Table of Contents

Title	Author	Page
The Role of English Medium Instruction in the Internationalisation of Japanese Universities: Approaches, Rationales, and Implications	**Joe Garner** International Christian University, Japan	1
The Rural-Urban Divide in Transitions to Higher Education in Chile	**Luis Herskovic** Universidad Adolfo Ibañez **Josefina Silva** Center for Latin American Monetary Studies	17
Organisational Culture in Indonesian Schools During COVID-19: Perceptions of School Principals	**Jenny Ngo** Institut Sains dan Teknologi Terpadu Surabaya	35
Communities of Practice and Acculturation: How International Students in American Colleges Use Social Media to Manage Homesickness	**Michael Schwartz** St. Cloud State University **Kikuko Omori** California State University, Sacramento	57
Book Review: Critical Pedagogical Narratives of Long-Term Incarcerated Juveniles: Humanizing the Dehumanized	**Vicheth Sen** University of British Columbia	73

The Role of English Medium Instruction in the Internationalisation of Japanese Universities: Approaches, Rationales, and Implications

Joe Garner[a]
International Christian University, Japan

Abstract: *In response to the economic pressures of globalisation, the Japanese government has sought to internationalise its universities while at the same time attempting to protect Japan's culture. To achieve its goals, namely the increase in the number of international students and the development of human resources, it has initiated a number of top-down, quantitative policies which promote the Internationalisation of Higher Education (IoHE) through an increase in the provision of English Medium Instruction (EMI) courses. This paper provides a critical analysis of the government's approach and how the policies have been implemented by universities. The paper contends that the government's approach has enabled universities, which do not wish to make substantive changes to their curricula, to peripheralise EMI courses. The consequence of this is that the government's current approach of promoting EMI to internationalise Japanese universities is unlikely to achieve its goals.*

Keywords: *English Medium Instruction (EMI); Internationalisation of Higher Education (IoHE); Internationalisation at Home (IaH); Internationalisation of the Curriculum (IoC); Japan*

Introduction

Internationalisation of higher education (IoHE) has increased significantly since the turn of the millennium. This is not limited to certain geographic regions but is a "global phenomenon" (de Wit & Altbach, 2021, p. 31). IoHE has predominantly been driven by an economic rationale, with countries seeking a competitive advantage over their rivals (de Wit & Merkx, 2012). However, recently, there has been an attempt to shift the focus away from economic competitiveness to one which focuses on broader contributions to society (see de Wit, Hunter, Howard, & Egron-Polak, 2015). A key element of IoHE is the "unprecedented" increase in English Medium Instruction (EMI) courses (Galloway, Numajiri & Rees, 2020, p. 396). As such, EMI has been described as the "default choice" for universities which are trying to internationalise (Bowles & Murphy, 2020, p. 20), and, like IoHE, is a "global phenomenon" (Galloway et al., 2020, p. 396). However, despite the clear connection between IoHE and EMI, the use of EMI to promote IoHE is not without critics, with de Wit (2011) stating that it is a misconception to view education in the English language as equivalent to internationalisation. Moreover, EMI's dominant role is contributing to the devaluation of other languages (Bowles & Murphy, 2020), leading some to argue that its spread is "a sign of the deepening entrenchment of English colonization around the world" (Han, 2023, p. 2).

The drive to internationalise higher education through the promotion of EMI is apparent in Japan. This drive is to compensate for the shrinking population of university-age students and to ensure that young Japanese people have the skills needed to compete in the globalised economy (Poole, Ota & Kawano, 2020). Ninomiya, Knight, and Watanabe (2009) described IoHE in Japan as

a Correspondence can be directed to: gajoe@icu.ac.jp

ISSN 2232-1802 doi: 10.14425/jice.2024.13.1.1230

"a pervasive force, shaping and challenging the higher education sector" (p. 117). They identified three stages of IoHE in Japan: post-war to 1980, 1980s-2000, and 2000-2009. To these three stages, I add a fourth which commenced in 2009 and is ongoing. This period has seen the government initiate four key policies, which, despite their varying foci, have aimed to internationalise universities through the promotion of EMI. This is not to disregard earlier government-led internationalisation initiatives but to note that the role of EMI has only become an integral part of them in recent years (Hashimoto, 2017). For example, in 1983 the "International Student 100,000 Plan" was launched, but EMI only played a "minor" role in this (Brown, 2018, p. 274). The shift to a greater focus on EMI in this fourth stage is illustrated by the 2008 report from the Education Rebuilding Council which argued that EMI should be considered "a core of university internationalization and reform" (cited in Hashimoto, 2017, p. 23). The importance of EMI in efforts to internationalise universities in Japan has been noted by Bradford, Ishikura, and Brown (2022), who argue that "EMI programs are *key* to Japan's higher education internationalization efforts" (p. 15, my emphasis).

Given both its rapid growth and the criticisms of its role in the process of internationalisation, as Bowles and Murphy (2020) argue, the role of EMI needs "urgent attention" from researchers (p. 8) as "a convincing educational case for internationalization through EMI has still not been made" (p. 21). This paper is a response to their call to action to better comprehend how EMI is implemented affects IoHE. By reviewing the extant literature on IoHE in Japan and the central role that EMI plays in this process, the paper deepens understanding of the rationale behind and effects of the current approach to internationalisation. While the paper examines the situation in Japan, as similar government-led approaches to IoHE through the promotion of EMI have been pursued in other East Asian countries, such as South Korea (see Bolton, Ahn, Botha, & Bacon-Shone, 2023) and China (see Rose, McKinley, Xu, & Zhou, 2020), conclusions are of relevance to countries across the region.

Perspectives on Globalisation and IoHE

Before examining the role of EMI in IoHE in Japan, it is important to note the broader context within which IoHE is occurring, namely a period of rapid globalisation. As Altbach and Knight (2007) note, globalisation and internationalisation are not the same. They define globalisation as the "context of economic and academic trends that are part of the reality of the 21st century", whereas internationalisation refers to the "policies and practices undertaken by academic systems and institutions" in reaction to the globalised academic environment (Altbach & Knight, 2007, p. 290). As such, globalisation is seen "as the catalyst while internationalisation is the response" (Knight, 1999, p.14). This view of internationalisation as being a response to globalisation is valid, but it is important to note that IoHE can also lead to further globalisation (Beerkens, 2003). This reciprocal causation is also noted by Mitchell and Nielson (2012) in their observation that internationalisation can be viewed as both a "leading variable, encouraging and facilitating globalization" and "a response variable describing how institutions respond to the presence of globalization" (p. 4). Therefore, while the degree to which IoHE is both a reaction to and a cause of globalisation remains open to debate, it is clear that IoHE cannot be viewed in isolation from globalisation.

Beerkens (2003) provides a theoretical framework which can be used to analyse the role of EMI in IoHE within the broader context of globalisation. He outlines four conceptualisations of globalisation: geographical, authority, cultural, and institutional. As institutions, namely the state and universities, play a central role in IoHE in Japan, applying his institutional conceptualisation of globalisation is most appropriate for this paper. According to this conceptualisation, "national commitments are eroding" as a "cosmopolitan identity or citizenship" is emerging to replace traditional ideas of national identity (p. 132); moreover, "social cohesiveness is no longer embedded in national institutions but is being substituted for some form of cosmopolitan solidarity" (p. 132). This institutional perspective views globalisation as a predominantly post-war process which has accelerated due to increased interconnectedness.

Contrasting Definitions of IoHE

There are differing views of what IoHE entails. For example, Kälvemark and van der Wende (1997) focused on its economic goals, defining it as "any systematic sustained effort aimed at making higher education more responsive to the requirements and challenges related to the globalisation of societies, economy and labour markets" (p. 19). This definition is in line with what Chan and Dimmock (2008) refer to as a globalist approach to IoHE. This approach prioritises national or institutional self-interests; it is economically driven and closely connected to the "values of the transnational capitalist class" (Cambridge & Thompson, 2004, p. 173). While Kälvemark and van der Wende's (1997) definition makes no specific reference to EMI, its economic rationale clearly lends itself to the use of EMI in that it is commonly believed by policymakers that EMI will develop the English skills that are so valued by many multi-national corporations.

An alternative definition of IoHE is provided by de Wit et al. (2015), who state that it is:

> the intentional process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education, *in order to enhance the quality of education and research for all students and staff, and to make a meaningful contribution to society* (de Wit et al., 2015, p. 283, emphasis in original)[1].

This view of IoHE is consistent with Chan and Dimmock's (2008) translocalist approach to IoHE. Universities following such an approach aim to develop both national and global perspectives among students by internationalising their curricula. They also aim to increase their employability by building English-speaking environments at their universities.

Internationalisation at Home (IaH)

IoHE is multi-faceted and "eclectic" (Chan & Dimmock, 2008, p. 184). One common element is IaH, which is defined as "the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments" (Beelen & Jones, 2015, p. 69). The concept of IaH overlaps with that of internationalisation of the curriculum (IoC), which is defined as the inclusion of "an international and intercultural dimension" in curricula (Leask, 2009, p. 209). According to these definitions, simply translating existing curricula into English without adding international and intercultural dimensions is "insufficient" for it to be considered internationalised (Beelen & Jones, 2015, p. 64). It is important to note that not only the formal curricula (e.g., syllabi), should be reformed, but that the informal (e.g., support services) and hidden (the "implicit and hidden messages sent to students") elements of curricula also need to be internationalised (Leask, 2015, pp. 8–9).

However, the stipulation that curricula include international and intercultural dimensions is problematic for two reasons. Firstly, there is, as Leask (2013) herself notes, little agreement among universities as to what IoC means in terms of practical changes to curricula. Secondly, and more importantly, in terms of the focus of this paper, the incorporation of international and intercultural dimensions is at odds with the current internationalisation approach, which, through the promotion of EMI, strongly prioritises one language, English. This issue is heightened as Leask (2009) also writes that an internationalised curriculum "will engage students with ... linguistic diversity" (p. 209). In sum, while IaH is consistent with de Wit et al.'s (2015) definition of IoHE, it would seem that the current approach to IoHE, with its prioritisation of EMI, is not.

Government Policies Aimed at Promoting EMI and IoHE in Japan

As noted in the Introduction, since 2009, the Japanese government has launched four initiatives which use EMI to promote IoHE. The first of these was Global 30, which ran from 2009 to 2014. It set the target of accepting 300,000 international students, with EMI being central to achieving

this target, as it was thought that EMI courses would make Japanese universities more attractive to international students (Burgess, Gibson, Klaphake, & Selzer, 2010). Therefore, the policy called for the "aggressive establishment" of EMI programs at 13 universities (Rose & McKinley, 2018, p. 121). The Re-inventing Japan Project was launched in 2011 and is ongoing. This aims to "foster human resources capable of being globally active" (MEXT, n.d., a) and seeks to improve the foreign language (predominantly English) skills of domestic students but is not specific about EMI. The third initiative was the Go Global Japan Project, running from 2012 to 2016. Originally named the Project for Promotion of Global Human Resource Development, it sought to "foster human resources who can positively meet the challenges and succeed in the global field, as the basis for improving Japan's global competitiveness" (MEXT, n.d., b) by promoting studying abroad and "internationalizing" Japanese universities (Kuroda, Sugimura, Kitamura, & Asada, 2018, p. 32); to achieve this, it encouraged the participating universities to increase the ratio of classes taught in English (Yu, 2023).

The most recent initiative is the Top Global University Project (TGUP). Launched in 2014 and scheduled to end in March 2024, it aims to "enhance the international compatibility and competitiveness of higher education in Japan" and to provide "prioritized support for the world-class and innovative universities that lead the internationalization of Japanese universities" (MEXT, 2014). Thirty-seven universities are participating in this initiative. These universities are categorized as either Type A (Top Type) or Type B (Global Action Type). Type A are "universities that are conducting world-level education and research and have the potential to be ranked among the world's top 100 universities"; Type B are "universities that are leading the internationalization of Japanese society by launching innovative programs based on their track records" (MEXT, n.d., c). Although EMI has been promoted at both types of universities, it has a more prominent role at Type B institutions (Aizawa & Rose, 2019).

The four policy initiatives have different foci. For example, whereas the government has primarily adopted an approach which encourages universities to adopt policies which impact the learning experience of university students studying in Japan (Hofmeyr, 2020), the Go Global Japan Project aimed to increase the number of Japanese students studying overseas. Also, while the role of EMI is explicitly stated in some of the initiatives, it is implied in others. Therefore, while the government has promoted the increased provision of EMI programs at universities in Japan, the relative importance of EMI within the various initiatives has fluctuated. This lack of consistency illustrates the ad hoc way IoHE policy has been developed over time. Such ad hocery can occur as ministers and other key actors move to new positions, and as a result, "policies shift and change their meaning" (Ball, 1993, p. 11).

However, although these government policy initiatives have some different aims, they have two common threads. Firstly, to varying degrees, they seek to increase the number of EMI courses and to internationalise Japanese universities (Rose & McKinley, 2018); in other words, they implicitly, and sometimes explicitly, promote the process of what Bowles and Murphy (2020) refer to as "internationalization through EMI" (p. 21). Secondly, they focus on increasing the competitiveness of Japanese universities and their graduates. This can be seen in terms of making the universities more attractive to foreign students (e.g., Global 30) and improving their global ranking (e.g., TGUP), and in terms of developing the country's human resources (e.g., Re-inventing Japan Project, Go Global Japan Project). In this way, rather than following a translocalist path to internationalisation, the government is adopting a globalist approach that is consistent with Kälvemark and van der Wende's (1997) definition of IoHE.

