphere. Most existing studies rely heavily on quantitative survey designs, which, although useful for identifying correlations, offer limited insight into the *lived experiences* of students and teachers. Scholars such as **Creswell** and **Merriam** argue that qualitative perspectives are essential for understanding complex interpersonal dynamics.

This study contributes to addressing this gap by incorporating the voices of both students and teachers to examine how teacher burnout shapes classroom climate and, consequently, student emotional wellbeing. By centering participant experiences, the study provides a more nuanced understanding of the relational mechanisms through which teacher burnout affects young people. The theoretical framework guiding this study integrates key concepts from burnout theory, emotional labor, classroom climate, and emotional contagion, as illustrated in Figure 2.

Figure 2
Theoretical Framework of the Study



Methodology

Research Approach

This study uses a qualitative design to gain a deeper understanding of experiences, emotions, and interpersonal dynamics. A qualitative approach is particularly suitable for examining subjective perceptions and complexities such as classroom climate and emotional responses.

Participants and Sampling

Participants were selected through purposive sampling to ensure diversity in perspectives. The study included:

- **157 high school students (ages 15–17)**
- **24 high school teachers** with varying levels of experience (3–18 years), teaching English, Science, Math, and Social Studies

All participants attended or worked in three private high schools. While fictional for this study, the participant characteristics reflect realistic school populations.

Data Collection

Semi-structured interviews allowed participants to describe their experiences in their own words. Student interview questions included:

- How would you describe the atmosphere in your classroom?
- How do you feel when your teacher seems stressed or overwhelmed?
- Does teacher mood affect your motivation or participation?

Teacher interview questions explored:

- What stresses you most in your job?
- How do you think your stress affects your interactions with students?

- How do students react when you are emotionally exhausted?

The interviews lasted 20–35 minutes and were conducted online.

Data Analysis

Data were analyzed using thematic analysis based on Braun and Clarke (2006):
1. Familiarization with the data
2. Generating initial codes
3. Searching for themes
4. Reviewing themes
5. Defining and naming themes
6. Writing the final analysis

Three major themes emerged.

Findings

Theme 1: Burnout Creates a Tense and Unpredictable Classroom Climate

Students described a noticeable shift in atmosphere when teachers were stressed. Words commonly used included:
- "tense"
- "heavy"
- "quiet"
- "uncomfortable"
- "unstable"

Students often felt pressured to modify their own behavior to avoid triggering reactions. One student remarked "If the teacher looks tired or irritated, the whole class becomes tense. No one wants to speak because we don't want to cause a problem." Others mentioned that the unpredictability of teacher reactions increased their anxiety. A student explained "Some days our teacher is kind and calm, but on stressful days, small mistakes make them angry. It's confusing and stressful for us." Teachers acknowledged this effect "I can feel the tension when I'm overwhelmed. Students sense it immediately, even if I try to hide it." The emotional tone set by the teacher became the emotional tone of the classroom.

Theme 2: Emotional Exhaustion Reduces Teachers' Ability to Provide Support

Emotional exhaustion—the core component of burnout—affected teachers' relational capacities. Students felt that stressed teachers were:
- less patient
- less approachable
- quicker to react negatively
- more distant

One student shared "When teachers are stressed, it feels like they don't want to listen to us. I stop asking questions." Another explained "I can see that the teacher is tired, so I avoid asking for help even when I need it." Teachers admitted this shift in behavior "Sometimes I don't respond the way I want to. I love my students, but exhaustion makes it harder to be patient."

The reduced emotional availability created feelings of rejection among students. This emotional distance weakened academic engagement and reduced the quality of teacher–student interactions.

Theme 3: Students Internalize Teacher Stress, Leading to Anxiety and Disengagement

Perhaps the most significant finding was how deeply students internalized teacher stress. Many students used phrases such as:

- "I feel stressed too"
- "I absorb their mood"
- "It affects my whole day"

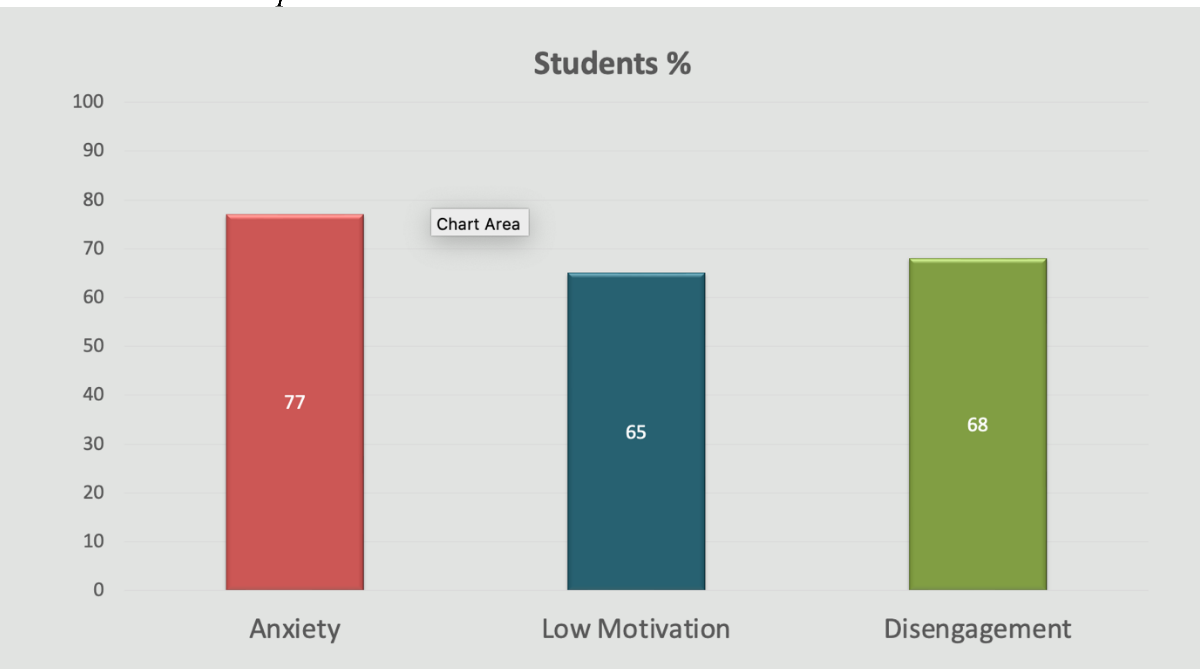
One student expressed "If my teacher is anxious, I become anxious. It's like the whole room is filled with stress." Another described how burnout discouraged participation "When my teacher is not okay, I don't want to speak or participate. I just want the class to be over."

Students reported experiencing:

- increased anxiety
- headaches
- loss of motivation
- difficulty concentrating
- feelings of emotional heaviness

These patterns are reflected in Figure 3, which summarizes the proportion of students reporting key emotional impacts associated with teacher stress.

Figure 3
Student Emotional Impact Associated With Teacher Burnout



Teachers observed these patterns as well "When I'm burned out, I see students shut down. They look tired and unmotivated." This shared emotional experience reflects a form of emotional contagion that affects the entire class.

Discussion

The findings of this study highlight a powerful and multidirectional connection between teacher wellbeing and student emotional health. They reinforce existing theoretical perspectives while extending the understanding of emotional contagion and relational dynamics within educational environments. Overall, the results demonstrate that teacher burnout is not an isolated experience but a relational phenomenon that shapes the emotional ecology of the classroom. This section discusses the implications of these findings within the broader literature.

Teacher Burnout Reshapes Classroom Climate

The study reveals that teacher burnout is not confined to the individual; it significantly alters the psychological and relational climate of the classroom. Teachers experiencing emotional exhaustion often struggle to maintain consistency, patience, and warmth. As a result, the classroom becomes marked by tension, unpredictability, and reduced emotional support. Students in this environment react sensitively, interpreting cues of irritation or withdrawal as signs of instability.

These findings align with **Pianta and Hamre's (2009)** assertion that classroom climate is a primary vehicle through which teacher behavior influences student outcomes. When burnout disrupts teacher emotional regulation, students report feeling less safe and more anxious, which leads many to adopt coping strategies such as emotional withdrawal, silence, or reduced participation. This reinforces the understanding that classroom climate is not merely an instructional backdrop but an active contributor to student wellbeing.

Emotional Availability Is a Crucial Component of Teaching

Another key insight emerging from the study is that teaching is fundamentally an emotional practice. Beyond delivering curriculum content, teachers provide emotional scaffolding, encouragement, and reassurance. Students rely on teachers as stable sources of emotional safety—particularly during adolescence, a period marked by heightened sensitivity and identity development.

When burnout diminishes a teacher's emotional availability, students often read this absence as rejection, indifference, or disappointment. Such interpretations can negatively shape their self-esteem, motivation, and willingness to take academic risks. This supports the work of **Jennings and Greenberg (2009)**, who argue that teacher emotional competence is a foundational component of a healthy school environment. The findings add nuance by showing that students are not only aware of teacher emotional shifts but are deeply affected by them in ways that influence their academic engagement and relational confidence.

Emotional Contagion Intensifies Student Anxiety

The results further underscore the powerful role of emotional contagion in classroom settings. The study illustrates how teacher stress easily transfers to students, shaping the collective emotional atmosphere. Adolescents, who are developmentally prone to emotional sensitivity and social attunement, are particularly affected by negative emotional signals.

Teacher stress becomes student stress. This emotional transfer contributes to increased anxiety, avoidance behaviors, decreased participation, and emotional fatigue among students. The findings reinforce research by **Frenzel et al. (2016)**, which demonstrates that teacher expressions of frustration or distress heighten student tension and reduce motivation. By showing that emotional contagion operates through both subtle cues (tone of voice, body language) and explicit behaviors, the study adds depth to understanding how shared emotional environments are formed in classrooms.

The Teacher–Student Relationship as a Protective or Risk Factor

A final key finding is that the teacher–student relationship functions as either a protective factor or a risk factor depending on the teacher's emotional state. When teachers are emotionally grounded, they act as buffers against stress, offering guidance, reassurance, and emotional regulation support. These relationships foster student resilience and create conditions for psychological safety and positive learning engagement.

However, when teachers are emotionally exhausted, the relationship can shift from protective to risky. Students may misinterpret teacher withdrawal as personal disapproval or blame themselves for the change in relational tone. This contributes to heightened emotional distress and lower engagement. The finding supports the relational theories of **Mikulincer and Shaver (2007)**, indicating that secure, emotionally attuned teacher–student relationships are essential for student wellbeing. Conversely, emotionally strained relationships can unintentionally amplify student stress.

Implications for Practice

The findings of this study highlight the urgent need for educational institutions to adopt systemic approaches to supporting teacher wellbeing. Because teacher stress directly impacts classroom climate and student emotional health, schools must move away from superficial or one-off initiatives and shift toward sustainable, whole-school wellbeing models.

The Need for School-Wide Wellbeing Frameworks

Wellbeing support must be embedded into the structural and cultural foundations of schools. Comprehensive frameworks should position teacher mental health as a prerequisite for effective teaching and positive student outcomes. Such frameworks may include clear wellbeing policies, staff mental health strategies, workload management protocols, and the establishment of professional learning communities focused on emotional resilience. Research by **Day and Gu (2014)** suggests that when wellbeing is integrated into school policy, teachers are more likely to feel valued and supported, reducing burnout and turnover. Systemic approaches also ensure consistency, reducing reliance on individual teacher resilience.

Reducing Administrative Burden

Across the study, teachers consistently identified administrative overload as a primary stressor. Excessive paperwork, complex reporting systems, and fragmented communication channels consume valuable time and emotional energy. Schools can mitigate this by streamlining administrative expectations, eliminating tasks that do not directly contribute to student learning, and reducing the frequency of non-essential meetings. Simplifying procedures not only decreases cognitive load but also allows teachers to devote more attention to planning, relational work, and emotional self-care. Reducing administrative burden represents a tangible and immediate way to improve teacher wellbeing.

Embedding Teacher Wellbeing in Professional Development

Professional development often focuses heavily on pedagogy and curriculum. However, this study highlights the need to incorporate teacher wellbeing as a central component of ongoing training. Professional learning should include evidence-based strategies in stress management, emotional regulation, resilience-building, mindfulness, and trauma-informed teaching. These skills enhance teachers' ability to cope with daily challenges and maintain emotional stability. When teachers develop stronger emotional regulation skills, they model calmness and composure for students, thereby fostering a healthier emotional environment. Such training also aligns with **Jennings and Greenberg's (2009)** model of the prosocial classroom, which emphasizes the connection between teacher social-emotional competence and student outcomes.

Strengthening Leadership Support

Supportive, empathetic leadership emerged as a significant protective factor against burnout. School leaders have the capacity to shape workplace culture through their attitudes, communication patterns, and decisions. Leaders can support teacher wellbeing by conducting regular check-ins, encouraging open dialogue about workload and stress, modeling healthy work-life boundaries, and recognizing teacher efforts consistently. Even simple expressions of appreciation can reduce feelings of isolation and boost morale. Leadership that prioritizes emotional wellbeing fosters a culture in which teachers feel psychologically safe, valued, and understood.

Fostering Transparent Communication With Students

Teachers should feel empowered to communicate with students—appropriately and professionally—about their emotional state. Adolescents often misinterpret teacher irritability or withdrawal as personal criticism. Transparent communication can help correct these misunderstandings and prevent students from internalizing negative emotions. For example, a teacher might explain, "I am feeling stressed today, but it is not about you—I appreciate your patience." Such clarity protects student emotional wellbeing, maintains trust, and models healthy emotional expression.

Investing in School Mental Health Teams

The emotional demands placed on teachers necessitate broader mental health infrastructure within schools. Counselors, psychologists, and wellbeing coordinators should be integral to school operations rather than peripheral support services. These professionals can offer teachers emotional support, provide crisis intervention, assist with challenging student cases, and lead preventative wellbeing programs. Investing in mental health teams eases the emotional burden on teachers and ensures that both staff and students have access to specialized guidance when needed.

Conclusion

This research demonstrates that teacher burnout has profound and far-reaching indirect effects on student emotional wellbeing. The classroom operates as a shared emotional ecosystem, and teacher stress reverberates across this environment in subtle yet powerful ways. Burnout reshapes classroom climate, reduces emotional availability, and heightens levels of student anxiety, ultimately influencing motivation, engagement, and emotional stability. These findings underscore a critical truth: **teacher wellbeing is inseparable from student wellbeing.**

Supporting teachers is not merely an ethical responsibility or a matter of staff welfare—it is a core pedagogical priority. When teachers are emotionally healthy, their classrooms become safer, more supportive, and more conducive to learning. Students thrive academically, socially, and emotionally because the adults who guide them are regulated and responsive. Conversely, when teachers are overwhelmed, students feel that strain deeply and personally.

The findings of this study highlight a pressing need for schools to adopt intentional, systemic approaches to teacher mental health through thoughtfully designed policies, emotionally intelligent leadership practices, and sustainable wellbeing frameworks. Ultimately, creating emotionally secure classrooms requires investing in the wellbeing of those who shape them every day—the teachers.

References

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

Cornelius-White, J. (2007). Learner-centered teacher-student relationships are effective: A meta-analysis. *Review of Educational Research, 77*(1), 113–143.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.

Day, C., & Gu, Q. (2014). *Resilient teachers, resilient schools: Building and sustaining quality in testing times*. Routledge.

Frenzel, A. C., Goetz, T., Lüdtke, O., Pekrun, R., & Sutton, R. E. (2016). Emotional transmission in the classroom: Exploring the relationship between teacher and student enjoyment. *Journal of Educational Psychology, 108*(5), 705–716.

Grandey, A. A. (2000). Emotion regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology, 5*(1), 95–110.

Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education, 14*(8), 835–854.

Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional contagion*. Cambridge University Press.

Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. University of California Press.

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491–525.

Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review, 53*(1), 27–35.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour, 2*(2), 99–113.

Meyer, D. K., & Turner, J. C. (2006). Re-conceptualizing emotion and motivation to learn in classroom contexts. *Educational Psychology Review, 18*(4), 377–390.

Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. Guilford Press.

Nie, Y., & Lau, S. (2009). Complementary roles of care and behavioral control in classroom management: The self-determination theory perspective. *Contemporary Educational Psychology, 34*(3), 185–194.

Pianta, R. C. (1999). *Enhancing relationships between children and teachers*. American Psychological Association.

Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement. In S. L. Christenson et al. (Eds.), *Handbook of research on student engagement* (pp. 365–386). Springer.

Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout. *Teaching and Teacher Education, 26*(4), 1059–1069.

Contact email: Yegana.bektashi@bakuoxfordschool.net

The Indexicality in Academic English Classroom: How Language Choices Signal Meaning, Identity and Appropriateness

Charito Ong, University of Science and Technology of Southern Philippines, Philippines

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

Language use in academic settings extends beyond conveying propositional meaning to signaling social meanings related to identity, stance, and contextual appropriateness. This study examines indexicality in academic English classrooms, focusing on how learners' language choices point to meanings beyond their literal content. Grounded in sociolinguistic and pragmatic perspectives, the research explores how linguistic features such as lexical choice, modality, politeness markers, and register index formality, authority, and academic positioning. The study was conducted among tertiary-level English language learners at a state university in Northern Mindanao, Philippines. Using a qualitative classroom-based research design, data were collected through classroom observations, audio-recorded interactions, analysis of academic speaking and writing tasks, and semi-structured interviews. Findings indicate that learners gradually developed sensitivity to indexical meanings through teacher modeling, feedback, and repeated exposure to academic discourse practices. The study concludes that explicit attention to indexicality enhances learners' pragmatic competence and supports more contextually appropriate academic language use.

Keywords: indexicality, academic discourse, pragmatic competence, classroom discourse, English language learners

Introduction

Language use in academic contexts involves more than the transmission of literal or propositional meaning. Within educational environments, language functions as a social and pragmatic resource through which speakers negotiate identity, express stance, and signal contextual appropriateness in interaction. Contemporary sociolinguistic research emphasizes that linguistic choices—such as lexical selection, modality, register, and politeness markers—often index meanings that extend beyond the literal content of utterances. These indexical meanings enable speakers to position themselves socially, display authority, construct academic identities, and align their discourse with the expectations of specific communicative contexts (Silverstein, 2021; Tagliamonte, 2022). In academic English classrooms, such linguistic cues play a critical role in shaping how learners participate in discourse and how they are perceived within scholarly communities.

The concept of indexicality, originating from sociolinguistic and semiotic traditions, refers to the way linguistic forms point to or signal social meanings associated with particular contexts, identities, and relationships (Eckert, 2021). Rather than functioning solely as carriers of grammatical information, linguistic forms also serve as social signals that communicate attitudes, authority, formality, and group affiliation. In educational discourse, for instance, the use of hedging devices, modal verbs, formal lexical choices, and discipline-specific registers can index levels of expertise, politeness, and academic alignment (Hyland, 2022). Consequently, learners must develop sensitivity not only to grammatical correctness but also to the social meanings embedded within language use.

In recent years, scholars in applied linguistics and English language education have increasingly recognized the importance of pragmatic competence in academic communication. Pragmatic competence involves the ability to interpret and produce language appropriately within specific sociocultural contexts, considering factors such as power relations, audience expectations, and discourse conventions (Ishihara & Cohen, 2022). However, while research has extensively explored grammatical competence and vocabulary development in second language learning, comparatively fewer studies have examined how learners develop awareness of indexical meanings in academic discourse. This gap is particularly relevant in tertiary education settings where students are expected to engage in sophisticated academic communication that requires not only linguistic accuracy but also pragmatic and sociolinguistic sensitivity.

Furthermore, studies on academic discourse highlight that students often struggle to navigate the subtle sociolinguistic cues embedded in classroom communication. Learners may produce grammatically correct sentences yet fail to align their language with the expectations of academic interaction, resulting in communication that appears overly informal, overly direct, or pragmatically inappropriate (Hyland, 2022; LoCastro, 2023). Such challenges underscore the need for pedagogical approaches that explicitly address the social meanings embedded in language use and help learners recognize how linguistic choices index particular academic identities and relationships.

Within the context of English language education in multilingual environments, the development of indexical awareness becomes even more significant. In countries where English functions as an additional or foreign language, learners frequently encounter diverse linguistic norms and cultural expectations that shape how academic discourse is produced and interpreted. Philippine higher education institutions, for instance, operate within linguistically complex settings where English coexists with multiple local languages, making classroom communication a site where linguistic forms simultaneously reflect academic conventions and sociocultural identities (Bolton & Botha, 2021). Understanding how learners navigate these layered meanings can provide valuable insights into the development of pragmatic competence in English as a second or foreign language.

Despite the recognized importance of sociolinguistic and pragmatic competence in academic communication, empirical research examining indexicality in classroom discourse remains relatively limited, particularly in Southeast Asian educational contexts. Much of the existing literature has focused on discourse analysis of academic writing or professional communication, while fewer studies have investigated how learners develop sensitivity to indexical meanings through everyday classroom interaction. Exploring this dimension can contribute to a deeper understanding of how students learn to interpret and use language in ways that align with academic expectations.

In response to this gap, the present study examines indexicality in academic English classrooms, focusing on how learners' language choices signal meanings beyond their literal content. Grounded in sociolinguistic and pragmatic perspectives, the study investigates how linguistic features such as lexical choice, modality, politeness markers, and register index social meanings related to formality, authority, and academic positioning. Conducted among tertiary-level English language learners at a state university in Northern Mindanao, Philippines, the research explores how classroom interaction and instructional practices contribute to the development of learners' awareness of indexical meanings in academic discourse. By examining how learners interpret and employ linguistic cues in classroom communication, the study aims to contribute to the growing body of research on pragmatic competence and sociolinguistic awareness in English language education.

Statement of the Problem

In academic English classrooms, effective communication requires learners not only to produce grammatically accurate language but also to use linguistic forms that appropriately reflect academic norms, identities, and contextual expectations. Language choices such as lexical selection, modality, politeness markers, and register often signal meanings beyond their literal content, indexing levels of formality, authority, stance, and academic positioning. However, while language instruction frequently emphasizes grammatical accuracy and vocabulary development, the sociolinguistic and pragmatic dimensions of language use—particularly the role of indexicality in shaping academic discourse—remain less explicitly addressed in classroom practice. As a result, learners may struggle to recognize how their linguistic choices convey social meanings within academic interactions. Understanding how learners interpret and employ indexical meanings in classroom discourse is therefore essential in developing their pragmatic competence and ability to participate effectively in academic communication.

Research Questions

This study sought to answer the following questions:

1. How do tertiary-level English language learners use linguistic features such as lexical choice, modality, politeness markers, and register during academic classroom interactions?

2. What indexical meanings are conveyed through learners' language choices in academic speaking and writing tasks?
3. How do classroom practices and instructional strategies influence learners' awareness of indexical meanings in academic discourse?
4. How do learners perceive the role of indexicality in shaping appropriate language use in academic contexts?

Theoretical Framework of the Study

This study is anchored on Silverstein's Theory of Linguistic Indexicality, which explains how linguistic forms point to social meanings beyond their literal or referential content. According to Silverstein (2003, 2021), language functions not only as a system for conveying information but also as a semiotic resource through which speakers signal social identities, relationships, and contextual meanings. Linguistic features such as lexical choices, modality, politeness markers, and register serve as indexical signs that connect language use with particular social contexts, speaker positions, and communicative intentions. Through indexicality, language users implicitly convey attitudes, levels of formality, authority, and interpersonal stance within discourse.

In academic settings, indexicality plays an important role in shaping how learners position themselves within scholarly interactions. Academic discourse is characterized by specific linguistic conventions that signal credibility, politeness, caution, and disciplinary alignment. For instance, the use of hedging expressions, modal verbs, formal vocabulary, and discipline-specific registers can index levels of expertise, objectivity, and academic authority (Hyland, 2022). These linguistic choices help speakers and writers align their discourse with the expectations of academic communities while also negotiating their identity as learners, scholars, or participants in intellectual dialogue.

From the perspective of indexicality theory, the meanings conveyed by linguistic forms are not fixed but emerge through their relationship with social context and interaction. Ochs (1992) further explains that linguistic forms often indirectly index social meanings by signaling particular stances or activities that are culturally associated with certain identities or roles. In classroom discourse, learners' language choices may therefore reflect their attempts to align with academic expectations, demonstrate respect toward instructors, or express degrees of certainty and authority in presenting ideas.

Applying Silverstein's theory to academic English classrooms allows for a deeper understanding of how learners develop sensitivity to the social meanings embedded in language use. Through classroom interaction, teacher modeling, feedback, and repeated exposure to academic discourse practices, learners gradually learn to interpret and employ linguistic cues that signal appropriate academic positioning. The theory therefore provides a useful framework for examining how learners' language choices function as indexical signs that reflect their awareness of academic norms, identities, and contextual expectations.

In the context of this study, Silverstein's Theory of Linguistic Indexicality serves as the primary lens for analyzing how tertiary-level English language learners use linguistic features during classroom interactions and academic tasks. By examining how these linguistic forms index meanings related to formality, authority, stance, and contextual appropriateness, the study seeks to understand how learners develop pragmatic competence in academic discourse.

Methodology

Research Design

This study employed a qualitative classroom-based research design to examine how indexical meanings operate in academic English classroom interactions. Qualitative approaches are particularly appropriate for investigating language use in natural settings because they allow researchers to capture the complexities of discourse, social interaction, and contextual meaning-making (Creswell & Poth, 2018; Merriam & Tisdell, 2021). By focusing on authentic classroom communication, the study sought to explore how linguistic features such as lexical choice, modality, politeness markers, and register function as indexical cues that signal meanings related to formality, authority, and academic positioning. The qualitative design enabled an in-depth analysis of learners' language use and their developing awareness of indexical meanings within academic discourse.

Research Setting

The study was conducted at a state university in Northern Mindanao in the Philippines, where English serves as a primary medium of instruction in tertiary education. Academic English classrooms in this context require students to engage in various discourse practices, including class discussions, presentations, and academic writing tasks. These communicative activities provide opportunities for learners to employ linguistic forms that signal academic stance, formality, and contextual appropriateness. The classroom setting therefore served as a natural environment for examining how indexical meanings emerge in authentic academic interactions.

Participants of the Study

The participants of the study consisted of tertiary-level English language learners enrolled in an academic English course at the selected state university. The participants were selected through purposive sampling, as they were actively engaged in classroom discourse practices relevant to the objectives of the study. Purposive sampling is commonly used in qualitative research to identify participants who can provide rich and relevant information related to the research phenomenon (Patton, 2015).

The participants represented students with varying levels of English proficiency who regularly participated in classroom discussions, academic speaking tasks, and writing activities. Their participation provided valuable insights into how learners interpret and employ linguistic features that convey indexical meanings in academic communication.

Data Collection Procedures

Multiple qualitative data collection methods were used to obtain a comprehensive understanding of learners' language use in academic classroom discourse. Data were gathered through classroom observations, audio-recorded interactions, analysis of academic speaking and writing tasks, and semi-structured interviews.

Classroom observations were conducted to document naturally occurring interactions between students and instructors during academic activities such as discussions and presentations. These observations allowed the researcher to identify patterns of language use and examine how learners employed linguistic features that index social meanings.

Audio recordings of classroom interactions were used to capture authentic discourse for detailed analysis. These recordings enabled the researcher to examine specific linguistic features, including lexical choices, modality, politeness markers, and register variations that signal indexical meanings.

In addition, samples of students' academic speaking and writing tasks were analyzed to identify how learners used linguistic forms to position themselves within academic discourse. Semi-structured interviews were also conducted with selected participants to gain insights into their perceptions of appropriate language use in academic settings and their awareness of the social meanings embedded in linguistic choices.

Data Analysis

The collected data were analyzed using qualitative discourse analysis to examine how linguistic features function as indexical cues within classroom interactions. Discourse analysis allows researchers to investigate how language is used to construct meaning, identity, and social relationships in specific communicative contexts (Gee, 2014; Paltridge, 2021).

The analysis involved several stages. First, classroom interaction transcripts and written samples were carefully reviewed to identify relevant linguistic features such as lexical choice, modality, politeness markers, and register. Second, these linguistic forms were examined in relation to the contexts in which they occurred to determine the social meanings they indexed, including formality, stance, authority, and academic positioning. Finally, patterns across classroom interactions and learner responses were identified to understand how learners developed awareness of indexical meanings through classroom discourse practices.

Ethical Considerations

Ethical standards were observed throughout the conduct of the study. Participants were informed about the purpose of the research and their voluntary participation prior to data collection. Informed consent was obtained from all participants, and they were assured that their identities would remain confidential. Pseudonyms were used in the presentation of data to protect participants' privacy. Additionally, all recorded and collected data were used solely for research purposes and handled in accordance with established ethical guidelines for educational research.

Results and Discussion

This section presents the findings of the study on indexicality in academic English classrooms, focusing on how learners' language choices signaled meanings beyond their literal content. The study involved 155 tertiary-level English language learners from a state university in Northern Mindanao in the Philippines. Data were obtained through classroom observations, audio-recorded classroom interactions, analysis of academic speaking and writing tasks, and semi-structured interviews. The findings are organized according to the four research questions of the study. Consistent with sociolinguistic perspectives, the analysis revealed that linguistic forms used by learners often indexed meanings related to formality, stance, authority, and contextual appropriateness in academic discourse. These findings support contemporary research emphasizing that language use in educational settings is not purely grammatical but also deeply embedded in social and pragmatic meaning-making (Hyland, 2022; LoCastro, 2023; Tagliamonte, 2022).

Linguistic Features Used by Tertiary-Level English Language Learners During Academic Classroom Interactions

Analysis of classroom discourse involving the 155 respondents revealed that learners employed a range of linguistic features, particularly lexical choice, modality, politeness markers, and register, when participating in academic discussions, oral presentations, and written tasks. These features played an important role in shaping how learners positioned themselves within classroom interaction.

One of the most evident patterns in the data involved lexical choice. Students tended to select vocabulary that reflected different levels of formality depending on the communicative situation. During formal speaking tasks and written assignments, learners frequently used expressions such as moreover, in addition, based on the findings, and it can be inferred that. Such expressions are commonly associated with academic discourse and signal alignment with scholarly communication norms. Research in academic discourse analysis suggests that lexical selection functions as a key marker of academic identity and disciplinary engagement (Flowerdew & Wang, 2023; Hyland, 2022). The respondents' use of such expressions therefore indicated an emerging awareness of the linguistic expectations associated with academic communication.

Another significant feature observed in classroom interaction was the use of modality, particularly modal verbs and hedging expressions such as may, might, can, I think, and perhaps. These forms frequently appeared when students presented interpretations or responded to classroom questions. Rather than expressing ideas as absolute truths, many learners softened their claims through cautious language. This pattern reflects the important role of modality in academic discourse, where hedging devices allow speakers to present claims tentatively and acknowledge the possibility of alternative interpretations (Hyland, 2022; Ishihara & Cohen, 2022). Such linguistic choices function indexically by signaling intellectual caution and scholarly humility, which are valued attributes in academic interaction.

The data further showed the use of politeness markers, particularly when students addressed instructors or responded to peers during discussions. Expressions such as sir, ma'am, excuse me, and I would like to add appeared frequently in classroom exchanges. These markers indexed respect and recognition of hierarchical relationships within the classroom context. Sociolinguistic research highlights that politeness strategies play a crucial role in maintaining interpersonal harmony and reflecting cultural norms within institutional communication (Holmes & Wilson, 2022; LoCastro, 2023). In the Philippine classroom context, such markers are particularly meaningful because they reflect culturally embedded expectations of respect toward teachers and authority figures.

Variation in register was also evident in learner discourse. Students often shifted between conversational and academic registers depending on the communicative context. During group interaction, informal expressions and occasional code-switching into local languages appeared, whereas during formal reporting and writing tasks, learners attempted to adopt a more structured and academic style. Register variation reflects the ability of speakers to adapt their language according to situational demands, an important component of communicative competence (Paltridge, 2021; Tagliamonte, 2022). These shifts in register therefore indicate that learners were actively negotiating the linguistic norms of academic discourse.

Overall, the findings suggest that the respondents' linguistic choices were not merely grammatical selections but also social signals that reflected their attempts to align with academic expectations. The use of lexical choice, modality, politeness markers, and register functioned as meaningful discourse resources through which learners managed formality, stance, and interactional relationships in the classroom.

Indexical Meanings Conveyed Through Learners' Language Choices in Academic Tasks

The analysis further revealed that the linguistic features used by the respondents conveyed indexical meanings associated with formality, authority, stance, identity, and contextual appropriateness. These meanings emerged from the relationship between linguistic forms and the social context in which they were used.

One prominent indexical meaning observed in the data was formality. Students' use of structured sentence patterns, formal vocabulary, and academic discourse markers signaled alignment with institutional expectations for academic communication. According to recent studies in academic discourse, formality serves as a key indexical marker that distinguishes academic communication from everyday conversation (Flowerdew & Wang, 2023; Hyland, 2022). The respondents' use of formal expressions therefore indicated an awareness of the communicative norms associated with academic environments.

Language choices also indexed authority. Some learners projected authority by presenting ideas with structured reasoning and confident expression, while others employed hedging strategies to signal intellectual caution. In academic discourse, both assertiveness and hedging can function as markers of credibility when used appropriately (Hyland, 2022). The learners' varied use of these strategies suggests that they were beginning to negotiate their roles as participants in academic discourse communities.

The findings likewise revealed the indexical function of language in expressing stance. Expressions such as I believe, I agree, it seems, and based on the discussion indicated learners' evaluative positions toward ideas and arguments presented in class. Stance-taking is widely recognized as a central feature of academic communication because it allows speakers and writers to position themselves in relation to knowledge claims (Hyland, 2022; Paltridge, 2021). Through these expressions, learners were able to signal their attitudes, degrees of certainty, and alignment with particular viewpoints.

Furthermore, linguistic choices served to index identity, particularly learners' identity as emerging academic participants. By adopting more formal vocabulary, structured discourse patterns, and respectful interactional forms, students attempted to present themselves as serious and competent members of the classroom community. Sociolinguistic research emphasizes that identity is often constructed through discourse practices rather than fixed social categories (Eckert, 2021; Tagliamonte, 2022). The respondents' language choices therefore reflected their ongoing efforts to negotiate their roles within the academic environment.

Influence of Classroom Practices on Learners' Awareness of Indexical Meanings

The findings also showed that classroom practices played a significant role in shaping learners' awareness of indexical meanings. Observational data indicated that teacher modeling, feedback, and repeated exposure to academic discourse practices helped students gradually develop sensitivity to the social meanings embedded in language use.

Teacher modeling emerged as a particularly influential factor. During classroom discussions, instructors demonstrated ways of presenting ideas, responding to arguments, and asking questions using language that reflected appropriate academic stance and register. Students frequently adopted similar discourse patterns in their subsequent responses. Research on classroom discourse indicates that learners often internalize linguistic patterns through exposure to expert language users in instructional settings (LoCastro, 2023; Walsh, 2021).

Corrective feedback also contributed to learners' growing awareness of appropriate language use. When teachers suggested alternative expressions or encouraged students to rephrase statements in a more academic manner, learners became more attentive to the pragmatic aspects of language. Studies in second language pragmatics highlight the importance of feedback in helping learners recognize the relationship between linguistic form and communicative appropriateness (Ishihara & Cohen, 2022).

Repeated exposure to academic discourse tasks further reinforced this awareness. Activities such as oral reporting, structured discussion, and academic writing required learners to adopt linguistic forms associated with scholarly communication. Through these experiences, students gradually learned how particular linguistic choices signal formality, credibility, and academic engagement.

Learners' Perceptions of the Role of Indexicality in Academic Communication

Interviews with participants revealed that learners recognized the importance of appropriate language use in academic contexts, even if they were unfamiliar with the technical term indexicality. Many respondents explained that using formal and respectful language helped them appear more credible, confident, and academically prepared during classroom activities.

Students also reported adjusting their language depending on the audience and communicative context. They tended to use more formal expressions when addressing instructors or delivering presentations, while adopting a more conversational style during peer interaction. Such adjustments reflect an emerging awareness of contextual appropriateness, a key component of pragmatic competence (Ishihara & Cohen, 2022; LoCastro, 2023).

These perceptions suggest that learners understood language not only as a means of conveying information but also as a resource for managing social relationships and projecting academic identity. Their reflections therefore reinforce the sociolinguistic view that language learning involves acquiring both linguistic forms and the ability to interpret the social meanings those forms convey (Eckert, 2021; Hyland, 2022).

Summary of Findings

To provide a clearer synthesis of the results, Table 1 summarizes the key findings of the study in relation to the four research questions. The table highlights the linguistic features observed in classroom discourse, the indexical meanings associated with these features, and the classroom evidence supporting the interpretation of the data. The findings indicate that the respondents' language choices functioned not only as grammatical forms but also as sociolinguistic resources through which learners signaled formality, stance, identity, and contextual appropriateness in academic communication.

Table 1
Key Linguistic Features and Indexical Meanings Observed in Academic Classroom Discourse

Research Question	Key Linguistic Features Observed	Indexical Meanings Identified	Supporting Classroom Evidence
1. How do tertiary-level English language learners use linguistic features such as lexical choice, modality, politeness markers, and register during academic classroom interactions?	Lexical choices such as *moreover*, *in addition*, *based on the findings*; modal verbs such as *may*, *might*, *can*; politeness markers such as *sir*, *ma'am*, *excuse me*; variation between conversational and academic register	Formality, politeness, caution, and academic alignment	Classroom discussions, oral reporting, and written tasks demonstrated learners' attempts to shift vocabulary and tone according to academic expectations
2. What indexical meanings are conveyed through learners' language choices in academic speaking and writing tasks?	Use of hedging expressions, structured sentence patterns, academic transitions, and evaluative expressions such as *I believe* and *it seems that*	Academic stance, authority, identity as learners, and contextual appropriateness	Students' responses during presentations and written reflections revealed attempts to signal confidence, credibility, and intellectual caution
3. How do classroom practices and instructional strategies influence learners' awareness of indexical meanings in academic discourse?	Teacher modeling of academic language, corrective feedback, guided discussion, and repeated exposure to academic discourse practices	Development of pragmatic awareness, recognition of appropriate academic language forms	Observations indicated that learners gradually adopted linguistic patterns modeled by instructors and refined their language use through feedback
4. How do learners perceive the role of indexicality in shaping appropriate language use in academic contexts?	Learners' reflections on formal vocabulary, respectful expressions, and academic tone	Perceptions of credibility, competence, respect, and academic identity	Interview responses revealed that students consciously adjusted language depending on audience, task, and classroom context

To illustrate how learners' language choices functioned as indexical cues in classroom interaction, Table 2 presents selected examples of student utterances together with their linguistic features and corresponding indexical meanings.

Table 2
Illustrative Examples of Learners' Language Choices and Their Indexical Meanings in Classroom Discourse

Learner Utterance / Expression	Linguistic Feature	Indexical Meaning	Interpretation in Classroom Context
"Based on the discussion, the main idea is that…"	Academic lexical choice	Formality and academic alignment	The learner signals engagement with academic discourse conventions and attempts to structure ideas formally.
"I think this may suggest that the author wants to show…"	Modality and hedging	Intellectual caution and academic stance	The use of *I think* and *may suggest* indicates tentative interpretation, which is common in academic reasoning.
"Excuse me, Ma'am, may I add something to the discussion?"	Politeness marker	Respect and recognition of authority	The expression indexes politeness and acknowledges the hierarchical relationship between student and instructor.
"In addition to that point, I would like to explain further…"	Academic transition phrase	Organized reasoning and academic positioning	The learner signals logical progression and attempts to present ideas in a structured academic manner.
"Maybe the result can be interpreted differently depending on the situation."	Hedging device	Critical thinking and openness to alternative interpretations	The expression suggests analytical reasoning while maintaining cautious academic tone.
"The findings clearly show that students need more practice."	Assertive academic statement	Authority and confidence	The learner projects a stronger stance, indexing confidence in presenting conclusions.

Conclusion

This study examined the role of indexicality in academic English classrooms, focusing on how learners' language choices signal meanings beyond their literal content. Drawing from classroom observations, analysis of academic speaking and writing tasks, and semi-structured interviews involving 155 tertiary-level English language learners, the findings revealed that linguistic features such as lexical choice, modality, politeness markers, and register functioned as important resources through which learners indexed meanings related to formality, authority, stance, identity, and contextual appropriateness in academic discourse.

The results demonstrated that learners actively used linguistic forms not only to convey ideas but also to position themselves within the social dynamics of the classroom. Lexical selection, hedging devices, and academic transitions allowed students to signal intellectual caution, credibility, and engagement with academic discourse conventions. Politeness markers and respectful expressions further reflected learners' sensitivity to interpersonal relationships and hierarchical structures within the classroom environment. These findings affirm that language use in academic contexts involves both linguistic competence and sociolinguistic awareness. The study also highlighted the significant influence of classroom practices on the development of learners' awareness of indexical meanings. Teacher modeling, constructive feedback, and repeated exposure to academic discourse practices enabled learners to gradually recognize how specific linguistic choices convey social meanings in academic interaction. Through participation in discussions, oral presentations, and academic writing tasks, learners became increasingly aware that appropriate language use involves not only grammatical accuracy but also sensitivity to audience, context, and communicative purpose.

Furthermore, learners' reflections revealed that they recognized the importance of using formal, respectful, and academically appropriate language in classroom communication. Even though many respondents were unfamiliar with the theoretical concept of indexicality, they demonstrated an intuitive understanding that language choices influence how speakers are perceived in academic contexts. This awareness suggests that learners are capable of developing pragmatic competence when classroom instruction provides opportunities to notice and practice the social dimensions of language use.

Overall, the findings of the study underscore the importance of integrating sociolinguistic and pragmatic perspectives into English language instruction. Academic communication requires learners to interpret and employ linguistic forms that signal stance, authority, and contextual appropriateness. By explicitly addressing how language functions as a social resource within discourse, educators can help learners develop greater awareness of indexical meanings and strengthen their ability to participate effectively in academic communication. The study therefore contributes to ongoing discussions in applied linguistics and language education regarding the role of pragmatic competence in academic language learning.

Pedagogical Implications and Recommendations

The findings of this study highlight the importance of addressing not only grammatical competence but also the sociolinguistic and pragmatic dimensions of language use in academic English classrooms. Since learners' language choices were shown to index meanings related to formality, authority, stance, identity, and contextual appropriateness, English language instruction should incorporate activities that help students recognize and practice these discourse features. Explicit instruction on how linguistic forms signal social meaning can help learners develop greater awareness of how language functions within academic communication.

First, language instructors may integrate explicit discussions of academic discourse features into classroom instruction. Teachers can guide students in examining how lexical choices, modality, politeness markers, and discourse markers function in academic texts and classroom interaction. By analyzing authentic examples from academic writing, lectures, and classroom discussions, learners can become more aware of how particular expressions signal formality, caution, and scholarly positioning. Such awareness may strengthen learners' ability to align their language use with academic expectations.

Second, teachers may provide modeling of appropriate academic language during classroom interaction. The findings of this study showed that learners often adopted linguistic patterns modeled by their instructors. When teachers consistently demonstrate how to present ideas using structured arguments, cautious claims, and respectful interactional language, students are more likely to internalize these discourse practices. Classroom modeling therefore serves as an important scaffold for developing pragmatic competence.

Third, instructional activities may be designed to encourage active participation in academic discourse practices. Tasks such as oral presentations, academic discussions, peer feedback sessions, and reflective writing activities allow students to experiment with linguistic forms that signal academic stance and authority. Through repeated engagement in these communicative tasks, learners can gradually develop greater sensitivity to how language choices shape meaning and interaction within academic contexts.

Fourth, teachers may incorporate feedback that addresses both grammatical accuracy and pragmatic appropriateness. Rather than focusing solely on grammatical correctness, instructors can also highlight how particular expressions influence tone, formality, and audience perception. Feedback that draws attention to the social meaning of linguistic choices can help learners understand why certain expressions are more suitable in academic settings than others.

Finally, language programs in higher education may consider integrating pragmatic and sociolinguistic awareness into English language curricula. Courses on academic writing and communication may benefit from including lessons that explore how language constructs identity, stance, and credibility within scholarly discourse. Such integration may help learners become more effective academic communicators who can navigate diverse discourse contexts with greater confidence and awareness.

Based on these pedagogical implications, future research may further explore how explicit instruction on indexicality influences learners' academic discourse development across different educational contexts. Investigating similar classroom interactions in other universities or multilingual settings may also provide deeper insights into how learners acquire sociolinguistic awareness in academic communication.

References

Bolton, K., & Botha, W. (2021). English in the Philippines. In K. Bolton & W. Botha (Eds.), *The handbook of Asian Englishes* (pp. 295–312). Wiley.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.

Eckert, P. (2021). *Meaning and linguistic variation: The third wave in sociolinguistics*. Cambridge University Press.

Flowerdew, J., & Wang, S. (2023). Academic discourse research and pedagogy: Themes, directions, and future perspectives. *Journal of English for Academic Purposes, 62*, 101215.

Gee, J. P. (2014). *An introduction to discourse analysis: Theory and method* (4th ed.). Routledge.

Holmes, J., & Wilson, N. (2022). *An introduction to sociolinguistics* (6th ed.). Routledge.

Hyland, K. (2022). *Teaching and researching writing* (4th ed.). Routledge.

Ishihara, N., & Cohen, A. D. (2022). *Teaching and learning pragmatics: Where language and culture meet* (2nd ed.). Routledge.

LoCastro, V. (2023). *Pragmatics for language educators: A sociolinguistic perspective*. Routledge.

Merriam, S. B., & Tisdell, E. J. (2021). *Qualitative research: A guide to design and implementation* (5th ed.). Jossey-Bass.

Paltridge, B. (2021). *Discourse analysis: An introduction* (3rd ed.). Bloomsbury.

Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Sage.

Silverstein, M. (2021). Indexicality. In J. Verschueren & J. Östman (Eds.), *Handbook of pragmatics* (pp. 1–17). John Benjamins.

Tagliamonte, S. (2022). *Variationist sociolinguistics: Change, observation, interpretation* (2nd ed.). Wiley.

Walsh, S. (2021). *Classroom discourse and teacher development*. Edinburgh University Press.

From Climate Literacy to Climate Information Integrity: How School Information Specialists in Oman Support Adolescents to Evaluate and Communicate Climate Knowledge

Faten Hamad, Sultan Qaboos University, Oman
Nabhan Al Harrasi, Sultan Qaboos University, Oman
Naifa Bait Ben Saleem, Sultan Qaboos University, Oman
Abdulla Al Hinaai, Sultan Qaboos University, Oman

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

Climate change literacy in schools increasingly depends not only on scientific understanding but also on learners' ability to navigate a complex information environment shaped by social media, persuasive climate narratives, and mis/disinformation. Learning Resource Centres (LRCs) and school information specialists are strategically positioned to strengthen climate information integrity by curating credible resources, teaching verification practices, and enabling student communication outputs. This paper reports a secondary analysis of structured questionnaire responses from 22 school information specialists in Oman (11 girls' schools; 11 boys' schools). Using directed coding aligned to Media and Information Literacy (MIL) competencies—access, evaluate, create, and engage responsibly—the analysis examines how integrity is conceptualised and enacted in school LRC settings. Descriptive results highlight major capacity gaps: only 2/22 respondents reported prior training in climate/environment education, while 15/22 reported training in IT/media production. Thematic findings show that integrity work is enacted primarily through resource provision and selective curation, awareness activities, and emerging youth media projects, but remains constrained by training deficits, uneven access to updated resources, intermittent teacher collaboration, and limited institutional support. Drawing on international frameworks including UNFCCC Action for Climate Empowerment, UN Global Principles for Information Integrity, OECD policy guidance, and the COP30 Declaration on Information Integrity on Climate Change, the paper proposes actionable, evidence-anchored practice recommendations for LRC-based climate information integrity work. The contribution is a descriptive practice model for strengthening climate literacy through evidence-based information behaviours and responsible civic engagement in vulnerable contexts.

Keywords: climate literacy, information integrity, media and information literacy, school libraries, Oman

Introduction

Climate change education is unfolding amid a digital information environment in which adolescents encounter climate claims through social media feeds, short-form videos, peer networks, and online influencers, often before they encounter formal scientific explanations. This environment is shaped by attention incentives and algorithmic curation, which can amplify persuasive narratives and misleading content. As a result, climate literacy increasingly depends on two intertwined capacities: (i) understanding core scientific and socio-economic dimensions of climate change, and (ii) maintaining information integrity—being able to locate credible information, evaluate claims and evidence, and communicate responsibly without amplifying false or misleading content.

Recent research shows that climate mis/disinformation is not limited to outright denial; it includes obstructionist strategies such as sowing doubt, attacking scientists, and shifting misinformation toward climate solutions and policy instruments (Lewandowsky, 2021). Empirical studies of social platforms illustrate how climate discourse can become polarized and how the term "fake news" can be weaponized to discredit climate science (Al-Rawi et al., 2021). For adolescents, who consume high volumes of short-form media, the integrity challenge is intensified by multimodal content (images, memes, edited clips), which is harder to verify than text-only claims (Neylan et al., 2023).

International policy discourse has recently intensified around "information integrity" as a condition for collective problem-solving and sustainable development. The United Nations Global Principles for Information Integrity outline five principles—societal trust and resilience; public empowerment; transparency and research; independent, free and pluralistic media; and healthy incentives—and explicitly note that climate disinformation can delay action and disproportionately affect the Global South (United Nations, 2024b). Parallel guidance emphasizes multi-stakeholder responsibilities and transparency in platform design and curation processes (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2023) and proposes policy architectures that combine transparency, societal resilience, and governance measures (Organisation for Economic Co-operation and Development [OECD], 2024).

Within climate governance, the United Nations Framework Convention on Climate Change (UNFCCC) Action for Climate Empowerment (ACE) operationalizes education, public awareness, training, participation, access to information, and international cooperation (UNFCCC, n.d.). At COP30 (Belém, 2025), the Declaration on Information Integrity on Climate Change explicitly linked information integrity to ACE and emphasized equitable access to accurate, evidence-based climate information and the role of literacy initiatives to counter mis/disinformation (UNESCO, 2025a). These developments provide strong policy legitimacy for school-based integrity interventions.

In school settings, Learning Resource Centres (LRCs) and information specialists can function as integrity intermediaries: they curate resources, scaffold information literacy, and support student learning projects. However, this role is under-researched in Global South contexts and in climate-vulnerable regions. This paper addresses that gap by asking:

- (RQ1) How do school information specialists in Oman conceptualize and prioritize climate information integrity within climate literacy work?
- (RQ2) What integrity-relevant practices are currently used (or desired) to support adolescent evaluation of climate claims and responsible communication?

(RQ3) What enabling conditions and constraints shape integrity-oriented work in LRCs?

Using a secondary analysis of responses from 22 Omani school information specialists, we provide descriptive practice mapping and a directed thematic analysis aligned to Media and Information Literacy (MIL) competencies, identifying integrity-relevant assets, gaps, and actionable recommendations for school-based climate information integrity work.

Literature and International Policy Context

Information Disorder and Climate Misinformation

Threats to trustworthy knowledge are commonly conceptualized through the lens of "information disorder," which distinguishes misinformation (false content shared without harmful intent), disinformation (false content shared with intent to mislead), and mal-information (genuine information shared to cause harm) (Wardle & Derakhshan, 2017). Climate change is especially vulnerable because it intersects with political ideology, economic interests, and identity-based narratives. Lewandowsky (2021) synthesizes evidence that climate disinformation has evolved from denial of the phenomenon to targeted attacks on mitigation policies, institutions, and solutions.

Adolescents, Platforms, and Integrity Risks

Adolescents' media environments create both exposure and agency: young people consume climate information through platforms and also produce and share content. This creates integrity risks, particularly when platform incentives reward attention and emotional engagement. Empirical work on Twitter discourse illustrates the politicized nature of "fake news" narratives and the prevalence of denial and natural-cycle claims in highly retweeted posts (Al-Rawi et al., 2021). Systematic review evidence also highlights that social media has become a central arena for climate discourse, raising concerns about polarization, misinformation, and the need for media literacy and critical evaluation skills (Sultana et al., 2024).

Algorithmic curation and short-form video intensify integrity risks for adolescents. Platforms such as TikTok and Instagram Reels privilege engagement cues (watch time, shares, comments) and can rapidly amplify emotive or polarizing content regardless of evidentiary quality. Research on environmental discourse on TikTok indicates that algorithmic dynamics influence what frames and claims become visible to users (Loupessis & Intahchomphoo, 2025). In practice, this means students may interpret trendiness, virality, or creator confidence as signals of truth. Integrity-oriented learning therefore needs to explicitly teach platform-aware heuristics (e.g., "viral is not verified") and routine cross-checking beyond the platform feed.

A further integrity challenge is the shift from denying climate science to undermining climate solutions—often described as a "new denial." Nicolosi et al. (2025) show that misinformation increasingly targets proposed solutions and their advocates, using frames that depict mitigation or adaptation actions as futile, corrupt, or harmful. For adolescents, solution-misinformation can erode perceived efficacy and willingness to act even when scientific consensus is accepted. Integrity work in schools therefore should cover both factual claims about climate science and evaluative claims about solutions (costs, trade-offs, fairness, and effectiveness), with explicit attention to how persuasion and ideology shape these narratives.

Evidence-Based Integrity Pedagogy: Verification and Inoculation

Integrity-oriented education can draw on two complementary evidence-informed strands. The first is explicit verification training (e.g., claim–source–evidence mapping and triangulation). The second is “prebunking” or psychological inoculation, which seeks to build resistance by exposing learners to weakened doses of misinformation techniques before they encounter them at scale. In climate communication experiments, inoculation has been shown to protect perceptions of scientific consensus against misinformation across ideological groups (van der Linden et al., 2017) and to reduce the impact of misinformation by exposing misleading argumentation techniques (Cook et al., 2017). More broadly, inoculation and prebunking approaches have been synthesized as promising tools for resilience against misinformation (Lewandowsky & van der Linden, 2021).

Evidence from cognitive and social psychology underscores why routine verification must be paired with careful communication design. Repetition alone can increase perceived truth (the illusory truth effect), including for counter-attitudinal climate-skeptical claims. In experimental work, repeated exposure increased perceived truth for both climate-science and climate-skeptical claims, even among climate-science endorsers (Jiang et al., 2024). For schools and LRCs, this implies safeguards in classroom talk and student products: avoid repeating false headlines as hooks without immediate correction and evidentiary context, and adopt “prebunking” or inoculation approaches that foreground manipulation techniques rather than rehearsing the false claim (Lewandowsky & van der Linden, 2021).

Education research indicates that students can be trained—within normal school constraints—to resist misinformation using structured activities embedded in science and information-literacy learning. An upper-secondary intervention integrating source evaluation, reasoning about evidence, and reflection on manipulation techniques reported measurable gains in students’ capacity to judge unreliable information (Mellberg et al., 2025). This evidence supports the feasibility of embedding integrity routines within existing school structures: short, repeated activities (claim–evidence–source checks), integrated across topics and outputs, can produce skill gains without requiring extensive curricular redesign.

International Frameworks Supporting Integrity-Oriented Climate Learning

UNFCCC Action for Climate Empowerment (ACE)

ACE denotes work under Article 6 of the UNFCCC and Article 12 of the Paris Agreement and centers on six elements: climate change education, training, public awareness, public participation, public access to information, and international cooperation (UNFCCC, n.d.). The UNESCO–UNFCCC ACE guidelines emphasize integrating these elements into national strategies and highlight the need for monitoring and evaluation, as well as the dissemination of accessible learning resources (UNESCO & UNFCCC, 2016).

Information Integrity Governance and Platform Accountability

The United Nations Global Principles for Information Integrity provide a holistic framework for multi-stakeholder action and explicitly note climate change as an area where disinformation can delay or derail action (United Nations, 2024b). The OECD policy framework similarly emphasizes three complementary aims: enhancing transparency and plurality; fostering societal resilience; and upgrading governance measures to uphold information integrity

(OECD, 2024). UNESCO’s Guidelines for the Governance of Digital Platforms articulate duties and roles for stakeholders and specify principles such as transparency and human-rights-based design and curation processes (UNESCO, 2023). Regulatory initiatives such as the EU’s strengthened Code of Practice on Disinformation illustrate increasing expectations that platforms and advertisers reduce incentives for disinformation and improve transparency and accountability (European Commission, 2022).

Climate-Specific Integrity Initiatives

The Global Initiative for Information Integrity on Climate Change—established by UNESCO, the Government of Brazil, and the UN—supports research, policy development, and campaigns to address climate disinformation and to safeguard those reporting on climate issues (UNESCO, 2025b). The COP30 Declaration on Information Integrity on Climate Change calls for equitable access to accurate, evidence-based climate information, and explicitly supports including information integrity measures in ACE implementation (UNESCO, 2025a).

Recent international policy developments explicitly elevate climate information integrity as a climate action enabler. The United Nations launched the Global Initiative for Information Integrity on Climate Change to mobilize governments and partners to counter climate disinformation and strengthen evidence-based climate communication (United Nations, 2024a). UNESCO’s COP30 Declaration on Information Integrity on Climate Change (Belém, 12 November 2025) frames climate disinformation as a barrier to effective action and calls for coordinated responses that protect freedom of expression while increasing the reliability of climate information ecosystems (UNESCO, 2025a). These developments legitimize the “integrity” vocabulary in school settings and provide policy justification for school-based verification and responsible communication activities.

In parallel, the OECD’s information integrity framework emphasizes improving transparency and accountability of information sources, strengthening societal resilience, and upgrading governance measures and institutional architecture to protect information ecosystems (Organisation for Economic Co-operation and Development, 2024). In school settings, these aims translate into practical requirements: (i) trusted resource infrastructures and clear sourcing norms; (ii) resilience-building pedagogy (verification routines and inoculation); and (iii) institutional support for implementation (time, training, and cross-role collaboration). The Oman case examined here aligns with these requirements, while also revealing the support gaps that must be addressed to operationalize integrity as a routine component of climate learning.

Climate Education and Whole-School Readiness

Beyond integrity governance, international education policy increasingly frames climate learning as a whole-school priority. UNESCO’s Greening Education Partnership aims to prepare every learner to acquire the knowledge, skills, values, and attitudes to tackle climate change, building on Education for Sustainable Development and system-level coordination (UNESCO, 2024b). This “climate-ready learner” agenda implies that integrity competencies must be embedded not only in lessons but also in school routines: resource selection, classroom tasks, student media outputs, and public-facing school campaigns.

Implications for Schools and LRCs

These global frameworks converge on an actionable implication: integrity is not solely an individual skill but an ecosystem responsibility, and education is a cornerstone of societal resilience. In schools, LRCs and information specialists are well-positioned to operationalize integrity through curated access, verification pedagogy, and youth communication safeguards aligned to MIL competencies.

Conceptual Framing: Operationalizing Climate Information Integrity Through MIL

We define climate information integrity in schools as the extent to which climate learning and student climate communication are anchored in accurate, evidence-based, transparent, and ethically shared information. This definition emphasizes both epistemic quality (truthfulness, evidence, consistency with credible scientific sources) and social responsibility (avoiding amplification of unverified claims, acknowledging uncertainty appropriately, and respectful engagement).

To operationalize integrity-oriented learning, we adopt a directed coding lens based on four MIL-aligned competencies:

(1) Access: the ability to locate and obtain credible climate information and data;
(2) Evaluate: the ability to assess credibility, evidence strength, bias/incentives, and to distinguish reliable claims from mis/disinformation;
(3) Create: the ability to produce climate communication artifacts (posters, videos, presentations) that are accurate, properly sourced, and audience-appropriate; and
(4) Engage responsibly: the ability to share and discuss climate information ethically, respectfully, and in ways that contribute to constructive civic engagement.

This competency model is consistent with integrity frameworks that emphasize public empowerment and societal resilience (OECD, 2024; United Nations, 2024b) and aligns with the LRC mandate for information stewardship.

Methods

Design and Data Provenance

This paper reports a secondary analysis of an existing dataset collected as part of a broader research programme on climate change literacy and school-based learning in Oman. The original data were collected using a structured questionnaire administered in Arabic during the 2024–2025 academic year. The questionnaire was distributed to school information specialists (librarians/LRC coordinators) across Omani governorates, using purposive sampling to ensure representation of both girls' and boys' schools. The instrument combined background questions (demographic and professional profile), closed items (selected-response and Likert-type items measuring resource availability, activity frequency, collaboration patterns, and perceived roles), and open-ended questions capturing narrative descriptions of practices, proposals, and desired initiatives related to climate education. Distribution was coordinated through the Ministry of Education's administrative channels, and participation was voluntary. The final dataset includes complete responses from 22 school information specialists in Oman (11 from girls' schools and 11 from boys' schools), representing a range of school contexts and geographic settings within the country.

Clarifying the "Secondary" Nature of the Data

The primary purpose of the original questionnaire was to map the status of climate education support within school LRCs, including resources, activity frequency, collaboration, and perceived roles. The original data collection was designed to produce a descriptive inventory of LRC climate-related activities and capacities rather than to test a hypothesis about information integrity. For this paper, we re-analyze the same dataset through an "information integrity" lens, using MIL competencies (access, evaluate, create, and engage responsibly) and integrity policy frameworks to reinterpret practices and gaps. This secondary analysis approach is methodologically appropriate because the original questionnaire items elicited detailed accounts of how respondents select, evaluate, and disseminate climate information—activities that map directly onto integrity constructs—even though the questionnaire did not use the term "information integrity" explicitly. No additional data were collected or solicited; the analytic contribution lies in the application of a different conceptual framework to an existing, already-collected dataset.

Ethical Considerations

The original data collection was conducted under a research programme approved by Sultan Qaboos University, College of Arts and Social Sciences. Participation in the questionnaire was voluntary, and respondents were informed about the purpose of the study and how their responses would be used. The raw questionnaire forms include identifiable school names; however, for this secondary analysis, all reporting is aggregated and de-identified. Respondents are referenced only by anonymized codes (R1–R22), and no school names, locations, or other identifying details are disclosed. Verbatim quotations included in the paper are limited to descriptions of professional practices and do not contain personal or sensitive information. No new data were collected for this paper, and the secondary analysis does not alter the risk profile established by the original ethical approval. The re-analysis through an information integrity lens does not involve any additional contact with participants or collection of supplementary information.

Analysis Approach

Closed items were summarized descriptively (counts and proportions) to characterize training, resources, and practice patterns. Open-ended responses were analyzed using a qualitative descriptive approach supported by directed coding aligned to the MIL competencies (access, evaluate, create, engage responsibly). Selected verbatim excerpts are provided in Arabic with brief English translations.

Results

Descriptive Results: Training, Resources, and Activity Patterns

Descriptive results establish feasibility constraints for integrity-oriented climate learning. Only 2/22 respondents reported prior training in climate/environment education, while 15/22 reported training in IT/media production. This pattern suggests that media-production capacity may exist in schools, but climate-specific verification and evidence interpretation may require dedicated professional development.

Resources in LRCs were uneven. Books were most common (18/22), while multimedia/digital resources were reported by 8/22 and posters/visual aids by 3/22. Two respondents reported no climate-related resources. Given international emphasis on equitable access to accurate, understandable climate information (UNESCO, 2025a), these gaps represent a minimum baseline barrier.

Activity patterns indicated limited institutionalization: student engagement in climate discussions/activities was most commonly "rarely" (12/22) or "never" (6/22), with only one respondent reporting monthly engagement. Teacher collaboration was intermittent. Eight respondents reported supporting student media projects (posters/videos/design), indicating an entry point for integrity learning through responsible creation—particularly relevant because evidence-based inoculation interventions can be embedded in participatory communication tasks rather than delivered as abstract lectures (Cook et al., 2017; van der Linden et al., 2017).

Thematic Analysis: Integrity Practices, Gaps, and Needs

Directed coding of open-ended responses yielded four overarching themes:

- T1. Integrity as critical thinking and evidence-based decision-making.
- T2. Integrity enacted through curated access and guidance.
- T3. Integrity enacted through youth communication outputs and environmental awareness activities.
- T4. Constraints and capability gaps limiting integrity-oriented practice.

Integrity Framed as Critical Thinking and Evidence

Some respondents explicitly conceptualized climate learning as requiring evaluation of sources and evidence-based decisions—an integrity framing aligned with the "evaluate" competency. "Climate change is complex and multi-dimensional… requiring students to engage with scientific information, evaluate different sources, and make evidence-based decisions" (R12). This framing aligns with integrity research emphasizing the need to pre-empt manipulation and strengthen resilience (Lewandowsky, 2021; OECD, 2024) and provides a clear anchor for LRC-based verification micro-lessons.

Integrity Enacted Through Curated Access and Guidance

The dominant integrity-related practice was guided access—providing materials and directing students to suitable references. This corresponds to the MIL "access" competency and the LRC's core mandate. "Providing materials and books" (R1). "Guiding students to appropriate references." (R9). In some cases, guided access extended to digital channels: "By publishing information on the school's social media" (R10). While access is necessary, global policy emphasizes that integrity also requires transparency, resilience-building and responsible incentives (OECD, 2024; United Nations, 2024b). Accordingly, access practices should be strengthened through explicit curation criteria (authority, evidence, currency) and by linking resources to trusted scientific syntheses (e.g., Intergovernmental Panel on Climate Change [IPCC], 2023) and to nationally credible agencies.

Youth Communication Outputs as an Integrity-Learning Pathway

Reported successful activities often combined awareness with hands-on engagement, including recycling, tree planting, and occasional youth media outputs. These activities can support integrity when paired with sourcing and review safeguards. “A workshop on recycling using plastic and paper to make school tools” (R1). “A tree-planting campaign within the school and its grounds…” (R3). Some respondents described emerging digital production, including AI-supported outputs: “LRC books, competitions, and an AI-generated video—best climate design about climate in Oman” (R5). Another respondent noted posters and a short video: “I participated in preparing posters and a short video… and it had a positive impact among students” (R14).

These examples suggest a scalable pathway: students learn integrity by producing shareable communication. This is consistent with evidence showing that technique-focused “pre-emptive” strategies can reduce susceptibility to climate misinformation (Cook et al., 2017; Lewandowsky & van der Linden, 2021; van der Linden et al., 2017). Importantly, the rise of multimodal misinformation and AI-assisted content generation makes it increasingly important that youth creation tasks include explicit checks for evidence and provenance (Neylan et al., 2023).

Constraints and Actions Needed

The data show four recurring gaps limiting integrity-oriented climate learning:

- Training: very limited climate/environment training (2/22).
- Updated resources and local data: uneven multimedia access and two reports of no climate resources.
- Collaboration: teacher collaboration is intermittent; interventions must be modular and low-friction.
- Institutional support: limited prioritization and time constrain sustained practice.

Respondents proposed structural actions aligned with these gaps. For example: “Create a dedicated climate education corner in the LRC” (R4). “Organize motivational competitions and disseminate awareness within the school” (R1). Others proposed partnerships with national agencies (ACE’s “access to information” and “cooperation” elements) (UNESCO & UNFCCC, 2016; UNFCCC, n.d.): “Collaborate with the Meteorology Authority and provide lectures for students and teachers” (R22).

Finally, respondents recognized that students rely on platforms such as YouTube and social media: “YouTube and social media” (R15).

This is significant because integrity governance frameworks emphasize that platform design and curation can shape exposure, incentives, and risks (UNESCO, 2023; United Nations, 2024b). Schools therefore need explicit platform-aware verification routines, not only resource provision.

Summary of Themes, Practices, Gaps, and Enabling Actions

Across the four themes, the data reveal a consistent pattern: integrity-relevant practices exist but remain informal, uneven, and under-supported. Theme 1 (critical thinking and evidence) provides a conceptual anchor but is articulated by only a subset of respondents. Theme 2 (curated access) is the most widespread practice, yet it focuses on provision rather than explicit credibility criteria. Theme 3 (youth communication outputs) offers a scalable pathway for integrity learning through production, but currently lacks structured sourcing and review safeguards. Theme 4 (constraints) identifies four recurring gaps—training, updated resources, collaboration, and institutional support—that must be addressed for integrity-oriented practice to move from informal to institutionalised. The actions needed span school, system, and ecosystem levels and are discussed in Section 6.

Discussion

From Climate Literacy to Climate Information Integrity

The findings reinforce a major shift: climate literacy is no longer only about understanding greenhouse gases or impacts; it is also about epistemic resilience—students' ability to maintain reliable beliefs and responsible communication in contested information spaces. Climate disinformation can delay action and erode trust in science and institutions (Lewandowsky, 2021). Platform discourse studies show the politicization of climate narratives and the weaponization of "fake news" framing (Al-Rawi et al., 2021). This underscores the need for integrity-explicit school interventions.

Positioning integrity as an educational objective aligns with emerging global governance frames. International policy increasingly treats information integrity as a public good and as a prerequisite for effective climate action, including protection for scientific voices and support for evidence-based communication (UNESCO, 2025a; United Nations, 2024b). The present findings therefore have relevance beyond individual LRCs: they identify implementation levers that are often feasible in schools (curation, micro-verification routines, and youth communication scaffolds) and specify where systemic capacity is required (training, collaboration, and platform-aware safeguards).

Interpreting Oman's LRC Landscape: Assets and Constraints

Three assets are evident. First, many LRCs have books and references, offering a baseline integrity infrastructure. Second, many information specialists have IT/media training, enabling youth outputs. Third, respondents propose partnerships with national agencies, consistent with ACE's emphasis on access to information and cooperation (UNFCCC, n.d.).

However, constraints are substantial. With only 2/22 reporting climate/environment training, integrity instruction cannot assume climate expertise. Uneven resources and low activity frequency indicate that integrity is not yet institutionalized. These patterns mirror international observations that resilient information ecosystems require both access and capability-building, especially for youth (United Nations, 2024b).