Rationale Underlying the Current Role of EMI in IoHE in Japan

Adopting a translocalist approach to IoHE involves internationalising the curriculum (Chan & Dimmock, 2008). Including this element of IoHE has the "potential to transform teaching and learning", but for this to happen, it is necessary that "dominant paradigms and long-held beliefs are challenged" (Leask, 2015, p. 105). This challenge to dominant paradigms has echoes of Beerken's

(2003) institutional conceptualisation of globalisation in which traditional national identities are replaced by cosmopolitan ones. Furthermore, according to this conceptualisation, the role of national institutions in providing social cohesiveness is weakened. Therefore, from an institutional perspective, it is possible to see why there could be reluctance among key actors to adopt a translocalist approach to IoHE. In contrast, adopting a more pragmatic globalist approach to IoHE, while clearly involving change to existing practices, appears to necessitate a far less radical challenge to the status quo. It is, therefore, apposite to examine the rationale underlying the government's approach to IoHE.

The Japanese State

The Japanese government's IoHE policies are only one part of its broader response to globalisation; this response is commonly referred to as *kokusaika* (internationalisation). This policy has been a defensive one in which the government has sought to protect the country from foreign pressure; as such, it is "less about transcending cultural barriers and more about protecting them" (Burgess et al., 2010, p. 463). In this way, *kokusaika* is driven by fear of falling behind rather than a desire to promote cultural diversity (Inuzuka, 2017); it is a policy response which is characterised by a desire for the country to benefit from the changes brought by globalisation without "losing its power and identity in the world" (Hashimoto, 2000, p. 43). As such, *kokusaika* illustrates the government's institutional perspective of globalisation; it is an attempt to protect and strengthen the national identity rather than embracing a cosmopolitan one. As Inuzuka (2017) writes, "Internationalization in Japan is a national project, a patriotic endeavor. It is a means to an end, designed to strengthen the Japanese nation" (p. 220). This view is reflected in Meiji University's (n.d) description of its Global Common Project (part of the university's globalisation strategy), which states that it aims to "form a foundation for transmitting Japanese culture, technology and intellectual property to the world." In sum, the Japanese state seeks to maintain the country's position in the world while protecting and promoting its cultural identity.

It is within this philosophy of internationalisation that the government's EMI policies are shaped: it seeks to maintain the "framework of 'Japanese internationalisation' and the essential qualities of Japanese culture, whilst simultaneously promoting the learning of English" (Phan, 2013, p. 166). Therefore, the translocalist model, which includes the progressive philosophy of IoC, is seen as unsuitable as it may contribute to the development of a more cosmopolitan identity among students. Rather, the pragmatic, globalist model of IoHE is viewed as the appropriate approach as it is less likely to weaken the national identity.

A key goal of the government's policies to promote EMI is to improve the global competitiveness of Japan's universities and their graduates. In terms of increasing the competitiveness of the universities, it is hoped that the promotion of EMI will attract talented non-Japanese academics (Shimauchi, 2018a) and high-quality international graduate students (Rakhshandehroo & Ivanova, 2020), resulting in improved research output which will have a positive impact on the global ranking of these universities. Such an approach is clearly visible in the TGUP Type A universities. However, this approach is limited in scope, being aimed at elite universities (Shimauchi, 2018a). While there is an expectation that some of these international students will remain in Japan after graduation and, therefore, continue to contribute to the country's economic competitiveness (Yamamoto, 2018), the primary focus of EMI is the development of *gurobaru jinzai* (global human resources) among the domestic student population. The competencies of *gurobaru jinzai* extend beyond English ability; for example, Poole et al. (2020) note that it also includes the capacity to think independently and develop cross-cultural understanding. Nevertheless, English ability is seen as crucial, so much so that Hashimoto (2017) argues that English proficiency is often equated with *gurobaru jinzai*. Moreover, EMI is assumed to develop *gurobaru jinzai* effectively (Toh, 2020). As such, a key goal of the promotion of EMI is "the 'development' of Japanese citizens who are able to use English as an instrument or tool to promote, enhance and defend Japanese interests and independence in an age of globalization" (Burgess et al., 2010, p. 466).

Elite-Oriented Policies

However, despite this desire to improve the global competitiveness of Japanese students, the impact of EMI is still relatively small. Shimauchi (2018a) describes EMI courses as a "limited phenomenon" (p. 85). One reason for this is that the government policies have focused on promoting EMI at a limited number of universities (for example, TGUP only involves 37 universities); as such, EMI remains "elite oriented" (Iino, 2018, p. 82). However, although government policies tend to only affect elite institutions directly, they have had an indirect impact on a wider range of universities. Many non-elite universities see internationalisation as a way to survive (Yamamoto, 2018), and EMI is seen as a "billboard for attracting domestic students" as it creates an image of an internationalised university (Shimauchi, 2018a, p. 81). Therefore, although the government policy of using EMI to promote internationalisation has been directed at a small number of elite universities, the effects of the policy have started to expand beyond the targeted universities.

A Top-Down Approach to IoHE

As well as being elite-oriented, the government's internationalisation policies have been characterised by a top-down approach (Shimauchi, 2018b). The policies, and the accompanying funding, encourage universities to adopt internationalisation strategies which respond to the government's targets, which are generally quantitative (Yamamoto, 2018). A clear example of such a target is Global 30's goal of attracting 300,000 international students. The quantitative approach to measuring internationalisation also applies to EMI programmes. For example, the number of courses offered in English is often used as a "simple but powerful indicator" of the extent to which a university has been internationalised (Shimauchi, 2018a, p. 82). This quantitative approach is central to TGUP, which includes among its targets both an increase in the ratio of international students in the total student population and an increase in the number of subjects taught in foreign languages and the development of English syllabi (MEXT, n.d. c). Here, it is interesting to note that MEXT refers to the promotion of "foreign languages" in general, but specifically the development of English syllabi; no other foreign languages are referred to by name.

Applying the government's quantitative target approach, in terms of international student numbers and EMI provision, it is possible to argue that IoHE is progressing in Japan. While the COVID-19 pandemic and its resulting restrictions on travel impacted the number of international students in Japan, over the medium term, their number is increasing. According to the Japan Student Services Organization (JASSO), there were 132,720 international students at higher education institutions in 2009; this rose to a high of 228,403 in 2019 before declining to 201,877 in 2021 (JASSO, 2021). Furthermore, MEXT (2020) reported that approximately 40% of universities now have some credit-awarding courses taught in English. However, as Poole et al. (2020) note, this quantitative approach has led to university administrators simply playing "a numbers game" (p. 40). This has led some to argue that "a broad chasm can … be seen between policy intentions and the ways in which policies are actually put into practice by universities" (Ota & Horiuchi, 2018b, p.19). This perhaps should not be surprising as policies are "more of a recipe than a blueprint", which leaves room for interpretation by the different relevant actors (Rizvi & Lingard, 2009, p. 5). These different interpretations of a policy often lead to gaps between stated goals and actual outcomes.

Universities' Approaches to the Provision of EMI Courses

Generally, Japanese universities have adopted different approaches to EMI courses depending on whether they are for international or domestic students. The majority of EMI courses are taken by domestic students (Bradford & Brown, 2018), and most of these tend to be part of Japanese-medium degree programmes. In fact, there are few full-degree undergraduate English-taught programmes (ETPs) at Japanese universities (Rakhshandehroo & Ivanova, 2020), and there is a limited number of places for international students on these courses (Poole et al., 2020). Shimauchi (2017) has provided

a useful categorisation of EMI courses (while Shimauchi was focusing on ETPs, her categorisation can be applied to EMI programmes more generally). The most common type of EMI course follows the Global Human Resource Development (GHRD) model, in which most of the students are Japanese who have been educated domestically. In these programmes, students generally take EMI classes to supplement their Japanese-medium degrees (Bradford, 2020). They are, to a large extent, made up of Japanese students being taught by Japanese faculty (Bradford & Brown, 2018, p. 4). These courses focus on developing international competencies such as English language skills and international awareness (Shimauchi, 2017). However, there are significant concerns that curricula in these courses are not being modified to contain more international and intercultural dimensions as called for in de Wit et al.'s (2015) definition of IoHE; rather, the course content tends to be what current faculty are able to teach in English (Takagi, 2017). Moreover, these courses tend to have a peripheral role within the university (Poole et al., 2020).

Courses for international students commonly follow the *Dejima* model (named after Dejima island, which was the only place non-Japanese were allowed to interact with Japanese during Japan's period of isolation from 1603 to 1868) in which international students, alongside a small number of Japanese returnees, take courses separately from Japanese students (Burgess et al., 2010). These tend to have been added to an existing department, and although the international students are enrolled in the same department as the domestic students, they use different curricula. The result of this is that there are very few chances for international and domestic students to mix (Ota & Horiuchi, 2018b); this could even be the result of these EMI programmes being physically secluded from other parts of the campus (Shimauchi, 2018b).

The final model is the Crossroads model, in which courses are designed for both domestically educated Japanese students and a diverse range of international students. While this final type of course provides opportunities for both domestic and international students to be educated together, these types of programmes place significant demands on universities and, therefore, tend to be limited to well-established and well-funded universities (Shimauchi, 2017). Consequently, it is most common for domestic and international students to take EMI courses apart from each other.

Reasons for the Universities' Approach

Government policy has often resulted in those Japanese universities which are developing EMI courses to make superficial changes (Toh, 2020) and adopt "easy solutions" (Hashimoto, 2017, p. 27), such as modifying existing curricula for EMI courses and the adoption of the *Dejima* model for international students on EMI courses. Therefore, it is important to question why there has not been a greater desire to implement EMI in a more proactive way in which its promotion is seen as an opportunity for greater transformation of universities so that they can meet the challenges they face, namely a shrinking number of domestic students and government pressure to produce *gurobaru jinzai*.

A key reason is that university administrations in Japan are generally conservative in their outlook, and while they want the grant money that is provided by the government's policies and to attract more students, they also want to maintain their universities' traditions and the dominance of the Japanese language (Poole et al., 2020) and EMI courses are viewed as a challenge to the identity of the university (Ota & Horiuchi, 2018a). In this way, university administrations' view of EMI echoes that of the institutional perspective of globalisation in that EMI is seen as a threat to the traditional identity of the institutions. Furthermore, making EMI central to the universities' identities would entail significant challenges to the existing power structures, potentially challenging "hierarchies of privilege and prestige, socioeconomic resource allocation, and educational practice in ways not seen in earlier internationalization policy" (Yamamoto, 2018, p. 236). Moreover, it would affect areas such as university governance, student and faculty recruitment, and language use in faculty meetings; in this way, giving EMI a more prominent role in the universities would bring the challenges of globalisation into the "local sociolinguistic habitat" (Iino, 2018, p. 87). Therefore, rather than embracing the possibilities of change which EMI could offer, the universities have chosen a

box-ticking approach which allows them to state their universities offer EMI courses without having to make more fundamental changes to the way they operate.

The universities' current approach benefits them. As noted above, it gives the elite among them access to government funding while allowing those in positions of power in the universities to maintain their status. Moreover, it helps the universities address the issue of the falling number of students because EMI courses, even if researchers have expressed concerns about their quality, can function as effective marketing tools to attract domestic students (Brown & Bradford, 2022) as they are seen as "innovative" (Birchley, 2018, p. 142) and "a symbol of academic rigor" (Brown & Bradford, 2022, p. 56).

Consequences of the Current Approach

EMI and International Students

As noted earlier, one reason for the promotion of EMI as a way to internationalise Japanese universities was to attract international students. This is not only to compensate for the falling number of domestic students but also to raise Japan's economic competitiveness. As such, it is pertinent to examine the experiences of international students who have taken EMI courses and programs at Japanese universities. While, as Galloway and Curle (2022) note, research into this field is limited, what research has been conducted does not paint a positive picture.

In analysing these international students' experiences, Leask's (2015) concept of the curriculum comprising formal, informal, and hidden interacting elements is useful. In terms of the formal curriculum, researchers have noted that international students have reported issues regarding the quality of the education that was provided. This is, at times, related to concerns about the English proficiency of their lecturers (Heigham, 2017) and that of their Japanese classmates (Galloway & Curle, 2022; Heigham, 2017). However, their concerns go beyond linguistic issues as negative comments regarding an overly teacher-centred teaching style and a lack of assignments, which led students to believe that the courses were not sufficiently academically challenging, have been reported (Heigham, 2017). Concerns regarding the teaching style and range of classes available were also reported by Galloway and Curle (2022). Researchers have also noted issues relating to the informal curriculum, with the support services provided being criticised. Heigham's (2017) study of international students in an ETP program found that they felt they received insufficient academic and non-academic support; for example, the university did not do enough to help them settle into life in Japan or to enable them to build friendships with Japanese students. The students in Heigham's study also reported a general lack of enthusiasm among the administrative staff tasked with supporting them. Ota and Horiuchi (2018a) similarly found that international students on EMI courses who lacked Japanese ability felt that they were not provided with enough information by the university.

Furthermore, for many international students enrolled in EMI courses, there are few opportunities for them to interact with domestic students. This is because the predominant model for EMI programmes for international students is the *Dejima* model. Consequently, a main concern international EMI students have reported is the lack of integration with domestic students (Galloway & Curle, 2022). The issues regarding the formal and informal curriculum directly connect to the hidden curriculum (i.e., the implicit messages that international students taking EMI courses receive about their programme and role within it). The administrative and physical divides which universities place between domestic and international EMI students do not provide a message of a desire to promote an internationalised campus. As Galloway and Curle (2022) conclude, because the experiences of international students who enrol in EMI courses in Japan do not match their expectations, there is a danger that it will hinder the future recruitment of such students.