Integrity-Enhancing Practices to Scale

(a) Credible curation: Many respondents already provide materials and references. This can be strengthened by adopting curation criteria (authority, evidence, currency) and by anchoring core materials to trusted syntheses (IPCC, 2023). (b) Micro-verification routines: Respondents' language about evaluating sources can be operationalized via short classroom/LRC routines: triangulation, claim-evidence mapping, and distinguishing data from opinion. (c) Youth communication with safeguards: Posters and videos are already used in some schools. Evidence suggests inoculation-style interventions can reduce susceptibility to climate misinformation (Cook et al., 2017; van der Linden et al., 2017). Embedding technique awareness into student production tasks can therefore build resilience while maintaining engagement.

The questionnaire responses indicate that many integrity-enhancing practices already exist as informal routines. Respondents described directing students to “official websites,” selecting “credible” materials, and guiding learners to teacher-approved resources (e.g., “I always direct them to official websites and scientific sources”; “We use ministry-approved resources and credible websites”). These routines can be strengthened by making them explicit, repeatable, and assessable. A short credibility checklist can be used consistently across lessons and tasks (authority, evidence, date, purpose, and corroboration), enabling students to articulate why a source is credible rather than treating credibility as a teacher-given label.

A second scalable practice is verification-through-production: using youth communication outputs (posters, infographics, short videos, school campaigns) as a structured pathway for integrity learning. Several respondents noted that students produce awareness materials and that specialists support content selection and messaging (e.g., “students make posters and presentations”; “we help them design awareness campaigns”). In integrity terms, production tasks create a natural requirement for evidence: students must justify claims, include credible citations, and avoid exaggeration. This is where LRC specialists can add distinctive value by providing templates, exemplars, and a lightweight review process that checks sources and language before school-wide dissemination.

What is Missing

The data suggest gaps in: (i) structured verification pedagogy; (ii) standardized safeguarding for student outputs (citations, review workflows); (iii) platform literacy (understanding how algorithmic curation shapes exposure); and (iv) institutional supports (time, recognition, collaboration mechanisms). These gaps align with OECD’s call to foster societal resilience while upgrading governance measures (OECD, 2024) and with UNESCO’s platform governance emphasis on transparency and accountability (UNESCO, 2023).

Two integrity gaps deserve emphasis. First, the data suggest limited systematic attention to platform-driven solution misinformation. While respondents discuss credibility in general terms, few explicitly reference verifying claims about renewables, adaptation measures, or policy trade-offs—topics increasingly targeted by “new denial” narratives that undermine confidence in solutions (Nicolosi et al., 2025). Second, the apparent absence of explicit instruction about repetition effects matters: well-intended classroom discussions can inadvertently reinforce false claims if they are repeated without careful framing. Given experimental evidence that repetition increases belief even among climate-science endorsers (Jiang et al., 2024), integrity-oriented pedagogy should teach students to identify persuasive repetition and to respond by checking primary sources rather than by forwarding or debating unverified content.

Actions Needed (School, System, Ecosystem)

School/LRC Level

- Establish a climate integrity corner with a trusted-source list; apply basic curation rules (IPCC, 2023).
- Adopt a two-source rule and a claim-check worksheet for student climate projects.
- Require citations and a “sources slide” for student posters/videos; implement pre-publication review.

System/Ministry Level

- Provide climate integrity professional development for information specialists and teachers.
- Produce Arabic, youth-friendly resource packs and guidance on trusted climate sources.
- Recognize LRC-led integrity activities in school plans and evaluation.

Ecosystem Level

- Partner with national agencies and universities for local data and credible updates.
- Align school integrity work with ACE implementation and with international integrity initiatives (UNESCO, 2025a, 2025b).

Why This Matters for Developing and Climate-Vulnerable Contexts

Reviewer feedback emphasized relevance for developing countries highly vulnerable to climate change. In such contexts, schools often face constrained resources and unequal access to high-quality learning materials, while communities may experience heightened exposure to rumor, politicized narratives, or commercial greenwashing. Information integrity is therefore not merely a “media studies” concern—it is a justice and capability concern. The United Nations Global Principles explicitly note that erosion of information integrity can worsen vulnerabilities and hinder progress on the Sustainable Development Goals, with particular impacts for the Global South (United Nations, 2024b). The COP30 Declaration similarly frames integrity as necessary for equitable access to evidence-based climate information and for effective public participation (UNESCO, 2025a). From this perspective, LRC-based integrity practice supports climate action by enabling adolescents to participate as informed communicators rather than passive recipients of contested narratives.

Limitations and Pathway to an Extended Journal Paper

This conference paper is limited by the available secondary dataset. The data are questionnaire-based rather than long-form interviews; therefore, thematic depth is constrained and some integrity practices may be under-reported. The sample (n = 22) supports exploratory mapping rather than statistical generalization. Additionally, the study does not include direct measures of student verification skills or systematic analysis of student-produced artifacts, limiting evaluative claims.

Data provenance and secondary analysis. The dataset comprises written responses from 22 school information specialists in Oman (female and male schools), collected via structured questionnaires as part of a broader inquiry into school-based climate literacy activities. This conference paper conducted a secondary analysis of these responses using directed coding aligned to MIL competencies (access, evaluate, create, and engage responsibly). Secondary analysis is efficient and reduces respondent burden, but it constrains analytic depth because responses were not originally elicited to probe “information integrity” constructs in detail.

Ethics and confidentiality. Responses were anonymized for analysis and reporting; quotes are presented without identifying details and are limited to practice descriptions. Nonetheless, questionnaire responses can be affected by social desirability and may over-represent “official” practices aligned with policy expectations. Future work that collects observational data, student artifacts, or platform-related examples should incorporate explicit consent, safeguarding protocols for youth-produced content, and procedures to minimize identifiable digital traces in publications.

These limitations also define a clear pathway to an extended journal article. A follow-on study should: (i) conduct in-depth interviews with information specialists and teachers; (ii) run student focus groups to map platform use and credibility heuristics; (iii) analyze student artifacts using an integrity rubric; and (iv) pilot integrity-oriented practice recommendations with pre/post measures of verification competencies and responsible sharing intentions. Inclusion of classroom/LRC observations would further strengthen causal interpretation by documenting real-time verification talk and the institutional conditions that enable integrity routines.

Measurement and generalizability. The study does not directly measure student learning outcomes, shifts in misinformation susceptibility, or the quality of student climate communication. It cannot establish causal links between specific LRC practices and student behaviors. In addition, the sample is context-specific and not designed for prevalence estimation; findings should be treated as a transferable practice model for comparable systems rather than a statistical representation of national practice.

Pathway to an extended journal paper (additional data to collect). To move from a practice model to an evidence-of-impact contribution, the next study should triangulate multiple data sources: (1) in-depth interviews with information specialists and teachers to map collaboration, workload, and decision rules for curation and review; (2) student focus groups and short performance tasks (evaluating claims, identifying manipulation techniques, justifying source choices); (3) structured observation of LRC-supported sessions and review workflows; and (4) artifact analysis of youth outputs (posters/videos) using an integrity rubric (source quality, accuracy, balance, transparency, and responsible framing). A pre–post design over one term could evaluate whether integrity-oriented practice interventions improve specific competencies and reduce uncritical sharing behaviors.

Conclusion

Strengthening climate literacy now requires strengthening climate information integrity. In this study, school information specialists in Oman described practices that already align with integrity work—resource provision, awareness activities, and emerging youth communication outputs—yet they also reported significant constraints, especially limited climate-focused training, uneven resourcing, and intermittent collaboration. International frameworks (ACE, global information integrity principles, platform governance guidance, and COP30 climate integrity commitments) provide strong justification for institutionalizing verification and responsible communication as core competencies. The findings identify actionable practice levers—credible curation, micro-verification routines, and youth communication with safeguards—that can be adapted to different school capacities and implemented within existing resource constraints. With targeted training and institutional support, LRCs can become scalable integrity infrastructures that help adolescents evaluate and communicate climate knowledge responsibly.

Acknowledgements

This research was supported by the Ministry of Higher Education, Research and Innovation (MoHERI), Sultanate of Oman, under the 2024 Block-Funding Program (SQU Project Code: RC/RG/ART/DIS/24/184).

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The authors declare that Claude (Anthropic), an AI assistant, was used to support the formatting, editing, and reference verification of the manuscript. The substantive content, research design, data analysis, findings, and discussion are the original work of the author derived from systematic conduct of the research.

References

Al-Rawi, A., O'Keefe, D., Kane, O., & Bizimana, A.-J. (2021). Twitter's fake news discourses around climate change and global warming. *Frontiers in Communication, 6*, 729818. https://doi.org/10.3389/fcomm.2021.729818

Cook, J., Lewandowsky, S., & Ecker, U. K. H. (2017). Neutralizing misinformation through inoculation: Exposing misleading argumentation techniques reduces their influence. *PLOS ONE, 12*(5), e0175799. https://doi.org/10.1371/journal.pone.0175799

European Commission. (2022). *The 2022 Code of Practice on Disinformation. European Commission, Digital Strategy*. https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation

Intergovernmental Panel on Climate Change. (2023). *Climate Change 2023: Synthesis Report (AR6 SYR—Longer Report)*. IPCC. https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_LongerReport.pdf

Jiang, Y., Schwarz, N., Reynolds, K. J., & Newman, E. J. (2024). Repetition increases belief in climate-skeptical claims, even for climate science endorsers. *PLOS ONE, 19*(8), e0307294. https://doi.org/10.1371/journal.pone.0307294

Lewandowsky, S. (2021). Climate change disinformation and how to combat it. *Annual Review of Public Health, 42*, 1–21. https://doi.org/10.1146/annurev-publhealth-090419-102409

Lewandowsky, S., & van der Linden, S. (2021). Countering misinformation and fake news through inoculation and prebunking. *European Review of Social Psychology, 32*(2), 348–384. https://doi.org/10.1080/10463283.2021.1876983

Loupessis, I., & Intahchomphoo, C. (2025). Framing the climate: How TikTok's algorithm shapes environmental discourse. *Telematics and Informatics, 102*, 102329. https://doi.org/10.1016/j.tele.2025.102329

Mellberg, S., Danielsson Friberg, A., & Nygren, T. (2025). Science education against misinformation: An educational intervention in upper-secondary schools. *International Journal of Science Education,* 1–33. https://doi.org/10.1080/09500693.2025.2571131

Neylan, J., Biddlestone, M., Roozenbeek, J., & van der Linden, S. (2023). How to "inoculate" against multimodal misinformation: A conceptual replication of Roozenbeek and van der Linden (2020). *Scientific Reports, 13*(1), 18273. https://doi.org/10.1038/s41598-023-43885-2

Nicolosi, E., Medina, R., Brewer, S., Vorkink, M., & Allred, A. (2025). The new denial: Climate solution misinformation on social media. *Global Sustainability, 8*, e31. https://doi.org/10.1017/sus.2025.10016

Organisation for Economic Co-operation and Development. (2024). *Facts not Fakes: Tackling disinformation, strengthening information integrity*. OECD Publishing. https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/03/facts-not-fakes-tackling-disinformation-strengthening-information-integrity_ff96d19f/d909ff7a-en.pdf

Sultana, B. C., Prodhan, M. T. R., Alam, E., Sohel, M. S., Bari, A. B. M. M., Pal, S. C., Islam, M. K., & Islam, A. R. M. T. (2024). A systematic review of the nexus between climate change and social media: Present status, trends, and future challenges. *Frontiers in Communication, 9*, 1301400. https://doi.org/10.3389/fcomm.2024.1301400

UNESCO. (2023). *Guidelines for the governance of digital platforms: Safeguarding freedom of expression and access to information through a multi-stakeholder approach*. UNESCO. https://www.unesco.org/en/internet-trust/guidelines

UNESCO. (2024). *Greening Education Partnership: Getting every learner climate-ready*. https://www.unesco.org/en/articles/greening-education-partnership-getting-every-learner-climate-ready

UNESCO. (2025a). *Declaration on Information Integrity on Climate Change* (COP30, Belém, 12 November 2025). https://www.unesco.org/sites/default/files/medias/fichiers/2025/11/cop_30_declaration_information_integrity_on_climate_change_12112025.pdf

UNESCO. (2025b). *Global Initiative for Information Integrity on Climate Change*. https://www.unesco.org/en/information-integrity-climate-change

UNESCO, & UNFCCC. (2016). *Action for Climate Empowerment: Guidelines for accelerating solutions through education, training and awareness-raising*. https://unfccc.int/sites/default/files/action_for_climate_empowerment_guidelines.pdf

United Nations. (2024a). *Global Initiative for Information Integrity on Climate Change*. https://www.un.org/en/climatechange/information-integrity

United Nations. (2024b). *United Nations Global Principles for Information Integrity*. https://www.un.org/en/information-integrity/global-principles

United Nations Framework Convention on Climate Change. (n.d.). *Action for Climate Empowerment* (ACE). UNFCCC. https://unfccc.int/topics/education-and-youth/big-picture/ACE

van der Linden, S., Leiserowitz, A., Rosenthal, S., & Maibach, E. (2017). Inoculating the public against misinformation about climate change. *Global Challenges, 1*(2), Article 1600008. https://doi.org/10.1002/gch2.201600008

Wardle, C., & Derakhshan, H. (2017). *Information disorder: Toward an interdisciplinary framework for research and policy making*. Council of Europe. https://rm.coe.int/information-disorder-toward-an-interdisciplinary-framework-for-researc/168076277c

Contact email: f.hamad@squ.edu.om

A Socio-Psychological Exploration of National Training Service Program (NSTP) Students' Coping and Support-Seeking in Mental Health Challenges

Johnnel S. Cagod, Iligan Medical Center College, Philippines

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

Due to academic pressures, societal expectations, and the long-lasting impacts of the COVID-19 pandemic, college students' mental health problems have gotten worse in recent years. In the Philippines, these concerns have been noted alongside shifts in help-seeking behaviors and heightened awareness of mental health issues among young learners. In this situation, it's important to know how pupils deal with stress and use support services. The National Service Training Program, which focuses on civic participation, leadership, and community involvement, creates a special social and psychological space where people can learn how to cope and ask for help. This study examines the experiences of NSTP students in navigating mental health difficulties, emphasizing their coping strategies, support-seeking behaviors, and resilience sources. Utilizing Lazarus and Folkman's Stress and Coping Theory with Bandura's Social Cognitive Theory, the study examines the interaction of individual beliefs, emotional responses, and social settings in influencing students' well-being. Data were gathered through semi-structured interviews with deliberately chosen NSTP students and later analyzed using thematic analysis. The findings aim to clarify emotional difficulties, efficient coping strategies, and the critical impact of parental, peer, and institutional support.

Keywords: coping mechanisms, mental health, NSTP students, support-seeking, socio-psychological

iafor

The International Academic Forum
www.iafor.org

Introduction

Mental health among students has emerged as a vital issue in educational research and policy deliberations of the schools. According to Li et al. (2022), academic settings frequently have high standards and a lot of work to do, which can lead to a lot of stress, anxiety, and burnout. For Albandia et al.; (2024) and Asiones (2023), the major shift to online learning during the COVID-19 pandemic made these problems worse because students had to deal with being alone, tech problems, and breaks in their usual support networks. Experts in the Philippines have observed a sudden increase in the access and incidence of mental health disorders among the students during and subsequent to the pandemic, accompanied by shifts in stigma and help-seeking behaviors according to Bollettino et al. (2023) and Asiones (2023). On the other hand, maladaptive coping (such avoidance and rumination) is linked to negative mental health indicators (Down but Never Out, 2022; Li et al., 2022).

The socio-psychological dimension is particularly important like coping and the quest for support are not solely individual psychological occurrences; they are shaped by social context, expectations, cultural norms, and institutional policies. For example, the stress students feel is greatly affected by the academic expectations of their parents, teachers, and their own internalized ideals. However, having supportive relationships and psychological tools like self-compassion or resilience will lessen the effects, as noted by Academic Expectation, Self-Compassion, etc. (2020) and Li et al. (2022). According to Albandia et al. (2024) and Asiones (2023), the post-pandemic environment still poses new problems, such as uncertainty, different teaching styles, and worries about reintegration. All of these things make it harder for students to cope and hurt their mental health.

Perhaps providing a unique framework for analyzing these processes, the Philippines' National Service Training Program seeks to promote civic awareness and community engagement among teenagers. This gave children structured opportunities to interact with one another, take charge, perform community service, and receive school support, all of which may have an impact on how they handle mental health issues (Custodio et al., 2025). By examining the coping strategies and help-seeking behaviors of the NSTP students dealing with mental health issues, as well as the sociopsychological elements that support or undermine resilience, this study aims to close the existing gap.

The author is currently connected at Iligan Medical Center College, Iligan City, Philippines as the Head of Student Affairs, National Service Training Program (NSTP) Coordinator, and a Member of Center for Research and Development Council.

Literature Review

Lazarus and Folkman (1984) conceptualized Social Cognitive Theory as a dynamic process that arises from the interaction between the individual and their environment. According to their theory, stress occurs when an individual appraises a situation as exceeding their resources for coping. They presented two principal coping strategies: problem-focused coping, which entails taking immediate action to mitigate the source of stress, and emotion-focused coping, which emphasizes the regulation of emotional suffering. The model also stresses how important social support is as a moderating element that can lessen the bad effects of stress and boost mental resilience.

Bandura's (1986) Social Cognitive Theory adds to this paradigm by showing how personal beliefs, social influences, and behaviors work together to form how people cope and ask for help. Self-efficacy is a key idea in Bandura's theory. It means believing that you can handle problems and reach your goals. Students who have faith in themselves are more likely to employ adaptive coping methods, stay going when things get tough, and ask for help when they need it. Bandura also discussed about reciprocal determinism, which shows how personal traits, behavior, and the environment all effect one another. This indicates that having a supportive environment, such peer networks or institutional programs, can help someone deal with stress better. On the other hand, taking proactive steps to deal with stress can boost someone's confidence and social ties. These themes together made up the socio-psychological framework of the current study, which looks into how NSTP students deal with mental health issues and how different support systems affect their resilience and well-being.

Methodology

Research Design

This study employs a qualitative descriptive design, utilizing an interpretive approach, to capture the lived experiences of NSTP students in managing their mental health challenges.

Participants

Out of 385 NSTP Students in attendance, fifteen students were selected through purposive sampling. They were chosen based on their willingness to discuss personal experiences and their active involvement in NSTP activities in Iligan Medical Center College, Palao, Iligan City.

Data Collection

Data were gathered through semi-structured face-to-face interviews. An interview guide with open-ended questions was used to encourage participants to share their thoughts in detail.

Data Analysis

Thematic analysis was employed. Data were transcribed, coded, and categorized into themes representing coping mechanisms, emotions, and social support experiences.

Results and Discussions

This section shows the result of the interview and goes into great detail about the outcomes. It analyzes the data collected in relation to the research objectives and examines their implications, substantiated by pertinent literature and observations.

Emotional Struggles

NSTP students shared experiences of sadness, exhaustion, and emotional instability due to academic and personal pressures: “Sometimes, I just cry alone in my room. It’s the only way to feel lighter before studying again” (P5).

Lazarus and Folkman (1984) assert in their Stress and Coping Transactional Model, the emotional responses occur when perceived stress surpasses available coping resources. Students in the NSTP program face emotional difficulties stemming from the convergence of responsibilities, academic obligations, community involvement, and personal aspirations. P5's experience shows that emotional anguish can show itself as crying, withdrawing, or feeling burned out. Lazarus and Folkman (1984) assert that stress arises when an individual perceives a situation as excessively demanding relative to their coping abilities. The emotional expression acts as a way to deal with stress and get back to normal. Crying, often referred to as emotional ventilation, corresponds with emotion-focused coping mechanisms that emphasize emotional relief rather than problem-solving. In the NSTP, where civic duty and self-reflection are important, people may feel emotional stress because they are trying to do their duties while also dealing with their feelings. This shows that NSTP programs need to have structured psychosocial support to help students deal with their feelings in a healthy way. Adding activities that are sensitive to mental health could help children control their emotions and feel stronger. Realizing that showing feelings is not a sign of weakness but a technique to deal with things could help student volunteers' mental health and make them more likely to ask for help. According to Lazarus and Folkman (1984) and Folkman and Moskowitz (2004), the understanding connects the personal and the emotional regulation to large institutional care systems that support student well-being through community-focused programs.

Academic Pressure

Academic demands and performance expectations were strong stressors for many NSTP students, often causing anxiety and self-doubt: “Even if I try my best, I feel like it is never enough. The pressure to do well keeps me awake at night” (P11).

Students' experiences show how the constant pressure to do well in school and the amount of work they have to do can hurt their mental health. P11's statement shows the mismatch between motivation and tiredness, when working hard doesn't feel gratifying anymore. The Yerkes-Dodson Law (1908) says that some stress can help people get things done, but too much stress makes them anxious, keeps them from sleeping, and makes them tired mentally. In the NSTP setting, where civic duties and coursework come together, this effect is even stronger. Students typically have to balance community service with schoolwork, which makes it hard to manage their time. The belief that you need to do well in school and in social situations leads to a cycle of self-doubt and dread of failure. If not dealt with, this emotional tiredness could lead to burnout. Schools and colleges need to know what this level of stress is and make sure that students have a good mix of work and assistance from teachers. Promoting self-compassion, mindfulness, and setting achievable goals can alleviate detrimental stress. Teaching students about mental health as part of NSTP activities could also help them understand their boundaries when it comes to stress and build resilience, so they perceive performance as growth instead of perfection (Schaufeli et al., 2009; Yerkes & Dodson, 1908).

Social and Family Factors

Family and peer relationships shaped how students coped with stress and maintained their mental health: “When my mother listens to me, even just for a few minutes, it already feels like a big help” (P6).

The ability of the students to deal with stress was greatly affected by the support they got from their families and friends. Participant 6's simple statement highlights how emotional support from family can help lower stress levels. As asserted by Bronfenbrenner (1979), an individual's microsystem, which includes family, friends, and peers, is essential for fostering emotional resilience. When students comprehend these systems, their capacity to navigate academic and personal problems is enhanced. On the other hand, not getting help can make you feel even more alone and helpless. In the NSTP environment, where community involvement typically reflects household cooperation, relational support becomes a model for empathy and social responsibility. Encouraging open communication at home and at school lets pupils talk about their problems before they get worse. This is in line with Filipino collectivist ideals that stress "kapwa" (shared identity) and caring for each other. Programs that involve parental involvement or peer mentoring can help students outside of school. These kinds of programs show how important it is for students' mental health and social belonging to be connected, which is important for their long-term health and growth.

Anxiety and Fear

Many participants expressed constant worry about failure and self-comparison, leading to emotional tension and insecurity: "I always compare myself to others. I feel like I'll never be good enough" (P8).

Fear typically comes from comparing yourself to others and feeling like you're not good enough. The statement of Participant 8 shows how social norms and comparing oneself to others can lead to worry that is felt within. Bandura's (1997) self-efficacy theory posits that individuals' views in their skills influence their approach to challenges. When students are often comparing themselves to others, they start to feel less competent, which makes them anxious, puts off work, and makes them retreat. In the NSTP program, working together and being able to see how well you do can make these feelings stronger if students think they are less capable of helping.

So, teachers and facilitators need to make sure that learning and community participation are safe for everyone and that everyone feels welcome. Students are more likely to focus on group success when they do tasks that are more cooperative than competitive. Giving NSTP students affirmations and constructive feedback makes them feel more confident and less anxious. In the end, encouraging a development attitude helps students perceive failures as chances to learn instead of threats to their self-esteem.

Coping Through Support

Talking to trusted people and seeking comfort from peers provided emotional relief for many students: "Just having someone listen makes me feel lighter, it's like I can breathe again" (P14).

Participants often found emotional relief through support from others, friends and even from the family. The statement of Participant 14 captures the spirit of being recognized and understood. The Person-Centered Theory of Rogers' (1951) emphasizes that authentic empathy and acceptance enable individuals to regain self-esteem and emotional stability. This further emphasize that peer sharing, group reflection, and collaborative initiatives within the NSTP framework has great impact on therapeutic environments a very conducive to natural listening and validation. These interactions help people feel like they belong and support each other, which is vital for keeping their emotions in check.

When students talk about their problems, they let go of some of the stress they are feeling inside, which makes them feel better. This fits with Filipino cultural qualities like pakikipagkapwa (shared humanity), which encourages emotional solidarity. Structured peer talks and guidance counseling integration in NSTP sessions may help students become more empathetic and caring. Creating safe spaces for communication also helps to get rid of the stigma that comes with talking about mental health, which makes it easier to ask for help. This relational way of dealing with things shows both psychological and cultural ways to heal and evolve as a person.

Faith and Inner Strength

Spirituality and faith became important sources of hope and calmness for several students: “When everything feels heavy, I just pray. It helps me feel safe again” (P7).

Faith has become a very personal way for NSTP students to deal with stress, showing both cultural and individual strength. The statement of Participant 7 illustrates how prayer helps individuals in regulating their emotions, gain a positive impact, and discovering significance in their existence. Pargament (1997) explains that religious coping helps people see problems in the context of a bigger goal, which gives them a sense of direction when they are upset. For Filipino youth, whose faith and family are closely linked, spirituality can help them feel better and provide them a sense of order during tough times. Spirituality strengthens virtues like service, appreciation, and perseverance in the NSTP curriculum, which generally includes community and moral development. Faith-based coping may not remove stress, but it might change it into something that is easier to deal with, which can help you handle your emotions better. To encourage a wide range of beliefs, institutions would want to think about integrating introspective techniques like mindfulness or debates based on principles. It is excellent for mental health and promotes inclusivity to encourage people to talk about their spirituality without making them follow a certain set of ideas. Faith, when combined with social support, ultimately fortifies optimism and enhances inner stability, which is essential for students managing both academic and civic duties.

Relaxation and Distraction

Many NSTP students managed their stress through leisure activities, hobbies, and short breaks to restore emotional balance: “When I feel overwhelmed, I just listen to music or draw. It helps me forget my problems for a while” (P13).

Students learned that relaxing and doing creative things helped them feel less emotionally tired. The statement of Participant 13 indicates that people can feel better when they are sad by doing artworks or listening to music. Lewinsohn's Behavioral Activation Theory (1974) asserts that deliberate effort amplifies positive reinforcement, hence alleviating negative emotional states. In the context of NSTP, where academic and social responsibilities converge, periods of leisure and relaxation become essential. These things are not only distractions; they are also planned ways to take care of yourself that help you get your mind back in balance. You can relax and minimize your risk of burnout by listening to music, writing in a journal, or spending time outside. Promoting these habits in schools can make relaxation a normal part of keeping your mental health up to date. Also, doing things for fun can boost creativity, which can lead to better community service and project planning in NSTP. Institutions can assist students deal with stress and stay motivated and mentally stable throughout their academic path by adding wellness breaks or creative workshops.

Self-Reflection and Growth

Several participants developed personal insight and emotional awareness through journaling and reflection on their experiences: “Writing about my feelings helps me understand why I feel that way and what I can do next time” (P10).

Self-reflection allowed NSTP students to explore themselves and learn how to deal with their feelings. Participant 10 said that it shows how strong reflective writing can be for making thoughts and feelings clearer. Mezirow's (1991) Transformative Learning Theory posits that critical reflection empowers individuals to extract meaning from their experiences and adjust their behaviors accordingly. The NSTP program not only encourages students to think about what they have done, but it also includes diaries and discussions after activities as part of the curriculum. These exercises help kids learn what makes them feel awful and how to turn issues into opportunities to grow. This internal dialogue cultivates self-efficacy, maturity, and empathy, which are fundamental goals of civic engagement education. Encouraging introspective exercises in NSTP helps students become more emotionally literate, which means they can better express their stress, find solutions, and deal with other people's feelings. In the end, keeping a notebook and thinking about yourself make you more resilient and help you think forward. This fits with the goals of holistic education, which sees intellectual and emotional growth as two important parts of student achievement.

Institutional Support

Students highlighted the importance of institutional programs and accessible guidance services to support mental health: “Sometimes we just need someone from the school to check on us or remind us that help is there” (P3).

NSTP students stressed that being involved in an organization is important for keeping mental wellness. P3's statement shows that institutions need to be proactive instead of reactive when there are problems. Bronfenbrenner's (1979) theory posits that institutions such as schools constitute a component of the mesosystem that directly impacts development. For Cohen and Wills (1985), contend that the perceived availability of social support serves as a coping mechanism against stress. Schools improve students' sense of belonging and safety when they offer mental health initiatives including counseling, peer mentoring, and campaigns to raise awareness. The NSTP's focus on civic engagement makes it a great place to teach psychosocial skills through group reflections, outreach programs, and leadership training. Also, regular communication between teachers and students builds trust and makes it more likely that students would ask for help early on. Institutional compassion thus serves as both a preventative and developing strategy. Incorporating mental health policy in higher education not only meets immediate needs but also fosters long-term resilience, ensuring that students excel academically, socially, and emotionally.

Collective Healing

Group interactions and community projects within NSTP fostered solidarity, empathy, and shared emotional recovery among students: “It feels healing when we help each other and share our stories, it reminds me I’m not alone” (P11).

One of the most important things that came out of NSTP was collective healing. P11's statement shows how shared experiences can help people feel like they belong and relieve their emotions.

Durkheim's (1897) Social Integration Theory posits that robust social connections safeguard individuals against psychological suffering and promote resilience. NSTP develops an environment that is like therapeutic group procedures by having group service projects, reflection sessions, and collaboration. The sense of unity and purpose helps students see their problems as part of being human, not as a failing on their own. This shared experience builds empathy and trust amongst people, both of which are important for civic engagement. Group reflection lets the students share their feelings and celebrate their accomplishments together at the same time, turning suffering into connection and learning. It is by encouraging of every students through peer support circles inside NSTP can make this healing dynamic a part of the organization, converting service activities into places where people can heal emotionally. The program not only develops awareness of civic issues by linking community work with caring for others, but it also promotes general health, making mental health an integral aspect of building a nation.

Findings

The results show that NSTP kids have serious mental health problems because of the stress of school, having to do a lot of things, comparing themselves to others, and adjusting to life after the epidemic. A lot of the people who took part said they felt anxious, emotionally drained, unsure of themselves, depressed, and afraid of failing. Academic obligations became a significant stressor, frequently leading to sleep difficulties, weariness, and the need to fulfill elevated expectations. Also, comparing themselves to their counterparts made them feel more insecure and anxious, which hurt their confidence and overall health even more. Even though they had to deal with these problems, students showed strength by using both emotion-focused and problem-focused coping mechanisms. They were able to deal with and control their emotional turmoil by crying, praying, listening to music, doing creative things, journaling, and reflecting on themselves. Problem-focused techniques, such as managing time, getting help with schoolwork, and taking care of things before they become problems, helped students deal with stressors better. Reflective practices, especially journaling and NSTP-guided reflections, were very important for helping people become more aware of themselves and evolve as people. Social support turned out to be a very important protective element. Family, especially parents, provide emotional support that made stress less and resilience stronger. Peer support in NSTP helped kids feel less alone by building empathy, understanding, and a sense of belonging. Institutional support services were also seen as important, but participants stressed that schools need to do more to assist mental health. Faith and spirituality also helped people get through hard times by giving them comfort, hope, and significance. NSTP activities, especially those that got students involved in their communities, helped them heal emotionally, connect with others, and find a sense of purpose. This shows how the program could help both civic development and student well-being.

Conclusion

The results show that NSTP students have a lot of mental problems because of the stress they encountered in their day-to-day living, comparing themselves to others, having too many duties, and adjusting to life after the epidemic. Sadness, anxiety, self-doubt, and tiredness were frequent feelings, and they were often made worse by high expectations and dread of failure.

Even though these were hard, pupils showed a lot of different ways to cope. Crying, praying, listening to music, writing in a notebook, and thinking about oneself are all examples of emotion-focused coping strategies that helped control emotional distress. There were also signs of problem-focused coping mechanisms, such managing time and asking for help. Social assistance became a key role in keeping people safe. Family, friends, and other trusted people gave emotional support, encouragement, and a sense of belonging, which helped lower stress levels a lot. When institutional support was clear and easy to go to, it made students even more resilient.

Faith and spirituality has great significance in contribution to the cultivation of optimism and emotional stability, paralleling the cultural context of Filipino pupils. Additionally, collective healing through group interactions in NSTP activities developed empathy, solidarity, and communal resilience. These results concluded that coping mechanisms and help-seeking behaviors are influenced by individual psychological processes, as well as by social interactions, cultural values, and institutional contexts. These results demonstrate that coping methods and help-seeking behaviors are influenced by individual psychological characteristics as well as social interactions, cultural values, and institutional contexts.

To conclude, NSTP serves not only as a civic engagement program but also as a potential psychosocial support platform. When supported by structured mental health initiatives, NSTP can significantly contribute to students' emotional well-being, resilience, and holistic development.

Recommendations

Based on the results of this study, a number of suggestions are made to improve the mental health support system for NSTP students. Facilitators and coordinators who run NSTP are encouraged to add structured psychosocial elements to the program, such as guided reflection sessions, peer support circles, stress management workshops, and mental health awareness discussions. This will make sure that civic engagement activities also promote emotional health. To make it easier for people to get help when they need it, NSTP coordinators and guidance counselors should work together more closely to set up frequent mental health check-ins, outreach counseling services, and peer mentorship programs that make asking for help seem normal. Colleges and universities should make mental health services available to everyone without stigma, encourage students to have balanced academic workloads, and teach staff to see indicators of emotional distress in students early on. Schools can also help students grow in all areas by offering wellness activities, seminars on strengthening resilience, and creative workshops. Families and local communities should encourage open communication and build up youth support programs that fit with NSTP aims. This will give the students emotional assistance outside of school. Policymakers should keep making it easier for colleges and universities to follow the Philippine Mental Health Act, also known as R.A. 11036, by giving enough money to mental health programs on campus and including psychosocial education in service-learning projects. Finally, for the coming researchers, they are encouraged to conduct quantitative, mixed-method, or longitudinal studies to attain the lasting impacts of NSTP participation on students' resilience, coping strategies, and overall mental health.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The author declares that Grammarly, an AI-assisted writing program, was used to check the work for errors and improve the wording. The only things that could be done were fixing spelling and grammar mistakes and rewording statements to make them clearer and more accurate. The author further declares that, apart from Grammarly, no other AI or AI-assisted technologies have been used to generate content in writing the manuscript. The ideas, design, procedures, findings, analyses, and discussion are originally written and derived from careful and systematic conduct of the research.

References

Acoba, E. F. (2024). Social support and mental health: The mediating role of perceived stress. *Frontiers in Psychology, 15*, Article 1330720. https://doi.org/10.3389/fpsyg.2024.1330720

Albandia, R. I. O., Biteño, C. A. J., Cadelina, Y. F. D., Evangelista, L. M. S., Guanzon, P. K. A., Mendoza, M. A., & Angoluan, M. A. S. L. (2024). Post-pandemic: Coping strategies and psychological well-being among college students within Metro Manila, Philippines. *International Journal of Research and Innovation in Social Science, 8*(7).

Alongi, L., & Brennan, J. (2015). Original research on internalised academic expectations. [Unpublished manuscript].

Asiones, F. A. V. (2023). *COVID-19 and the mental health crisis faced by students from a private university in the Philippines: A phenomenological study.*

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* W. H. Freeman.

Bollettino, V., Foo, C. Y. S., Stoddard, H., Daza, M., Sison, A. C., Teng-Calleja, M., & Vinck, P. (2023). COVID-19-related mental health challenges and opportunities perceived by mental health providers in the Philippines. *Asian Journal of Psychiatry, 84*, Article 103578.

Bronfenbrenner, U. (1979). *The ecology of human development.* Harvard University Press.

Cassaretto, M., Espinosa, A., & Chau, C. (2024). Effects of resilience, social support, and academic self-efficacy on mental health among Peruvian university students during the pandemic: The mediating role of digital inclusion. *Frontiers in Psychology, 15*, Article 1282281. https://doi.org/10.3389/fpsyg.2024.1282281

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310–357.

Custodio, Z. U., Rungduin, T. T., Fernández, E. V. M., Ortega, R. R., Urbiztondo, L. A., & Sabaté, R. D. (2025). Impact evaluation of the NSTP in promoting volunteerism toward nation-building. *PNU Research Portal.*

Durkheim, É. (1951). Le suicide (Suicide): *A study in sociology* (J. A. Spaulding & G. Simpson, Trans.). The Free Press. (Original work published 1897).

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*(2), 117–140.

Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology, 55*, 745–774.

Guiping, C., & Huichang, M. (2001). Original study on academic expectations and stress. [Unpublished manuscript].

House, J. S. (1981). *Work stress and social support.* Addison-Wesley.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* Springer.

Lewinsohn, P. M. (1974). A behavioral approach to depression. In R. J. Friedman & M. M. Katz (Eds.), *The psychology of depression: Contemporary theory and research* (pp. 157–178). Wiley.

Li, P., Yang, J., Zhou, Z., & Liu, T. (2022). The influence of college students' academic stressors on mental health during COVID-19: The mediating effect of social support, social well-being, and self-identity. *Frontiers in Public Health, 10.* https://doi.org/10.3389/fpubh.2022.917581

Magorokosho, N. K., Heraclides, A., Papaleontiou-Louca, E., & Prodromou, M. (2025). Resilience and mental health in university students post-COVID-19 pandemic: Insights from the Republic of Cyprus. *Frontiers in Public Health, 13*, Article 1638427. https://doi.org/10.3389/fpubh.2025.1638427

Mazzucchelli, T. G., Kane, R. T., & Rees, C. S. (2010). Behavioral activation treatments for depression. *Clinical Psychology Review, 30*(6), 547–561. https://doi.org/10.1016/j.cpr.2010.04.008

Mezirow, J. (1991). *Transformative dimensions of adult learning.* Jossey-Bass.

Pargament, K. I. (1997). *The psychology of religion and coping.* Guilford Press.

Park, C. L. (2010). Making sense of the meaning literature. *Psychological Bulletin, 136*(2), 257–301. https://doi.org/10.1037/a0018301

Poots, A., & Cassidy, T. (2020). Academic expectation, self-compassion, psychological capital, social support and student wellbeing. (2020). *International Journal of Educational Research, 99*, Article 101506. https://doi.org/10.1016/j.ijer.2019.101506

Rogers, C. R. (1951). *Client-centered therapy.* Houghton Mifflin.*Career Development International, 14*(3), 204–220. https://doi.org/10.1108/13620430910966406

Schön, D. A. (1983). *The reflective practitioner.* Basic Books.

Uy, H. F. B., Narsico, P. G., Estudillo, J. L., Delantar, J. R., & Narsico, L. O. (2024). Psychological well-being and social support as moderators of the stress coping–performance relationship among university students. *International Journal of Multidisciplinary: Applied Business and Education Research, 348*(7), 2873.

World Health Organization. (2023). *Promoting mental health among youth.* WHO Press.

Yalom, I. D., & Leszcz, M. (2005). *The theory and practice of group psychotherapy* (5th ed.).

Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology, 18*(5), 459–482.

Contact email: johnnel.cagod@imcc.edu.ph

The Role of Private Actors in Military AI Governance

Elza Ganeeva, Independent Public Affairs Advisor, Netherlands

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

The integration of artificial intelligence, AI, into military operations is accelerating, with applications spanning the entire spectrum of warfare, from strategic planning to execution. In this context, the private sector, particularly major AI developers, has assumed a greater role not only as a technology supplier but also as a stakeholder in shaping policies, standards, and broader discourses at both national and international levels. Grounded in security governance theory and literature on the role of private actors, this study examines military AI governance through the lens of Microsoft's cooperation with the Israeli government. It draws on critical discourse and document analysis to explore how legal, principle-based, and corporate frameworks govern the use of Microsoft's technologies in this context. The analysis reveals that while Microsoft has developed a robust internal AI governance architecture and plays an increasingly prominent role in global debates on responsible AI, its norm-setting influence appears limited in high-stakes security contexts. This case suggests that the role of private actors in global governance, often portrayed in modern academic discourse as increasingly growing, is more nuanced in sensitive security environments, where state actors continue to exert dominant influence. The case also points to the limitations of soft law, voluntary commitments, and corporate frameworks in effectively addressing the realities of military AI deployment and highlights the need for clearly defined responsibilities and oversight mechanisms applicable to both states and private actors.

Keywords: security governance, military AI governance, private actors

Introduction

Military adoption of AI is accelerating, with the technology increasingly integrated across the entire cycle of warfare, from operational planning to targeting and post-operation analysis. While AI may improve military efficiency and support compliance with international humanitarian law through enhanced precision and decision-making, its deployment also creates significant risks, including flawed targeting, unlawful attacks, and increasing risks of civilian casualties (International Committee of the Red Cross, 2021).

The current international debate has largely focused on whether existing legal frameworks, particularly international humanitarian law, IHL, adequately regulate military AI. However, far less attention has been devoted to the governance of AI systems developed by private actors for commercial purposes and later deployed in military contexts. This gap is increasingly significant as commercial technologies not originally designed for battlefield decision-making are integrated into armed conflict (Biesecker et al., 2025).

Building on literature suggesting that private actors are gaining authority and legitimacy in global governance (Abrahamsen & Williams, 2007; Bureš & Carrapico, 2017; Cutler, 1999; Finnemore & Sikkink, 1998; Hall & Biersteker, 2002; Khanal et al., 2024), this research examines the role of technology companies in shaping the governance of military AI. It focuses on the Microsoft-Israel partnership as a case study to explore how private-sector actors influence the emerging global governance landscape of military AI.

The case illustrates the complex dynamic between commercial technology development and state military deployment. Microsoft is a prominent private actor actively contributing to global AI governance. At the same time, Israel has emerged as a leading state actor in the military application of AI, particularly in the Gaza conflict following the Hamas attacks of 7 October 2023 (Grim & Ahmed, 2025). Reports indicate that Israel relies extensively on Microsoft's services in support of military operations (Abraham, 2025; Biesecker et al., 2025), raising questions about the role of private actors in both the operational and normative dimensions of military AI governance.

In this context, the research asks: What does the Microsoft-Israel cooperation reveal about current military AI governance mechanisms? Specifically, the study examines whether the increasing prominence of private actors in AI governance discourse translates into meaningful authority over the deployment of military AI, or whether states remain the dominant actors in determining how such technologies are used in practice.

Literature Review

Traditionally, as the governance concept was closely associated with the state, security was long considered an inherently state-bound responsibility tied to sovereignty and the "*state's monopoly on the legitimate use of physical force within its territory*" (Weber, 1947, p. 78). The state was seen as the principal actor responsible for maintaining and providing public order and security. However, since the end of the Cold War, the concept of security has significantly transformed, expanding beyond its conventional military focus to include political, economic, and societal dimensions (Hänggi & Tanner, 2005). In this sense, security is no longer limited to the battlefield but a broader field encompassing new threats. As a result, a new framework of security governance has emerged (Abrahamsen & Williams, 2009), reflecting both the diversification of threats and the re-configuration of authority manifested in the rise of private actors and new arrangements involved in providing security.

Previously, the expanding authority of private, non-state actors has been synonymous with state failure and eroding sovereignty when states outsource or lose control over security functions (Abrahamsen & Williams, 2007). However, the involvement of private actors does not necessarily mean the retreat or failure of the state but rather signals a transformation in how authority is produced and exercised across networks of public and private actors. While private security may be controversial and occasionally operates at the margins of legality, private actors also engage in a range of lawful activities, often in coordination with public security forces.

One example is a growing class of non-security private actors whose core business is outside traditional security but whose infrastructures, platforms, or services have become essential for security governance. These include tech firms, financial institutions, infrastructure owners and operators, and others. While security is not their main mission, these actors may still intentionally contribute to it, deliberately and purposefully engaging in actions that address security concerns rather than doing so incidentally as a by-product of their operations. In other words, their involvement goes beyond accidental effects and becomes a deliberate effort to deal with (in)security within a given environment (Abrahamsen & Williams, 2007).

This growing involvement of private actors in security governance can also be explained by the post-9/11 "*securitization"* trend in many Western states, where governments began actively enlisting them to help manage national security challenges. This development, in turn, promoted the approach of "*responsibilization*," in which private businesses and other non-state actors are expected to take more responsibility for their own safety and security (Garland, 2001). As a result, the lines between public and private security have become blurred (Wood & Dupont, 2006), with more entities without a background in security becoming involved in the delivery of security functions.

As the engagement of private actors deepens, they also begin to assert and perform functions traditionally reserved for public authority, such as setting agendas, establishing boundaries, and contributing to the provision of global public goods like order and security (Hall & Biersteker, 2002). In other words, private actors operate across both domestic and international spheres in ways that challenge established notions of state sovereignty and public authority (Cutler, 1999).

However, private entities remain unaccountable to citizens. They are neither elected by citizens nor subject to democratic oversight but rather accountable to shareholders and the market itself. In this context, tech companies represent a peculiar set of private actors within global security governance. Unlike traditional public authorities, the power of tech companies does not derive from democratic legitimacy, legal mandate, or intergovernmental delegation. Instead, it is grounded on market dominance, technical expertise, and infrastructural control. While not traditional security providers, their platforms and products are deeply embedded in international security, from cybersecurity to applications in conventional military operations. They exclusively control "*computational infrastructure,"* a globally distributed network comprising data centers, digital platforms, mobile devices, and communication networks that are proprietary, layered, and deeply interdependent (Sharon & Gellert, 2024).

As digitalization accelerates across all sectors, including defense, tech companies have become critical enablers of essential functions, creating structural dependencies when other actors largely rely on their infrastructure and technologies. They also enforce their own "*governance regimes"* through platform-specific policies and terms of use, effectively acting as regulators within their domains (Khanal et al., 2024). As a result, private companies can be seen not merely as partners to the public sector but as "*norm entrepreneurs"* – agents, constructing cognitive frames, calling attention to issues, or even creating them (Finnemore & Sikkink, 1998).

By setting industry standards, entering partnerships with international institutions, advocating for policy changes, co-authoring academic research, and shaping information environment, they are embedding themselves in security governance. Private actors are no longer just advising or supporting state efforts in providing security but also redrawing the boundaries of who governs security and how. The central role of their infrastructure, technologies, and proprietary knowledge, combined with the absence of meaningful counterbalancing alternatives, raises concerns for global governance, particularly in areas with limited public oversight, such as the military domain. As AI becomes increasingly integrated in military planning and operations, tech companies are no longer observers or simply "*objects of regulation"* (Carrapico & Farrand, 2016). They are increasingly architects of the emerging governance rules and norms. But what are these rules?

Microsoft's Approach to AI Governance and Implications for Military AI Governance

This research traces the growing impact of the private sector on AI governance in security, focusing on Microsoft as a revealing case study. While Microsoft's experience cannot be generalized across the tech sector, it offers valuable insights into the expanding role of major tech companies in shaping global governance frameworks, including in the most sensitive areas of technological development. Microsoft's engagement in corporate diplomacy has deep roots, particularly in cybersecurity governance, where the company's influence has already drawn academic attention (Fairbank, 2019; Gorwa & Peez, 2020; Hurel & Lobato, 2018).

Building on this foundation, this paper explores how Microsoft has extended its norm-setting reach into the sphere of AI. The dataset includes corporate policies, governance and compliance frameworks, public statements, and other materials. Given the dual-use nature of AI and Microsoft's focus on broader commercial AI, the delineation between its approach to commercial and military governance is often blurred. Accordingly, the analysis integrates both Microsoft's broader AI policy narratives and its defense-specific engagements. These materials are examined using a qualitative interpretive approach informed by Critical Discourse Analysis, drawing on van Dijk's socio-cognitive model (van Dijk, 1993). The analysis focuses on how Microsoft frames its governance role, constructs legitimacy, and advances its policy positions across different institutional contexts. Particular attention is given to argumentation, rhetorical framing, and appeals to broader societal values, as well as to how these narratives relate to the company's practices.

At the center of Microsoft's vision are its Responsible AI principles – fairness, reliability and safety, privacy and security, transparency, accountability, and inclusiveness (Microsoft, n.d.-a), which underpin a range of corporate resources and requirements such as the Responsible AI Standard, Transparency Reports, Enterprise AI Services Code of Conduct, or the Sensitive Use Case Framework (Microsoft, 2022, 2023a, 2024a). While they set expectations for development and use of AI, they remain high-level and it is not clear how these principles and requirements are operationalized in the company's internal decision-making, development, testing, evaluation, and auditing of AI systems designed for sensitive use cases, such as defense and security. Moreover, the company acknowledges that at the later stages, it has limited visibility into how customers deploy the company's technologies, especially on their own infrastructure (Microsoft, 2025). As a result, meaningful oversight during the later stages of use is largely confined to legal and contractual mechanisms, such as terms of use and broader compliance requirements.

In parallel, Microsoft advances its governance approach through policy documents such as the "*AI Blueprint for the Future"* (Microsoft, 2023b), proposing measures like safety standards and regulatory interoperability structures aligned with the company's technical architecture. In the document, Microsoft advocates for expanded public-private partnerships as a means of addressing economic and societal challenges associated with AI. This framing is indicative of a "*technosolutionist"* discourse – the idea that social problems should be addressed through technologies rather than policy reforms, and the progress stems from the private sector, not the state (Morozov, 2013). A similar approach is reflected in its "*Global Governance Book,"* which outlines the company's vision for international AI governance and favors flexible, principle-based, soft law approach – "*a technocratic, adaptive, and flexible framework built on cooperation among smaller groups of like-minded states"* (Microsoft, 2024b, p. 51), over formal international treaty-based models. In effect, Microsoft positions itself as a governance stakeholder, evaluating international governance models and suggesting their configuration and participants.

At the international level, Microsoft institutionalizes its influence via strategic partnerships such as with UNIDIR, launching the Roundtable for AI, Security and Ethics, RAISE, (UNIDIR, 2024) facilitating direct engagement with national policymakers and contributing to the UN discourse on international security (Microsoft, 2021). The company also engages in standard-setting processes (Microsoft, 2024b), academic collaborations (Microsoft, n.d.-b), and multistakeholder initiatives, reinforcing its role in shaping governance discussions and knowledge production.

At the national level, the engagement with the U.S. government and defense sector, positions Microsoft as one of the key stakeholders in shaping policy and norms, aligned with U.S. goals of tech leadership. The U.S. government is both one of Microsoft's most important clients and a strategic partner in defense (Lopez, 2022; Townes-Whitley, 2021). Recognition by influential military power as a competent and trusted actor further enhances Microsoft's legitimacy in the eyes of other governments, institutions, and private actors.

Leveraging this comprehensive governance architecture, the company effectively acts as a norm entrepreneur in the AI governance field, influencing policy agendas, framing the discourse, and building institutional and public trust in both its technologies and the broader societal and economic potential of AI. However, limited visibility is offered in the company's efforts for implementing its responsible AI commitments. It remains unclear how Microsoft's principles and requirements are operationalized in practice and what oversight exists over the end use of its technologies. As AI is increasingly deployed in international conflicts, the lack of transparency from both technology developers and their end-users raises significant concerns. Suggested informal, principle-based frameworks, rooted in soft law and voluntary commitments, often lack clarity, accountability, and enforcement mechanisms.

Israel's Approach to Military AI Governance

Building on the approach applied to Microsoft, this paper uses Critical Discourse Analysis, CDA, to examine how Israel positions itself in international debates on military AI. The analysis draws on Israel's voting behavior and official statements in the United Nations General Assembly on AI in the military domain and lethal autonomous weapons systems, LAWS (Israel, 2024), its engagement with the Council of Europe's Framework Convention on Artificial Intelligence, Human Rights, Democracy, and the Rule of Law (Council of Europe, 2024), and the development of its domestic legal and policy frameworks. It also incorporates operational practice, drawing on statements by Israeli military officials and independent media investigations, which often provide the only available evidence of real-time military AI applications.

The analysis focuses on how Israel articulates and justifies its use of AI, including through legal and strategic argumentation, rhetorical framing, and narrative positioning. In particular, it examines how AI is presented as enhancing accuracy and effectiveness of military operations, how debates are framed through selective legal distinctions, and how Israel positions itself as a responsible actor through engagement with international initiatives.

At the international level, Israel participates in key discussions on military AI governance, arguing that the existing international legal frameworks adequately address challenges posed by AI in military contexts (Israel, 2024). In December 2024, the country voted in favor of UN GA Resolution 79/239 on AI in the military domain (United Nations General Assembly, 2024a). While an important step toward consensus-building, the document outlines a general framework, encouraging states to address the opportunities and challenges of military AI, but does not impose substantive constraints or clarify legal obligations beyond broad, principle-based commitments.

At the same time, Israel abstained from voting on the more specific UNGA resolution 79/62 (United Nations General Assembly, 2024b), which is dedicated to the issue of LAWS. Israel's position on LAWS is especially illustrative of its broader approach. Like other technologically advanced military powers, Israel views these systems as serving both military and humanitarian necessities and upholding compliance with IHL (Israel, 2024, para. 2). In its rhetoric, Israel suggests a flexible approach and maintains that the legality of LAWS should be assessed contextually, depending on specific use cases. Moreover, in Israel's view, even the application of IHL should be based on the operational context and should "*not be equated with blanket declarations about the legality or illegality of a weapon per se*" (Israel, 2024, para. 8).

The country also proposes a distinction between the "*primary rules of IHL*," which it defines as hard, established legal obligations, and "*secondary or supporting concepts*" such as human control, responsibility, foreseeability, or predictability. While it acknowledges the relevance of the "*secondary*" concepts for interpreting and applying IHL, it outlines that they do not constitute legal obligations and should not be treated as binding components of the legal framework (Israel, 2024, para. 9).

In the broader AI governance debate, Israel supports largely declarative international efforts rather than military-specific initiatives suggesting practical constraints or legal commitments. Its participation can be viewed mainly as a reputational strategy aimed at preemptively addressing concerns about its use of AI. For example, in September 2024, Israel joined the Council of Europe's Framework Convention on Artificial Intelligence, Human Rights, Democracy, and the Rule of Law (Council of Europe, 2024). While the Convention seeks to ensure that AI systems align with human rights and democratic values, it explicitly excludes military applications and activities related to national security (Babická & Giacomin, 2024). As a result, military AI systems developed and deployed by states and private actors fall outside its scope.

At the national level, Israel has not adopted specific legislation regulating AI. The only relevant policy document, the National AI policy (Ministry of Innovation, Science and Technology et al., 2023), sets out non-binding guiding principles, which, as stated in the document, are not legally binding on regulators or organizations. In this context, Israel's operational practices appear to diverge from its declarative commitments, which remain largely non-binding and limited in scope.

The Israeli Defense Forces, IDF, have actively integrated AI into battlefield operations. The IDF describes the adoption of AI as a means of enhancing the "*accuracy and effectiveness*" of its strikes by better managing vast amounts of data and improving intelligence processes while reducing risks of civilian casualties (Bohbot, 2022). Israel has previously used conflicts in Gaza and Lebanon to test and refine AI-powered military solutions. During an 11-day campaign against Hamas in May 2021, the IDF characterized the operations as its "*First AI War.*" At that time, Israeli intelligence officials described AI as a "*force-multiplier*," enabling significantly higher volumes of airstrikes than in previous conflicts (Biesecker et al., 2025). This activity has reached a higher level in the military operations on Gaza, with the IDF, reportedly integrating AI across multiple dimensions of warfare, including surveillance, target identification, operational planning, and execution.

The IDF emphasizes that AI-enabled systems help identify targets, while final decisions are made by operational commanders, who assess the compliance with international law by weighing the military advantage against the potential collateral damage. According to Israeli officials, when AI is involved, several layers of human oversight are always in place. However, available reports point to a significant increase in the scale and speed of strike approvals. As one Israeli commander reportedly noted, while previously a single airstrike required a team of up to 20 people a day, AI-assisted targeting now enables the approval of hundreds of attacks per week (Biesecker et al., 2025), which raises questions about the compliance with IHL principles.

Beyond general statements that the use of such technology complies with international law Israel discloses little specific information about the operational details or governance structures of its military AI systems. However, available reporting suggests that the use of AI has expanded the scope of targeted individuals and infrastructure, with reported civilian harm and concerns about the extent of human involvement in life-and-death decision-making (Thornhill, 2025).

Governing Military AI: Insights From the Microsoft-Israel Collaboration

Amid the deepening cooperation between Israel and the U.S. tech corporations, the Microsoft-Israel partnership stands out particularly. These relationships have been developing for years and significantly intensified after the Hamas attack on 7 October 2023. Microsoft is one of the biggest cloud and AI service providers for the Israeli military. In 2021, the IDF signed a three-year contract with Microsoft valued at USD 133 million, reportedly making Israel one of

Microsoft's largest government customers following the U.S., and one of its top 500 clients globally (Biesecker et al., 2025).

These relationships are mainly managed through the Israeli Ministry of Defense, MoD, overseeing Microsoft's services integration across all major Israeli military infrastructures with hundreds of active subscriptions for specific divisions, units, bases, and projects (Grim & Ahmed, 2025). On Microsoft's side, reporting indicates that a team of dedicated employees is responsible for supporting the Israeli MoD, including personnel with prior experience in Israeli military intelligence. Support for IDF personnel includes both technical assistance and skills-development activities, such as meetings and professional workshops. Between October 2023 and June 2024 alone, the Israeli MoD reportedly received 19,000 hours of engineering support from Microsoft at a cost of USD 10 million (Abraham, 2025).

According to reports, Microsoft provides its cloud platform, Azure, and other services, including AI, to support the growing technological needs of the Israeli military. In 2024, the demand for such services increased to 200 times the level prior to the October 7 attack (Biesecker et al., 2025). The expanded use of services is registered across various units of the IDF, including air, ground, and naval forces, as well as intelligence (Frenkel & Odenheimer, 2025). In particular, the volume of data stored in Microsoft's local data centers reportedly doubled and the IDF's use of Microsoft servers increased by nearly two-thirds within the first two months following the October 7 attack (Abraham, 2025).

Reports describe Microsoft cloud services being used to compile, transcribe, translate, and analyze large-scale data, including phone calls, text messages, and social media, which are then cross-referenced with internal targeting systems to assist in locating individuals (Biesecker et al., 2025). One example is the *Rolling Stone* system, used by the Israeli army to manage the population registry and movement of Palestinians in the West Bank and Gaza, which is associated with Microsoft cloud infrastructure (Abraham, 2025).

In parallel, advanced AI models are allegedly provided through OpenAI, the developer of ChatGPT, in which Microsoft is the largest investor (Novet, 2023). Since 2021, Microsoft has offered ChatGPT services through its cloud platform (Shaw, 2021). Revealed Microsoft documents have shown that the Israeli military purchases OpenAI tools as part of a "bundled package" provided by Microsoft (Grim & Ahmed, 2025). In 2023, the IDF reportedly began using GPT-4, OpenAI's most advanced language model, through Azure. Since October 2023, its use by the Israeli military increased by 20 times compared to pre-war levels (Abraham, 2025).

The IDF has also made extensive use of translation tools. While the specific models used remain unclear, OpenAI has previously acknowledged that its AI-powered translation model, Whisper, can transcribe and translate speech into multiple languages, including Arabic, but may produce inaccurate outputs, including the insertion of content which is not present in the original speech (Burke & Schellmann, 2024). Available reporting further describes instances in which intelligence personnel were affected by inaccurate machine translations from Arabic to Hebrew while identifying targets. It also highlights concerns about operational pressure to rapidly identify threats, when officers are disproportionately relying on AI-generated outputs, resulting in the misidentification of targets.

In May 2025, Microsoft issued a public statement (Microsoft, 2025), confirming its provision of cloud and AI services to the Israeli MoD. In the statement, the company stated that it does not have visibility into how customers use its software on their own servers or devices. Microsoft also noted that the Israeli MoD is subject to the company's terms of service, including the AI Code of Conduct, which prohibits the use of its services to inflict harm. Following both internal evaluation and external independent review by a third party, the details of which were not disclosed, Microsoft stated that it had found no evidence of the MoD violating the AI Code of Conduct or terms of use. However, the company admitted that it may grant exceptions to these terms and confirmed that such an exception had been granted to the Israeli government in the weeks following the 7 October attack. At the same time, neither the MoD nor the company has disclosed any oversight mechanisms that govern their cooperation in such sensitive contexts, raising questions about whether meaningful governance mechanisms are in place.

Conclusion

The analysis reveals a divergence between formal governance frameworks and operational practice in the use of military AI. Israel's approach to military AI is characterized by its engagement with non-binding international initiatives and the absence of formal national regulation, while its expanding use of AI raises questions about compliance with IHL and related principles in practice. By contrast, Microsoft has developed an extensive AI governance architecture, but limited public information is available on how these principles are implemented in practice. This divergence highlights a gap between state and corporate governance commitments and the real-time application of AI technologies in conflict settings, where transparency regarding safeguards remains scarce, particularly in the absence of oversight mechanisms specific to military AI at both international and domestic levels.

This points to a broader tension in state-private actor partnership in national security, reflecting uncertainty regarding the extent to which private actors like Microsoft can meaningfully influence or constrain the end use of their technologies when engaging with powerful state clients. In this case, Microsoft's influence over the conditions of deployment appears limited. In fact, the dynamic may be reversed, with Israel setting the terms of use in practice and operating beyond the reach of corporate governance frameworks. This finding also adds nuance to the emerging academic consensus that private tech companies are increasingly gaining influence in shaping global governance. Instead, it suggests that in high-stakes security contexts, state actors continue to exert dominant authority, while private-sector influence remains contingent.

This case study also underscores the limitations of soft law and voluntary governance mechanisms in high-stakes domains such as military AI. While states may endorse principle-based commitments, these do not necessarily translate into operational constraints. Israel's engagement with non-binding initiatives has not been accompanied by the development of binding rules or observable limitations in practice. Participation in international debates and the endorsement of declarative documents on military AI governance may therefore function primarily as expressions of alignment rather than mechanisms of accountability.

Finally, ambiguity, lack of transparency, and insufficient public oversight in current state-private actor security relationships constitute a key challenge for emerging military AI governance. While it is difficult to clearly delineate roles and responsibilities in such partnerships, this uncertainty enables an environment where accountability is diffused and control mechanisms, where they exist, do not provide a meaningful constraint. As military AI continues to advance and its deployment in conflict settings accelerates, addressing these gaps in state-private sector security arrangements will be central to the development of effective governance frameworks aligned with operational realities.

Disclosure

The author worked for Microsoft until 2021. The author’s former affiliation with Microsoft did not influence the design, analysis, or conclusions of the research. The work is based solely on publicly accessible information.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The author used Grammarly, an AI-assisted writing tool for grammar and punctuation correction and minor language refinement. No AI tools were used to generate content.

References

Abraham, Y. (2025, January 23). *Leaked documents expose deep ties between Israeli army and Microsoft*. +972 Magazine. https://www.972mag.com/microsoft-azure-openai-israeli-army-cloud/

Abrahamsen, R., & Williams, M. C. (2007). Securing the city: Private security companies and non-state authority in global governance. *International Relations, 21*(2), 237–253. https://doi.org/10.1177/0047117807077006

Abrahamsen, R., & Williams, M. C. (2009). Security beyond the state: Global security assemblages in international politics. *International Political Sociology, 3*(1), 1–17. https://doi.org/10.1111/j.1749-5687.2008.00060.x

Babická, K., & Giacomin, C. (2024, November 5). *Understanding the scope of the Council of Europe framework convention on AI*. Opinio Juris. https://opiniojuris.org/2024/11/05/understanding-the-scope-of-the-council-of-europe-framework-convention-on-ai/

Biesecker, M., Mednick, S., & Burke, G. (2025, February 18). *As Israel uses US-made AI models in war, concerns arise about tech's role in who lives and who dies*. AP News. https://apnews.com/article/israel-palestinians-ai-technology-737bc17af7b03e98c29cec4e15d0f108

Bohbot, A. (2022, July 2). *Neshek shover shivyon: Ha-tekhnologya she-takhri'a et ha-ma'arakha ha-ba'a shel Tzahal* [A game-changing weapon: The technology that will decide the IDF's next campaign]. Walla. https://news.walla.co.il/item/3559347

Bureš, O., & Carrapico, H. (Eds.). (2017). *Security privatization: How non-security-related private businesses shape security governance*. Springer. https://doi.org/10.1007/978-3-319-63010-6

Burke, G., & Schellmann, H. (2024, October 26). *Researchers say an AI-powered transcription tool used in hospitals invents things no one ever said*. AP News. https://apnews.com/article/ai-artificial-intelligence-health-business-90020cdf5fa16c79ca2e5b6c4c9bbb14

Carrapico, H., & Farrand, B. (2016). Dialogue, partnership and empowerment for network and information security: The changing role of the private sector from objects of regulation to regulation shapers. *Crime, Law and Social Change, 67*, 245–263. https://doi.org/10.1007/s10611-016-9652-4

Council of Europe. (2024). *Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law* (CETS No. 225). https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

Cutler, A. C. (1999). The contours and significance of private authority in international affairs. In A. C. Cutler, V. Haufler, & T. Porter (Eds.), *Private authority and international affairs* (pp. 333–379). State University of New York Press.

Fairbank, N. A. (2019). The state of Microsoft? The role of corporations in international norm creation. *Journal of Cyber Policy, 4*(3), 376–394. https://doi.org/10.1080/23738871.2019.1696852

Finnemore, M., & Sikkink, K. (1998). International norm dynamics and political change. *International Organization, 52*(4), 887–917. https://doi.org/10.1162/002081898550789

Frenkel, S., & Odenheimer, N. (2025, April 25). *Israel uses AI to target Gaza amid rising civilian toll*. The New York Times. https://www.nytimes.com/2025/04/25/technology/israel-gaza-ai.html

Garland, D. (2001). *The culture of control: Crime and social order in contemporary society*. Oxford University Press.

Gorwa, R., & Peez, A. (2020). Big Tech hits the diplomatic circuit: Norm entrepreneurship, policy advocacy, and Microsoft's cybersecurity tech accord. In D. Broeders & B. van den Berg (Eds.), *Governing cyberspace: Behavior, power, and diplomacy* (pp. 263–283). Rowman & Littlefield.

Grim, R., & Ahmed, W. (2025, January 23). *The Israeli military is one of Microsoft's top AI customers, leaked documents reveal*. Drop Site News. https://www.dropsitenews.com/p/microsoft-azure-israel-top-customer-ai-cloud

Hall, R. B., & Biersteker, T. J. (2002). The emergence of private authority in the international system. In R. B. Hall & T. J. Biersteker (Eds.), *The emergence of private authority in global governance* (pp. 3–22). Cambridge University Press. https://doi.org/10.1017/CBO9780511491238.002

Hänggi, H., & Tanner, F. (2005). Promoting security sector governance in the EU's neighbourhood. In N. Lybekk & K. Smith (Eds.), *Challenges for the European security and defence policy* (Chaillot Paper No. 75, pp. 11–26). European Union Institute for Security Studies.

Hurel, L. M., & Lobato, L. C. (2018). Unpacking cyber norms: Private companies as norm entrepreneurs. *Journal of Cyber Policy, 3*(1), 61–76. https://doi.org/10.1080/23738871.2018.1467942

International Committee of the Red Cross. (2021). *ICRC position on autonomous weapon systems*. https://www.icrc.org/en/document/icrc-position-autonomous-weapon-systems

Israel. (2024). *Remarks on the Secretary-General's implementation report* (L.56: "Lethal autonomous weapons systems"). United Nations General Assembly. https://docs-library.unoda.org/General_Assembly_First_Committee_-Seventy-Ninth_session_%282024%29/78-241-Israel-EN.pdf

Khanal, S., Zhang, H., & Taeihagh, A. (2024). Why and how is the power of Big Tech increasing in the policy process? The case of generative AI. *Policy and Society, 44*(1), 52–69. https://doi.org/10.1093/polsoc/puae012

Lopez, C. T. (2022, December 12). *Department names vendors to provide joint warfighting cloud capability*. U.S. Department of Defense. https://www.defense.gov/News/News-Stories/Article/Article/3243483/department-names-vendors-to-provide-joint-warfighting-cloud-capability

Microsoft. (n.d.-a). *Our approach to AI*. https://www.microsoft.com/en-us/ai/principles-and-approach

Microsoft. (n.d.-b). *Artificial intelligence*. Microsoft Research. https://www.microsoft.com/en-us/research/research-area/artificial-intelligence/

Microsoft. (2021, December). *Submission to the OEWG chair's questions on developments in the field of information and telecommunications in the context of international security*. https://documents.unoda.org/wp-content/uploads/2021/12/Microsoft-submission-to-OEWG-Chair-questions-DECEMBER-2021.pdf

Microsoft. (2022, June). *Responsible AI standard, v2: General requirements*. https://cdn-dynmedia-1.microsoft.com/is/content/microsoftcorp/microsoft/final/en-us/microsoft-brand/documents/Microsoft-Responsible-AI-Standard-General-Requirements.pdf

Microsoft. (2023a). *Put responsible AI frameworks in action*. Microsoft Learn. https://learn.microsoft.com/en-us/training/modules/embrace-responsible-ai-principles-practices/7-put-responsible-ai-frameworks

Microsoft. (2023b). *Governing AI: A blueprint for the future*. https://cdn-dynmedia-1.microsoft.com/is/content/microsoftcorp/microsoft/msc/documents/presentations/CSR/Governing-AI-Blueprint-for-the-Future.pdf

Microsoft. (2024a). *AI code of conduct*. https://learn.microsoft.com/en-us/legal/ai-code-of-conduct

Microsoft. (2024b, May). *Global governance: Goals and lessons for AI*. https://cdn-dynmedia-1.microsoft.com/is/content/microsoftcorp/microsoft/msc/documents/presentations/CSR/Global-Governance-Book-DIGITAL.pdf

Microsoft. (2025, May 15). *Our statement on technology and the conflict in Israel and Gaza*. https://blogs.microsoft.com/on-the-issues/2025/05/15/statement-technology-israel-gaza/

Ministry of Innovation, Science and Technology, Office of Legal Counsel and Legislative Affairs, & Ministry of Justice. (2023). *Israel's policy on artificial intelligence regulation and ethics*. https://www.gov.il/BlobFolder/policy/ai_2023/en/Israels%20AI%20Policy%202023.pdf

Morozov, E. (2013). *To save everything, click here: The folly of technological solutionism*. PublicAffairs.