EMI and Domestic Students

The potential negative impact of the current approach towards the provision of EMI programmes on international student recruitment may be less of a concern to the government and universities than one may expect. As noted above, there has been a dual approach to IoHE in Japan: an increased EMI provision combined with the increased recruitment of international students. However, the goal of increasing the number of international students has become secondary to the provision of "international" programmes for domestic students (Galloway & Curle, 2022). These programmes generally adopt the GHRD model. However, it may well be the case that these courses are failing to develop the desired international competencies among the students.

One possible reason for the programmes not achieving their aims is the predominance of the GHRD and *Dejima* models for domestic and international students, respectively. This results in a lack of opportunities for interaction between them, limiting opportunities for domestic students to be exposed to a more diverse range of students while also reinforcing a message of separation between Japanese students and international students. This hidden aspect of the curriculum is far from the internationalised curriculum outlined by Leask. A further reason is that modification of formal curricula to include international and intercultural dimensions has not been widely reported; rather, a rehashing of existing curricula to be delivered through EMI is much more common. This is problematic because only changing the medium of instruction to English is not equivalent to adding international and intercultural dimensions.

The reason for this lack of significant change to curricula may be because, rather than viewing the introduction of EMI courses as central to universities' educational reforms, they are seen as peripheral (Poole et al., 2020), and therefore EMI courses tend to be simply tacked on to existing courses without changing the curriculum (Hashimoto, 2017). However, the separation of domestic and international students and the lack of significant reform to curricula may not concern the government. This is because such an approach to implementing EMI courses makes it less likely that cosmopolitan identities and "transnational community ties" will develop among students; such ties, according to an institutional perspective of globalisation, are viewed as having the potential to replace traditional nation-based connections (Beerkens, 2003, p. 132).

Concerns regarding the development of students' international competencies are heightened by the fact that there are significant doubts as to whether many Japanese students taking EMI courses which adopt the GHRD model have the linguistic proficiency to cope with the demands of the courses. As a result, EMI classes are often too difficult for Japanese students (Burgess et al., 2010). For example, it has been noted that the students often have problems with the reading demands of EMI classes (Aizawa, Rose, Thompson, & Curle, 2023) and comprehending the course content (Yamamoto & Ishikura, 2018). Compounding these issues is that it is common for Japanese universities to assume that teaching content in English will automatically lead to improved English proficiency, even if suitable pedagogical support is not provided (Bradford, 2020). Considering these issues regarding the English proficiency of the students and the lack of learning support from the universities, it is unsurprising that a negative impact on students' academic performance in EMI courses has been reported (Aizawa & McKinley, 2020). One would think that universities would offer greater support to the students to allow them to cope better with the demands of the courses, but as the EMI courses are seen as peripheral to the curriculum, the motivation to do so is lacking. Consequently, there is a danger that EMI courses will not be able to develop students' knowledge and language skills which the government's policies have targeted with its globalist approach to IoHE.

Recommendations

The Japanese government's current IoHE strategy, in which EMI is given a limited role, is unlikely to meet its economic objectives of attracting international students and developing *gurobaru jinzai*. If it is to meet these goals, it will need to change its IoHE policies. Rather than setting simple

numerical targets, which leads to universities viewing the implementation of EMI programs as box-ticking exercises, the government needs to adopt policies which require universities to have a more comprehensive approach to EMI programme development. To achieve this the government needs to be more prescriptive in what it expects universities to do in order to receive funding. If such policy changes occurred, to benefit from funding, universities would have to make substantive changes to the way they provide EMI courses and give them a much more central role. This would result in the universities making changes that lead to both faculty and students receiving the support they need to meet the demands of EMI.

However, reports indicate that the government is not planning to significantly modify its approach to IoHE when TGUP ends in March 2024. According to the Prime Minister's Office of Japan (March 17, 2023), to succeed TGUP, the government will launch the New Plan on Overseas Student Dispatch and Foreign Student Acceptance. This new policy targets sending 500,000 Japanese students overseas and recruiting 400,000 international students to study in Japan by 2033. As such, it is clear that quantitative targets will continue to play a central role in IoHE policy. In addition to these numerical targets, "English and international understanding education" is to be promoted (Prime Minister's Office of Japan, March 17, 2023); however, it is unclear whether the government will prescribe how universities achieve this.

If Japan is to meet its internationalisation objectives, several key reforms need to be made at the university level. Firstly, the current peripheral nature of EMI courses means that not enough time, thought, or money has been invested into developing them; it is essential that these courses are given a more central role and greater resources are allocated to them. This would enable the faculty responsible for teaching the courses, who have been found to feel unprepared (Toh, 2020) and overburdened (Bradford et al., 2022), to receive more effective training and support. Secondly, as some students lack the linguistic proficiency to cope with the demands of EMI courses, universities need to ensure that those students who need it are also provided with sufficient support in the form of additional English for Academic Purposes classes. These classes, which Richards and Pun (2022) refer to as "concurrent support", need to be offered to students throughout their EMI studies. Thirdly, given that international students, contrary to their expectations, are often isolated from the domestic student body, it is vital that universities move away from the *Dejima* model and adopt the Crossroads model. Doing so may put a strain on university resources in the short term, but over time, it will improve international students' learning experiences and should make it easier for universities to attract them in the future.

Conclusion

According to an institutional perspective, globalisation threatens to erode national commitments as national identities are supplanted by cosmopolitan ones (Beerkens, 2003). This institutional view of globalisation is apparent in the Japanese government's approach to IoHE. This approach, which is consistent with its broader policy of *kokusaika*, seeks to protect Japanese cultural identity while strengthening the nation by taking advantage of the economic opportunities which globalisation offers. Therefore, as per Kälvemark and van der Wende's (1997) definition, Japan's approach has been to implement IoHE policies in response to global economic pressures. As such, Japan has adopted what Chan and Dimmock (2008) refer to as a globalist model of IoHE, and it is within this model that EMI is thought to be able to play an important role.

In order to achieve its IoHE goals, the government has initiated top-down policies which set quantitative targets for universities in terms of international student recruitment and provision of EMI classes. However, due to the conservative nature of their administrations, there is little desire among universities to make substantial changes to their curricula. Consequently, elite institutions have adopted an approach which gives them access to government funding by increasing the number of EMI courses offered while at the same time peripheralising these courses. Non-elite institutions have adopted a similar approach as EMI courses act as marketing tools.

The government's current approach of setting quantitative targets, which has been a core element of the four internationalisation initiatives launched since 2009, is unlikely to meet its objectives of developing the competitiveness of the universities or their graduates. This is because it has allowed the universities to follow a box-ticking approach when setting up EMI courses; this approach has had detrimental effects on the programmes. For example, international students taking EMI courses are often separated from the domestic student body, limiting both the international and domestic students' opportunities for intercultural interaction. In addition, this separation is likely to make recruitment of international students more difficult in the future. Furthermore, the peripheralisation of EMI courses has resulted in not enough resources being allocated to curriculum development or student support. Consequently, it is unclear whether domestic students who take EMI courses will be able to sufficiently develop either their subject knowledge or English language proficiency. If the government is to achieve its goals of attracting more international students and developing *gurobaru jinzai* through the promotion of EMI it needs to formulate policies which require universities to place EMI courses at their core.

This paper builds on existing studies into the role which EMI can play in IoHE. It provides insights into the consequences of the current Japanese IoHE policy and recommendations as to how the approach could be improved. While this paper is focused on Japan, as other countries in the region are also attempting to internationalise their universities through the implementation of top-down government policies which promote the development of EMI courses, it is likely that the paper's conclusions are applicable to them. A limitation of the paper is that it primarily relies on English language sources; therefore, it would be beneficial if future research in this field examined a broader range of Japanese language sources.

Note

[1] This is an updated version of Knight's (2003) definition which stated that IoHE was "the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of post-secondary education" (p. 2).

References

Aizawa, I. & McKinley, J. (2020). EMI challenges in Japan's internationalization of higher education. In H. Bowles and A.C. Murphy (Eds.) *English-Medium Instruction and the Internationalization of Universities*. London: Palgrave MacMillan, pp. 27-48. https://doi.org/10.1007/978-3-030-47860-5_2

Aizawa, I. & Rose, H. (2019). An analysis of Japan's English as medium of instruction initiatives within higher education: The gap between meso-level policy and micro-level practice. *Higher Education*, *77*(6), pp. 1125-1142. https://doi.org/10.1007/s10734-018-0323-5

Aizawa, I., Rose, H., Thompson, G. & Curle, S. (2023). Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction programme. *Language Teaching Research, 27*(4), pp. 837-861. https://doi.org/10.1177/1362168820965510

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

Ball, S. J. (1993). What is policy? Texts, trajectories and toolboxes. *Discourse: Studies in the Cultural Politics of Education*, *13*(2), pp. 10-17. https://doi.org/10.1080/0159630930130203

Beelen, J. & Jones, E. (2015). Redefining internationalization at home. In A. Curaj, L. Matei, R. Pricopie, J. Salmi and P. Scott (Eds.) *The European Higher Education Area: Between Critical Reflections and Future Policies*. Cham: Springer, pp. 59-72. https://doi.org/10.1007/978-3-319-20877-0_5

Beerkens, E. (2003). Globalisation and higher education research. *Journal of Studies in International Education, 7*(2), pp. 128-148. https://doi.org/10.1177/1028315303007002002

Birchley, S. (2018). A marketing perspective on English-medium instruction at universities in Japan. In A. Bradford and H. Brown (Eds.) *English-medium Instruction in Japanese Higher Education: Policy, Challenges and Outcomes*. Bristol: Multilingual Matters, pp. 130-148. https://doi.org/10.21832/9781783098958-011

Bolton, K., Ahn, H., Botha, W. & Bacon-Shone, J. (2023). EMI (English-medium instruction) in South Korean elite universities. *World Englishes*, *42*(3), pp. 465-486. https://doi.org/10.1111/weng.12623

Bowles, H. & Murphy, A.C. (2020). *English-medium Instruction and the Internationalization of Universities*. Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-030-47860-5

Bradford, A. (2020). Internationalizing Japan's undergraduate education through English medium instruction. In S. Dimova and J. King (Eds.) *Integrating Content and Language in Multilingual Universities*. Cham: Springer, pp. 53-74. https://doi.org/10.1007/978-3-030-46947-4_4

Bradford, A. & Brown, H., (2018). ROAD-MAPPING English-medium instruction in Japan. In A. Bradford and H. Brown (Eds.) *English-medium Instruction in Japanese Higher Education: Policy, Challenges and Outcomes*. Bristol: Multilingual Matters, pp. 3-13. https://doi.org/10.21832/9781783098958-003

Bradford, A., Ishikura, Y. & Brown, H. (2022). Sustaining internationalization: English-medium programs in Japan. *International Higher Education, 110*, pp. 15-16.

Brown, H. (2018). English-medium instruction in Japanese universities: History and perspectives. In P. Clements, A. Krause, and P. Bennett (Eds.) *Language Teaching in a Global Age: Shaping the Classroom, Shaping the World.* Tokyo: JALT, pp. 273-278.

Brown, H. & Bradford, A. (2022). Faculty perspectives on professional development and certification for English-medium instruction programs in Japan. *Nagoya Journal of Higher Education, 22*, pp. 55–87.

Burgess, C., Gibson, I., Klaphake, J. & Selzer, M. (2010). Globalisation, societies and education. The 'Global 30' Project and Japanese higher education reform: An example of a 'closing in' or an 'opening up'? *Globalisation, Societies and Education*, *8*(4), pp. 461-475. https://doi.org/10.1080/14767724.2010.537931

Cambridge, J. & Thompson, J. (2004). Internationalism and globalization as contexts for international education. *Compare*, *34*(2), pp. 161-175. https://doi.org/10.1080/0305792042000213994

Chan, W.W.Y. & Dimmock, C. (2008). The internationalization of universities: Globalist, internationalist and translocalist models. *Journal of Research in International Education, 7*(2), pp. 184-204. https://doi.org/10.1177/1475240908091304

de Wit, H. (2011). Internationalization of higher education: Nine misconceptions. *International Higher Education*, *64*, pp. 6-7.

de Wit, H. & Altbach, P. G. (2021). Internationalization in higher education: Global trends and recommendations for its future. *Policy Reviews in Higher Education*, *5*(1), pp. 28-46. https://doi.org/10.1080/23322969.2020.1820898

de Wit, H., Hunter, F., Howard, L. & Egron-Polak, E. (2015). *Internationalisation of Higher Education.* Brussels: European Parliament, Directorate-General for Internal Policies.

de Wit, H. & Merkx, G. (2012). The history of internationalization of higher education. In D. Deardorff, H. de Wit H and T. Adams (Eds.) *The SAGE Handbook of International Higher Education*. Thousand Oaks, CA: Sage, pp. 43-59. https://doi.org/10.4135/9781452218397.n3

Galloway, N. & Curle, S. (2022). 'I just wanted to learn Japanese and visit Japan': The incentives and attitudes of international students in English-medium instruction programmes in Japan. *International Journal of Language Studies, 16*(2), pp. 23-48.