Novet, J. (2023, April 8). *Microsoft's complex bet on OpenAI brings potential and uncertainty*. CNBC. https://www.cnbc.com/2023/04/08/microsofts-complex-bet-on-openai-brings-potential-and-uncertainty.html

Sharon, T., & Gellert, R. (2024). Regulating Big Tech expansionism? Sphere transgressions and the limits of Europe's digital regulatory strategy. *Information, Communication & Society, 27*(15), 2651–2668. https://doi.org/10.1080/1369118X.2023.2246526

Shaw, F. X. (2021, November 2). *Microsoft cloud at Ignite 2021: Metaverse, AI and hyperconnectivity in a hybrid world*. Microsoft. https://blogs.microsoft.com/blog/2021/11/02/microsoft-cloud-at-ignite-2021-metaverse-ai-and-hyperconnectivity-in-a-hybrid-world/

Thornhill, J. (2025, April 29). *Future weapons – Battlefield AI*. Financial Times. https://www.ft.com/content/802864cb-a680-48ea-837b-32cb31ad09e4

Townes-Whitley, T. (2021, July 6). *Microsoft's commitment to the DoD remains steadfast*. Microsoft Official Blog. https://blogs.microsoft.com/blog/2021/07/06/microsofts-commitment-to-the-dod-remains-steadfast

United Nations General Assembly. (2024a, December 24). *Resolution 79/239*. https://undocs.org/A/RES/79/239

United Nations General Assembly. (2024b, December 2). *Resolution 79/62*. https://undocs.org/A/RES/79/62

The United Nations Institute for Disarmament Research (UNIDIR). (2024). *RAISE: The roundtable for AI, security and ethics*. https://unidir.org/raise/

van Dijk, T. A. (1993). Principles of critical discourse analysis. *Discourse & Society, 4*(2), 249–283. https://doi.org/10.1177/0957926593004002006

Weber, M. (1947). *The theory of social and economic organization* (A. M. Henderson & T. Parsons, Trans.). Free Press.

Wood, J., & Dupont, B. (2006). Democracy, society and the governance of security. *Security Journal, 19*(4), 249–267.

Contact email: elza@raisenl.com

Voices the World Failed to Hear: Media Frames, Transnational Memory, and the Politics of Humanitarian Narratives in Global Crisis Coverage

Teresa Martín, Universidad Complutense de Madrid—Harvard University, Spain

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

This paper examines the role of journalistic frames in constructing transnational memory and moral authority in the global coverage of Rohingya displacement between 2016 and 2023. Drawing on Critical Discourse Analysis of nine English-language outlets across three world regions, the study identifies four dominant narrative frames—moral urgency, victimization, civilizational threat, and geopolitical interest—and argues that each produces a distinct political reality with measurable consequences for humanitarian response. The analysis reveals profound asymmetries in global narrative power: Western frames circulate transnationally while Rohingya voices and Southeast Asian perspectives remain structurally marginalised. The paper introduces the concept of narrative infrastructure to theorise the durable discursive structures that render certain crises narratable and certain solutions conceivable. This concept bridges media theory and International Relations, reframing journalism not as an observer of global politics but as an actor constitutive of it. The findings carry implications for media practitioners, humanitarian organisations, and scholars of forced displacement, genocide studies, and the political economy of global communication.

Keywords: framing analysis, Rohingya, transnational memory, humanitarian communication, narrative infrastructure, critical discourse analysis, media and human rights

iafor
The International Academic Forum
www.iafor.org

Introduction

When the military offensive against the Rohingya population of Rakhine State began in August 2017, international media attention surged with an intensity that briefly rendered the crisis legible to a global public. Within weeks, however, that attention had already begun to recede—following the predictable rhythm of what Moeller (1999) termed "compassion fatigue," the structural tendency of news cycles to exhaust moral responses precisely as crises deepen. By 2020, as hundreds of thousands of Rohingya remained confined to the world's largest and most densely populated refugee camps in Cox's Bazar, their story had largely vanished from the front pages of the same outlets that had once called them "the most persecuted people in the world" (United Nations, 2013).

This paper begins from the premise that the problem is not merely one of journalistic negligence or limited attention spans. It is, rather, structural and systemic. The media do not simply report crises—they construct them discursively, determining which populations become visible as victims, which actors acquire moral authority, and which political responses appear feasible. These determinations are not neutral. They reflect, and in turn reproduce, the geopolitical hierarchies that shape international humanitarian and legal order. To analyse the coverage of Rohingya displacement is therefore to investigate a set of representational choices that carry political weight far beyond the text of any individual article.

The central research question guiding this study is: how do journalistic frames construct transnational memory and moral authority in the global coverage of Rohingya displacement? To address this question, the paper applies Critical Discourse Analysis (CDA) to a corpus of reporting published across nine English-language outlets spanning Asia, North America, and Europe between 2016 and 2023. Three critical junctures structure the temporal scope of the analysis: the August 2017 military offensive; the 2019 proceedings before the International Court of Justice (ICJ); and the conditions in Cox's Bazar during the COVID-19 pandemic of 2020–2021.

The paper makes two principal contributions. First, it offers a systematic comparative cartography of the framing strategies employed across regional media systems, demonstrating that the same events are constituted as profoundly different crises depending on the site from which they are narrated. Second, it introduces the concept of narrative infrastructure—the durable, cross-cutting discursive structures that determine which stories can be told, which voices are granted credibility, and which futures are rendered imaginable. This concept, the paper argues, provides the theoretical tools necessary to understand why transformation of global crisis coverage requires not only better journalism but a restructuring of the conditions under which journalism is produced.

Theoretical Framework: Framing, Memory, and Symbolic Power

The analysis in this paper draws on three interconnected bodies of scholarship: framing theory as developed in communication studies; theories of collective and transnational memory; and Bourdieu's (1991) sociology of symbolic power.

Within communication studies, framing theory holds that news coverage does not neutrally transmit information but actively organises it by selecting, emphasising, and interpreting events through particular conceptual lenses (Entman, 1993). Frames are not simply rhetorical ornaments; they are cognitive scaffolds that shape how audiences understand causality, assign responsibility, and evaluate possible responses. Gitlin's (1980) foundational work on media and social movements demonstrated that framing choices could effectively domesticate political challenges, rendering them legible in terms that foreclosed rather than opened transformative possibilities. Subsequent scholarship has applied and extended these insights to the coverage of humanitarian crises, refugee flows, and international conflict (Chouliaraki, 2006; Cottle, 2009; Orgad, 2012), consistently finding that the representational choices made by journalists have measurable effects on public attitudes and, by extension, on the political conditions within which humanitarian response becomes possible or impossible.

The second theoretical resource is the literature on collective and transnational memory. Assmann and Conrad (2010) have argued that memory is never simply individual or national but is produced through circuits of communication that traverse borders and scales. In an era of globalised media, the repetitive coverage of particular events or populations contributes to the formation of what might be called a transnational moral archive—a shared repertoire of images, narratives, and moral judgments that informs how future crises are recognised and how the international community imagines its obligations. The Rohingya case is exemplary in this respect: the frameworks developed during earlier crises of forced displacement—above all, the post-Holocaust idiom of genocide—are invoked, contested, and strategically deployed in coverage, with significant consequences for the political and legal standing of the affected population.

The third theoretical resource is Bourdieu's (1991) account of symbolic power, understood as the power to constitute social reality through acts of naming and categorisation. Applied to journalism, this framework suggests that the media do not simply describe a pre-existing humanitarian reality but actively participate in producing it—conferring legitimacy on certain actors, rendering others invisible, and establishing the terms within which political action is understood as appropriate or conceivable. To speak of journalistic frames as exercises of symbolic power is not to impute conspiratorial intent to individual journalists; it is to insist that the cumulative effect of professional routines, editorial hierarchies, and source networks produces a structured distribution of narrative authority that systematically advantages certain perspectives over others.

These three frameworks converge in the concept this paper introduces: narrative infrastructure. By analogy with material infrastructure, narrative infrastructure refers to the underlying structures—institutional, discursive, and technological—that make certain stories expressible and others unsayable. Infrastructure, as scholars in science and technology studies have noted (Star & Ruhleder, 1996), typically becomes visible only when it breaks down; it otherwise functions as a naturalized background condition. Narrative infrastructure operates similarly: the conditions under which the Rohingya story has been told appear, to the journalists and audiences who consume them, as simply the shape of reality rather than as the product of contingent historical choices that could, in principle, be made differently.

Methodology

This study employs Critical Discourse Analysis (CDA) as its primary methodological framework, drawing particularly on the analytical procedures developed by Fairclough (1995) and Van Dijk (1998). CDA is suited to the present inquiry because it attends simultaneously to the linguistic texture of texts—lexical choices, syntactic structures, rhetorical strategies—and to the social conditions of their production and reception. Crucially, it understands discourse not as a transparent medium of communication but as a site of ideological struggle in which particular representations of social reality are naturalised, contested, or suppressed.

The corpus was constructed through purposive sampling at three peak moments of media attention: the August 2017 offensive, the 2019 ICJ proceedings, and the 2020–2021 pandemic period in Cox's Bazar camps. This temporal structure was chosen deliberately to capture not only the initial surge of coverage but also the subsequent cycles of diminishing attention—cycles that are themselves a central object of analysis. Articles were selected from nine outlets across three regional clusters: in Asia, The Straits Times (Singapore), The Daily Star (Bangladesh), and The Irrawaddy (Myanmar-focused); in North America, The New York Times, The Washington Post, and Al Jazeera English; in Europe, The Guardian, BBC News, and Deutsche Welle (DW).

The decision to focus exclusively on English-language press requires justification. English-language journalism is not, of course, the only journalism that matters—the local-language media of Bangladesh, Myanmar, and the region produce their own accounts of the crisis with their own logics and consequences. However, English-language reporting occupies a structurally privileged position within the global humanitarian field: it is the press that reaches the international organisations, donor governments, and advocacy networks whose decisions have direct consequences for the Rohingya. To analyse how the crisis has been constituted in this register is therefore to analyse the discourse that most directly shapes the political conditions of humanitarian response.

Analytical attention was directed at four principal dimensions of each text: the lexical choices through which events and actors were named and categorised; the source hierarchies through which some voices were granted authority and others were marginalised or silenced; the rhetorical strategies through which particular framings were naturalised and alternatives were foreclosed; and the implicit ideological assumptions embedded in the texts' presuppositions and absences. Across these dimensions, the analysis traced the emergence and consolidation of what proved to be four dominant frames, each of which will be discussed in the following section.

Findings: Four Frames, Four Political Realities

The analysis reveals four dominant narrative frames structuring global English-language coverage of Rohingya displacement. While individual outlets draw on more than one frame, and while the relative prominence of frames shifts across the three analytical periods, these four configurations account for the overwhelming majority of the coverage examined.

Moral Urgency

The moral urgency frame was dominant in Western media following August 2017 and constituted the primary mode through which the crisis was introduced to a global public. Its characteristic features include extensive use of testimonial evidence, graphic or affectively charged visual imagery, quantitative data foregrounding the scale of suffering, and explicit invocations of international legal and moral norms—above all, the genocide framework codified in the 1948 UN Convention. In formal terms, this frame employs the resources of what Chouliaraki (2006) has called “emergency journalism”: a mode of reporting that constructs an urgent gap between the world as it is and the world as it ought to be, interpellating the reader as a moral subject capable of action.

The structural limitation of the moral urgency frame, however, is precisely its urgency. Its capacity to mobilise attention is inseparable from its temporal volatility: as the initial shock of the offensive gave way to the slower, less photogenic suffering of displacement, the frame's affective economy depended on ever-diminishing returns of novelty. By 2020, the same camps that had generated global headlines in 2017 were covered, when covered at all, in terms that had entirely evacuated the moral urgency that had once characterised their appearance in the news. The frame is structurally self-undermining: it succeeds in generating attention precisely by constructing the crisis as exceptional, and exceptionality is, by definition, unsustainable.

Victimization

The victimization frame was present across all regional media systems and proved particularly dominant in coverage oriented toward fundraising and humanitarian mobilisation. Its defining feature is the consistent representation of Rohingya individuals and communities as passive recipients of violence and aid—as bodies that suffer rather than as subjects that act, organise, or make political demands. The Rohingya appear in this frame as what Agamben (1998) would call "bare life": human beings reduced to biological existence, stripped of the political attributes that would render them legible as agents within international discourse.

The political cost of this frame is considerable. The Rohingya have, in fact, a rich history of political organisation, legal advocacy, and collective resistance. They have brought cases before international courts, produced sophisticated analyses of their situation, and articulated detailed demands for citizenship, repatriation, and accountability. None of this appears with any regularity in the coverage examined. When Rohingya individuals do appear as speakers rather than subjects, they are almost invariably quoted in the testimonial mode—narrating their suffering rather than making political arguments. The victimization frame thus produces a paradox that will be examined further below: the more visible the Rohingya become within global humanitarian discourse, the more thoroughly their political agency is erased.

Civilizational Threat

The civilizational threat frame, characteristic above all of Myanmar's state media but also present in segments of the Southeast Asian press, represents the Rohingya not as victims but as dangers. Within this frame, the crisis is constructed as a challenge to national security, territorial integrity, and cultural or religious homogeneity. The lexical register shifts markedly: where moral urgency and victimization frames employ the vocabulary of humanitarianism and international law, the civilizational threat frame draws on the vocabulary of security, invasion, and civilisational conflict. The term "Rohingya" itself—implying a distinct ethnic and historical identity rooted in the territory of Myanmar—was explicitly contested and frequently avoided in favour of the designation "Bengali," which framed the population as foreign infiltrators rather than indigenous inhabitants.

The analysis of this frame confirms what scholars of ethnic conflict and mass violence have long argued: that the discursive construction of a population as an existential threat to the social body is a precondition, not merely a consequence, of genocidal violence (Malkki, 1995; Straus, 2006). The civilizational threat frame is not, in this sense, a neutral description of how some media choose to cover the crisis; it is a constitutive element of the political conditions that enabled the violence to occur and that continue to obstruct durable solutions.

Geopolitical Interest

The geopolitical interest frame, prominent in foreign policy-oriented publications and in Southeast Asian media attentive to ASEAN dynamics, subordinates the question of Rohingya rights to the logics of interstate competition, regional order, and great-power rivalry. Within this frame, the crisis is significant primarily as a node in broader geopolitical configurations: China's strategic interests in Myanmar, the ASEAN principle of non-interference, the competition between Beijing and Western capitals for influence in the region. The Rohingya themselves are largely absent from the analytical frame, appearing only as a variable in equations whose real subjects are states and their interests.

This frame is analytically coherent on its own terms—the geopolitical dimensions of the crisis are real and consequential—but its effect is to displace the human rights question entirely. The ICJ proceedings, which in 2019 offered an opportunity for international legal accountability, were covered in this frame primarily as a site of diplomatic maneuvering rather than as a potential mechanism of justice. The Rohingya, once again, disappeared as relevant subjects.

Regional Asymmetries and the Structure of Global Narrative Power

The comparative analysis reveals that the four frames do not distribute evenly across regions but are clustered in ways that reflect and reproduce the hierarchies of the global media system. Western outlets—particularly those in North America and Europe—predominantly employed the moral urgency and victimization frames, with Al Jazeera English partially complicating this pattern through its greater attentiveness to political context and Rohingya voice. South Asian outlets, particularly The Daily Star, were primarily structured by what the analysis identifies as a burden and security frame—distinct from but related to the victimization frame in its foregrounding of the consequences of displacement for Bangladesh and India rather than the rights of the displaced. Southeast Asian outlets were largely structured by the geopolitical interest and ASEAN non-interference frames, while Myanmar's state media operated almost exclusively through the civilizational threat frame.

These regional concentrations have a consequence that extends beyond descriptive mapping: they determine which frames circulate globally and which remain localised. The international organisations, donor governments, and advocacy networks that shape humanitarian response are primarily located in Western contexts and primarily consume Western media. The moral urgency and victimization frames thus acquire a structural dominance in the global humanitarian field that is entirely disproportionate to the range of perspectives from which the crisis could be, and is, narrated. Rohingya political voices, the nuanced analyses produced by The Irrawaddy, the South Asian perspectives that complicate simple narratives of victimhood—these circulate only within their regional media systems, failing to penetrate the circuits of global narrative production.

This asymmetry is not the result of individual editorial decisions but of structural conditions: the concentration of global wire services in Western cities; the economic and institutional resources that allow outlets like The New York Times and The Guardian to maintain correspondents in the region; the linguistic dynamics of English as the dominant language of international institutions; and the deep-rooted habits of source selection that privilege established interlocutors—UN spokespersons, NGO communications officers, Western government officials—over the political representatives of affected communities. To transform this asymmetry would require not better intentions on the part of individual journalists but structural changes to the narrative infrastructure within which journalism is produced.

The Paradox of the Visible Victim

The most theoretically significant finding of this analysis concerns what might be called the paradox of the visible victim. The victimization frame, as noted above, is not without effect: it has generated genuine solidarity, substantial humanitarian funding, and the political conditions for legal proceedings before the ICJ. It would be reductive and inaccurate to dismiss it as merely ideologically distorting. Yet its effects are systematically double-edged. The price of visibility within the humanitarian field is the erasure of political subjectivity. To be recognisable as a victim deserving compassion, the Rohingya must appear within a representational framework that forecloses precisely the political claims—to citizenship, to sovereignty, to accountability—that a durable resolution of their situation would require.

This paradox is not unique to the Rohingya case. Chouliaraki (2013) has theorised it as a constitutive feature of what she calls “post-humanitarianism”: a mode of moral engagement that emphasises individual emotional response over collective political action, and that consequently depoliticises the structural conditions it claims to address. The humanitarian frame, in this analysis, functions not as a challenge to the international order that produced the Rohingya crisis but as a mechanism for its management—a way of responding to the symptoms of a political pathology without addressing its causes.

The implications for advocacy and communication strategy are significant. Organisations seeking to generate and sustain public engagement with the Rohingya crisis face a structural dilemma: the communicative strategies most effective at generating immediate attention—testimonial narratives, affective imagery, quantitative evocations of scale—are precisely those that most thoroughly depoliticise the crisis and most thoroughly marginalise Rohingya political voice. A communication strategy adequate to the demands of justice would require developing new repertoires of representation that can render Rohingya political agency legible within global media circuits—a transformation that is, as the preceding analysis suggests, as much a matter of structural change as of individual choice.

Narrative Infrastructure as Theoretical Contribution

The concept of narrative infrastructure, as developed in this paper, offers a contribution to the interdisciplinary field connecting media studies and International Relations. The mainstream IR literature has tended to treat media as a contextual factor—an element of the environment within which states and other actors pursue their interests—rather than as a constitutive element of the international political order itself. Constructivist IR theory has opened space for attending to the role of ideas, norms, and discourse in shaping international outcomes (Wendt, 1999), but it has rarely engaged systematically with the institutional structures of global media production.

The concept of narrative infrastructure bridges this gap by insisting that the media are not merely conduits for ideas that originate elsewhere but active participants in the production of the normative frameworks within which international politics operates. Frames do not simply influence states—they constitute the terms within which state action is understood as legitimate, appropriate, or necessary. The framing of the Rohingya crisis as one of moral urgency, rather than of genocide, has direct implications for the legal and political obligations that attach to international actors; the framing of the crisis through the geopolitical interest lens has direct implications for which multilateral responses appear feasible. These are not merely interpretive differences; they are productive of different political realities.

Narrative infrastructure, moreover, captures something that more static concepts of framing tend to miss: the temporal and institutional durability of discursive structures. Individual frames are applied and discarded; narrative infrastructure persists. It structures the conditions within which individual framing decisions are made, setting the parameters of what is sayable, credible, and consequential. To study narrative infrastructure is therefore to study not only what is said but the conditions of possibility of saying—the institutional sediments, professional norms, and geopolitical hierarchies that make certain representations natural and others unthinkable.

Conclusions

This paper has argued that the global English-language coverage of Rohingya displacement is structured by four dominant narrative frames—moral urgency, victimization, civilizational threat, and geopolitical interest—whose distribution across regional media systems reflects and reproduces the hierarchies of the global political order. The analysis has demonstrated that these frames are not merely interpretive options but politically productive: they determine who acquires moral authority, which solutions appear conceivable, and which futures remain unthinkable. The victimization frame, despite its genuine humanitarian effects, carries a structural political cost in the erasure of Rohingya agency and the depoliticisation of a crisis whose resolution requires precisely the political recognition it withholds.

The concept of narrative infrastructure, introduced in this paper, offers a theoretical instrument for understanding why these patterns are so durable and so resistant to the good intentions of individual journalists, advocates, and scholars. Transforming the global narrative of the Rohingya crisis—and, by extension, of comparable crises in Syria, Sudan, Gaza, and elsewhere—requires attending not only to the content of individual articles but to the institutional, economic, and geopolitical conditions that determine which voices reach global circuits of narrative production.

Three practical implications follow. First, humanitarian organisations and advocacy networks need to invest in media produced by and for affected communities, supporting the development of narrative capacities that can compete, at least partially, with the infrastructural advantages of Western global media. Second, international journalism institutions need to develop training and editorial frameworks that explicitly address the political consequences of framing choices—not to substitute advocacy for journalism, but to cultivate the reflexivity that genuine accountability requires. Third, scholars working at the intersection of media studies, International Relations, and humanitarian law need to extend comparative analysis of narrative infrastructure across multiple cases, identifying the structural conditions under which alternative frames have succeeded in gaining traction within global humanitarian discourse.

The Rohingya remain, at the time of writing, among the most displaced and legally unprotected populations in the world. Their situation has not been produced by journalistic failure alone, and it cannot be resolved by journalistic transformation alone. But the narratives that circulate about them—who they are, what they have suffered, what they are owed—are not peripheral to the politics of their situation. They are constitutive of it. To take this seriously is not to inflate the significance of media analysis beyond reasonable bounds; it is to insist that the question of who gets to tell whose story, and under what structural conditions, is a question with real political consequences for millions of people.

References

Agamben, G. (1998). *Homo sacer: Sovereign power and bare life*. Stanford University Press.

Assmann, A., & Conrad, S. (Eds.). (2010). *Memory in a global age: Discourses, practices and trajectories*. Palgrave Macmillan.

Bourdieu, P. (1991). *Language and symbolic power*. Harvard University Press.

Chouliaraki, L. (2006). *The spectatorship of suffering*. Sage.

Chouliaraki, L. (2013). *The ironic spectator: Solidarity in the age of post-humanitarianism*. Polity Press.

Cottle, S. (2009). *Global crisis reporting: Journalism in the global age*. Open University Press.

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication, 43*(4), 51–58.

Fairclough, N. (1995). *Media discourse*. Edward Arnold.

Gitlin, T. (1980). *The whole world is watching: Mass media in the making and unmaking of the New Left*. University of California Press.

Malkki, L. H. (1995). *Purity and exile: Violence, memory, and national cosmology among Hutu refugees in Tanzania*. University of Chicago Press.

Médecins Sans Frontières. (2017). *'No one was left': Death and violence against the Rohingya in Rakhine State, Myanmar*. MSF.

Moeller, S. D. (1999). *Compassion fatigue: How the media sell disease, famine, war and death*. Routledge.

Orgad, S. (2012). *Media representation and the global imagination*. Polity Press.

Star, S. L., & Ruhleder, K. (1996). Steps toward an ecology of infrastructure: Design and access for large information spaces. *Information Systems Research, 7*(1), 111–134.

Straus, S. (2006). *The order of genocide: Race, power, and war in Rwanda*. Cornell University Press.

United Nations. (2013). *Report of the Special Adviser to the Secretary-General on the Prevention of Genocide*. United Nations.

Van Dijk, T. A. (1998). *Ideology: A multidisciplinary approach*. Sage.

Wendt, A. (1999). *Social theory of international politics*. Cambridge University Press.

Contact email: mmartinmartin@fas.harvard.edu

Credit Accumulation Transfer and Recognition of Prior Learning: Bridging the Gap Between Policy and Practice

Ambetsa Emisiko Andibo, Kabete National Polytechnic, Kenya

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

Recognition of Prior Learning (RPL) is widely promoted in international education agendas as a key strategy for advancing access, equity, and learner mobility within lifelong learning systems. UNESCO's lifelong learning framework, Sustainable Development Goal 4 (SDG 4), and the African Union's education strategies all emphasize flexible learning pathways, skills recognition, and inclusive qualification frameworks. Despite these policy commitments, RPL practice in many contexts continues to focus primarily on non-formal and informal learning, with limited integration of formal learning through Credit Accumulation and Transfer Systems (CATS). This study investigates the extent to which CATS is leveraged as a pathway for RPL certification in Kenya's Technical and Vocational Education and Training (TVET) sector, offering lessons relevant to national and regional systems pursuing SDG 4 targets and AU lifelong learning aspirations. Anchored in Constructivism and Lifelong Learning theories, the study adopts a descriptive research design involving a survey of 1,000 RPL practitioners across 28 national polytechnics and an interview with the Director of the RPL Delivery Unit. Quantitative data were analyzed using SPSS, while qualitative findings were thematically analyzed. Findings reveal a persistent gap between policy and practice, with CATS not systematically applied during RPL assessment and certification processes. This limits learner progression, mobility, and the optimal recognition of prior formal learning. The study argues that stronger alignment between policy frameworks and institutional practice is essential for realizing UNESCO, SDG 4, and AU objectives related to inclusive, flexible, and lifelong learning systems. Policy and practice recommendations are proposed to strengthen the effective integration of CATS within RPL frameworks across diverse educational contexts.

Keywords: RPL, CATS, lifelong learning, labour mobility, TVET

Introduction and Statement of the Problem

Despite the establishment of the Kenya Credit Accumulation and Transfer System (KCATs) under the Kenya National Qualifications Authority framework and the provisions of the Kenya National Qualifications Framework Act No. 22 of 2014, Recognition of Prior Learning (RPL) practice in Kenya continues to focus predominantly on the certification of non-formal and informal learning, with limited consideration of formal learning achievements already acquired by learners (KNQF Act, 2014). This creates duplication, wastage of prior competencies, and weak integration of accumulated credits within qualification pathways (Kenya National Bureau of Statistics, 2025).

Although KCATs was designed to facilitate progression, entry, re-entry, transfer, and exit across qualification levels, courses, and institutions, preliminary studies indicate that its application in RPL assessment and certification remains inadequate. Consequently, learners with existing competencies may not fully benefit from credit transfer opportunities, thereby limiting flexibility, lifelong learning, mobility, and efficient progression within the education and training system.

Further, the absence of effective integration between KCATs and RPL practices undermines the realization of constructivist and lifelong learning principles that advocate recognition, validation, and continuous development of previously acquired knowledge and skills (Oduor & Kilonzo, 2024). While policies supporting RPL and KCATs exist, there is insufficient empirical evidence on the extent to which KCATs is being leveraged as a pathway for RPL certification in Kenyan national polytechnics and the challenges hindering its implementation.

Therefore, this study sought to examine the extent to which KCATs contributes to RPL certification in Kenya, identify gaps limiting its effective utilization, and propose strategies for strengthening KCATs as a pathway for Recognition of Prior Learning assessment and certification.

Literature Review

In view of recent austerity measures in global budgets and skills shortages in high income countries, TVETs (technical vocational education and training institutions) should be viewed as labour mobility hubs. This improves employment outcomes for trainees while filing critical labour gaps in destination countries (Dempster & Ricou, 2026).

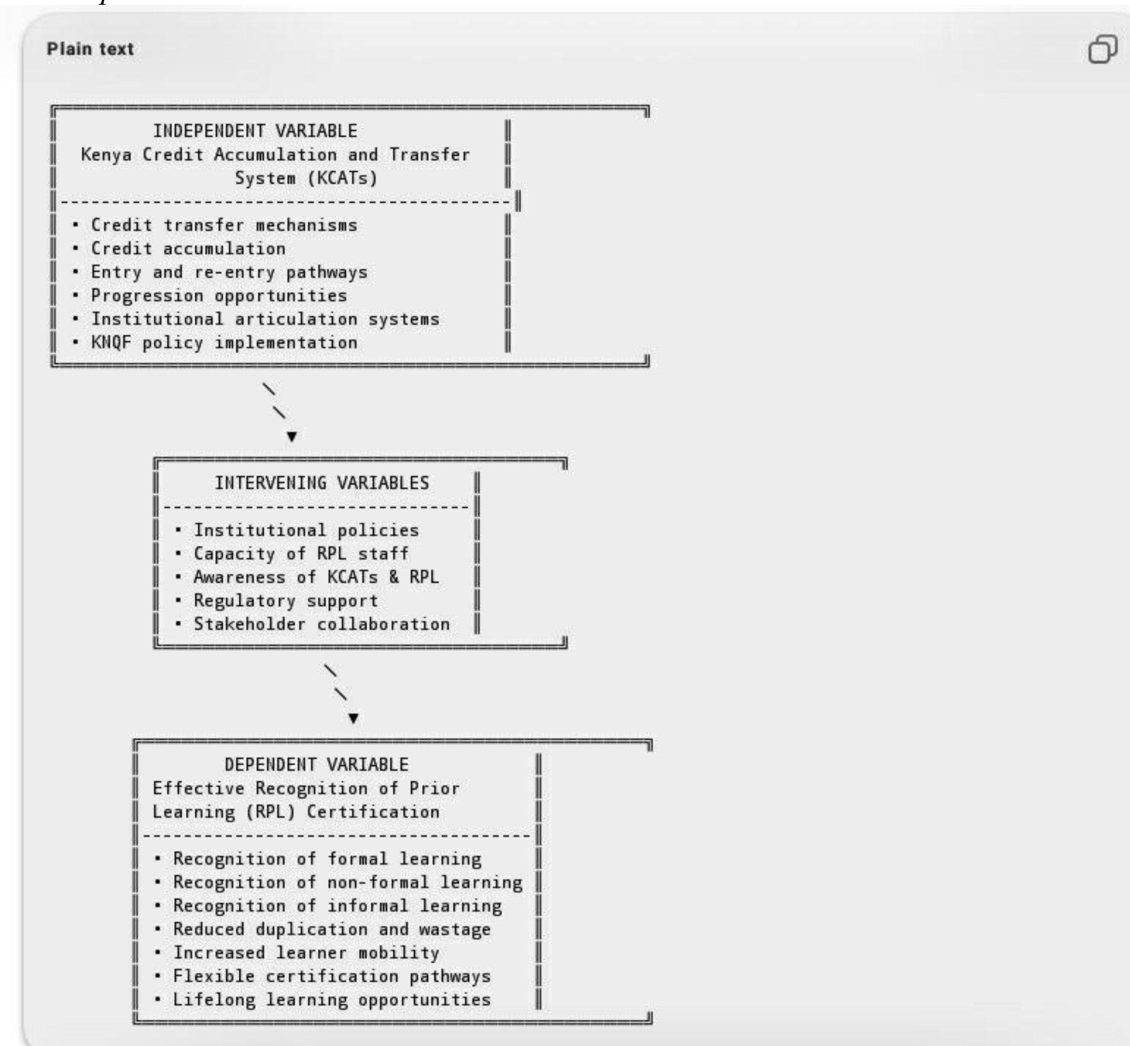
Aligning training content and quality to employer needs and recognizing qualifications through mutual recognition processes as well as international certification should result in increased TVET placement rates, improved institutional quality and expanded opportunities for disadvantaged groups including refugees.

UNESCO and CESA (Continental Education Strategy for Africa) encourage countries to establish qualification frameworks that improve credibility, visibility and competitiveness of qualifications so that skills acquired in one institution can be recognized globally and workers can move from one sector to another without repeating training. Credit Accumulation Transfer allows accumulation of learning over time, transfer of credits between programs and movement between institutions and qualification levels.

The resulting multiple pathways to acquisition of skills and competencies mean that learning is not by any means linear and happens even outside of classrooms. Skills acquired through work experience can be recognized and workers can re-enter training at various stages of life (ILO, 2021). Vertical, horizontal and diagonal mobility enhances workforce productivity ands skills become a professional passport with competencies that can be transferred to various settings. RPL (Recognition of Prior Learning), KCATS and qualification frameworks are key instruments in linking TVET to global labour mobility.

Conceptual Framework

Figure 1
Conceptual Framework



While KCATs influences the effectiveness of RPL assessment and certification, institutional and policy-related factors either strengthen or weaken this relationship.

Objectives

The study interrogated whether RPL practice fully leverages Credit Accumulation Transfer as an avenue for RPL Assessment and Certification.

Specific Objectives

1. To assess the contribution made by KCATs in RPL Assessment and Certification.
2. To identify existing gaps in the use of KCATs as a pathway to RPL Certification.
3. To make recommendations on how best to leverage KCATs in RPL Assessment and Certification.

Statement of Hypothesis

Availability of Policy, Standards, Guidelines and requirements does not significantly predict the implementation of RPL Assessment and Certification.

Significance of the Study

This study will inform policy review and implementation and also make a valuable contribution to academic knowledge about research on Technical Vocational Education.

Methodology

Descriptive Research Design was used to examine the extent to which institutions offering RPL Assessment and Certification employ KCATs during their assessments. Out of a total 2930 Accredited TVET Institutions, stratified sampling was used to select 28 National Polytechnics and simple random sampling was used to select 1000 trained RPL Practitioners. Structured Questionnaires and Key Informant Interviews were used to collect data. Data was analysed and presented as percentages. Regression analysis was used to test the hypothesis. The researcher obtained consent from respondents and maintained confidentiality.

Testing the Hypothesis

The regression analysis shows a strong and statistically significant relationship between Availability and the dependent variable RPL Implementation.

Model Summary Interpretation

R	0.86	Indicates a very strong positive relationship between Availability and Implementation
R^2	0.75	Availability explains 75% of the variation in implementation
Adjusted R^2	0.72	After adjusting for sample size, the model still explains 72% of the variation
Standard Error	20.12	Average prediction error of the model

An R value of 0.86 shows a strong positive correlation between Availability of Standards and requirements and implementation of RPL Assessment and Certification. The R^2 value of 0.75 means that Availability of Standards and requirements accounts for 75% of the changes in implementation, while the remaining 25% may be explained by other factors not included in the model.

ANOVA Interpretation

Statistic	Value
F	32.44
p-value	< .001

The ANOVA test was used to check whether the regression model is statistically significant. Since the p-value is less than 0.001, which is below the common significance level of 0.05: The regression model is statistically significant. Availability significantly predicts implementation. The regression model was statistically significant, $F(1,11) = 32.44$, $p < 0.001$, indicating that availability significantly predicts implementation.

The regression equation is as follows:

$$Y = 7.74 + 1.07X. \tag{1}$$

Where:
Y = implementation
X = availability

Statistic	Value
B	7.74
P	0.44

When Availability is zero, implementation would be predicted at 7.74. However, the intercept is not statistically significant because $p = 0.44 > 0.05$.

Availability Variable

B	1.07
Beta	0.86
T	5.7
P	< .001

A one-unit increase in Availability leads to a 1.07 unit increase in implementation. The standardized beta coefficient of 0.86 indicates a very strong positive effect. Since $p < .001$, Availability significantly influences implementation.

Availability had a positive and statistically significant effect on implementation ($\beta = 0.86$, $t = 5.7$, $p < 0.001$). A unit increase in availability resulted in a 1.07 increase in implementation.

For Availability:
Lower bound = 0.66
Upper bound = 1.49

Because the confidence interval does not include zero, the effect of Availability is statistically significant. Residuals are centered close to zero. Standardized residuals range between −1.47 and 2.22, which are within acceptable limits. This suggests there are no serious outliers and the regression assumptions are reasonably met.

The regression analysis revealed that Availability of Policy, Standards, Guidelines and Requirements significantly influences implementation of RPL assessment and certification.

The model explained 75% of the variation in implementation ($R^2 = 0.75$). The relationship was strong and positive ($R = 0.86$), and the regression model was statistically significant, $F(1,11) = 32.44$, $p < 0.001$. Availability was found to be a significant predictor of implementation ($\beta = 0.86$, $p < 0.001$).

Table 1
Regression Analysis Coefficients

Predictor	B	β (Beta)	t	p-value	95% CI Lower	95% CI Upper	Interpretation
Constant (Intercept)	7.74	–	–	0.44	–	–	When Availability is zero, Implementation is predicted to be 7.74. The intercept is not statistically significant.
Availability of Policies, Standards, Guidelines and Requirements	1.07	0.86	5.70	< 0.001	0.66	1.49	A one-unit increase in Availability leads to a 1.07-unit increase in Implementation. Availability significantly predicts Implementation.

Table 2
Challenges Cited by RPL Practitioners

Rank	Challenge	Frequency
1	Regulatory and accreditation challenges	65
2	Lack of awareness	62
3	Negative public perception	61
4	Changing industries and technology	54
4	Weak linkage between industry and RPL assessment centers	54
6	Lack of coordination between stakeholders	46
7	Lack of partners to support RPL implementation	44
7	Lack of qualified practitioners	44
9	Limited knowledge on KCATs and RPL	26

The table presents the major challenges cited by RPL practitioners during the survey. The findings indicate that regulatory and accreditation challenges were the most frequently cited challenge, reported by 65 percent of the respondents. This suggests that policy, legal frameworks, and accreditation procedures remain significant barriers to effective implementation of Recognition of Prior Learning (RPL). The second most cited challenge was lack of awareness with 62 percent of the respondents, indicating that many stakeholders still have limited understanding of RPL processes, benefits, and opportunities. Similarly, negative public perception was also identified as a major issue by 61 percent of the respondents, showing that misconceptions and skepticism about RPL continue to affect its acceptance.

Other notable challenges included; changing industries and technology and weak linkage between industry and RPL assessment centers, each cited by 54 percent of the respondents. This implies that rapid technological changes and inadequate collaboration with industry hinder alignment of RPL practices with labour market demands. Lack of coordination between stakeholders was reported by 46 percent of the respondents, highlighting gaps in collaboration among institutions, industry players, and regulatory bodies. Lack of partners to support RPL implementation and lack of qualified practitioners were each cited by 44 percent of the respondents, suggesting inadequate human and institutional capacity for successful implementation. The least cited challenge was limited knowledge on KCATs and RPL, reported by 26 percent of the respondents. Although comparatively lower, the finding still indicates the need for continued sensitization and capacity building on the Kenya Credit Accumulation and Transfer System (KCATs) and RPL practices.

Overall, the findings reveal that RPL implementation is affected by a combination of regulatory, institutional, technological, and awareness-related challenges. The study therefore underscores the need for stronger policy frameworks, stakeholder coordination, public sensitization, industry partnerships, and practitioner training to enhance effective implementation of RPL and KCATs.

Key Findings

1. The implementation of the Kenya Credit Accumulation and Transfer System (KCATs) has enhanced flexibility within the education and training sector by supporting credit transfer, progression, entry, re-entry, and exit across qualification levels and institutions. This has promoted learner mobility and strengthened lifelong learning pathways.
2. Recognition of Prior Learning (RPL) has mainly been practiced as a mechanism for certifying non-formal and informal learning, with limited integration of competencies acquired through formal learning and work experience. As a result, opportunities for holistic recognition of learner achievement remain underutilized.
3. Existing policies and legal frameworks such as the Kenya National Qualifications Framework (KNQF) Act No. 22 of 2014 provide a strong foundation for KCATs and RPL implementation. However, gaps still exist between policy provisions and actual institutional practice.
4. The study established that many institutions face challenges in operationalizing KCATs and RPL due to inadequate awareness, limited institutional capacity, insufficient assessor training, and lack of harmonized implementation guidelines.
5. Stakeholders acknowledged that KCATs and RPL contribute significantly to reducing duplication of learning, minimizing wastage of skills and knowledge, and improving access, equity, and employability within the education and training sector.

6. The findings further revealed that limited public sensitization and misconceptions surrounding RPL continue to affect its acceptance and uptake among learners, employers, and institutions.

Conclusions

1. KCATs and RPL are critical mechanisms for promoting lifelong learning, learner progression, inclusivity, and workforce development within Kenya's technical education and training system.
2. Effective integration of KCATs and RPL can bridge the gap between policy and practice by ensuring that knowledge, skills, and competencies acquired through formal, non-formal, and informal learning are recognized and valued equally.
3. Despite the existence of supportive policy frameworks, implementation remains uneven across institutions due to inadequate structures, limited technical capacity, and insufficient stakeholder engagement.
4. Strengthening collaboration among regulatory bodies, training institutions, industry stakeholders, and policymakers is essential for successful and sustainable implementation of KCATs and RPL practices.
5. The integration of KCATs with RPL has the potential to improve access to qualifications, support career progression, enhance employability, and contribute to national and global lifelong learning agendas such as the Sustainable Development Goals (SDGs) and the African Union Agenda 2063.

Recommendations

1. The government and relevant regulatory agencies should develop clear operational guidelines and standardized procedures to support effective implementation of KCATs and RPL across all institutions.
2. Institutions should strengthen capacity building through continuous training of assessors, coordinators, and institutional staff involved in KCATs and RPL processes.
3. Awareness creation and sensitization programs should be enhanced to improve understanding, acceptance, and uptake of KCATs and RPL among learners, employers, industries, and training providers.
4. Institutions should establish dedicated RPL and KCATs coordination structures to facilitate assessment, credit transfer, learner guidance, documentation, and quality assurance.
5. Greater collaboration between industry and training institutions should be encouraged to ensure that assessment and certification processes reflect workplace competencies and labor market needs.
6. Monitoring and evaluation mechanisms should be strengthened to track progress, identify implementation challenges, and ensure continuous improvement of KCATs and RPL practices.
7. Further research should be conducted on the impact of KCATs and RPL on employability, learner mobility, access to education, and national skills development.

Acknowledgement

I thank my fellow RPL Practitioners and members of the Kabete National Polytechnic policy writing committee who inspired me to write. The effort was further guided by members of TVETA Research Department and the CBET Delivery Unit whose insights were invaluable.

I acknowledge the use of AI – ChatGPT to interpret the results of the regression analysis and rank the factors that hinder effective use of CATS in RPL Assessment and Certification.

I would like to acknowledge the respondents for their honest opinions and willingness to take part in this study.

References

African Continental Qualifications Framework. (n.d.). Kenya Credit Accumulation and Transfer System policy. https://acqf.africa

African Union Commission. (2016). Continental Education Strategy for Africa (CESA 16-25). African Union Commission.

Centre for Curriculum Development, Assessment and Certification Council. (n.d.). Recognition of prior learning policy framework in Kenya. https://www.tvetcdacc.go.ke

Dempster, H., & Ricou, M. (2026). Linking labour mobility and technical and vocational education and training (TVET) (Policy Paper No. 380). Center for Global Development.

International Labour Organization. (2021). Skills and lifelong learning for the future of work. ILO Publishing.

Kabete National Polytechnic. (n.d.). Credit accumulation transfer policy.

Kenya National Qualifications Authority. (n.d.). Kenya Credit Accumulation and Transfer System (KCATs). https://knqa.go.ke

Oduor, J., & Kilonzo, J. (2024). Bridging policy and practice: The implementation of RPL in Kenya's TVET sector. Journal of Technical Education and Training, 16(1), 23-36.

Republic of Kenya. (2014). Kenya National Qualifications Framework Act, No. 22 of 2014. Government Printer.

Technical and Vocational Education and Training Authority. (2023). Baseline study on RPL implementation in TVET institutions in Kenya. TVETA.

UNESCO Institute for Statistics. (2012). International Standard Classification of Education: ISCED 2011. UNESCO.

UNESCO. (2016). Strategy for technical and vocational education and training (TVET) 2016-2021. UNESCO Publishing.

Left Alone With AI: Evaluating Student Preparedness for Fully Automated Language Instruction

Miguel A. Varela, Universitat Oberta de Catalunya, Spain

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

The increasing integration of artificial intelligence (AI) in education has posed a question for scholars: are learners prepared for fully AI instruction without teacher intervention? There has been some research investigating whether AI-supported agents can act as teachers, and some researchers have even raised the question of whether teachers might still be necessary in the future. In this hypothetical case of fully AI-mediated lessons, are younger learners ready to learn solely through AI technology? This study addresses this concern by examining whether high school students can learn Spanish as a foreign language effectively solely with AI and how this compares with traditional teacher-led education. Based on student agency and self-directed learning theories (Candy, 1991; Knowles, 1975), the study employed a crossover design in an international school. Participants worked on two units (reflexive verbs and past tense) under two conditions: teacher-led instruction and autonomous learning with a custom AI-supported app. Data were collected through pre- and posttests, a confidence survey, and semi-structured student interviews. Quantitative findings revealed significant learning gains in both instructional conditions, but there was not statistically significant superiority of either method. Qualitative findings, however, indicated that students continued to value teachers for clarification, feedback, emotional support, and personalized explanations. The results suggest that while AI technologies can effectively support language learning and engagement, students still preferred the human teacher interaction. This study presents original empirical data on AI integration, learner autonomy, and the future of education. Findings support hybrid methodologies that integrate technological agency with teacher support.

Keywords: artificial intelligence in education, self-directed learning, learner autonomy, language learning, educational technology

iafor
The International Academic Forum
www.iafor.org

Introduction

Artificial intelligence (AI) is rapidly transforming everyday life and it has evidently affected education. AI is no longer considered a supplementary aid in administrative tasks, it is now widely used in educational settings in several ways: generating content, personalizing learning, assessing student performance, and simulating teacher interactions (Case et al., 2025). As schools worldwide increasingly integrate AI-driven tools into classrooms, it seems necessary to ask how far autonomous systems will reach in educational settings.

Recent advances in AI, and its growing integration in school settings, have generated debates about the future role of teachers. Some scholars argue that, given the appropriate context, AI systems might eventually replace teachers, particularly in contexts where personalization, scalability, and efficiency are prioritized (Edwards & Cheok, 2018). Others, however, caution that education involves far more than content delivery. Human teachers provide emotional support, mentorship, ethical guidance, and motivation that may not be replicable through technology alone. AI has demonstrated promising results in tutoring, proving feedback, and for individualized practice. However, the extent to which learners are prepared to learn with less teacher interaction and more AI-mediated instruction remains largely unknown.

This notion becomes especially important nowadays where students are increasingly exposed to technology from an early age and some regions are suffering from teacher shortages. Many young learners are highly familiar with digital devices and online learning platforms. This in turn might lead researchers to suggest that technology could take a more prominent role where teachers are scarce, leaving students to deal with digital tutors. In such hypothetical case, more student autonomy might be needed. It seems to be that, although autonomous learning depends on several variables like motivation and self-regulation, more technologically savvy students may be more ready for self-directed learning. It therefore, becomes important to investigate whether students could learn autonomously in a computer-led classroom without teachers. Not much attention has been given to this topic, therefore, the present study addresses this gap questioning if students can effectively learn without direct human instruction.

This project then investigates whether high school students can effectively learn Spanish as a foreign language solely through AI-supported instruction, without pedagogical intervention from teachers. Based on self-directed learning theories (Candy, 1991; Knowles, 1975), this study compares student performance, confidence, and perceptions. The intervention employes two instructional conditions: traditional teacher-led instruction and fully AI-mediated learning through a custom-designed educational application (app).

With a crossover experimental design, this research examines whether learning performance differs between both instructional approaches. Students' perceptions regarding the experience of learning independently with AI are also collected. Through both quantitative and qualitative data, the study contributes empirical evidence to ongoing discussions about AI, learner agency, and the future of teaching. Findings from this study aim to add up to the question of whether current learners might be prepared to be left alone with educational AI systems, or whether human teachers continue to be irreplaceable in the classroom.

Literature Review

Introduction

Technology and artificial intelligence (AI) are reshaping the modern school system. This literature review covers case studies integrating AI in education, critical questions about teacher roles, and concerns about learner agency and equity. This review is organized around four major topics discussing AI as pedagogical tools and as potential substitutes for teachers: technology in schools: AI in education; learner agency and self-directed learning; and some critical perspectives on the integration of AI in schools. Some convergences, unresolved tensions, and concrete gaps that motivate the present study are revised below.

Technology in Educational Settings

The integration of technology in educational contexts has become increasingly essential to assist in administrative tasks, and to create more relevant, creative, and collaborative learning environments (Felszeghy et al., 2019; Siegle & Hook, 2023). For instance, scholars like Cheng et al. (2018) and Varela (2026) state that appropriate technological integration can significantly enhance student motivation and engagement. In line with this, others claim that technology has transformed how education is delivered and experienced (Hemajothi & Kumar Jain, 2022), making teaching and learning more accessible, personalized, and engaging (Krstić et al., 2022; Zou et al., 2025).

Although technology seems to enhance the teaching the learning experience, it can still pose complications for its seamless implementation. For example, Ntorukiri et al. (2022) refer to the challenges that need to be sorted by institutions for its adoption and integration, from structural adaptations, to devices, and staff training. This perspective aligns well with a growing concern about meeting contemporary educational demands. In this sense, the rapidly evolving technological landscape suggests that traditional pedagogical methods require substantial updating. This in turn suggests that the successful implementation of technology in education depends critically on adequate training across all stakeholder groups (Felszeghy et al., 2019; Siegle & Hook, 2023). At the student level, Couch (2023) emphasizes that technology-enhanced learning presents both opportunities and challenges, where students must navigate through difficulties to achieve academic success.

Artificial Intelligence Applications in Educational Contexts

The application of Artificial Intelligence (AI) in education has expanded considerably since the end of 2022 (Milićević et al., 2024). Some implementations range from virtual teaching assistants to specialized support for diverse learner populations. A notable early example emerged at Georgia Tech in the United States, where the AI teaching assistant “Jill Watson” was deployed to support student learning (Maderer, 2016). Students interacted so well with the digital assistant, to the level of believing that Jill was in fact a person, not a chatbot. This pioneering application demonstrated the potential for AI systems to augment educational delivery in actual school settings.

Research has also explored AI applications for literacy and specialized educational needs. For instance, Qidwai et al. (2020) investigated the use of robotic assistants to support students with autism, while Kohnke (2023) examined AI-powered robots designed to facilitate language learning. In a similar fashion, the IBM AI Watson Tutor seemed to improve comprehension with real-time support and customized learning (Annuš, 2024). The large potential for adaptability that AI agents have, proved to be very effective in such cases. Those interventions therefore suggest that AI technologies may be particularly valuable in contexts requiring personalized, patient, and consistent instructional support.

The proliferation of AI in education and the potential to foster teaching and learning, has prompted fundamental questions about the evolving role of human educators. Gentile et al. (2023), for instance, pose the provocative question of whether teachers remain necessary in an age of increasingly sophisticated educational technology. This sparked stimulating important debates about the balance between technological assistance and human pedagogical expertise. Based on the abundant amount of research on AI in education, it seems that AI can automate some instructional functions and offer support via adapted learning. However, the fact that it could hypothetically replace the ethical and humanistic pedagogical work of teachers remains an issue for investigation (Kohnke, 2023; Maderer, 2016; Qidwai et al., 2020).

Critical Perspectives on AI and the Future of Teaching

The rapid advancement of AI capabilities has prompted serious examination of the future role of human teachers. Edwards and Cheok (2018) posed a question of whether robot instructors could address teacher shortages in countries like the USA or UK for instance. This positions AI not merely as a supplementary tool but as a potential solution to actual staffing challenges. This perspective provokes interesting thoughts related to the future of teaching and learning.

In a rather futuristic and hypothetical view, Newton and Newton (2019) advanced the discussion by proposing ethical frameworks for the deployment of humanoid robots as teachers. They even referred to a code of conduct to govern such implementations. Their work acknowledges both the potential benefits, the need for careful ethical consideration, and the possible needed adaptations to deploy AI in teaching roles.

The question posed by Gentile et al. (2023) regarding whether teachers remain necessary synthesizes these concerns. This seems to challenge the educational community to articulate the contributions of human educators in an era of increasingly capable AI systems. This ongoing debate reflects fundamental tensions between the advancement of technology and the efficiency, personalization and human connection in the classroom. There are questions that still need to be answered regarding the intricacies of educational relationships that extend beyond content delivery like mentorship, socialization, and emotional support for example.

Student Agency and Self-Directed Learning

Technological integration in educational settings, AI applications, and the general changing landscape affecting administration, teachers, and students, bring up new debatable topics. Before discussing teacher substitution from the point of view of AI capabilities, the role of the students need to be considered. This way, if students were to be left “alone” with robot teachers, then they would need to be autonomous enough to deal with everyday classroom situations. Therefore, the development of learner autonomy represents a crucial educational outcome with implications extending beyond formal schooling. Luke and Hogarth (2011) and Chakraborty (2024) emphasize that self-directed learning capabilities are essential skills for both academic success and professional effectiveness in adulthood. This perspective positions student agency not merely as a pedagogical preference but as a fundamental competency for lifelong success.

In times when AI agents seem to be more increasingly integrated into everyday teaching and learning, autonomous learners may be more a need than a luxury.

Theories for self-directed learning emphasize the central role of student responsibility and control. Knowles (1975) and Candy (1991) established foundational principles suggesting that learners must assume primary responsibility for their educational processes. This perspective was reinforced by contemporary research (Khat, 2017) confirming that student ownership of learning correlates with improved outcomes. This idea seems to be closely related to internal motivation to learn (Loeng, 2020) and the fact that for successful intake, learners should be motivated and focused (Schmidt, 2012; Varela, 2020).

This learner independence has received empirical support, specially in connection to technology familiarity. Geng et al. (2019) found that students demonstrate greater independence in their learning when they have substantial experience with technology use. This suggests a mutually reinforcing relationship between technological competence and autonomous learning behaviors. Hence, in a hypothetical world of fully technology mediated learning, tech savvy students could have an advantage in terms of adaptability and performance in comparison to the rest.

Despite the recognized importance of self-directed learning, Morris and Rohs (2021) identify a critical gap in the research literature. They noted that investigation of self-directed learning among younger learners remains vital yet surprisingly scarce, which highlights the importance of conducting research in that area. Therefore, it seems crucial to investigate how AI assistants might affect younger learners' ability to plan, monitor and evaluate their own learning. This leads to the main focus of research of this study, asking whether young learners might be ready to learn solely through technology in the (now) hypothetical case that AI agents could replace teachers completely.

Hence, this study focused on whether younger learners could learn solely with technology working autonomously without teacher guidance.

Methodology

Context

The study was conducted in a very large private international school in Qatar that serves students from Kindergarten through 12th grade (k-12), offering the International Baccalaureate program. The school showcases state of the art facilities that enhance learning through technology, and is very well-equipped with technology devices. Teachers integrate technology widely at the school, and students are accustomed to working individually, and independently with tablets and computers for learning from an early age.

Participants

The study involved 23 students aged 15–17 enrolled in two Spanish as a foreign language courses (14 and 9 students, respectively), with 10 females and 13 males. Participants were highly familiar with computer, tablets and technology for learning. This study used a convenience sample, with each class remaining intact (11 and 12 students respectively) and participating twice: once as the control group (teacher-led) and once as the experimental group (technology-only) in a crossover design. This methodology was chosen to reduce interindividual variability and to increase statistical power. As a form of repeated-measures experimentation, it also addressed some threats to internal validity through order control (Connelly, 2014).

Two teachers and the researcher were involved in this study. The teachers were the usual instructor participants had in their course of study to ensure familiarity of class delivery, participants focus and commitment; and to avoid unexpected behavior. The control group lessons were taught by the usual class teacher, while the experimental group had the usual teacher as invigilator ensuring that everything worked as planned and that students were on task. The invigilator teacher did not offer any guidance or help to students in the experimental group as they were supposed to learn independently and solely with instructions provided in the app. The invigilator made sure students did not navigate away from the app and did not use any other resources than the ones allowed in the process.

Materials

A custom app was developed specifically for this study using Artificial Intelligence (AI) for coding and for generating text, practice questions, and for self-grading quizzes. The app was installed in tablets by the researcher. The app aimed to mirror the traditional lesson structure and methodology normally used by teachers in the classroom. There were two units, one on Spanish reflexive verbs, and the second one on Spanish simple past tense. The app included introductions, definitions, guided practice, interactive activities, videos, games, and online search tools, ensuring relevance to the curriculum. The main goal of this was to ensure familiarity with the learning process, so that participants knew exactly what to do, and to avoid class delivery and instructions as factors that could negatively influence learning and performance. This resulted in both the traditional and the AI-based lessons having identical structure, method used, target vocabulary, and practice activities. Students had also access to an online translator in case they had issues with new words.

Two digital tests were specially created for this study to test knowledge prior to and after the each units. One test checked knowledge on Spanish reflexive verbs while the other cheked Spanish simple past tense. Each test covered all topics taught in each corresponding unit. The test was emailed to all participants prior to the beginning of the unit. Each pretest was completed by the participants immediately before starting each unit (pretest), and immediately after finishing it (posttest). The test had 20 questions worth 5 points each and they all referred to topics covered in the lessons. The two units in the app (Spanish reflexive verbs and Spanish simple past tense) were part of the curriculum, so students had to learn them as part of their regular course of studies.

In order to measure participant’s confidence when learning through the AI-driven app or the traditional method, a 10-item Likert-scale survey (1 = strongly disagree, 4 = strongly agree) was administered. The confidence test included statements like “I am good at Spanish” and “I can learn Spanish better with traditional methods.” All participants took the test at the end of each unit.

Finally, at the end of the study, individual interviews with four students were conducted to capture students’ perceptions. Each student was randomly selected and responded to five questions eliciting information about their experiences with the project. Participants answered questions like: “What do you think is a negative aspect of working alone with an AI created app?”

Procedure

Prior to the study, all ethical procedures were carefully observed to protect participants' integrity, rights, and wellbeing. The researcher obtained formal authorization from the school to conduct the study, and parents provided informed consent for their children's participation. The topics covered in the project followed the curriculum of the of the school, therefore, the content taught during the intervention fit perfectly into the course of studies normally followed by the students. The day and duration of the lessons followed the school's schedule. This meant that each unit was spread over three lessons in one week. The whole duration of the study took place over two weeks in six lessons. The study began when the researcher explained the purpose and procedures of the study to each group and emphasized that participation was voluntary. Students were informed that they could withdraw at any moment without any consequences or penalties. The lessons took place as they normally would (at the same time and place and with the usual teacher in the classroom), the only difference was the means of instruction and the fact that students using the AI-app were asked to work completely independently.

After randomly assigning which group would act as the control (teacher-led instruction) and experimental (app-based, self-directed learning) for the first unit of instruction, both groups took the pretest for unit one. After all students had finished the pretest, the usual teacher started teaching the first lesson to the control group, while the experimental group, guided by the usual class teacher, started working independently on unit one on the app. Each unit was taught over three classes in one week. At the end of the three classes, the groups took the posttest and the confidence test. For unit two, the groups changed the learning method: the control group became the experimental group, and the group that acted as the experimental group for unit one, became the control group in unit two. The same logistics was employed for unit two, i.e., pretest, teaching intervention, posttest and confidence test. At the end of the second unit four individual interviews were conducted to collect qualitative data about the intervention.

Results

The results below are organized by content unit, showing the percentage scores of each pretest and posttest, the individual group gains, and difference between groups.

Results of Unit One (Spanish Reflexive Verbs) for Both Groups

Pretest and Posttest Results for Unit 1 for the Control Group (n = 11)

A paired-samples t-test indicated that students' average test scores in the control group improved substantially from pretest (M = 59.11) to posttest (M = 84.20). Gain scores (pre-post) showed a percentage improvement of 25.09 points (SD = 3.75), with all participants showing positive learning gains. This increase was statistically significant, $t(10) = 4.36$, $p < .01$. The magnitude of the effect was large ($d = 1.31$), indicating substantial learning gains across participants.

Pretest and Posttest Results for Unit One for the Experimental Group (n = 12)

The paired-samples t-test for the experimental group percentage scores also showed considerable improvement from pretest (M = 52.9) to posttest (M = 90.0). Gain scores (pre-post) showed an improvement of 37.1 points (SD = 6.50), with all participants having positive learning gains. There was a statistically significant improvement, $t(11) = 19.75$, $p < .001$, with an extremely large effect size ($d = 5.71$).

Comparison of Gain Between the Two Groups for Unit One

Table 1 below shows a percentage test-score gain comparison between groups after unit one. Figure 1 below shows a graphical representation of the difference in percentage scores of pre and posttest for each group for unit one.

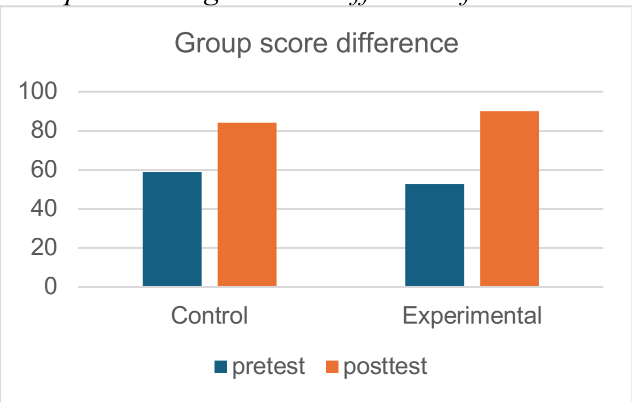
Table 1

Test-Score Gain Comparison Between Groups After Unit One

Group	Pretest	Posttest	Gain	SD	n
Control	59.11	84.2	25.9	3.75	11
Experimental	52.9	90.0	37.1	6.5	12

Figure 1

Group Percentage Score Difference for Unit One (Spanish Reflexive Verbs)



In order to check whether there was a statistically significant difference between the gains of both groups after the intervention for unit one, the mean gains of both groups were compared using an independent-samples t-test with Welch's correction. The test revealed a statistically significant difference in gain scores between groups, $t(17.4) = -5.97$, $p < .001$, $d = 2.16$. The experimental groups showed larger gains, with a large effect size.

Results of Unit Two (Spanish Simple Past Tense) for Both Groups

For the second unit, Spanish simple past tense, the groups swapped teaching methods. This time the control group for unit one became the experimental group, and vice versa.

Pretest and Posttest Results for Unit 2 for the Control Group (n = 12)

A paired-samples t-test indicated that students' test scores in the control group substantial improvement from pretest ($M = 24.5$) to posttest ($M = 90.0$). Gain scores (pre-post) showed an improvement of 65.6 points ($SD = 1.83$), with all participants demonstrating positive learning gains. This increase was highly statistically significant, $t(11) = 124.24$, $p < .001$, with an extremely large effect size ($d = 35.85$), showing considerable learning gains across participants.

Pretest and Posttest Results for Unit 2 for the Experimental Group (n = 11)

A paired-samples t-test indicated that students' test scores in the control group substantial improvement from pretest (M = 23.2) to posttest (M = 90.0). Gain scores (pre-post) showed an improvement of 66.8 points (SD = 3.14), with all participants having positive learning gains, t(10) = 70.54, p < .001, and an extremely large effect size (d = 21.27).

Comparison of Gain Between the Two Groups for Unit Two

Table 2 below shows a percentage test-score gain comparison between groups after unit two. Figure 2 below shows a graphical representation of the difference in percentage scores of pre and posttest for each group for unit two.

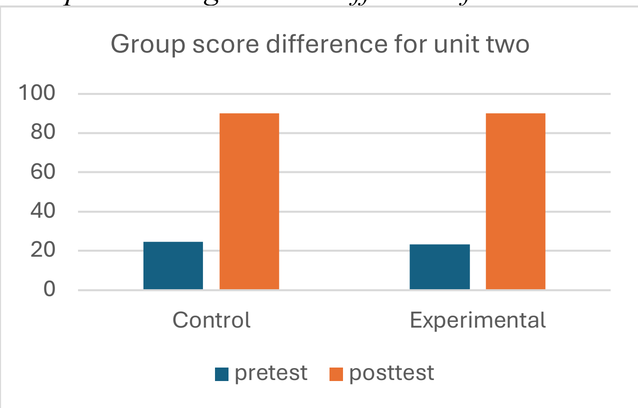
Table 2

Test-Score Gain Comparison Between Groups After Unit Two

Group	Pretest	Posttest	Gain	SD	n
Control	24.5	90.0	65.6	1.83	12
Experimental	23.2	90.0	66.8	3.14	11

Figure 2

Group Percentage Score Difference for Unit Two (Spanish Simple Past Tense)



To test the statistical significance of the difference between the gains of both groups after unit two, the mean gains of both groups were compared using an independent-samples t-test with Welch's correction. The test showed that the difference in gain scores between the control group (M = 65.6, SD = 1.83) and the experimental group (M = 66.8, SD = 3.14) was not statistically significant, t(16.4) = -1.11, p = .28, with a moderate effect size (d = -0.47).

Results of the Confidence Test for Both Groups

The results of each confidence test administered at the end of each unit were combined discriminating between the group learning with the AI-app, and the results obtained from the participants learning through the traditional method.

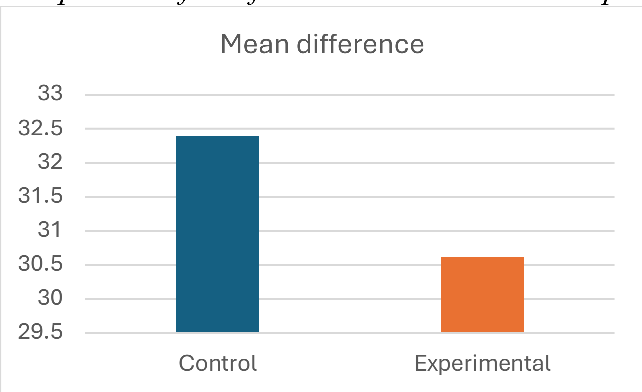
To measure the significance of the confidence test results, AI-app group (M = 30.61, SD = 3.76) and the traditional teaching group (M = 32.39, SD = 2.76), an independent-samples t-test with Welch's correction was run. The test indicated that the difference in scores between both groups was not statistically significant, t(20) = -1.30, p = .21, although a moderate effect size was observed (d = -0.53).

Table 3 below shows the means and standard deviations of the confidence test for both groups. Figure 3 below shows a graphical representation of the mean difference.

Table 3
Confidence Test Comparison Between Groups

Group	mean	SD	n
Control	32.39	2.76	23
Experimental	30.61	3.76	23

Figure 3
Comparison of Confidence Between Both Groups



Thematic Analysis of the Interview Questions

Following Braun and Clarke's (2006) framework, a thematic analysis was conducted to analyze participants responses to the interview questions. Four main themes emerged from the responses: (1) mixed engagement with AI-app learning, (2) preference for traditional methodologies, (3) interest in interactive and listening-based activities, (4) disregard towards the push towards AI-based learning, and (5) perceptions towards learning and memorization.

Mixed Engagement With AI-App Learning

Students offered different responses in terms of AI-app learning, some reported positive experiences and others neutral or negative ones. This inconsistency suggests that motivation was not necessarily increased through the integration of AI, and its effectiveness seems to depend on individual preferences.

Preference for Traditional Methodologies

The most prominent theme was the preference for teacher-led instruction using traditional methods. Participants seemed to value explanations of the teacher, for its clarity and depth. They also pointed out that verbal interaction supported better comprehension. This suggests that participants consider that digital tools should complement rather than replace teacher instruction.

Interest in Interactive and Listening-Based Activities

Students seemed to prefer interactive activities focusing on engagements, for instance, listening activities and sentence reorganization. They seemed to dislike true/false type of questions in reading activities stating that they preferred more active rather than passive exercises.

Disregard Towards the Push Towards AI-Based Learning

Participants did not show any particular preference towards a change from traditional to digital learning methods, specially if learning happens solely with technology.

Perceptions Towards Learning and Memorization

Responses on memorization effectiveness were divided, but there was clear preference towards the use of traditional learning methods. For instance, the use of pen and paper was preferred for learning and memorization of new topics.

Overall Interpretation

The AI-app seemed to offer valuable interactive learning experiences but did not seem to replace teacher-led instruction according to students' perception. A blended approach, combining digital tools with teacher-led methodologies, appeared as preferred and suggested, with interactive and engagement activities as favorites.

Discussion

The results suggest that while technology seemed to enhance engagement through interactivity, visuals, and multimedia, students still prefer to rely on teachers for personalized feedback and relevant explanations. This aligns with prior research emphasizing the importance of teacher roles in language learning (Gentile et al., 2023; Liu et al., 2025) and the need for adequate integration and training in technology use (Siegle & Hook, 2023). The high engagement with the app and the fact that students seemed to dive into the activities with not difficulties, supports findings that students accustomed to technology are more independent in digital learning environments (Geng et al., 2019). However, the preference for teacher guidance indicates that fully self-directed learning in younger learners needs strong support and guidance by adults, consistent with Morris and Rohs (2021) and Xie et al. (2026).

Conclusion

This study demonstrates that technology-driven tools, such as AI-apps, can engage students in language learning but are most effective when complemented by teacher guidance. Students value interactivity but seem to prefer personalized feedback and error explanation, underscoring the enduring role of supportive and empathetic educators. This seems to reinforce the notion that, while digital technologies could bring interest and entertainment, teaching methodologies and motivation play a crucial role in acquiring and retaining knowledge (Varela, 2020, 2026).

Limitations include the small, convenience-based sample and the short duration (one week per unit), which may not capture long-term effects. The crossover design reduced individual differences but may have introduced carryover effects. Future research could explore larger samples, longer interventions, and specific performance metrics to contrast learning outcomes.

To conclude, it appears that some features of AI, such as automating administrative tasks or generating personalized activities, could further support teachers. Results from this project may have direct implications for the language classroom. Instructors and curriculum designers could adopt a hybrid approach to teach languages, integrating AI for engagement and adaptative learning, and teachers for guidance and support. These findings contribute to the growing literature on balancing technology and human instruction in language education (Case et al., 2025; Gordon et al., 2025).