Galloway, N., Numajiri, T. & Rees, N. (2020). The 'internationalisation', or 'Englishisation', of higher education in East Asia. *Higher Education, 80*(3), pp. 395-414. https://doi.org/10.1007/s10734-019-00486-1

Han, J. (2023). English medium instruction: Expanding notions of English hegemony and colonization. In: J. Han (Ed.) *English Medium Instruction as a Local Practice: Language, Culture and Pedagogy*. Cham: Springer, pp. 1-15. https://doi.org/10.1007/978-3-031-19904-2_1

Hashimoto, H. (2017). Government policy driving English-medium instruction at Japanese universities: Responding to a competitiveness crisis in a globalizing world. In A. Bradford and H. Brown (Eds.) *English-medium Instruction in Japanese Higher Education: Policy, Challenges and Outcomes*. Bristol: Multilingual Matters, pp. 14-31. https://doi.org/10.21832/9781783098958-005

Hashimoto, K. (2000). 'Internationalisation' is 'Japanisation': Japan's foreign language education and national identity. *Journal of Intercultural Studies, 21*(1), pp. 39-51. https://doi.org/10.1080/07256860050000786

Heigham, J. (2017). Center stage but invisible: International students in an English-taught program. In A. Bradford and H. Brown (Eds.) *English-medium Instruction in Japanese Higher Education: Policy, Challenges and Outcomes*. Bristol: Multilingual Matters, pp. 161-179. https://doi.org/10.21832/9781783098958-013

Hofmeyr, A. S. (2020). Taking advantage of a multicultural campus: Impact of at-home intercultural initiatives on Japanese students' skills and future goals. *Journal of Studies in International Education*, *25*(2), pp. 182-202. https://doi.org/10.1177/1028315320906159

Iino, M. (2018). EMI (English-medium instruction) in Japanese higher education. A paradoxical space global and local sociolinguistic habits. In: K. Murata (Ed.) *English-Medium Instruction from an English as a Lingua Franca Perspective*. New York: Routledge, pp. 78-95. https://doi.org/10.4324/9781351184335-7

Inuzuka, A. (2017). A dialectic between nationalism and multiculturalism: An analysis of the internationalization discourse in Japan. In S. Toyosaki and S. Eguchi (Eds.) *Intercultural Communication in Japan: Theorizing Homogenizing Discourse*. Oxford: Routledge, pp. 207-223. https://doi.org/10.4324/9781315516936-14

JASSO (2021). *Result of an annual survey of international students in Japan 2021.* Available at https://www.studyinjapan.go.jp/en/_mt/2022/03/date2021z_e.pdf [Accessed 20 March 2023].

Kälvemark, T. & van der Wende, M. (1997). *National Policies for Internationalization of Higher Education in Europe*. Stockholm: National Agency for Higher Education.

Knight, J. (1999). Internationalisation of higher education. In J. Knight and H. de Wit (Eds.) *Quality and Internationalisation in Higher Education*. Paris: OECD Publishing, pp. 13-28.

Knight, J. (2003). Updated Definition of Internationalization. *International Higher Education, 33,* pp. 2-3.

Kuroda, K., Sugimura, M., Kitamura, Y. & Asada, S. (2018). *Internationalization of Higher Education and Student Mobility in Japan and Asia.* Background Paper for the 2019 Global Education Monitoring Report: Migration, Displacement, and Education. Available at: https://www.jica.go.jp/Resource/jica-ri/publication/other/l75nbg000010mg5u-att/Background_Kuroda.pdf [Accessed 9 February 2024].

Leask, B. (2009). Using formal and informal curricula to improve interactions between home and international students. *Journal of Studies in International Education*, *13*(2), pp. 205-221. https://doi.org/10.1177/1028315308329786

Leask, B. (2013). Internationalizing the curriculum in the disciplines: Imagining new possibilities. *Journal of Studies in International Education*, *17*(2), pp. 103–118. https://doi.org/10.1177/1028315312475090

Leask, B. (2015). *Internationalizing the Curriculum*. Oxford: Routledge. https://doi.org/10.4324/9781315716954

Meiji University (n.d). *Global Common Project*. Available at https://www.jsps.go.jp/english/ [Accessed 28 January 2024].

MEXT (2014). *Selection for the FY 2014 Top Global University Project*. Available at http://docplayer.net/16379288-Selection-for-the-fy-2014-top-global-university-project-we-hereby-announce-the-selection-of-universities-for-the-top-global-university-project.html [Accessed 5 March 2023].

MEXT (2020). *Heisei 30-nendo no daigaku ni okeru kyouiku naiyo-tou no kaikaku joukyo ni tsuite (Gaiyō)* (Reform Status of Education Content at Universities in 2018 (summary)). Available at https://www.mext.go.jp/content/20201005-mxt_daigakuc03-000010276_1.pdf [Accessed 1 February 2024].

MEXT (n.d., a). *Inter-University Exchange Project (Re-Inventing Japan Project)*. Available at https://www.mext.go.jp/en/policy/education/highered/title02/detail02/sdetail02/1373893.htm#:~:text=The%20%22Re%2DInventing%20Japan%20Project,efforts%20for%20the%20formation%20of [Accessed 25 February 2023].

MEXT (n.d., b). *Project for Promotion of Global Human Resource Development*. Available at https://www.mext.go.jp/en/policy/education/highered/title02/detail02/sdetail02/1373895.htm [Accessed 2 March 2023].

MEXT (n.d., c). *Top Global University Project.* Available at https://www.mext.go.jp/en/policy/education/highered/title02/detail02/sdetail02/1395420.htm [Accessed 11 March 2023].

Mitchell, D. E. & Nielsen, S. Y. (2012). Internationalization and globalization in higher education. In H. Cuadra-Montiel (Ed.) *Globalization: Education and Management Agendas*. Rijeka, Croatia: Intech, pp. 3-22.

Ninomiya, A., Knight, J. & Watanabe, A. (2009). The past, present, and future of internationalization in Japan. *Journal of Studies in International Education*, *13*(2), pp. 117-124. https://doi.org/10.1177/1028315308331095

Ota, H. & Horiuchi, K. (2018a). How accessible are English-taught programs? Exploring international admissions procedures. In A. Bradford and H. Brown (Eds.) *English-medium Instruction in Japanese Higher Education: Policy, Challenges and Outcomes*. Bristol: Multilingual Matters, pp. 108-129. https://doi.org/10.21832/9781783098958-010

Ota, H. & Horiuchi, K. (2018b). Internationalization through English-medium instruction in Japan: Challenging a contemporary Dejima. In D. Proctor. and R. Rumbley (Eds.) *The Future Agenda for Internationalization in Higher Education: Next Generation Insights into Research, Policy, and Practice*. Oxford: Routledge. pp. 15-27. https://doi.org/10.4324/9781315266909-2

Phan, L. H. (2013). Issues surrounding surrounding English, the internationalisation of higher education and national cultural identity in Asia: a focus on Japan. *Critical Studies in Education*, *54*(2), pp. 160-175. https://doi.org/10.1080/17508487.2013.781047

Poole, G., Ota, H. & Kawano, M., (2020). Tracing the developments of the "global education effect" in Japanese higher education: Discourses, policy, and practice. In N.M. Doerr (Ed.) *The Global Education Effect and Japan*. Oxford: Routledge. pp. 33–60. https://doi.org/10.4324/9780429292064-3

Prime Minister's Office of Japan (March 17, 2023). *Council for the Creation of Future Education.* Available at https://japan.kantei.go.jp/101_kishida/actions/202303/_00024.html [Accessed 4 March 2024].

Rakhshandehroo, M. & Ivanova, P. (2020). International student satisfaction at English-medium graduate programs in Japan. *Higher Education*, *79*(1), pp. 39-54. https://doi.org/10.1007/s10734-019-00395-3

Richards, J. & Pun, J. (2022). *Teaching and Learning in English Medium Instruction: An Introduction.* Oxford: Routledge. https://doi.org/10.4324/9781003191445

Rizvi, F. & Lingard, B. (2009). *Globalizing Education Policy*. Oxford: Routledge. https://doi.org/10.4324/9780203867396

Rose, H. & McKinley, J. (2018). Japan's English-medium instruction initiatives and the globalization of higher education. *Higher Education*, *75*(1), pp. 111-129. https://doi.org/10.1007/s10734-017-0125-1

Rose, H., McKinley, J., Xu, X. & Zhou, S. (2020). *Investigating policy and implementation of English-medium instruction in higher education institutions in China*. British Council.

Shimauchi, S. (2017). English-medium degree programs in internationalization of Japanese universities: Conceptual models and critical issues. *Journal of Asia-Pacific Studies, 29*, pp. 105-117.

Shimauchi, S. (2018a). English-medium instruction in the internationalization of higher education in Japan: Rationales and issues. *Educational Studies in Japan*, *12*, pp. 77-90. https://doi.org/10.7571/esjkyoiku.12.77

Shimauchi, S. (2018b). Gender in English-medium instruction programs: Differences in international awareness. In A. Bradford and H. Brown (Eds.) *English-medium Instruction in Japanese Higher Education: Policy, Challenges and Outcomes*. Bristol: Multilingual Matters, pp. 180-194. https://doi.org/10.21832/9781783098958-014

Takagi, H. (2017). Development of English-medium instruction as a key for internationalizing curricula in Japan. In A. Bradford and H. Brown (Eds.) *English-medium Instruction in Japanese Higher Education: Policy, Challenges and Outcomes*. Bristol: Multilingual Matters, pp. 51-70. https://doi.org/10.21832/9781783098958-007

Toh, G. (2020). Challenges in English-medium instruction (EMI) at a Japanese university. *World Englishes*, *39*(2), pp. 334-347. https://doi.org/10.1111/weng.12434

Yamamoto, B.A. (2018). The internationalization of Japanese higher education: Incremental change in a dynamic global environment. In: A. Yonezawa, Y. Kitamura, B. Yamamoto and T. Tokunaga (Eds.) *Japanese education in a global age: Sociological reflections and future directions*. Singapore: Springer, pp. 221-239. https://doi.org/10.1007/978-981-13-1528-2.

Yamamoto, B.A. & Ishikura, Y. (2018). A pebble that creates great waves? Global 30 classes and internationalization of the student body. In A. Bradford and H. Brown (Eds.) *English-medium Instruction in Japanese Higher Education: Policy, Challenges and Outcomes*. Bristol: Multilingual Matters, pp. 71-87. https://doi.org/10.21832/9781783098958-008

Yu, P. (2023). Japan's English medium instruction policy evolution in higher education. *Scientific and Social Research*, *5*(12), pp. 36-41. https://doi.org/10.26689/ssr.v5i12.5806

The Rural-Urban Divide in Transitions to Higher Education in Chile

Luis Herskovic[a]
Universidad Adolfo Ibañez

Josefina Silva
Center for Latin American Monetary Studies

Abstract: *This study uses administrative student data from Chile to explore the transitions of urban and rural students to higher education. We find that urban students are more likely to register to take university entrance exams than rural students. Among those who do take the exams, urban students perform significantly better. Even though both groups of students enroll in higher education in similar proportions, urban students are more likely to enroll in universities, whereas rural students are more likely to enroll in technical education. We also explore differences in major choices for students who enroll in higher education and find that rural students are more likely to enroll in fields related to health, education, and agriculture, while they are less likely to enroll in social sciences or the humanities. Finally, both groups are as likely to choose STEM fields when enrolling in higher education. Our findings suggest that although rural students have similar access to higher education as their urban counterparts, they face different challenges, especially related to standardized tests, which have an impact when choosing which type of higher education institution to enroll in.*

Keywords: *STEM; rural; urban; gap; college major-choice; achievement; higher education*

Introduction

Rural students face unique difficulties in their transition to higher education for several reasons, including the resources they typically have access to, their collective histories, and, in many cases, the preparation they receive in high school (Scott et al., 2016, p.1). Data from the Programme for International Student Assessment (PISA) in the years 2015 and 2018 show that, on average across OECD countries, students in city schools score approximately 30 points higher in science than students in rural schools, which is roughly equivalent to one additional year of schooling (Echazarra & Radinger, 2019). Results from PISA 2022 reflect the same types of gaps between urban and rural schools at different schooling levels (OECD, 2023).

Understanding the pathways towards higher education is relevant in the context of rural development when we consider that there are positive returns to higher education, not only in terms of income but also in skills and capabilities (Oreopoulos & Petronijevic, 2013). This study focuses on the transitions of rural and urban students to higher education in the context of Chile, a developing country.

Previous research has shown that rural high school students are less likely than their urban counterparts to enroll in postsecondary institutions, particularly four-year colleges (Yan, 2002; Hu, 2003; Sparks & Nuñez, 2014). By comparing rural high school graduates with their urban and suburban peers, Byun et al. (2012) show that rural students were less likely to enroll in selective universities. In addition, compared to their urban counterparts, graduates of rural high schools were more inclined to delay the start of postsecondary education. Furthermore, rural high school graduates who attended college were less likely to maintain enrollment over time. Studies focusing

a Correspondence can be directed to: luis.herskovic@uai.cl

ISSN 2232-1802 doi: 10.14425/jice.2024.13.1.0913

on the STEM (Science, Technology, Engineering and Mathematics) pathways between rural and urban students when entering high school show that rural and urban students' interest in STEM careers is comparable, but by the conclusion of the 11th grade, rural students' enthusiasm has decreased significantly (Saw & Agger, 2021).

In line with this literature, we examine data from Chile to explore the existence of an urban-rural divide in the transition to higher education. For this, we use administrative data from the Chilean Ministry of Education, which includes every student who graduated from high school between 2014 and 2017, to examine the differences between urban and rural students in their transition to higher education. We combine this data with data from college applications, enabling us to determine the type of institution and major that each student ultimately chose to enroll in. We then estimate logistic regressions for each transition, while controlling for a series of observable characteristics.

In the first transition, we find that rural students are less likely to register for university entrance exams. When looking at those who take the exams, we find that rural and urban student are as likely to enroll in higher education, but rural students do so proportionally more in technical institutions and less in universities. In terms of fields of study, rural students focus more on applied fields, such as agronomy, health, and engineering, and less on fields related to social sciences and humanities than urban students. Finally, we find that rural students are also less likely to enroll in STEM fields.