References

Annuš, N. (2024). Educational software and artificial intelligence: students' experiences and innovative solutions. *Information Technologies and Learning Tools, 101*(3), 200–226. https://doi.org/10.33407/itlt.v101i3.5479

Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology, 3*, 77–101. http://dx.doi.org/10.1191/1478088706qp063oa

Candy, P. C. (1991). *Self-directed learning*. Jossey-Bass.

Case, R., Liu, L., & Mintz, J. (2025). Integrating AI technology into language teacher education: Challenges, potentials, and assumptions. *Computers in the Schools, 42*(2), 93–99.

Chakraborty, S. (2024). Empowering and Engaging Adult Learners: Strategies to facilitate Self-directed learning in adult education. *International Journal For Multidisciplinary Research, 6*(3), 1–26.

Cheng, J., Wang, Y., Tjondronegoro, D., & Song, W. (2018). Construction of interactive teaching system for course of mechanical drawing based on mobile augmented reality technology. *International Journal of Emerging Technologies in Learning (Online), 13*(2), 126–139.

Connelly, L. M. (2014). Understanding crossover design. *Medsurg Nursing, 23*(4), 267.

Couch, J. D. (2023). *Rewriting education: Technology unlocks every student's potential*. BenBella Books.

Edwards, B. I., & Cheok, A. D. (2018). Why not robot teachers: artificial intelligence for addressing teacher shortage. *Applied Artificial Intelligence, 32*(4), 345–360. https://doi.org/10.1080/08839514.2018.1464286

Felszeghy, S., Pasonen-Seppänen, S., Koskela, A., Nieminen, P., Härkönen, K., Paldanius, K. M. A., Gabbouj, S., Ketola, K., Hiltunen, M., Ludin, M., Haapaniemi, T., Sointu, E., Bauman, E.B., Gilbert, G.E., Morton, D., & Mahonen, A. (2019). Using online game-based platforms to improve student performance and engagement in histology teaching. *BMC Medical Education, 19*(273), 1–11. https://doi.org/10.1186/s12909-019-1701-0

Geng, S., Law, K. M., & Niu, H. (2019). Investigating self-directed learning and technology readiness in blended learning environment. *International Journal of Educational Technology in Higher Education, 16*(1), 1–17. https://doi.org/10.1016/j.ced.2019.07.005

Gentile, M., Città, G., Perna, S., & Allegra, M. (2023). Do we still need teachers? Navigating the paradigm shift of the teacher's role in the AI era. *Frontiers in Education, 8*, Article 1161777. https://doi.org/10.3389/feduc.2023.1161777

Gordon, R., Cumming-Potvin, W., & Chapman, S. (2025). Balancing tradition and innovation: Digital technology integration in Australian secondary English classes. *Issues in Educational Research, 35*(2), 550–572.

Hemajothi, S., & Kumar Jain, S. (2022). Challenges of e-learning during the pandemic and its implications in education. *Technoarete Transactions on Applications of Information and Communication Technology (ICT) in Education, 1*, 1–6. https://doi.org/10.36647/TTAICTE/01.04.A001

Khat, H. (2017). Academic performance of self-directed learning: Adult student perspective. *Journal of Further and Higher Education, 41*(1), 4–9.

Knowles, M. (1975). *Self-directed learning: A guide for learners and teachers*. Association Press.

Kohnke, L. (2023). L2 learners' perceptions of a chatbot as a potential independent language learning tool. *International Journal of Mobile Learning and Organization, 17*(1–2), 214–226. https://doi.org/10.1504/ijmlo.2023.128339

Krstić, L., Aleksić, V., & Krstić, M. (2022). Artificial intelligence in education: A review. In *Proceedings of the 9th International Scientific Conference Technics and Informatics in Education (TIE 2022)* (pp. 223–228). University of Kragujevac, Faculty of Technical Sciences Čačak. https://doi.org/10.46793/TIE22.223K

Liu, H., Shen, Z., Shen, Y., & Xia, M. (2025). Exploring the predictive role of students' perceived teacher support on empathy in English-as-a-foreign-language learning. *New Directions for Child and Adolescent Development, 2025*(1), 2577602.

Loeng, S. (2020). Self-directed learning: A core concept in adult education. *Education Research International, 2020*(1), 3816132.

Luke, B., & Hogarth, K. (2011). Developing and enhancing independent learning skills: Using video tutorials as a means of helping students help themselves. *Accounting Research Journal, 24*(3), 290–310. https://doi.org/10.1108/10309611111187019

Maderer, J. (2016). *Artificial intelligence teaching assistant*. Georgia Tech News Center. https://news.gatech.edu/2016/09/artificial-intelligence-teaching-assistant

Milićević, V., Koceva Lazarova, L., & Jordovic Pavlovic, M. (2024). The Application of Artificial Intelligence in Education – The Current State and Trends. *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE), 12*(2), 259–272. https://doi.org/10.23947/2334-8496-2024-12-2-259-272

Morris, T., & Rohs, M. (2021). The potential for digital technology to support self-directed learning in formal education of children: A scoping review. *Journal of Educational Technology, 41*(1), 97–108.

Newton, D. P., & Newton, L. D. (2019). Humanoid robots as teachers and a proposed code of practice. *Frontiers in Education, 4*, Article 125. https://doi.org/10.3389/feduc.2019.00125

Ntorukiri, T. B., Kirugua, J. M., & Kirimi, F. (2022). Policy and infrastructure challenges influencing ICT implementation in universities: a literature review. *Discover Education, 1*(1), 19.

Qidwai, U., Kashem, S. B. A., & Conor, O. (2020). Humanoid robot as a teacher's assistant: helping children with autism to learn social and academic skills. *Journal of Intelligent & Robotic Systems, 98*(3), 759–770. https://doi.org/10.1007/s10846-019-01075-1

Schmidt, R. (2012). Attention, awareness, and individual differences in language learning. *Perspectives on individual characteristics and foreign language education, 6*(27), 27–49.

Siegle, D., & Hook, T. S. (2023). Learning and teaching with digital technology. *Journal of Educational Technology, 41*(1), 1–20. https://doi.org/10.1038/s41467-019-1408-7

Varela, M. A. (2020). *Vocabulary retention in a spaced repetition longitudinal field study with high-school language learners* [Doctoral dissertation, Swansea University].

Varela, M. A. (2026). Enhancing FL Vocabulary Retention, Confidence and Engagement Through Movie Trailers. *RE@ D-Revista de Educação a Distância e Elearning*, e202608-e202608.

Xie, J., Wu, C., Wang, G., Yu, R., Zhang, H., Metoyer, R., & Chen, S. (2026). Understanding parents' perspectives on responsible AI for children's self-directed learning. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems* (pp. 1–20). Association for Computing Machinery.

Zou, Y., Kuek, F., Feng, W., & Cheng, X. (2025). Digital learning in the 21st century: Trends, challenges, and innovations in technology integration. *Frontiers in Education, 10*, Article 1562391. https://doi.org/10.3389/feduc.2025.1562391

Haunted Lineages and African Historical Continuum in the New World: Memory, Diaspora and Postcolonial Resistance/Identity in Alex Haley's *Roots*

Alvin Joseph, Mahatma Gandhi University, India

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

The paper discusses Alex Haley's *Roots: The Saga of an American Family* from the perspective of memory studies, diasporic studies and postcolonial theory. It indicates that *Roots* can be read as a personal and collective archive of African American memory resisting hegemonic historical narratives and reclaiming Black diasporic identity. The novel foregrounds the politics of remembering and forgetting in postcolonial contexts through its representation of ancestral memory across centuries of displacement, enslavement and resistance. *Roots* stages a transgenerational act of cultural remembrance through the projects of post memory and genealogical recovery, that is not only retrospective but also centrally concerned with the continuity of Black American culture. This paper considers how Haley's narrative is a counter-historical project in that it denies the erasure of African origins and reclaims the agency of the enslaved through remembered lineage. The study contextualizes *Roots* within postcolonial and diasporic discourse to demonstrate how memory can be a powerful tool for rebuilding identity and achieving historical justice.

iafor

The International Academic Forum
www.iafor.org

Introduction

The history of the dispersal of African peoples across the world is inextricably connected to the pain of being uprooted, the upheaval, the efforts to wipe out their culture and the brutal rule that went with the transatlantic slave trade and its consequences for generations to come. This violent history of millions of Africans forcibly removed from their homes did not simply shifted people, it violently tore apart their culture, family structures and spoken traditions. African languages, beliefs and forms of transmission of history were systematically destroyed during the Middle Passage, on the plantations and under colonial rule. This often-left black people in the Americas with nothing tangible that tied them to where they came from. Memory is more than thought, it is a vital act of re-voice-ing, re-identity-ing, re-historicising self. It is what we remember as individuals and what groups remember. It is a form of cultural resistance, a way of survival, a way of telling their story differently against the powerful forces that try to erase it. All this helps the readers of Alex Haley's *Roots: The Saga of an American Family*, published in 1976. *Roots* is a genuinely original contribution to literature and culture. What is special about it are the elements of personal storytelling, spoken history and family trees. This book tells the story of Kunta Kinte, a young Mandinka man from the Gambia. In the mid-1700s he was captured by slave traders and sold into slavery in colonial America. Then Haley follows the family of Kunta Kinte for seven generations, taking readers along with them to the author's birth and his search for his ancestors. In this way *Roots* connects the past and the present, individual lives and the larger community, personal memory and larger history.

Roots is not just a story; it is a quest for truth. Haley's work is a record that challenges the traditional narratives of history, particularly those that excluded the stories of Black Americans. Haley follows in the footsteps of his family, recovering their history and situating it within larger historical contexts, emphasizing African and Black American angles. Such a recovery challenges the dominant Western narratives that had for too long marginalized or erased Black experience from the history books. In many ways, *Roots* is literature's way of honouring oral traditions, family histories, and Black historical documents as legitimate and honest sources of information. Haley's project also reflects a deeper longing on the part of the dispersed African peoples. They were displaced, longing for their roots, their identity, a sense of total culture. For many in the African diaspora, the disconnection from their ancestors left a great void in their hearts and minds. Many were written by the colonizers and slave owners, and today's history books cannot fill the gap. In *Roots*, Haley attempts to bridge this gap by tracing his lineage back to Africa, providing an uplifting approach for dispersed African populations to rediscover their identity. It is not just names and dates. It is about re-voicing the silenced, re-dignifying the enslaved, re-placing through time and space. Thus, *Roots* is a story of homecoming, of symbolic homecoming, of linking today's Black Americans with their African past. There is another structure inside *Roots* that shows its key ideas. The novel follows the course of Black American history from Kunta Kinte's childhood in Africa, through slavery, emancipation, and reconstruction, to modern America. Each new chapter adds more layers and it is clear how the cultural memory is passed down, changes and remains alive despite different historical times. Over and over again comes up the theme of Kunta Kinte's strength of will to keep his name and African identity even as others tried spitefully to obliterate them. It is a testament to the power of memory and cultural legacy. His spirit of defiance lives on through his descendants in things like naming their children, telling stories, and fighting unjust systems. At its core, *Roots* is a story of people overcoming great hardship. Slavery was about dehumanizing people, about splitting them up. Haley's is a story of strong family ties, cultural traditions and a deep pride in one's heritage. This connects to what cultural theorist Paul Gilroy called the "Black Atlantic" – a space between nations and cultures where dispersed Black identities are constantly being remade, redefined and celebrated. Thus, Haley's work on his family tree is a message to a collective consciousness of dispersed African peoples who understand the pain and triumphs of Black history. *Roots* must be read in this way, not only as a family saga, but as a serious reflection on the interpretation of history, the political mobilization of memory and the construction of identities in a post-colonial world. *Roots* also became a hugely important cultural symbol and book. The 1976 debut and the 1977 television adaptation sparked a national conversation about race, heritage and the lasting effects of slavery in America. For many black Americans the story resonated because it seemed to offer a way of tracing their own family histories and their own identities as scattered Africans. Genealogy, once seen as a Eurocentric endeavour, evolved into a powerful way for Black Americans to find their place and reclaim their history. *Roots* became more than just a story of fiction. It became an interactive historical project that inspired many people to interact with Black memory and identity in this way. But in order to fully understand the impact of *Roots* it has to be understood in conjunction with other larger ideas of the twentieth century such as the rise of memory studies, postcolonial theory and African diaspora studies. Writers such as Pierre Nora, Marianne Hirsch and Michel-Rolph Trouillot have examined the role of power, ideas and emotions in memory, both individual and collective. Much of that deep thinking is already built into Haley's work, particularly in his exploration of who gets to remember, whose memories are considered authentic, and how the past is constructed. *Roots* addresses the historical amnesia that so often buried the legacy of slavery and its lasting impact, centering the voices of the enslaved and their descendants.

This paper will examine *Roots* from a variety of perspectives, including memory studies, the African diaspora and postcolonial theory. It will discuss the treatment of historical trauma, cultural memory and the reclamation of identity by the scattered African people in the novel. These three perspectives are central to understanding *Roots* as at its core the story is about belonging, identity and being displaced and reclaiming history. Through storytelling and symbols, Haley's project seeks to heal a historical wound of dehumanization, uprooting, and erasure that has endured for centuries. In retracing his family tree in Africa, Haley is not just reconstructing his own family history, but symbolically restoring dignity and humanity to the countless Black Americans whose family histories had been obscured or obliterated by the cruelty of slavery and rampant racism. In memory studies, *Roots* can be understood as a set of rediscovered and reimagined memories. As scholars like Pierre Nora and Marianne Hirsch have shown, memory is not simply a matter of remembering the past, but is an active process shaped by culture, society and politics. Haley's use of oral history and stories passed down through generations demonstrates how memory is performed and formed. By interweaving family stories, folk traditions and African practices, Haley resists the historical amnesia that has muted/marginalized Black voices within hegemonic historiography. Thus, *Roots* becomes an act of "postmemory" – a term developed by Hirsch to describe the transmission of memory across generations in the wake of traumatic events. Haley never met Kunta Kinte, but he manages to situate him in a continuum by imagining Kunta's life through oral accounts and cultural research, and in doing so *Roots* reconstructs Kunta Kinte's personal identity in a larger cultural and historical flow. Memory in *Roots* is never still. It is always in motion. It stretches over generations and changes and grows as slavery, segregation and modern times change. But it begins also with an act of primal naming and defiance: Kunta Kinte's rejection of the slave's name "Toby." This lasting dedication to recall and cling to one's name becomes a recurring theme in the novel, representing the fight to preserve cultural identity in the face of concerted attempts to erase it. Haley sees memory at once as a political and personal act of resistance and as a way of asserting the veracity of stories from dispersed African peoples.

Theoretical Framework: Memory as Resistance

This analysis of Alex Haley's book, *Roots: The Saga of an American Family*, is informed by ideas of memory, history and trauma from other disciplines. This study is engaging with theories such as cultural memory, postmemory (Marianne Hirsch), collective memory (Maurice Halbwachs), lieux de mémoire (Pierre Nora), and Michel-Rolph Trouillot's work on what is left out of history. That is why *Roots* is a way of preserving and passing memories, even memories that people tried to erase. It does so by collecting pieces of lost or buried histories and into a strong cultural narrative that pushes back and enables African Americans to reclaim their family and cultural heritage. Another important concept is "postmemory," a term coined by Marianne Hirsch. Postmemory is the relationship that a generation growing up under the dominance of the narratives of the generation before them develops toward experiences they themselves did not directly live through. "Memories of things traumatic descendants did not see themselves can be so powerful they feel almost like their own memories because they are linked through stories, pictures and culture," (Hirsch, 2012). This idea is at work in Haley's *Roots*. Even if Haley himself did not experience slavery, he would have heard these painful stories through his family's oral histories, especially from his grandmother and older relatives. *Roots* is built on these memories passed down through the generations and made into a book that contextualizes and personalizes the story of slavery and resistance. Hirsch explains that "postmemory" is not merely an inheritance of the past in a passive way, but an active engagement with it. One can see that in Haley's deep research, his trip to The Gambia, to find his family's old village and the story of Kunta Kinte. This pushes Haley's memory forward. He combined family stories with a historical narrative, so that the pain, strength and actions of his ancestors would not be lost to the silence of history. The novel is therefore not only a site of postmemory, but also a permanent record. It connects generations, remembers lost histories, and speaks of ancestral experiences too awful to speak of. *Roots* also deals with the concept of collective memory as proposed by Maurice Halbwachs. Halbwachs believed that memory is not only individual but also constructed, maintained and transmitted by groups such as families, religious groups and cultural organizations. Memory is very much to do with who they are and what a group thinks of him. This is seen in *Roots* where the story of ancestors' experiences – enslavement, resistance, freedom, migration – is transmitted through traditions, naming and oral stories. It is a great example of collective memory when they tried to make Kunta Kinte conform and he wouldn't give up his name. His name acquired mythical dimensions, a symbol of African personality and resistance, handed down through the generations – a legacy in itself. In *Roots*, the past is not static: Each generation adds and protects pieces of it as society and history change. *Roots* is a manifestation of Halbwachs's idea of the present as the centre of collective memory through the illustration of how Haley's present-day persona is influenced by historical forces that preceded his life. The book itself is a collective memory that slavery, systemic racism and official neglect tried to erase. It creates a family history where there is no history and creates a narrative for African Americans to understand their collective past.

Roots can also be viewed in terms of memory passed down through generations (postmemory) and shared by groups (collective memory) and Pierre Nora's "lieux de mémoire" or "sites of memory." Nora uses this term to refer to symbolic objects (monuments, books, rituals) that represent collective memory, especially when the actual sites of memory are disappearing. These sites of memory serve as surrogate or as guide to a collective memory of a group after slavery when living memory was often severed or destroyed. *Roots* is a monument, a story-monument to a people whose history was not written down but lived on in spoken traditions, spiritual beliefs and scattered memories. Haley turned all of these pieces into a digestible story, creating a symbolic place where black identity could come together. The novel gives voice to the voiceless, and to more. It shows us the marginalised, puts the forgotten bits of history in perspective. It is a piece of literature, a mnemonic device, a place of memory where people have gathered and returned for generations.

Michel-Rolph Trouillot’s ideas are partly the result of his research into the unsaid of history, a theme that he explored in his classic book, *Silencing the Past: Power and the Production of History.* Trouillot explored how history is produced through the absences, omissions, and silences in the dominant stories people tell. These silent spaces occur at different times: when facts are made (the creation of sources), when sources are saved (the collection of facts), when stories are constructed (the selection of facts), and when past events are made meaningful (the subsequent assignment of significance). These silences are especially potent around slavery. For example, enslaved people, who were often not allowed to read or write (or even have a voice) and who mostly appear as footnotes in official records and history books. *Roots* fills those gaps with a different sort of history, one based on the memories and experiences of those with no power. This is what the unspeakable is, and this is what Haley is writing down when he imagines the life of Kunta Kinte: what wasn't written, what filled the silences of the archives. *Roots* is a living counter-history that speaks African voices where official history is silent, that validates oral tradition, and that emphasizes resistance not victimhood. Haley’s work, therefore, responds to Trouillot’s call for a more nuanced and expansive history that takes account of the uses of memory in struggles over power and the unequal distribution of historical power. *Roots* is therefore a form of cultural reclamation, thinking of memory as resistance. It is not just to tell a family story, but to actively challenge the intellectual damage of slavery and colonial modes of historiography. Drawing on Hirsch, Halbwachs, Nora and Trouillot, the paper shows how *Roots* uses memory as a tool of resistance, animating the past not for nostalgia, but for the forging of identity, the attainment of justice, and the construction of common dignity.

Politics of Memory and Trauma of Slavery

Roots: The Saga of an American Family represents slavery not just as a historical institution but as a disturbing legacy that continues to haunt the collective consciousness of contemporary African American communities. *Roots* is the story of capture, enslavement, brutalization and the handing down of pain from one generation to the next. It is about the lasting psychological, cultural and political effects of slavery. It is not just about what had happened, but also about the work of recognition, of commemoration, of healing in the historical realm. It does so by engaging with the work of scholars such as Saidiya Hartman, Christina Sharpe and Cathy Caruth who explore the ways in which trauma and memory shape the identities and experiences of descendants of enslaved people. Haley exposes the savage and complex face of slavery. *Roots* depicts slavery as an institution designed to annihilate the identity, freedom and human dignity of African people, from the capture of Kunta Kinte in West Africa, through his agonizing passage on the Middle Passage, to the savage enforcement of submission on southern plantations. The novel paints a stark picture of the physical pain of slavery – whips, chains, hard work – and the mental anguish: names being wiped out, African languages and traditions outlawed, families torn apart. But *Roots* is more than a documentation of this violence; it is a revoicing of it, a reinsertion of the voices of the enslaved into a historical narrative from which they have been erased.

In its own way, *Roots: The Saga of an American Family* is a celebration of the inner lives and acts of resistance of the enslaved, through what Saidiya Hartman calls “critical fabulation,” a method that inserts imaginative reconstructions into the gaps of the historical record. Hartman writes in her powerful book, *Lose Your Mother: A Journey Along the Atlantic Slave Route*, “The colonial archives do not easily yield the stories of enslaved people, only their status as property or marginal notes” (Hartman, 2007). But, argues, to recover these stories through storytelling, imagination and memory is radical in itself (Hartman, 2007). And this is where the story of Alex Haley, fact or fiction, comes in. Haley does not re-invent the daily lives, the inner thoughts, fears and hopes of Kunta Kinte and his descendants in order to re-write history; he brings back its emotional richness and moral complexity.

Roots is based on the premise that trauma is not a one-off. Kunta Kinte’s legacy as a slave is not a legacy for his generation alone, it is a legacy that continues to reverberate in the choices, relationships and identities of his descendants. Finally, Cathy Caruth’s theory of trauma transmission between generations is that traumatic events are not fully processed when they occur but it returns in a delayed or symbolic form later (Caruth 4). Caruth also argues that trauma is not the experience of violence, but the inability to fully understand the violence as it happens (Caruth, 1996). In *Roots: The Saga of an American Family*, trauma is a cycle. It is a constant fear of separation, a constant practice of naming as resistance, and a constant struggle for dignity in a dehumanizing society. As Haley demonstrates, emancipation does not heal the scars of slavery, but rather, these scars are transmitted through generations and continue to shape how descendants perceive themselves and their position within American society. Often seen as a burden, this trauma passed down from generation to generation is also a source of resistance and strength. Haley’s characters draw pride, resilience and identity from memories of past suffering. Memory turns to empowerment, a resistance to cultural extinction, a reclaiming of power. One important moment of resistance comes when Kunta Kinte insists that his name is Kunta, not Toby. He has to bow to the system’s rules in the end but his refusal to give up his identity is a quiet but potent act of resistance. A name that has been passed down through generations is a living monument to survival. It is a personal act of defiance and a cultural inheritance that links the descendants to their ancestral identity. Thus, traumatic memory is both burden and strength, revealing the complexities of remembering slavery in the African diaspora. Christina Sharpe’s *In the Wake: On Blackness and Being* (2016) examines the legacy of slavery and its ongoing ramifications for Black life, from kinship to state violence. Sharpe argues that “Black people live in the wake of slavery” and are always negotiating its afterlives (Sharpe, 2016). “Mourning, memory, and resistance are ethical ways of engaging the past,” she also offers (Sharpe, 2016). The project of *Roots* is not simply to recover history, but to find ways of living with and through history. The novel proposes that the legacy of slavery can be contested without being obliterated by it, and that memory can be a foundation of identity instead of a chain of suffering. *Roots* is also a meditation on the politics of memory: who is allowed to remember, what they remember, and how those memories are valued or erased within dominant historical narratives. Enslaved people are often overlooked in traditional historical accounts, as passive victims or simply omitted. Haley’s narrative seeks to offset this absence by focusing on the experiences, choices, and resistances of the enslaved. In doing so, it confirms Michel-Rolph Trouillot’s critique of “silencing in historical production,” in which some voices disappear not for lack of evidence but because power structures determine what counts as history (Trouillot, 1995). Roots provides a voice for the historically voiceless, bringing the experiences of the enslaved from the margins into the centre of historical consciousness. First published in 1976 and adapted as the television miniseries Roots in 1977, it transformed public discourse about slavery in the United States. It forced the traumatic memory of slavery into the national consciousness and required audiences to face a history that is often minimized or excluded from public discussion. The novel and miniseries also inspired many African American families to undertake genealogical research and cultural reconnection, making remembrance a political and personal act. In the end, *Roots* is a powerful form of politicized memory work. The text draws on the theories of Hartman, Caruth, Sharpe, and

Trouillot to argue that remembering trauma is complicated, not always redemptive, but necessary for justice, healing, and the creation of diasporic identities built on endurance, not erasure.

Conclusion: Justice and Counter-History in Historical Writing

In that respect *Roots* is a fine example of counter-history. It is not just a matter of inserting African American elements into the canonical story of the American history. It changes the whole story. It begins in Africa and goes through the ages exploring the Black experience. Unlike sanitized versions of slavery often found in textbooks or public history, the novel powerfully depicts the violence, disruption, and psychological pain of the transatlantic slave trade and plantation slavery. It also celebrates the resilience, ingenuity and continuity of black people in the face of systemic oppression. Haley pushes back against the colonial idea that the African history of Black Americans is unknowable, irrelevant or lost forever by tracing his ancestor Kunta Kinte from The Gambia to his life in 20th-century America. It shows that African Americans are not rootless, but are rooted in a historical continuum that starts in Africa, passes through the Middle Passage, and extends across generations of resistance and struggle. This retrieval of Black ancestry is a radical act of historical justice, a story of atonement. Haley also animates anonymous figures by naming and narrating the stories of his ancestors—Kunta Kinte, Bell, Kizzy, Chicken George, Tom, and others—thereby rendering them historical subjects with voices, desires, and agency. This is all the more important because the historical record systematically erased the individual identity of enslaved persons. As Michel-Rolph Trouillot argues in Silencing the Past, the making of history is marked by archival and narrative silences, the silences of the enslaved particularly. Haley's *Roots* silences these silences to provide a history from the lived experience of those who have been historically silenced, not the voices of the powerful. The novel also interrogates the myth of American exceptionalism, the myth that American history is a story of liberty, progress and democracy. *Roots* contrasts the ideals of liberty and justice with the brutality of slavery, exposing the contradictions and hypocrisies that are a part of the nation's founding. Kunta Kinte and his descendants' story is an accounting of the primal violence on which the country was built, a meditation on the human costs of America's rise.

Roots thus enters the lexicon of what is being called historical redress literature – literature that aims to repair the intellectual and cultural damage wrought by centuries of racial exclusion. In its storytelling, *Roots* is part of an ongoing project of truth-telling and reconciliation, not only for African Americans, but for the larger American society which has often been reluctant to confront its past. The healing function has had real-world consequences: the 1977 television adaptation of the novel was watched by over 130 million people, and it sparked public conversations about race, family lineage and historical justice that were previously unimaginable in mainstream American media. Haley's work has also shaped ongoing movements and academic discourse on the significance of African American genealogical recovery, ancestral memory, and historical redress. In many respects, *Roots* anticipated later discussions of critical race theory, debates over reparations, and public history projects that sought to foreground the experiences of the enslaved and their descendants. *Roots: The Saga of an American Family* by Alex Haley is not just a family tree, not even a fictionalized personal saga; it is an important event in our culture and in the way we understand history. Marianne Hirsch's theory of "postmemory," Michel-Rolph Trouillot's "silencing," Paul Gilroy's "Black Atlantic" and Homi Bhabha's "hybridity" all imply that *Roots* is more than a book, it is a site of resistance for culture. Haley's story is like reclaiming what was lost through colonialism. It helps build an identity for scattered peoples around the world. It's a way of doing what Michel

Foucault called “counter-memory” – remembering things other than the official story. The familiar stories tend to sideline people of African descent. The book shows how Instead it tells a different story, a story of memory, pain and just survival. *Roots* is also a “postmemory” project, and that is one of the most important things it does. Haley himself was not a slave, but his story echoes the pain of past generations. The memories African Americans have from that time. So, *Roots* is a record that bridges generations, linking the present with a past that was deliberately hidden. Hirsch’s concept of postmemory accounts for the powerful emotional and cultural connection that Haley and his readers are able to establish with a traumatic past prior to their own lives. Remembering is a conscious decision. It’s a political and moral commitment to the past, a request for continuity when things are supposed to be broken.

Roots also shifts our understanding of the diaspora. It’s not just about losing things, but a place where people change, adapt and survive. The book really shows how adaptable people in the diaspora are and how they keep the culture alive. African cultural practices such as language, names, spiritual beliefs, music and oral stories have survived across time and space. They were taken from Africa to America, brutalized, their feelings less than human. They still had their family relations and background. Instead, it created a blend and mix of cultures that is still a powerful component of African American identity today. The work of memory in *Roots* is also connected to the broader project of historical justice. Haley is engaged in what one might call “reparative history” — writing history from the perspective of the oppressed. He is trying to give dignity and a voice to people who have been excluded from official stories for too long. By naming his ancestors and telling their stories, Haley is symbolically putting things right. He knows their suffering. He praises their strength. He makes sure they are human. It’s an act that still echoes in a society wrestling with the legacy of slavery, racial inequality and how we remember our culture. The novel demonstrates how storytelling can be a powerful act of resistance. Haley's story is about African oral traditions of feelings, family lines, and memory. Western historians do not usually, formally, write that way. This type of storytelling is a familiar technique in post-colonial writing, which gives those on the margins a voice and a hearing. *Roots* is not a story of victims, it is a story of people who fight back against oppression with their own will, their own creativity and resilience. It creates a lineage that is hard to erase, a nucleus for a shared identity. And people gets to know the enormous cultural impact of *Roots*. When the book came out — and especially when it was turned into a groundbreaking TV miniseries — it sparked public conversations about race, slavery and family history in a way that nothing had before. The *Roots* encouraged many African-Americans to search out their own family trees, to be proud of their culture and to delve deeper into history. It brought enslaved people’s stories into millions of homes, forcing America to face uncomfortable truths about its past. It is a work of literature, but it is also a work of public history, connecting individual stories with the consciousness of the nation. But for all its virtues, *Roots* has its flaws. It raises important questions about its blending of fact and fiction, its dependence on oral history, and the controversies surrounding plagiarism and its accuracy. But these difficulties also point to larger issues for memory studies and postcolonial writing: the difficulty of returning and telling stories from histories that have been systematically erased. The debates do not mean that the novel is not important. Instead, they emphasize the importance of stories for making sense of the world and for acting ethically. *Roots* is ultimately a powerful reminder of the way stories can endure, inform history, identity and memory. It connects the personal to the collective, the hurt to the healing, the forgotten to the remembered. Haley’s work redefines what it means to write history from the perspective of ordinary people and demonstrates that literature can be a powerful tool in the fight for recognition, justice and knowing one’s self. *Roots* is more than just a family tree. By tracing a lineage broken by slavery and colonialism, *Roots* reconstructs the humanity, the heritage and the hope of an entire people. Roots is a cultural piece that still has a great impact on academic, social, and political discussions. It is a literary milestone and an enduring testament to history and culture. It is a reminder that to remember, to remember what people would have us forget, is an act of resistance. And it is that resistance that gives us the possibility of change, of healing and of freedom.

References

Bhabha, H. K. (1994). *The location of culture*. Routledge.

Caruth, C. (1996). *Unclaimed experience: Trauma, narrative, and history*. Johns Hopkins University Press.

Foucault, M. (1977). Nietzsche, genealogy, history. In D. F. Bouchard (Ed.), *Language, counter-memory, practice: Selected essays and interviews* (D. F. Bouchard & S. Simon, Trans., pp. 139–164). Cornell University Press.

Gilroy, P. (1993). *The Black Atlantic: Modernity and double consciousness*. Harvard University Press.

Halbwachs, M. (1992). *On collective memory* (L. A. Coser, Ed. & Trans.). University of Chicago Press.

Haley, A. (1976). *Roots: The saga of an American family*. Doubleday.

Hall, S. (1990). Cultural identity and diaspora. In J. Rutherford (Ed.), *Identity: Community, culture and difference* (pp. 222–237). Lawrence & Wishart.

Hartman, S. (2007). *Lose your mother: A journey along the Atlantic slave route*. Farrar, Straus and Giroux.

Hirsch, M. (2012). *The generation of postmemory: Writing and visual culture after the Holocaust*. Columbia University Press.

Ngũgĩ wa Thiong'o. (1986). *Decolonising the mind: The politics of language in African literature*. James Currey.

Nora, P. (1989). Between memory and history: Les lieux de mémoire. *Representations, 26*, 7–24. https://doi.org/10.2307/2928520

Said, E. W. (1993). *Culture and imperialism*. Knopf.

Sharpe, C. (2016). *In the wake: On blackness and being*. Duke University Press.

Spivak, G. C. (1988). Can the subaltern speak? In C. Nelson & L. Grossberg (Eds.), *Marxism and the interpretation of culture* (pp. 271–313). University of Illinois Press.

Trouillot, M.-R. (1995). *Silencing the past: Power and the production of history*. Beacon Press.

Gendering Leadership Education: Global Discourses and Local Pathways Toward SDG 4.5 and Gender Equity in South Korean and Indonesian Curricula

Seri Yoon, Waseda University, Japan

The Washington DC Conference on the Social Sciences 2026
Official Conference Proceedings

Abstract

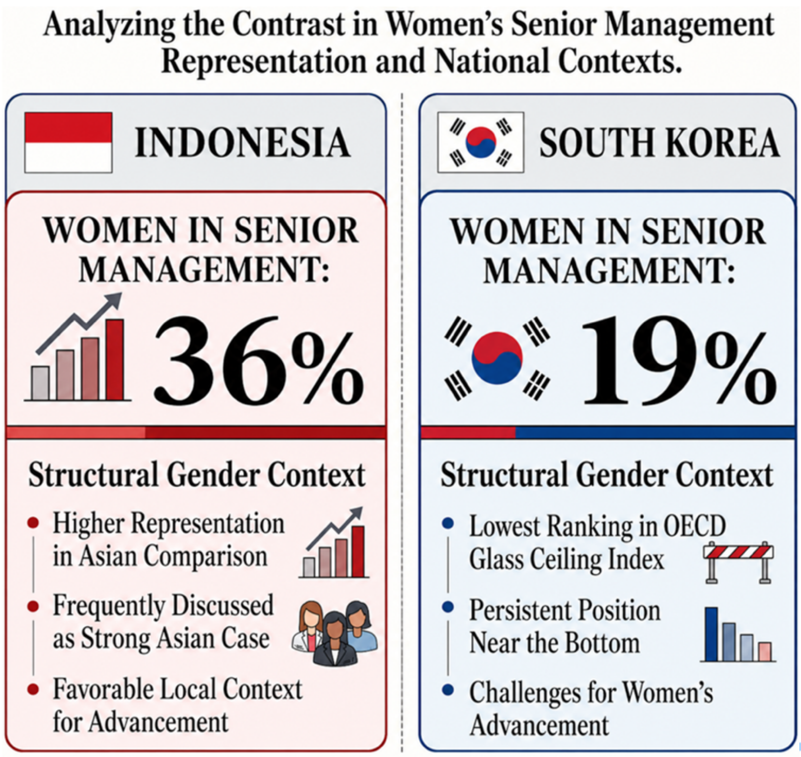
Indonesia is one of the countries with the highest proportion of women in senior management positions in Asia, with 36% according to the Women in Business 2024 report. In contrast, South Korea ranks lowest among OECD countries in the Glass Ceiling Index 2023, with only 19%. These notable differences raise an inquiry into how gendered expectations are constructed within educational structures and leadership discourses, particularly in school-based curricula. This study adopts a qualitative methodology informed by Stuart Hall's theory of representation, Chandra Mohanty's postcolonial feminism, and intersectionality theory. It analyzes official educational materials published by both governments at the secondary level, including national curricula, civics education guidelines, and leadership training documents. Examples include Indonesia's Pancasila and Citizenship Education modules and South Korea's middle school civics curriculum. The analysis focuses on how leadership is framed as requiring specific attributes and responsibilities, including civic engagement, ethical attitudes, and social responsibility. It further explores how such expectations are gendered and institutionalized through pedagogical practices. It draws on SDG 4.5 (gender equality in education) as a comparative benchmark and examines how global education discourses such as UNESCO's Global Citizenship Education (GCED) are interpreted and localized differently in South Korea and Indonesia. These differences show how national contexts shape the ways global education narratives are interpreted and translated into locally embedded gendered leadership pathways. By revealing how leadership discourses in education can reinforce or challenge gender inequality, the study provides practical insights for policymakers and educators striving toward SDG 4.5 and more equitable education systems.