Literature Review

Higher education is essential to economic and social development. Institutions of higher education are primarily responsible for providing individuals with the advanced knowledge and skills necessary for positions of responsibility in government, business, and other professions (Gale & Parker, 2014). Although more students in developing countries have achieved access to higher education over time, several studies have shown that there are still disparities in access between rural and urban students. According to data from PISA 2015 and TALIS 2013, on average across OECD countries, about half of the students in urban schools are expected to complete a university degree; this percentage goes down to 30% for students in rural schools (Echazarra & Radinger, 2019).

While a broader literature has explored transitions to higher education, in this paper we focus on the comparison between urban and rural students during the different stages of the transition process. Empirical studies in developed countries have shown that rural students experience lower rates of college enrollment and degree completion than their non-rural peers (Scott et al., 2016; Wells et al., 2019). Hu (2003) investigates students' postsecondary access and choice, as well as their educational aspirations, using data from the National Education Longitudinal Study of 1988 (NELS) of the United States. The results show that higher percentages of students in rural schools desired to attend high school (16.6% for rural in contrast to 11.0% for urban and 10.6% for suburban schools). Another major finding is that the percentage of students enrolling in four-year colleges was comparatively higher in urban schools (60.8%) compared to suburban schools (56.9%) and rural schools (56.4%). Byun et al. (2017, p.1) study patterns of college attendance using data from a nationwide and contemporary sample of rural youth in the United States. The authors found that more than half of the rural youth attended two-year institutions at some point during their college career and about a fourth initially enrolled in a two-year college before enrolling in a four-year college. Means et al. (2016) examine the college choice process, barriers and career aspirations of African American high school students from rural schools. This study explores qualitatively the importance of emotional support provided by teachers and families within the context of career aspirations and college preparedness.

Fleming and Grace (2017), using data from regional and rural students provided by the government of Australia find that there is an increase in higher education attainment intention, especially in year 10 students, and also explore the unique factors that affect the transition into higher education for rural students. Also in Australia, Gao et al.(2022) explore the stalled growth in rural student participation in higher education and focus on the importance of developing context-

specific local programs for students. Lasselle (2016) explored access to higher education in Scottish rural communities. The author shows that rural students perceive a higher barrier regarding the financial and geographical challenges they face, compared to urban students.

While the gender gap in access to STEM fields has been more widely documented (Riegle-Crumb et. al, 2011; Tandrayen-Ragoobur & Gokulsing, 2021; Herskovic & Silva, 2022), not much is known about the differences between urban and rural student's enrollment in these fields. Li et al. (2007) and Hango et al. (2021, p.1) examine the possible interaction effects of gender and region— (urban vs. rural) on student beliefs about women in math and science. They suggest that urban students, regardless of their gender, were more likely to consider careers related to science or mathematics than rural students. Along similar lines, Saw & Agger (2021) used the United States nationally representative High School Longitudinal Study of 2009 to document that rural and small-town students were significantly less likely to enroll in postsecondary STEM degree programs compared to their suburban peers. The results indicate that a rural–suburban gap in STEM career aspirations emerged by the end of 11th grade (8.9% rural vs. 10.5% suburban).

Relatively few studies have focused on transitions into higher education in the context of Chile. Gallego et al. (2007) analyzed the optimality of institutionality in public education in rural areas to efficiently reach a minimum level of educational quality. The results on educational quality show that students who attend rural schools have lower standardized test scores than urban students (0.35 standard deviations). This suggests that students in rural areas are not receiving the same quality of education as students in urban areas, which could put them at a disadvantage when it comes to transitioning to higher education.

In Sevilla -Encinas (2018), the focus is on how social background influences access to the higher education system in Chile. The research explores the impact of prior academic performance and parental education and expectations on these differences. The findings reveal that in selective educational paths, achievement gaps play a significant role in explaining enrollment disparities between income quintiles. However, in non-selective tracks, social background emerges as a key determinant of educational outcomes, more so than academic achievement. The author finds that students from lower socioeconomic backgrounds continue to be underrepresented in higher education.

Contreras et al. (2023) analyzed how the COVID-19 pandemic has affected Chilean students with disabilities as they advance to higher education. The authors find while attendance rates for elementary and secondary education are comparable for students with and without disabilities, transitioning to postsecondary education is 15.7% less likely for students with disabilities. Additionally, the findings demonstrate that the gap has grown since the pandemic. This suggests that the COVID-19 pandemic has had a disproportionate impact on students with disabilities, making it more difficult for them to transition to higher education.

Overall, these studies suggest that there are a number of factors that can affect a student's transition to higher education in Chile, including social origin, academic achievement, and disability status. These factors can make it more difficult for students to access higher education, and they can also affect their success once they are enrolled. At the same time, the international and Chilean-focused literature lacks empirical studies examining the comparison between urban and rural students' transitions to higher education in a country as a whole, considering all students in the system, and all possible stages in these transitions. Studies so far have focused either on smaller groups or sub-populations or on specific stages in the transition process. This necessarily generates limitations on the ability of the authors to generalize from their findings.

This study contributes to bridging this gap in the literature on access to higher education by rural students in developing countries by exploring all key sequential transitions into higher education, from high school graduation to choice of STEM field, with all stages in between. As a distinguishing characteristic of this study, we follow all students in high school in Chile over three cohorts, as they progress towards higher education, which allows us to examine the behavior of the complete population of urban and rural students, controlling for their characteristics and performance. Even

though we do not make claims of causality, this allows us to better isolate the effect of living in rural areas as this relates to transitions to higher education. The results expand those from previous studies focused on Australia, South Africa, China, and India, contributing to a more extensive understanding of the issues faced by rural students in developing countries (Fleming & Grace, 2014; Chakrabarti, 2009; Mgqwashu et al, 2020; Yang, 2010). Specifically, we investigated the stages that potentially guide students from high school to higher education institutions, ultimately shaping their career paths in STEM fields. Notably, our research addresses a significant gap in the literature, as a small proportion of previous studies have examined the specific barriers encountered by rural students in this context when accessing higher education. By shedding light on these challenges, our study offers insights into the unique hurdles faced by rural students during their educational journey in developing countries, facilitating a more comprehensive understanding of the factors influencing their access to higher education and their subsequent pursuit of STEM careers.

Rural Education in Chile

Increasing the national coverage of education was one of Chile's main challenges in the 1990s (Arellano, 2001). This explains the spike in educational policy initiatives to promote the integration of boys and girls with special needs into mainstream schools and address the associated problems. In this period, attention is focused on the design of educational policies and strategies that promote the generation of conditions that facilitate the integration of students with disabilities into regular school. This is how a few years later Chile adopted the School Integration Program (PIE), an inclusive educational strategy that aims to support all students, especially those with permanent or temporary special education needs (SEN) in meeting their learning objectives and participating in class (Tamayo Rozas et al, 2017 and 2018). This approach also intends to help educational establishments maintain a high standard of instruction. Within this context, in 1992, the Program to Improve the Quality and Equity of Education for Rural Basic Schools (MECE RURAL) was implemented. The objective of this program was to move towards differentiated education in inputs, school management processes and pedagogical practices, for children and young people in rural schools and to offer rural students equal opportunities based on results (MINEDUC, 2000).

In 2021, according to Chile's National Institute of Statistics (INE), 13.4% of the population was considered rural and 86.6% was considered urban. The results from a large household survey Encuesta de Caracterización Socioeconómica Nacional (CASEN) in the year 2020, showed that poverty is more prevalent in rural regions (13.82%) than in urban areas (10.42%). Rural poverty, however, declined significantly in the previous three years (from 16.5% in 2017), whereas urban poverty increased (from 7.4% in 2017). While enrollment in the education system has decreased in recent years, this decrease has been more prominent in rural establishments, mainly driven by the drop in rural primary education enrollment. This reduction was more than five times greater than that experienced by the educational system as a whole (5.1%). This asymmetry can be explained by the lower population in rural areas and greater connectivity to travel to urban establishments (Zamorano et al., 2017). According to the Ministry of Education (MINEDUC) in the year 2021, there were 3,317 rural schools and high schools in Chile, 53.8% of which were concentrated in the most isolated areas of the country. Rural educational establishments comprised 54% public schools and 46% private or subsidized schools (Zamorano et al., 2017). At younger ages, some rural schools are organized as multigrade classrooms, which respond to the diversity of students who attend, given their age, learning dispositions, and starting points. In a multigrade school, at least one of its classrooms is combined, that is, it is made up of students from different grades (MINEDUC, 2024). Multigrade schools constitute a significant pedagogical problem because they host students of varying ages and courses in one classroom with a single teacher. Boys and girls from rural areas may not be able to achieve the same level of success because the majority of their teachers have been educated to teach one-on-one courses and identical classes to every student (Fundación 99, 2023, p.1). When looking at standardized test scores taken both during the 4th grade and during the

process of higher education admissions, students from urban schools consistently outperform rural students. On both tests, urban students outperformed rural students in mathematics, language, and reading comprehension (Licsa, 2016).

All students who graduate from high school may choose to register and take a university entrance exam (PSU) that is required for admission at selective universities but is not required for other types of higher education institutions, such as technical or professional institutes. Quiroz et. al (2022) uses a Heckman probit-type (Heckit) model to adjust for selection during application to higher education. The results show that just 37.9% of all high school graduates who completed the university selection exam were able to continue their studies beyond high school. The findings indicate that the student's application and admission to Chilean colleges are significantly impacted locally by geographical factors—neighborhood features and distance from Santiago. Additionally, they find that the likelihood of applying to universities rises with distance to the capital city up to a threshold of 1400 kilometers, after which the likelihood starts to decline.

Data and Descriptive Statistics

We use administrative data from the Chilean Ministry of Education to build a panel that allows us to follow three cohorts of students through their last year of high school and their transition to higher education. These data are combined with administrative information on university applications supplied by the Department of Evaluation, Measurement, and Educational Registry (DEMRE), which also contains data on each student's family and test results from university entrance exams. We then merge this with the Ministry of Education data on higher education enrollment and major choice.

We track three cohorts of students who graduated from high school in 2014, 2015, and 2016 through their last year of high school and the application process into higher education, and pool these cohorts together. Although the raw data corresponds to a census, including the complete student population, in our panel we do not include students who did not graduate from high school, which means that we are looking at a somewhat selective group of urban and rural students. We group rural and mixed municipalities within the rural category. We conducted standard data validation procedures, eliminating duplicated cases, and out-of-range values, and checking the internal consistency of the data. This results in a dataset composed of 568,150 students, 418,801 of whom reside in urban areas, and 149,349 in rural areas. We consider that a rural student is a student who resides in a rural municipality as defined by Chile's National Statistics Institute.

For our analysis, we use two major metrics of educational performance: high school subject grades and university entrance exam scores. During the four years of high school, all students must study a number of mandatory subjects and choose several elective classes. The minimum grade needed to pass a course is 4.0, and the range of grades is 1.0 to 7.0. We also consider the results of the PSU exams, which range from 150 to 850 points, with a mean of 500 points. When applying to a selective university, both the GPA and PSU scores are taken into consideration. We define higher education broadly, consisting of professional institutes, technical institutes, and universities. The first two do not require applicants to have taken the PSU, while universities do.

We also obtain information on educational background from each student's mother and father, along with their families' income level, whether or not the parents are still living, who is recognized as the head of the family, as well as the type of school the student attended (public, voucher or subsidized, or private).

Table 1 displays the general descriptive statistics for our data, including the number of urban and rural students, their gender, the number of students in each cohort, and the type of school they attended. The main difference between the two groups is related to the type of school they attend. In urban areas, the majority (61%) of students attend voucher schools (subsidized private schools that generally require a low payment), and in rural areas, the majority of students attend public schools (51%). While 12.7% of urban students attend private schools, only 2.6% of rural students do.

Table 1. Descriptive Statistics by Geographic Area - 2014 to 2016

Variable	Rural	Urban
Total students	149,349	418,801
Female	69,769 (46.7)	204,007 (48.7)
Cohort		
2014	49,831 (33.4)	139,210 (33.2)
2015	50,206 (33.6)	140,751 (33.6)
2016	49,312 (33.0)	138,840 (33.2)
Type of School		
Public	64,767 (50.8)	101,349 (26.2)
Voucher	59,258 (46.5)	236,226 (61.1)
Private	3,349 (2.6)	49,082 (12.7)

Source: Calculations based on data from MINEDUC (2014)

Table 2 shows the percentage of urban and rural students who undertake each transition on the path of accessing higher education in the Chilean system. Of 149,349 rural students, 85% enroll in the higher education entrance exam, while 92% of urban students do so. Of those who enrolled in the test, 90% of rural students and 93% of urban students ended up taking the test. Among those who took the test, almost the same percentage of rural and urban students enroll in higher education (approximately 63%). After this transition, a larger difference appears when choosing to enroll in a university: 68% of students from urban areas do so, whereas only 59% of rural students do so. Finally, 26% of rural students enrolled in a university choose a STEM field, while 28% of urban students do so.

Table 2. Transitions by Geographic Area - 2014 to 2016

Variable		Rural		Urban	
	Total N in transition	N	%	N	%
Number of students	568,150	149,349	100%	418,801	100%
Enrollment in PSU	568,150	127,374	85%	386,657	92%
Took PSU	514,031	114,203	90%	359,206	93%
Enrollment in Any Type of Higher Education	473,409	70,759	62%	225,936	63%
Enrollment in University	296,695	41,535	59%	154,065	68%
Enrollment in STEM	195,600	10,979	26%	42,297	28%

Source: Calculations based on data from MINEDUC (2014)

When we consider students who completed the transition to any type of higher education, we include three types of institutions. Two of them are less selective, the Centers for Technical Formation (CFT) and Professional Institute (IP), while the third, universities, are generally more selective and require students to have taken the PSU admission exam.

We group higher education majors into broader categories used by the Ministry of Education to explore the differences in field choices by geographic area. These categories are agriculture, sciences, engineering, technology, social science, humanities and arts, business, law, education, and service management.

We also classify majors as belonging to a STEM field or not. The literature on STEM participation utilizes various definitions of which majors should be included in that category. In our main definition of STEM, we consider university majors in the fields of science, technology, engineering, and mathematics. We did not consider majors in Medicine, Nursing, or any health-related majors to be part of STEM in our analysis.

Table 3 shows the distribution of students from the three cohorts across these broad fields of study by geographic area. Engineering, industry, and construction is the most popular choice for urban students, with 25.1% choosing this field. Meanwhile, 25.9% of rural students major in health and social services. There is a noticeable difference in education majors, with 11.4% of rural students choosing this field compared to 7.4% of urban students.

Table 3. Major Enrollment by Geographic Area - 2014 to 2016

Variable	Rural	Urban
Total students	103,094	402,613
Major Group		
Agriculture	2,245 (3.8%)	5,282 (2.2%)
Science	3,603 (6.1%)	19,904 (8.3%)
Social Science, Business and Law	10,160 (17.1%)	56,912 (23.6%)
Education	6,811 (11.4%)	17,875 (7.4%)
Humanities and Arts	1,499 (2.5%)	12,648 (5.2%)
Engineering, Industry and Construction	14,576 (24.5%)	60,622 (25.1%)
Health and Social Services	15,445 (25.9%)	50,810 (21.1%)
Services Management	5,209 (8.7%)	17,204 (7.1%)

Source: Calculations based on data from MINEDUC (2014)

Table 4 focuses on the top 75 percentile of students in the distribution of the PSU math scores. This subgroup is examined to see if there are any significant variations at the top of the academic achievement distribution in terms of major choice. As the table shows, engineering attracts 30.6% of the urban students in the top 75 percentile of the PSU score distribution. Urban students also enroll in other fields, such as social sciences, where 24.5% of high-performing urban students enroll, compared with only 18.4% of high-performing rural students. Rural students within this group are more likely to enroll in Engineering and Health-related majors than urban students.

Table 4. Major Enrollment by Geographic Area for Top 75 Percentile in PSU Score - 2014 to 2016

Variable	Rural	Urban
Total students	15,510	115,922
Agriculture	375 (2.8%)	2,289 (2.4%)
Science	1,199 (9.0%)	10,168 (10.7%)
Social Science, Business and Law	2,445 (18.4%)	23,363 (24.5%)
Education	824 (6.2%)	4,698 (4.9%)
Humanities and Arts	297 (2.2%)	4,161 (4.4%)
Engineering, Industry and Construction	4,393 (33.1%)	29,140 (30.6%)
Health and Social Services	3,421 (25.8%)	19,365 (20.3%)
Services Management	313 (2.4%)	2031 (2.1%)
PSU Percentile	85.7 (7.1%)	87.7 (7.5%)

Source: Calculations based on data from MINEDUC (2014)

Empirical Framework

To explore the associations between the urban-rural divide and transitions to higher education, we est imate logistic regressions including an indicator variable identifying students residing in urban areas and a series of covariates. The variable of interest captures the relationship between urban areas and the different transitions to higher education. We control for relevant individual, family and geographic characteristics that could affect these transitions. The general equation we estimate is as follows:

$$Y_i = B_o + B_1 Urban_i + X_i + E_i , \qquad (1)$$

Y is a binary variable for each transition, which takes a value of 0 if student *i* did not complete that transition and a value of 1 if the student completed the transition. Urban is a binary variable that takes a value of 0 if a student lives in a rural area and a value of 1 if the student lives in an urban area. The X variables are controls for the characteristics of students, their families, and the schools they attend.

We first estimate models without controls as a baseline and then estimate them with controls. We do this for each dependent variable: enrolled in PSU, took PSU, enrolled in higher education, enrolled in university, and enrolled in a STEM major.

Results and Discussion

Our goal is to understand the association between residing in urban or rural areas and the probability of completing different stages in the transition to higher education. The results we find are in general consistent with the broader literature on urban-rural gaps in education achievement and performance. Even though rural conditions may vary largely across different countries, it is apparent that rural students face certain common challenges despite the different contexts. Table 5 and Table 6 present the results of estimating the logistic regressions described in the previous section, without and with controls.

Model 1 serves as our baseline, as it includes only a dummy variable for urban areas, with no controls. We find similar results to what we found when looking at descriptive statistics: urban students are more likely to complete each transition, but in some transitions, such as the transition to higher education, the gap between urban and rural students is small. This is consistent with studies on access to higher education in other developing countries such as Australia, China, South Africa, and India (Fleming & Grace, 2017; Chakrabarti, 2009; Mgqwashu et al., 2020; Yang, 2010). In Model 2, we add a binary variable for gender, the income level of each student's family, the type of school they attend, and geographic controls for the region in which the student resides. The coefficients remain largely unchanged despite the addition of these variables.

Table 5. Probability of Transition, Marginal Effects without Controls

	Enrolled PSU	Takes PSU	Enrolled Higher Ed	Enrolled University	Stem Major
Urban	0.070***	0.032***	0.009***	0.095***	0.032***
	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)
N	568,150	514,031	475,409	296,695	195,600

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 6. Probability of Transition, Marginal Effects with Controls

	Enrolled PSU	Takes PSU	Enrolled Higher Ed	Enrolled University	Stem Major
Urban	0.066***	0.033***	0.008***	0.096***	0.026***
	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)
Controls					
Year	Yes	Yes	Yes	Yes	Yes
Gender	Yes	Yes	Yes	Yes	Yes
Family controls	Yes	Yes	Yes	Yes	Yes
Region	Yes	Yes	Yes	Yes	Yes
N	568,150	514,031	475,409	296,695	195,600

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Column 1 of Table 6 shows that if we compare rural and urban students' enrollment in the PSU, urban students are about 7 percentage points more likely to enroll in the test than rural students.

Exploring the distribution of this first transition, enrolling in the PSU, which is completed by 514,031 students (90% of students who graduated high school) indicates that only the highest performing rural students match the enrollment rates of urban students. This suggests that rural students face an initial hurdle in their pathways towards higher education: students who are not in the top percentiles of school GPA are less likely to take the university entrance exam than urban students.

This can be seen in Figure 1, Panel (a), which shows there is a positive relationship between performance in school (as GPA percentile) and the percentage of students enrolling to take the PSU test, with urban students enrolling more relative to rural students, especially at the lower part of the GPA percentile distribution.

Figure 1, Panel (b) shows the second transition: taking the PSU. In this case, we focus on students who enrolled in the test and compare who ended up taking the test. Here, differences are less evident than in the first transition, although again it is clear that urban students are more likely to take the test than rural students across the whole GPA distribution.

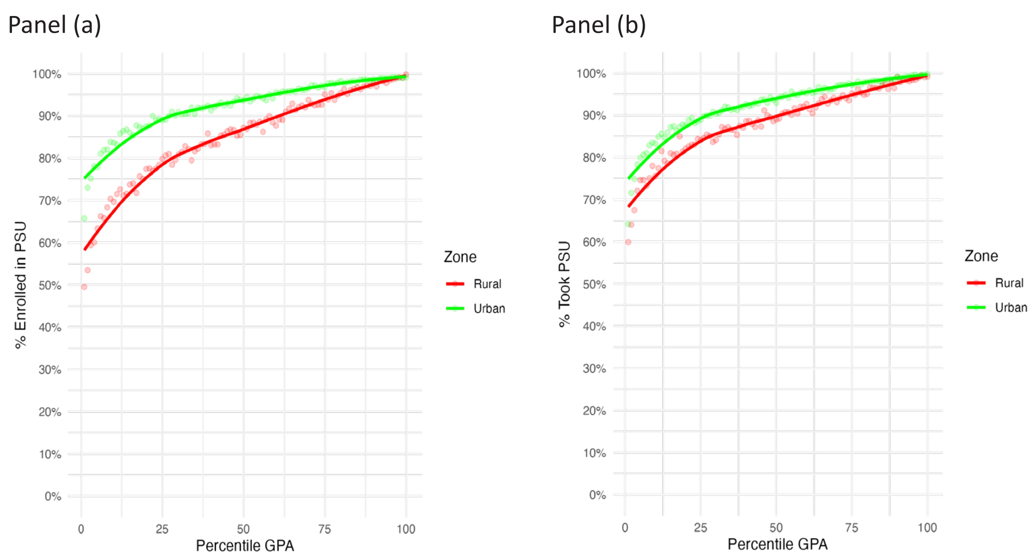


Figure 1. Percentage of Urban and Rural Students (a) Registering and (b) Taking the PSU test by GPA Percentile

Considering those who enroll in the PSU, urban students are 3 percentage points more likely to take the test as shown in Column 2 of Table 6. These results indicate that enrolling in the PSU is a larger barrier for rural students than actually taking the test once enrolled, but adding both transitions results in a substantial gap between both groups. This is in line with the literature's documentation of lower rates of college enrollment for rural students, highlighting a shared global challenge in facilitating the first steps toward higher education for students in rural areas (Scott et al., 2016; Wells et al., 2019).

International studies on higher education transitions have shown that socioeconomic factors have a significant impact on participation rates in postsecondary education (Smyth & Hannan, 2007; Chowdry et al., 2013). We can see this same trend in Chile by examining student's PSU take-up according to their family's income level, as shown in Figure 2. The differences in the distribution of urban and rural test-takers are more pronounced among students from low-income families. Urban and rural students from medium and high-income families are more similar when it comes to taking the PSU. This means that it is mainly low-income rural students who are less likely to take the university entrance exams.

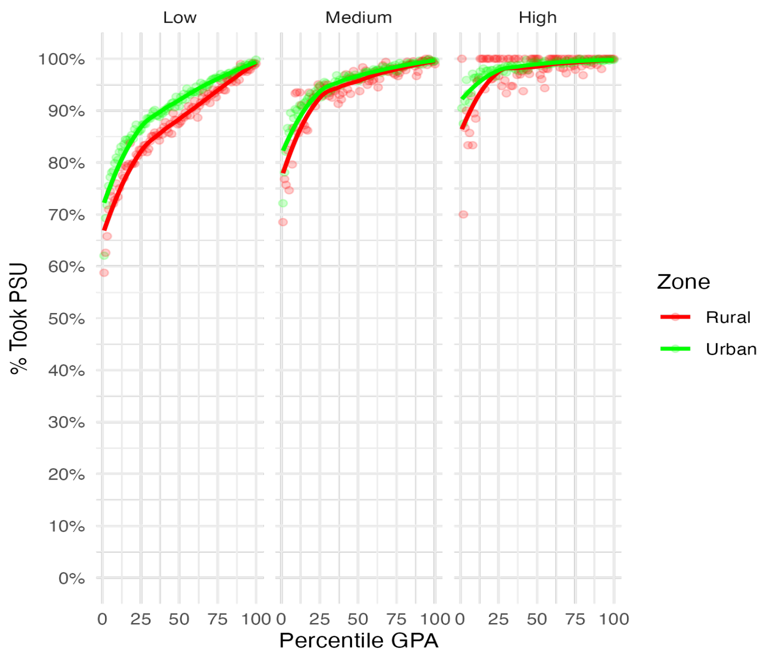


Figure 2. Percentage of Urban and Rural Students taking the PSU Test by GPA Percentile, by Income Level

Examination of PSU scores reveals substantial disparities in academic performance between students residing in urban and rural areas. Specifically, the analysis indicates that rural students tend to be predominantly situated within the lower stratum of the score distribution, suggesting comparatively weaker academic outcomes. Conversely, urban students consistently demonstrate higher test scores, illustrating a higher level of achievement, as can be seen in Figure 3, Panel (a). These differences are more pronounced for students from low and high-income families, in contrast with students from medium-income families in which, although the differences still exist, they are smaller. This can be seen in Figure 3, Panel (b). These differences between urban and rural students in Chile match an extended gap in urban-rural achievement, evidenced in several countries over the last decades (Cartwright & Allen, 2002; Tayyaba, 2012; Zarifa et at., 2019; Hillier et al., 2022).

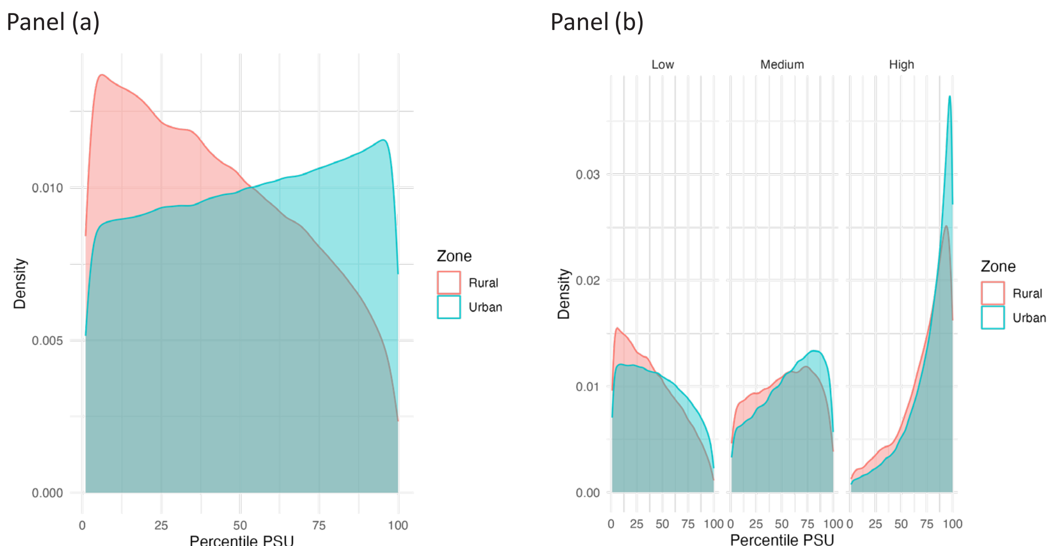


Figure 3. Density of Urban and Rural Students' PSU scores, Total and by Income Level

Column 3 in Table 6 shows that the third transition, enrolling in higher education, is completed at almost the same rate by urban and rural students, with urban students 1 percentage point more likely to enroll in higher education. This is relevant because although rural students are less likely to sign up and take the university entrance exam, this does not result in them being less likely to complete the transition to higher education. The reason for this is that students can enroll in higher education institutions that do not require entrance exams, and rural students are more likely to enroll in these types of institutions.