Keywords: gender and education, leadership education, global citizenship education, SDG 4.5

Introduction

Indonesia's relatively high proportion of women in senior management and South Korea's persistent position near the bottom of international glass ceiling rankings present a comparative puzzle for gender and education research. The Women in Business 2024 report shows that the global share of women in senior management remains uneven across national contexts, while Indonesia is frequently discussed as one of the stronger Asian cases in women's senior management representation and South Korea remains a difficult case in terms of women's advancement into senior leadership (Grant Thornton, 2024). The Economist's Glass Ceiling Index also places South Korea at the bottom among OECD countries, suggesting that women's educational achievement and national economic development do not necessarily lead to equal access to leadership (The Economist, 2023). The contrast is therefore not only a matter of labor market participation or corporate promotion. It also invites attention to earlier educational spaces where students encounter ideas about what leadership means, who can be imagined as a leader, and which forms of responsibility are treated as socially legitimate.

Figure 1
Comparative Puzzle Between Women's Senior Management Representation and National Leadership Contexts



Education is one of the main spaces where social meanings are produced, repeated, and normalized. School curricula do not simply deliver neutral knowledge. They also carry expectations about citizenship, responsibility, authority, and participation in public life. UNESCO's work on Global Citizenship Education emphasizes that education should help learners understand global interdependence, respect diversity, work with others, and participate actively in addressing local, national, and global challenges (UNESCO, 2024). UNESCO also explains that GCED can be integrated into existing subjects such as civic education, social studies, peace education, and related areas, which makes civic curricula an important site for examining how global values are translated into national educational practice (UNESCO, 2017). SDG 4 establishes inclusive and equitable quality education as a global objective, while Target 4.5 specifically calls for eliminating gender disparities in education and ensuring equal access for vulnerable groups (United Nations, 2024). These frameworks make it necessary to ask whether gender equality is treated only as access to schooling, or whether it also appears in the deeper curricular construction of leadership, participation, and civic responsibility.

South Korean and Indonesian secondary curricula provide a useful comparison because both cases connect civic education to broader projects of citizenship formation, although they do so through different historical and cultural vocabularies. In Indonesia, Pancasila and Citizenship Education offers a major curricular space where students encounter ideas of civic duty, national unity, community responsibility, and moral conduct. In South Korea, middle school civics curriculum similarly teaches democratic citizenship, social participation, public responsibility, and ethical judgment. These subjects are not identical in content or history, but they are comparable as institutional sites where young people are introduced to normative models of civic life. They therefore allow an analysis of how leadership is represented within official educational discourse and how such representations may carry gendered assumptions.

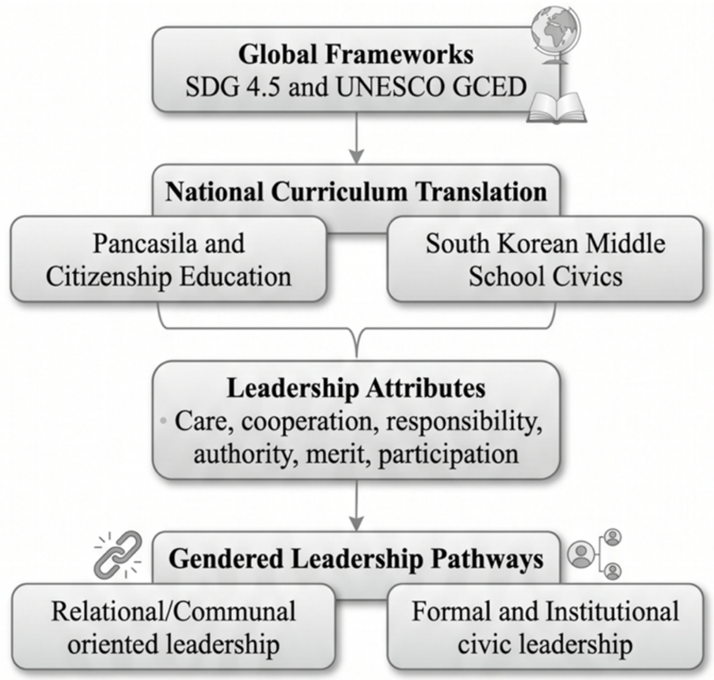
The theoretical approach brings together representation, postcolonial feminism, and intersectionality in order to examine how leadership becomes meaningful in curriculum. Hall's theory of representation is useful here because it treats meaning as something actively produced through language, symbols, and discourse, rather than simply reflected by them (Hall, 1997). From this perspective, educational texts do not merely describe leadership as a pre-existing quality. They help produce the categories through which leadership becomes recognizable. A curriculum that repeatedly links leadership to public authority, rational decision making, competitiveness, and institutional status may attach leadership to social meanings that have often been coded as masculine. A curriculum that connects leadership to relational responsibility, mutual cooperation, care, and community participation may open different ways of imagining who can lead. The central issue is not whether curricula explicitly state that boys or girls should lead. The more important question is how leadership becomes meaningful through recurring words, examples, roles, and pedagogical expectations.

This concern with meaning also requires attention to locality. Mohanty's postcolonial feminism is important because the comparison between South Korea and Indonesia cannot rely on a universal model of women's leadership derived from Western liberal assumptions. Mohanty critiques the tendency to treat women outside the West as a single homogeneous group and emphasizes the importance of historical location, power relations, and difference in feminist analysis (Mohanty, 2003). In this study, that insight matters in two ways. Indonesian women's leadership should not be interpreted simply through the assumptions often used to explain leadership in OECD contexts. At the same time, South Korea's glass ceiling should not be reduced to a lack of women's education. Both cases require attention to how national histories, civic ideals, family norms, institutional structures, and global education discourses come together in the formation of gendered leadership expectations.

Intersectionality deepens this approach by showing that gender never operates by itself. Crenshaw's concept of intersectionality explains how gendered inequality is shaped through overlapping structures of power such as race, class, law, and social status (Crenshaw, 1989). In the context of curriculum, students are not addressed only as boys or girls. They are also addressed as citizens, future workers, community members, national subjects, and moral actors. Leadership education often appears through civic language that seems neutral, yet that language may still distribute authority, care, public responsibility, and social legitimacy in gendered ways. For this reason, the analysis considers how gender intersects with national identity, civic duty, moral responsibility, and social belonging in the construction of leadership.

The guiding question of this article is how leadership education is gendered through official secondary school curricula in South Korea and Indonesia. The analysis focuses on how leadership is framed as requiring particular attributes and responsibilities, including civic engagement, ethical attitudes, and social responsibility. It also considers how global discourses such as UNESCO's Global Citizenship Education are interpreted and localized differently across national contexts. Global education frameworks do not enter national curricula as fixed models. They are translated through local educational traditions, political cultures, and civic ideals. The comparison therefore shows how national contexts shape the ways global education narratives become embedded in locally specific and potentially gendered leadership pathways.

Figure 2
Analytical Framework for Examining How Global Education Discourses Become Localized Into Gendered Leadership Pathways



The contribution of this article lies in shifting attention from labor market outcomes alone to the educational construction of leadership before the workplace. The high level of women's senior management representation in Indonesia and the persistent constraints faced by women in South Korea provide the empirical puzzle, but the main analytical focus lies in the curricular meanings that precede these outcomes. This approach moves the discussion from equal access to education toward the content and meaning of education itself. If SDG 4.5 is to be understood as more than parity in enrollment, then it should also include critical attention to the gendered meanings embedded in what students are taught about authority, responsibility, participation, and leadership.

Methodology

This study adopts a qualitative document analysis design to examine how gendered expectations of leadership are constructed in official secondary school curricula in South Korea and Indonesia. Curriculum texts, civic education guidelines, and pedagogical materials are treated here not only as sources of information but also as institutional records through which states organize educational meanings, define desirable forms of citizenship, and normalize expectations about responsibility and participation (Bowen, 2009). Since the purpose of this research is not to measure individual student attitudes, but to interpret how leadership is represented within official educational discourse, a qualitative documentary approach allows close attention to language, categories, examples, and recurring normative patterns.

The corpus is drawn from official educational materials published or recognized by the governments of South Korea and Indonesia at the secondary level. In the Indonesian case, the analysis centers on Pancasila and Citizenship Education materials, especially curriculum related modules and supporting documents connected to civic formation, national unity, moral conduct, and the Pancasila Student Profile. For South Korea, the analysis focuses on middle school civics curriculum within the national curriculum framework, with attention to democratic citizenship, social participation, ethical judgment, and public responsibility. The two sets of materials are not treated as identical, but they offer comparable curricular sites because both place civic education at the center of citizenship formation and both connect leadership to civic engagement, ethical attitudes, and social responsibility. The comparison therefore remains focused on specific curricular spaces rather than on the entire education system.

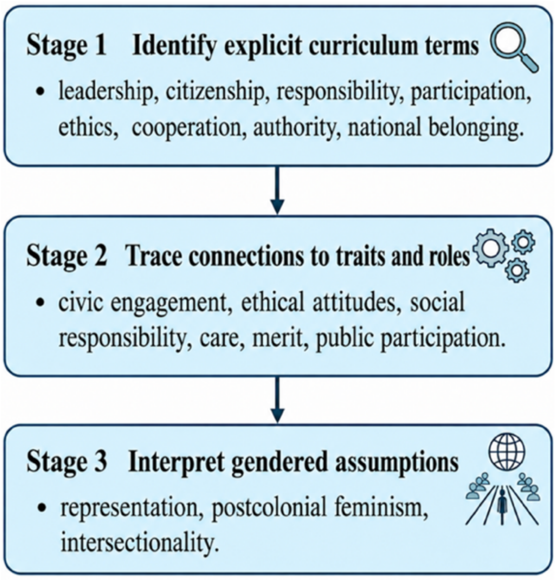
Table 1
Corpus and Analytical Scope

Category	Indonesia	South Korea	Analytical Purpose
Curriculum site	Pancasila and Citizenship Education	Middle school civics curriculum	Compare civic education as a site of leadership formation
Educational level	Secondary education	Secondary education	Maintain comparable scope
Core civic vocabulary	Pancasila, gotong royong, national unity	Democratic citizenship, public responsibility, ethical judgment	Identify local civic meanings
Leadership related focus	Cooperation, moral conduct, community responsibility	Participation, rational judgment, institutional responsibility	Trace gendered leadership expectations
Global reference	SDG 4.5 and UNESCO GCED	SDG 4.5 and UNESCO GCED	Compare localization of global discourse

Materials are included when they meet a combination of institutional, thematic, and comparative relevance. The documents need to be officially issued, publicly available, or institutionally recognized as part of secondary education policy. They also need to contain content related to citizenship, civic responsibility, moral education, leadership, social participation, or student development. Finally, they need to make it possible to compare national curriculum discourse with broader global education discourse. The resulting corpus includes national curriculum texts, civics education guidelines, leadership related pedagogical materials, and contextual documents on UNESCO's Global Citizenship Education and SDG 4.5. When English versions or official English descriptions are available, they are prioritized for consistency. When original terms are retained, such as Pancasila and gotong royong, they are treated as culturally specific concepts and interpreted through official descriptions and relevant secondary scholarship rather than translated as neutral equivalents.

The analytical process combines qualitative content analysis with theory informed interpretation. The documents are read repeatedly in order to identify how leadership is described, which attributes are attached to leadership, and which forms of civic behavior are presented as desirable (Schreier, 2012). Coding begins with explicit references to leadership, citizenship, responsibility, participation, ethics, cooperation, authority, and national belonging. The analysis then follows how these ideas are connected to particular traits, roles, and pedagogical expectations across the documents. Particular attention is given to moments where gender is not directly named, but where recurring associations may still carry gendered assumptions. This makes it possible to examine gender as an embedded meaning within institutional discourse rather than only as an explicit curriculum topic.

Figure 3
Coding Process for Gendered Leadership Analysis



The theoretical framework enters the analysis as a set of interpretive lenses rather than as separate blocks of explanation. Hall's theory of representation is especially useful for reading curriculum as a site where leadership becomes meaningful through language, symbols, and repeated associations (Hall, 1997). Leadership is therefore not treated as a fixed concept that simply appears in the curriculum. It is examined through the ways it becomes recognizable through terms such as authority, cooperation, care, merit, responsibility, and public participation. Mohanty's postcolonial feminism adds a necessary caution against reading women's leadership through a universal model derived from Western liberal assumptions (Mohanty, 2003). This is important because Indonesia and South Korea are shaped by different civic histories, family norms, educational traditions, and relationships to global gender discourse. Intersectionality further helps trace how gender intersects with national identity, civic duty, moral responsibility, and social belonging in the construction of leadership (Crenshaw, 1989).

The comparative strategy is interpretive rather than statistical. South Korea and Indonesia are not approached as equivalent national units with identical education systems. They are compared as two cases where secondary civic education functions as a state supported site of citizenship formation. This approach follows the logic of qualitative comparison, in which cases are selected not for representativeness but for their ability to illuminate a meaningful contrast. Indonesia's stronger representation of women in senior management and South Korea's persistent glass ceiling provide the comparative puzzle, while the documents provide the main evidence for examining how leadership is educationally represented. The argument therefore does not claim that curriculum alone causes national differences in women's leadership outcomes. It asks how curriculum may contribute to the cultural and institutional conditions through which leadership becomes gendered.

Global education discourse is used as a comparative benchmark rather than as a fixed universal standard. SDG 4.5 provides the normative framework for examining gender equality in education, while UNESCO's Global Citizenship Education offers a framework for understanding how civic responsibility, diversity, participation, and global awareness are educationally articulated (UNESCO, 2017, 2024; United Nations, 2024). The analysis examines how these global ideas are interpreted within national curricula and how they become connected to local traditions of citizenship and leadership. This makes it possible to ask whether global education narratives encourage gender equitable understandings of leadership or whether they are localized in ways that reproduce existing gendered expectations.

Analytic reliability is supported through repeated reading, cross document comparison, and memo writing. Initial codes are developed from the theoretical framework and research questions, but they are revised as patterns emerge from the documents. This follows the flexible logic of thematic analysis, where themes are developed through close engagement with the data rather than imposed mechanically in advance (Braun & Clarke, 2006). The analysis focuses on recurring patterns rather than isolated phrases. Particular attention is given to how leadership is linked to civic engagement, ethical attitudes, social responsibility, authority, cooperation, care, competitiveness, and community belonging. These patterns are then interpreted in relation to representation, postcolonial feminism, and intersectionality.

Because the analysis relies on official documents, it cannot measure how teachers actually teach these materials or how students interpret them in classrooms. It also does not claim to represent all schools or all educational experiences in South Korea and Indonesia. The value of this methodological choice lies in showing how official curricula and related pedagogical materials construct the symbolic boundaries of leadership before students enter higher education or the labor market. This is consistent with the central argument of the paper, which treats curriculum as a site where leadership is not only taught but also represented, normalized, and potentially gendered.

Results and Findings

The analysis shows that leadership is rarely presented as a single explicit curriculum category. It appears instead through repeated references to citizenship, responsibility, participation, moral conduct, cooperation, authority, and social contribution. This matters because leadership education is embedded in civic and moral language rather than always named directly as leadership. In both South Korea and Indonesia, students are taught to become responsible social actors, but the qualities attached to that responsibility differ across national contexts. Leadership emerges less as a formal title than as a set of civic dispositions, ethical expectations, and social roles that students are expected to internalize through school based learning.

In the Indonesian materials, leadership is strongly connected to collective responsibility and moral citizenship. Pancasila and Citizenship Education frames the student as a member of a national community whose responsibilities include social harmony, respect for diversity, cooperation, and contribution to collective life. This pattern is reinforced by the Pancasila Student Profile, which identifies dimensions such as faith and noble character, global diversity, mutual cooperation, independence, critical reasoning, and creativity as desirable qualities of Indonesian students (Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, n.d.). In this context, gotong royong becomes especially important because it presents cooperation not as a secondary interpersonal skill but as a central civic capacity. Official descriptions define gotong royong as the ability to work together voluntarily so that shared activities become easier and more meaningful for the community (Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, n.d.). Leadership is linked not only to command or public authority, but also to the capacity to sustain collective life.

This Indonesian framing carries a distinctive gendered implication. Because leadership is linked to care, cooperation, harmony, and community responsibility, it can be interpreted as opening symbolic space for women's leadership through culturally recognized forms of relational authority. The point is not to claim that Indonesian curriculum directly produces women leaders, nor to romanticize care based leadership as automatically emancipatory. Rather, the official language of civic education provides a vocabulary through which leadership can be imagined as relational and communal instead of only hierarchical and institutional. The gendered significance of this pattern becomes clearer when read alongside scholarship on Indonesian gender politics, especially the idea of state ibuism. Suryakusuma describes state ibuism as a political and cultural formation that connects women's social value to motherhood, care, family, and service to the nation (Suryakusuma, 2011). Even when curriculum does not name ibuism directly, the broader socio cultural discourse remains relevant. When leadership is repeatedly connected to care and community, women's public recognition may become more culturally acceptable, while that recognition may still remain tied to morally approved forms of feminine responsibility.

The Indonesian case reveals an important ambiguity in the civic vocabulary of Pancasila and gotong royong. These concepts provide an inclusive image of leadership that is not limited to individual dominance or formal office. At the same time, they may attach women's leadership to expectations of care, harmony, and service. This ambiguity helps explain why a curriculum can appear gender neutral while still producing gendered meanings. The leadership pathway made visible in the Indonesian materials is not simply a path toward authority. It is a path toward socially recognized responsibility. Such responsibility may be more accessible to women when it is framed through community and care, but it may also reproduce expectations that women lead by serving others.

The South Korean materials construct leadership through a different set of civic meanings. The middle school civics curriculum and the broader national curriculum framework emphasize democratic citizenship, social participation, ethical judgment, respect for others, communication, self direction, and public responsibility (Ministry of Education of the Republic of Korea, 2022). These values are not explicitly gendered. They appear as general qualities expected of all students. Yet the way they are organized around democratic participation, institutional life, rational judgment, and public responsibility gives leadership a more formal civic character. In this context, leadership becomes recognizable through the ability to deliberate, participate, communicate, make judgments, and act responsibly within public and institutional settings.

Compared with the Indonesian case, South Korean civic leadership is less strongly anchored in communal care and more strongly attached to institutional citizenship. The curriculum encourages students to become democratic citizens who can participate in public life and make ethical decisions, but the model of participation often resembles formal democratic competence. Leadership is associated with rational communication, public deliberation, merit, and social contribution. These qualities are valuable and necessary for democratic education, yet they may also overlap with social meanings historically associated with masculine coded public authority. From the perspective of representation, the important question is not whether the curriculum openly excludes girls. What matters is how the repeated association of leadership with institutional authority, rational judgment, competitive merit, and public presence makes some forms of leadership appear more legitimate than others.

The Korean case shows how gendered meaning can emerge even without explicit gender language. A curriculum can promote equality and democratic citizenship while still relying on leadership images that are culturally closer to formal authority than relational responsibility. This helps explain why women’s high educational achievement does not automatically become equal leadership recognition. When students encounter leadership mainly through public institutions, rational decision making, and competitive forms of civic competence, the imagined leader may remain implicitly closer to masculine coded norms of authority. Korean civic education is not presented here as the direct cause of the country’s glass ceiling. The argument is that curriculum may contribute to the symbolic conditions through which some leadership styles are more easily recognized as legitimate than others.

The comparison between the two cases shows that global education discourses are localized through different civic vocabularies. UNESCO’s Global Citizenship Education emphasizes active participation, respect for diversity, cooperation, and responsibility toward local and global challenges (UNESCO, 2017, 2024). SDG 4.5 further frames gender equality as a core educational concern by calling for the elimination of gender disparities in education (United Nations, 2024). These global frameworks provide shared normative language, yet they enter national curricula through distinct civic histories. In Indonesia, global citizenship values are translated through Pancasila, gotong royong, national unity, and community responsibility. In South Korea, similar values are translated through democratic citizenship, public participation, ethical judgment, and institutional responsibility. Global discourse becomes meaningful through these local histories of citizenship formation rather than through simple adoption.

This localization contributes to different gendered leadership pathways. In Indonesia, the curriculum’s emphasis on mutual cooperation, harmony, and community responsibility may support a model of leadership that is socially compatible with care based and relational forms of women’s participation. In South Korea, the curriculum’s emphasis on democratic competence, rational judgment, public responsibility, and institutional participation may support a model of leadership that remains closer to formal civic authority. The two curricula are not mirror opposites, since both contain cooperation, responsibility, ethics, and social participation. The meaningful difference lies in which qualities become central to the imagination of leadership and which qualities are more likely to be recognized as legitimate public capacity.

Table 2
Comparative Coding of Leadership Attributes

Analytical Dimension	Indonesia	South Korea	Gendered Interpretation
Civic vocabulary	Pancasila, gotong royong, national unity	Democratic citizenship, public participation, ethical judgment	Civic language shapes how leadership becomes recognizable
Leadership image	Relational and community oriented	Formal, rational, and institutionally oriented	Different leadership styles gain legitimacy
Key attributes	Cooperation, care, harmony, moral conduct	Rational judgment, merit, authority, public responsibility	Gendered meanings emerge without explicit gender language
Possible pathway	Care based and relational participation	Formal civic authority and institutional competence	Leadership becomes gendered through different symbolic routes
Main ambiguity	Opens space for women through care but may reproduce service expectations	Promotes participation but may privilege masculine coded authority	Neither model is entirely inclusive or exclusionary

The findings also reveal the importance of the hidden curriculum. Leadership education does not operate only through explicit lessons about leaders. It also works through examples, repeated language, expected behaviors, and the moral vocabulary used to define good citizenship. Jackson's concept of the hidden curriculum is useful here because school learning includes informal and implicit lessons about roles, authority, and social expectations (Jackson, 1968). Apple's work on curriculum and ideology also helps explain why school knowledge should be understood as socially organized rather than neutral (Apple, 2004). In this study, the hidden curriculum of leadership appears in the way civic education normalizes relationships between authority, care, responsibility, cooperation, and public action. These relationships shape what kinds of leadership become imaginable before students enter higher education or the labor market.

A major finding is that gender equality in education cannot be reduced to enrollment, access, or formal inclusion. Both South Korea and Indonesia have institutional commitments to education and citizenship formation, but the meanings attached to leadership differ. SDG 4.5 is relevant not only because it addresses gender disparities in education, but also because it raises a deeper question about the content of education itself. If leadership is taught through gendered assumptions about authority and care, equality requires more than equal access to schooling. It requires attention to how curricula define desirable citizenship, legitimate responsibility, and socially recognizable leadership.

The empirical puzzle of Indonesia's stronger representation of women in senior management and South Korea's persistent glass ceiling cannot be explained by curriculum alone. The findings instead point to the role of secondary curricula in forming the symbolic and cultural conditions through which leadership is imagined. Indonesia's civic education materials make relational and community oriented leadership more visible, while South Korean civic materials give stronger emphasis to formal democratic competence and institutional responsibility. These different curricular patterns help clarify how leadership can become gendered even when gender is not directly named. Education thus appears not only as preparation for social life but as a site where the meanings of leadership, responsibility, and gender are produced before leadership outcomes become visible in the workplace.

Implications & Conclusion

The findings broaden how gender equality in education should be understood. SDG 4.5 calls for the elimination of gender disparities in education, yet the analysis in this paper suggests that equality also depends on how students learn to imagine authority, responsibility, participation, and leadership (United Nations, 2024). When leadership is represented through narrow assumptions about who appears responsible, rational, caring, public, or legitimate, gender inequality may remain present even inside formally inclusive curricula. Policy discussions on gender equity therefore need to move beyond enrollment, achievement, and access indicators and examine the symbolic messages embedded in civic education, moral education, and leadership related pedagogical materials.

Curriculum review becomes especially important at the level of language. Official materials deserve attention for explicit references to gender and for quieter patterns in how leadership qualities are described. Terms such as responsibility, cooperation, authority, care, merit, participation, and public service may appear neutral, yet their meanings change depending on the examples, activities, and role models through which they are taught. UNESCO's work on gender equality in education emphasizes teaching and learning practices, education content, and life opportunities as part of gender equality in and through education (UNESCO, 2019). This broader understanding supports a gender responsive approach that reads textbooks and curriculum frameworks as places where social roles and future possibilities are constructed for learners.

Table 3
Policy Implications for SDG 4.5

Area of Intervention	Problem Identified	Recommended Direction
Curriculum review	Leadership appears neutral but may carry gendered meanings	Examine recurring leadership vocabulary and role models
Civic education	Citizenship may normalize narrow ideas of authority or care	Represent leadership through plural civic practices
Teacher education	Classroom language may assign different expectations by gender	Train teachers to identify hidden gender codes
GCED implementation	Global values are localized differently across contexts	Adapt GCED with attention to local gendered meanings
SDG 4.5 monitoring	Gender equality is often measured through access	Include curriculum content and leadership representation

The Indonesian case offers an important lesson about the symbolic possibilities of relational and community oriented leadership. Pancasila and Citizenship Education gives strong emphasis to social harmony, mutual cooperation, moral conduct, and responsibility toward collective life. These emphases may help make leadership intelligible through community service and relational authority. At the same time, this pathway remains ambivalent because women's leadership may be recognized most readily when it is linked to care, harmony, and service. Indonesia therefore should not be treated as a simple model to be copied. Its case shows how culturally grounded forms of civic leadership can widen the symbolic field of leadership while still carrying gendered expectations that require critical reflection.

The South Korean case raises a different policy concern. Civic education that emphasizes democratic participation, rational judgment, institutional responsibility, and public deliberation provides important foundations for democratic life. These values may become gendered, however, when they are repeatedly associated with formal authority, competitiveness, and public sphere legitimacy. Curriculum reform does not need to remove democratic competence or institutional participation from civic education. The more urgent task is to diversify the forms of leadership through which democratic citizenship is represented. Leadership can be taught as formal authority and public achievement, but it can also be presented through collaborative problem solving, ethical care, community mediation, and shared responsibility.

This argument matters directly for Global Citizenship Education. UNESCO presents GCED as a way to help learners understand interdependence, respect diversity, work together, and participate actively in addressing shared challenges (UNESCO, 2017, 2024). The findings of this paper show that these global values become educational practice through national histories, civic traditions, and local moral vocabularies. In Indonesia, global citizenship values are connected to Pancasila, gotong royong, diversity, and national unity. In South Korea, they are connected to democratic citizenship, public responsibility, ethical judgment, and institutional participation. Global frameworks such as GCED and SDG 4.5 therefore need to be implemented with close attention to how local curricula translate global ideals into particular gendered models of leadership.

Teachers and curriculum designers occupy a crucial position in this process. Leadership examples in classroom materials should include a wider range of figures, practices, and contexts. Activities should invite students to see leadership in deliberation, cooperation, care, conflict resolution, ethical judgment, and collective action. Teacher education can also help educators notice moments when apparently neutral classroom language assigns different expectations to boys and girls. UNESCO's gender responsive pedagogy resources emphasize that teaching practices and learning materials can play an important role in creating gender responsive learning environments (UNESCO IICBA, 2023). The same principle applies to leadership education because students learn leadership through formal content and through repeated classroom expectations about who speaks, who decides, who cares, and who represents the group.

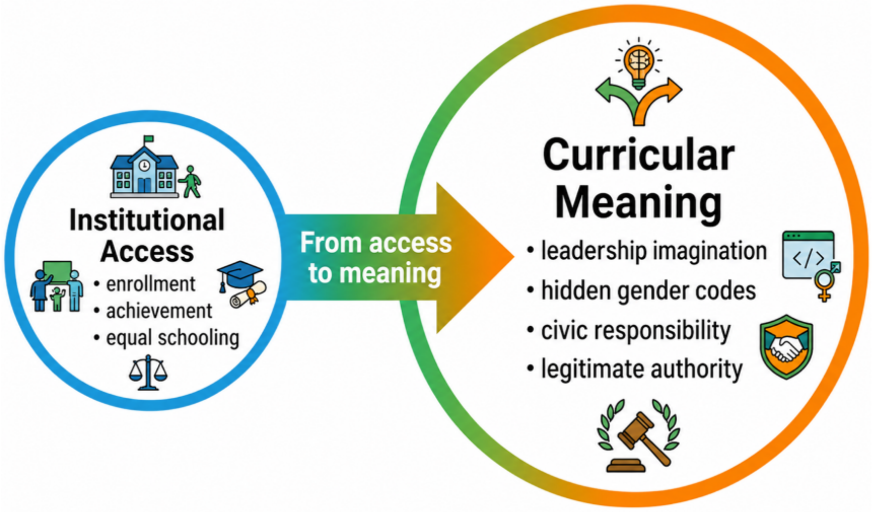
For comparative education research, the contrast between Indonesia and South Korea shows the limits of explanations based only on economic development, educational attainment, or labor market participation. A curriculum based approach reveals how leadership is symbolically prepared before students enter universities, workplaces, or political institutions. Curriculum does not determine later leadership outcomes by itself, but it participates in the formation of cultural conditions that make some leadership styles more visible, more legitimate, or more socially acceptable than others. Comparative research on gender and leadership would therefore benefit from closer attention to the early educational formation of civic identities and leadership imaginaries.

The discussion also connects to debates on student agency. OECD's Learning Compass 2030 emphasizes that students need knowledge, skills, attitudes, and values to shape the future and contribute to individual and collective well being (OECD, 2019). If agency is understood as the ability to act responsibly and influence one's surroundings, leadership education becomes an important part of student development. Agency is not gender neutral when the curriculum attaches different social meanings to authority, care, public action, and responsibility. A gender responsive approach to leadership education should help all students imagine themselves as capable of ethical action, civic participation, and social influence without restricting these capacities through gendered assumptions.

The central conclusion is that gendered leadership begins before the labor market. It is formed in part through curricular languages that teach students what counts as responsibility, who can be imagined as a leader, and which forms of public action are treated as legitimate. Indonesia and South Korea show two different ways that civic education can construct leadership. The Indonesian materials make relational and community oriented leadership more visible, while the South Korean materials give stronger emphasis to formal democratic competence and institutional responsibility. Neither pattern is entirely inclusive or entirely exclusionary. Both reveal how leadership can be gendered through meanings that appear civic, moral, and educational rather than explicitly discriminatory.

The paper returns finally to SDG 4.5 because the promise of gender equality in education cannot be fulfilled through access alone. Equal access matters, but students also need educational materials that expand rather than narrow their imagination of leadership. The deeper work of curriculum analysis lies in examining the hidden gendered meanings embedded in civic learning. A curriculum that teaches authority, responsibility, care, cooperation, and participation in more plural ways can help create broader pathways through which young people of all genders may imagine themselves as legitimate leaders.

Figure 4
Expanding SDG 4.5 From Institutional Access to Curricular Meaning



References

Apple, M. W. (2004). *Ideology and curriculum*. RoutledgeFalmer.

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal, 9*(2), 27–40. https://doi.org/10.3316/QRJ0902027

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex. *University of Chicago Legal Forum, 1989*(1), 139–167.

The Economist. (2023). *The glass ceiling index*. The Economist. https://www.economist.com/graphic-detail/2023/03/06/the-economists-glass-ceiling-index

Grant Thornton. (2024). *Women in business 2024: Pathways to parity*. Grant Thornton International. https://www.grantthornton.co.uk/globalassets/1.-member-firms/united-kingdom/pdf/publication/2024/women-in-business.pdf

Hall, S. (1997). *Representation: Cultural representations and signifying practices*. Sage.

Jackson, P. W. (1968). *Life in classrooms*. Holt, Rinehart and Winston.

Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia. (n.d.). *Profil Pelajar Pancasila* [Pancasila student profile]. Center for Character Strengthening. https://cerdasberkarakter.kemendikdasmen.go.id/profil-pelajar-pancasila/

Ministry of Education of the Republic of Korea. (2022). *The national framework for the elementary and secondary curriculum*. Ministry of Education. https://koreaneducentreinuk.org/wp-content/uploads/2025/04/2022%EA%B0%9C%EC%A0%95%EA%B5%90%EC%9C%A1%EA%B3%BC%EC%A0%95%EC%B4%9D%EB%A1%A0%EC%98%81%EB%AC%B8%ED%8C%90TheNationalFrameworkfortheElementaryandSecondaryCu.pdf

Mohanty, C. T. (2003). *Feminism without borders: Decolonizing theory, practicing solidarity*. Duke University Press.

OECD. (2019). *OECD Learning Compass 2030*. OECD Publishing. https://www.oecd.org/content/dam/oecd/en/about/projects/edu/education-2040/concept-notes/OECD_Learning_Compass_2030_concept_note.pdf

Schreier, M. (2012). *Qualitative content analysis in practice*. Sage.

Suryakusuma, J. (2011). *State ibuism*. Komunitas Bambu.

UNESCO. (2017). *The ABCs of global citizenship education*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000248232

UNESCO. (2019). *From access to empowerment: UNESCO strategy for gender equality in and through education 2019 to 2025*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000369000

UNESCO. (2024). *What you need to know about global citizenship education*. UNESCO. https://www.unesco.org/en/global-citizenship-peace-education/need-know

UNESCO IICBA. (2023). *Gender responsive pedagogy eLearning course*. UNESCO International Institute for Capacity Building in Africa. https://www.iicba.unesco.org/en/node/90

United Nations. (2024). *Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*. United Nations. https://sdgs.un.org/goals/goal4

The International Academic Forum (IAFOR)
Sakae 1-16-26-201
Naka Ward, Nagoya, Aichi
Japan 460-0008
www.iafor.org