Figure 4 shows that rural students from lower percentiles of the PSU test distribution are more likely to enroll in higher education than urban students. But at the high end of the distribution, urban students are more likely to do so, and those segments contain large numbers of urban students while having few rural students.

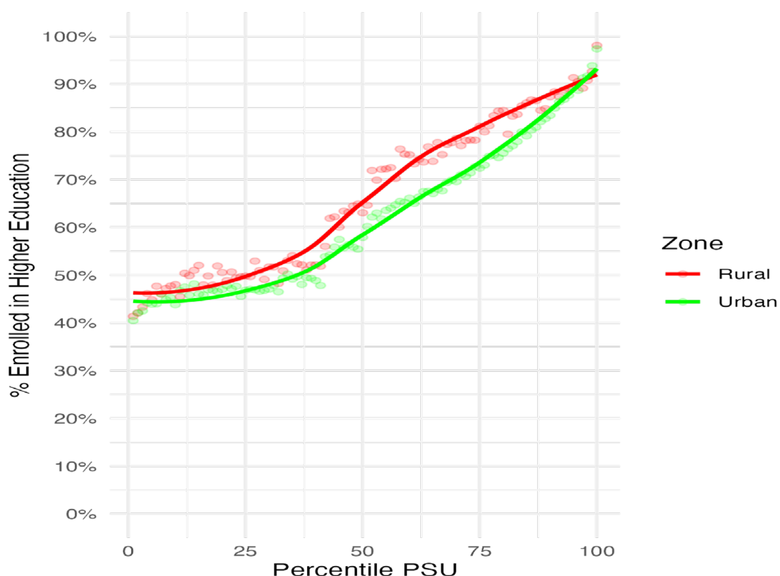


Figure 4. Percentage of Urban and Rural Students Enrolled in Higher Education by PSU Test Percentile

The largest difference between both groups of students appears in the transition to university, shown in Column 4 of Table 6. This transition is completed by 66% of students that enrolled in a higher education institution but there is a large gap: urban students are almost 10 percentage points more likely to enroll in a university than rural students. In this transition, we only consider students who took the PSU test, so they have at least shown an interest in attending a university and have taken steps to achieve this. Disparities in university enrollment rates might reflect in part the better performance of urban students in the PSU test, who end up taking most spots in selective universities.

If we look at students who enroll in universities, we see that urban and rural students are almost just as likely to enroll in a STEM major, as Column 5 in Table 6 shows. Rural students with high performances on the PSU test are more likely to enroll in these fields than urban students. In other contexts, it has also been documented that rural students enroll less often in STEM fields (Saw & Agger, 2021).

Figure 5 shows a positive relationship between PSU performance and enrollment in STEM majors, in which high-performing rural students are more likely to enroll in STEM majors. For rural students, it seems that performance during high school has a heavier weight in their decision to enter a STEM major than for urban students.

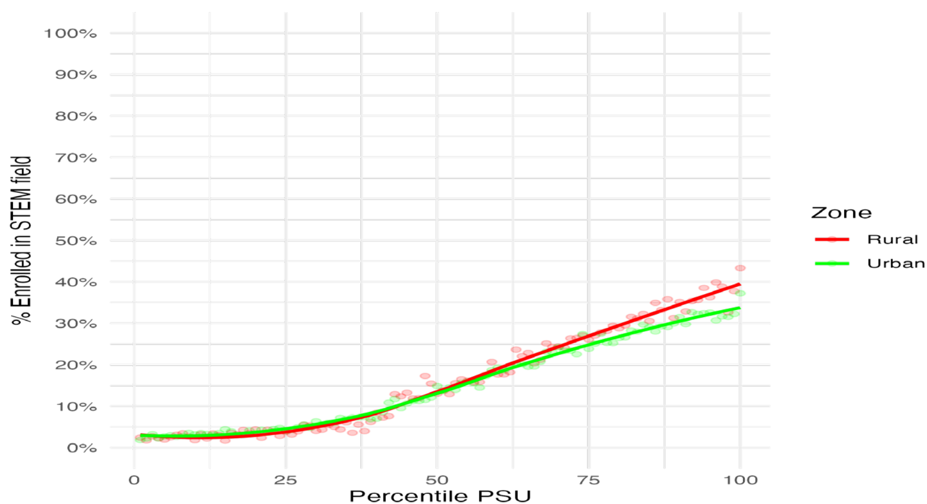


Figure 5. Percentage of Urban and Rural Students Enrolled in a STEM Field by PSU Test Percentile

Rural students likely face different costs and different opportunities when deciding on a university major. A rural student will more likely have to move to another part of the country to attend a selective university, while an urban student might have more options closer to where they reside. If STEM fields are higher paying on average, this might then be a more determinant factor when deciding on a major for rural students (Liao et al., 2013; Crain & Webber, 2021; Tran et al., 2021).

Rural students in Chile face several challenges when it comes to attending higher education, including lower test scores on standardized tests, which are used as the main entrance mechanism to universities. This suggests that policies aimed at bridging the rural-urban development divide should consider these challenges and take steps to address them. One way to do this would be to create a more comprehensive admissions system that takes into account geographic differences in student development. This could include providing additional support and resources to rural students, such as tutoring and mentoring, as well as giving them more opportunities to demonstrate their academic abilities in other ways besides standardized testing, such as through essays or interviews.

Conclusion

Our study adds several new perspectives to the body of knowledge on rural and urban, higher education. This study is one of the few in the body of literature that provides estimates of the underrepresentation of rural students in key transitions into higher education, leading towards STEM degree programs, based on a national population. Our findings expand upon and complement existing research from various contexts, including Australia, South Africa, China, and India. By focusing sequentially on each of the stages guiding students from high school to higher education institutions in Chile, and a specific focus on STEM fields, we address a significant gap in the literature, in which previous studies have offered insights into individual transition stages, but have not looked at the larger picture encompassing the barriers encountered by rural students in accessing higher education in developing countries. This comprehensive approach allows for a more nuanced understanding of the challenges faced by rural students.

Based on administrative data from high school graduates in Chile, we find that rural students are less likely to enroll in university entrance exams and perform significantly worse on them. These students enroll in higher education at similar rates, with urban students more likely to enroll in universities and rural students in technical or professional institutions. Even though urban students outperform rural students on standardized tests, both groups enroll in STEM professions in roughly equal numbers once they choose to pursue a university degree. When we examine this result, we show that students from rural areas with high performance on university entrance exams are more likely to pursue STEM careers than comparable students from urban areas. Thus, our research offers new insights into STEM career aspirations and choices. This unexpected finding warrants further investigation, potentially involving qualitative studies to explore underlying motivations and decision-making processes. Rural students are also less likely to enter social science or humanities majors, and more likely to enroll in health, education, services management, and agronomy.

There are several possible explanations for these findings. Rural students may have less access to quality education, which could lead to lower test scores (Zinth, 2014). They may also have less exposure to university-level academics, which could make them less likely to consider enrolling in university. Additionally, rural students may face financial barriers to attending university, as they may not be able to afford the cost of tuition or living expenses if having to move to a different region of the country (Scott et al., 2016; McNamee & Ganss, 2023). Our findings highlight the complexities of the rural-urban divide in higher education. While factors like lower educational quality in rural areas and financial barriers play a role (Gallego et al., 2007; Scott et al., 2016), other unobserved characteristics or interactions with individual and family circumstances might also influence educational choices.

These findings suggest that there are significant disparities in educational opportunities between rural and urban students in Chile, especially at specific transitions to higher education. These disparities need to be addressed to ensure that all students have the opportunity to reach their full potential.

Generating incentives and policies that help students from rural areas to enter universities and in particular STEM fields, would benefit those students and possibly the areas where they reside in the long run. It would also help reduce inequalities in a centralized admissions system that does not consider the different opportunity costs and barriers faced by students from rural areas when compared to students from urban areas, as highlighted in different contexts in studies by Scott et al. (2016) and McNamee & Ganss (2023). Further studies focused on the costs and limitations that rural students face when making the transition to higher education are required to better understand and address the gaps observed in the path towards higher education.

The implications of this study highlight the need for targeted interventions to address the disparities in educational opportunities between rural and urban students in Chile, especially during critical transitions into higher education. The underrepresentation of rural students in key pathways toward higher education, particularly in university enrollment, underscores the urgency of implementing policies and incentives aimed at facilitating their entry. Understanding why rural

students are less likely to enroll in university entrance exams is essential to explore strategies that alleviate these challenges and create a more equitable educational landscape.

Efforts to bridge the educational gap should encompass not only financial support but also initiatives that enhance the quality of education and exposure to university-level academics in rural areas, as suggested by Fleming & Grace (2014) and Gao et al. (2022). Developing targeted programs to improve the performance of rural students in university entrance exams could be instrumental in increasing their representation in universities, as well as in STEM fields.

This study has two main limitations: (1) data is limited to students who remain in the education system, that is, students who fall behind significantly or drop out of the school system entirely are left out of our analysis; and (2), we cannot account for students that might follow alternative paths towards higher education. In this sense, our results and conclusions are limited only to those students who remain on a more traditional path, which might be especially relevant for rural students. Further studies are needed to explore these alternative pathways, and to understand how they might impact the choices made by urban and rural students.

Note:

[1] This research is funded by the Agencia Nacional de Investigación y Desarrollo (ANID), National Fund for Scientific and Technological Development of Chile (FONDECYT) project No. 11230130.

References

Arellano, J. P. (2001). Educational reform in Chile. *Cepal Review 73,* pp. 81-91 https://doi.org/10.18356/b15cf4a7-en

Byun, S. Y., Meece, J. L., & Irvin, M. J. (2012). Rural-nonrural disparities in postsecondary educational attainment revisited. *American Educational Research Journal*, *49*(3), pp412-437.

Byun, S. Y., Meece, J. L., & Agger, C. A. (2017). Predictors of college attendance patterns of rural youth. *Research in Higher Education*, *58*(8), pp 817-842. https://doi.org/10.1007/s11162-017-9449-z

Cartwright, F., & Allen, M. K. (2002). *Understanding the Rural-Urban Reading Gap*. Available at: https://eric.ed.gov/?id=ED505294 [Accessed 28 May 2023]

Chakrabarti, A. (2009). Determinants of participation in higher education and choice of disciplines: Evidence from urban and rural Indian youth. *South Asia Economic Journal*, *10*(2), pp 371-402. https://doi.org/10.1177/139156140901000205

Chowdry, H., Crawford, C., Dearden, L., Goodman, A., & Vignoles, A. (2013). Widening participation in higher education: Analysis using linked administrative data. *Journal of the Royal Statistical Society Series A: Statistics in Society*, *176*(2), pp 431-457. https://doi.org/10.1111/j.1467-985X.2012.01043.x

Crain, A., & Webber, K. (2021). Across the urban divide: STEM pipeline engagement among nonmetropolitan students. *Journal for STEM Education Research*, *4*(2), pp 138-172. https://doi.org/10.1007/s41979-020-00046-8

Contreras, M., Duryea, S., & Martínez, C. (2023). The effect of the pandemic on the transition to tertiary education in Chile: A focus on students with disabilities. *International Journal of Educational Development*, *100*, pp 100-102. https://doi.org/10.1016/j.ijedudev.2023.102779

Echazarra, A. and T. Radinger (2019). *Learning in rural schools: Insights from PISA, TALIS and the literature, OECD Education Working Papers, No. 196*. Paris: OECD Publishing. https://doi.org/10.1787/8b1a5cb9-en.

Fleming, M. J., & Grace, D. M. (2014). Increasing participation of rural and regional students in higher education. *Journal of Higher Education Policy and Management*, *36*(5), pp 483-495. https://doi.org/10.1080/1360080X.2014.936089

Fleming, M. J., & Grace, D. M. (2017). Beyond aspirations: Addressing the unique barriers faced by rural Australian students contemplating university. *Journal of Further and Higher Education*, *41*(3), pp 351-363. https://doi.org/10.1080/0309877X.2015.1100718

Fundación 99 (2023). *2º Versión de la Caracterización de la Educación Rural en Chile después de dos años de pandemia por COVID-19, Santiago, Chile [2nd Version of the Characterization of Rural Education in Chile after two years of the COVID-19 pandemic, Santiago, Chile].* Available at: https://www.fundacion99.org/descargas/encuesta.pdf [Accessed 4 January 2024]

Gale, T., & Parker, S. (2014). Navigating change: a typology of student transition in higher education. *Studies in Higher Education*, *39*(5), pp 734-753. https://doi.org/10.1080/03075079.2012.721351

Gallego, F., Rodríguez, C., & Sauma, E. (2007). Provisión de educación en zonas rurales de Chile: Incentivos, costos y calidad [Education provision in rural areas of Chile: Incentives, costs and quality]. *Camino al Bicentenario Propuestas para Chile*, pp 47-74.

Gao, C. Y., Dollinger, M., D'Angelo, B., & Harvey, A. (2022). Leveraging local knowledge: Exploring how to support regional, rural and remote students' career development. *Australian and International Journal of Rural Education*, *32*(1), pp 1-17. https://doi.org/10.47381/aijre.v32i1.298

Hango, D., Zarifa, D., Pizarro Milian, R., & Seward, B. (2021). Roots and STEMS? Examining field of study choices among northern and rural youth in Canada. *Studies in Higher Education*, *46*(3), pp 563-593. https://doi.org/10.1080/03075079.2019.1643308

Herskovic, L., & Silva, J. (2022). Links between performance in high school and the decision to major in STEM fields: evidence from Chile. *Educational Studies*, pp 1-28. https://doi.org/10.1080/03055698.2022.2117540

Hillier, C., Zarifa, D., & Hango, D. (2022). Mind the gaps: Examining youth's reading, math and science skills across northern and rural Canada. *Rural Sociology*, *87*(1), pp 264-302. https://doi.org/10.1111/ruso.12401

Hu, S. (2003). Educational aspirations and postsecondary access and choice. *Education Policy Analysis Archives*, *11*, pp 14-14. https://doi.org/10.14507/epaa.v11n14.2003

Lasselle, L. (2016). Barriers to higher education entry–a Scottish rural perspective. *Scottish Educational Review*, *48*(1), pp 78-88. https://doi.org/10.1163/27730840-04801007

Liao, P. A., Chang, H. H., Wang, J. H., & Horng, T. H. (2013). Do rural students really perform worse than urban students do? Empirical evidence from a university entrance program in Taiwan. *Rural Sociology*, *78*(1), pp 109-131. https://doi.org/10.1111/j.1549-0831.2012.00096.x

Licsa (2016). *Laboratorio de Investigación en Ciencias Sociales Aplicadas (Licsa) de la Universidad de La Frontera (Ufro). Perfiles de Estudiantes Rurales de la Región de La Araucanía [Research Laboratory in Applied Social Sciences (Licsa) of the University of La Frontera (Ufro). Profiles of Rural Students from the La Araucanía Region]*. Available at: https://nucleocienciasociales.ufro.cl/index.php/2016/11/28/estudio-releva-diferencias-de-hasta-30-puntos-entre-escuelas-rurales-y-urbanas/ [Accessed 5 January 2024]

McNamee, T. C., & Ganss, K. M. (2023). Rural students in higher education: From college preparation and enrollment to experiences and persistence. *Peabody Journal of Education*, *98*(4), pp 380-395. https://doi.org/10.1080/0161956X.2023.2238508

Means, D. R., Clayton, A. B., Conzelmann, J. G., Baynes, P., & Umbach, P. D. (2016). Bounded aspirations: Rural, African American high school students and college access. *The Review of Higher Education*, *39*(4), pp 543-569.

Ministerio de Educación de Chile (MINEDUC). (2000). *Programa de Educación Básica Rural [Rural Basic Education Program]*Available at: https://bibliotecadigital.mineduc.cl/bitstream/handle/20.500.12365/2125/mono-945.pdf [Accessed 6 June 2023]

MINEDUC (2014). *Ministerio de Educacion [Ministry of Education].* Available at: https://www.mineduc.cl/. [Accessed 20 June 2014].

MINEDUC (2024). *Educación Rural [Rural Education].* Available at: https://escolar.mineduc.cl/educacion-rural/ . [Accessed 15 October 2023].

Mgqwashu, E. M., Timmis, S., De Wet, T., & Madondo, N. E. (2020). Transitions from rural contexts to and through higher education in South Africa: Negotiating misrecognition. *Compare: A Journal of Comparative and International Education*, *50*(7),pp 943-960. https://doi.org/10.1080/03057925.2020.1763165

OECD (2023). *PISA 2022 Results (Volume II): Learning During – and From – Disruption.* Paris: OECD Publishing.

Oreopoulos, P., & Petronijevic, U. (2013). *Making College Worth It: A Review of Research on the Returns to Higher Education (working paper).* Cambridge, MA: National Bureau of Economic Research. https://doi.org/10.3386/w19053

Quiroz, J. L., Peeters, L., Chasco, C., & Aroca, P. (2022). Equal access to university ducation in Chile? An application using spatial heckman probit dodels. *Mathematics, 10*(2), pp 280. https://doi.org/10.3390/math10020280

Riegle-Crumb, C., Moore, C., & Ramos-Wada, A. (2011). Who wants to have a career in science or math? Exploring adolescents' future aspirations by gender and race/ethnicity. *Science Education*, *95*(3), pp 458-476. https://doi.org/10.1002/sce.20431

Saw, G. K., & Agger, C. A. (2021). STEM pathways of rural and small-town students: Opportunities to learn, aspirations, preparation, and college enrollment. *Educational Researcher*, *50*(9), pp 595-606. https://doi.org/10.3102/0013189X211027528

Scott, S., Miller, M. T., & Morris, A. A. (2016). Rural community college student perceptions of barriers to college enrollment. *Academic Leadership Journal in Student Research*, *4*, pp. 1-9. https://doi.org/10.58809/BTAF8861

Sevilla Encinas, A. M. (2018). *Disentangling Inequality of Educational Opportunities: The Transition to Higher Education in Chile.* Available at: https://www.proquest.com/openview/e6cf4482ed9363c507d145c5c9469f00/1?pq-origsite=gscholar&cbl=51922&diss=y [Accessed 1 June 2023]

Sparks, P.J., & Nuñez, A. (2014). The role of postsecondary institutional urbanicity in college persistence. *Journal of Research in Rural Education, 29*(6), pp 1-19.

Tamayo, M., Rebolledo, J., & Besoaín-Saldaña, A. (2017). Monitoring inclusive education in Chile: Differences between urban and rural areas. *International Journal of Educational Development, 53,* 110-116. https://doi.org/10.1016/j.ijedudev.2017.01.002

Tamayo Rozas, M., Carvallo Arrau, M. F., Sánchez Cornejo, M., Besoaín-Saldaña, Á., & Rebolledo Sanhueza, J. (2018). Programa de Integración Escolar en Chile: brechas y desafíos para la implementación de un programa de educación inclusiva [School integration program in Chile: Gaps and challenges for the implementation of an inclusive education program]. *Revista Espanola de Discapacidad, 6* (1), pp. 161-179. https://doi.org/10.5569/2340-5104.06.01.08

Tandrayen-Ragoobur, V., & Gokulsing, D. (2021). Gender gap in STEM education and career choices: what matters?. *Journal of Applied Research in Higher Education*, *14*(3), pp 1021-1040. https://doi.org/10.1108/JARHE-09-2019-0235

Tayyaba, S. (2012). Rural-urban gaps in academic achievement, schooling conditions, student, and teachers' characteristics in Pakistan. *International Journal of Educational Management*, *26*(1), pp. 6-26. https://doi.org/10.1108/09513541211194356

Tran, Q. N., Meyerink, M., Aylward, A., & Luo, F. (2021). College enrollment and STEM major choice in a rural state: A statewide examination of recent high school cohorts. *Theory & Practice in Rural Education*, *11*(1), pp 40-59. https://doi.org/10.3776/tpre.2021.v11n1p40-59

Wells, R. S., Manly, C. A., Kommers, S., & Kimball, E. (2019). Narrowed gaps and persistent challenges: Examining rural-nonrural disparities in postsecondary outcomes over time. *American Journal of Education*, *126*(1), pp 1-31. https://doi.org/10.1086/705498

Yan, W. (2002). *Postsecondary Enrollment and Persistence of Students from Rural Pennsylvania* (report). Harrisburg, PA: Center for Rural Pennsylvania

Yang, X. (2010). Access to higher education for rural-poor students in China. *Educational Research for Policy and Practice*, *9*, 193-209. https://doi.org/10.1007/s10671-010-9084-3

Zamorano, H., Serrano, V., and Zamora, H. (2017). *Estudio de Establecimientos de Educación Media en Territorios Rurales [Study of Secondary Education Establishments in Rural Territories].* Available at: https://bibliotecadigital.mineduc.cl/bitstream/handle/20.500.12365/18826/E17-0012.pdf?sequence=1 [Accessed 5 June 2023]

Zarifa, D., Seward, B., & Milian, R. P. (2019). Location, location, location: Examining the rural-urban skills gap in Canada. *Journal of Rural Studies*, 72, pp 252-263. https://doi.org/10.1016/j.jrurstud.2019.10.032

Zinth, J. D. (2014). Dual Enrollment: A Strategy to Improve College-Going and College Completion among Rural Students. *Education Commission of the States*. Available at: https://files.eric.ed.gov/fulltext/ED561909.pdf [Accessed 5 June 2023]

Organisational Culture in Indonesian Schools During COVID-19: Perceptions of School Principals

Jenny Ngo[a]
Institut Sains dan Teknologi Terpadu Surabaya

Abstract: This study investigates and identifies the organizational culture of Indonesian schools during COVID-19 through the lens of principals. We collected survey data from 93 applications of the OCAI instrument. Our data analysis results show that Indonesian schools' organizational culture is a unique blend of the four cultural types, with clan and hierarchy culture dominating, followed by adhocracy and, to a lesser extent, market culture. The most commonly ingrained concepts in the culture are job security and internal stability, coordination to ensure the smooth operation of online education, school commitment to innovation in online education, and school management through collaboration and teamwork. Our findings offer insights regarding how the COVID-19 pandemic transformed or changed the organizational culture of schools in Indonesia, which can be used to respond quickly to the *Merdeka Belajar* (Independent Learning) policy and enhance school performance in the post-COVID-19 pandemic.

***Keywords**:* COVID-19, Indonesia, OCAI, organizational culture, school principals

Introduction

The *Merdeka Belajar* (Independent Learning) policy was announced in early 2020 by the Minister of Education and Culture, *Nadiem Makarim*. The policy's ultimate goal is to promote an autonomous and flexible learning environment by transitioning from teacher-centered to student-centered learning, as well as to foster an innovative learning culture through the use of technology (Kemendikbud, 2020a). To implement *Merdeka Belajar*, all schools must modify their curricula to include project-based learning strategies that help students build knowledge and strengthen significant learning while studying independently. In this regard, schools must be able to provide interactive, direct, appealing, and in-depth learning.

Before the implementation of the Independent Learning Policy spread throughout Indonesia, COVID-19 hit 190 nations, including Indonesia, employing various social distancing, lockdown, and quarantine measures to stop the spread of infection, with schools being the first to close, affecting nearly 1.7 billion students globally (World Bank, 2020). As a result, on March 17, 2020, the government issued the first official COVID-19 virus-fighting measures in Indonesia, encouraging online learning and work from home (Kemendikbud, 2020b), affecting 45.21 million students (Annur, 2021a) across 217.283 Indonesian schools (from primary to secondary) during the 2020/2021 academic year (Annur, 2021b).

Three critical components of Indonesian school education have changed as a result of the epidemic. To begin with, pedagogical transitions from traditional classroom models to remote or virtual classroom models are occurring (Kemendikbud, 2020a). The use of technology, such as the Internet, is the second factor. Many schools, principals, teachers, students, and parents are unprepared for remote online education in terms of online learning platforms and web-videoconferencing tools

a Correspondence can be directed to: mooi_mice@yahoo.com

ISSN 2232-1802 doi: 10.14425/jice.2024.13.1.1205

(Paddock & Sijabat, 2020). Third, schools must enforce rules, regulations, and policies to guarantee that teaching and learning are consistent across school systems (Kemendikbud, 2020a).

Indonesian schools are expected to be dynamic organizations, reflecting the fact that they have had to deal with last-minute closures as they prepare to move classes online and assess the impact of the virus on staff and student well-being (Bush, 2021). Schools may have shared specific values to help them manage their daily operations in order to respond immediately to the COVID-19 crisis. Schools may have shaped new beliefs, norms, processes, and strategies that resulted in the development of a new organizational culture (Istianda & Anthony, 2022).

This study investigated how the COVID-19 pandemic influenced the organizational culture of Indonesian schools. Thus, the purpose of this research was to investigate and identify the organizational culture of schools in Indonesia during COVID-19. Beyond the primary goal, the findings of this study are hoped to assist schools in successfully implementing the *Merdeka Belajar*, in which the disruptive impact of COVID-19 has accelerated the digital transformation process in schools (Haffar et al., 2023) related to online learning, leading to students' independent learning (Ngo & Ngadiman, 2019; Kemendikbud, 2020a). Furthermore, Istianda and Anthony (2022) argue that schools must be supported by their organizational culture in order to implement Independent Learning, as organizational culture is an important intangible resource for achieving strategic goals (Zhang et al., 2023). As a result, the study posits its importance that the study's findings will assist schools in understanding how their organizational culture can respond quickly to *Merdeka Belajar* (Independent Learning) implementation and its impact on school performance in the post-COVID-19 pandemic.

The structure of this study is as follows. The concepts of organizational culture and the Organizational Culture Assessment Instrument (OCAI) are first introduced to fully describe the study. Methods are then defined, including survey participants, procedures, measures, and data analysis. The empirical results are then presented, analyzed and discussed. Finally, the findings, implications, limitations and future directions of the study are discussed.

Organizational Culture

The modern definition of organizational culture includes the following elements: organizational values, dominant leadership styles, languages and symbols, practices and routines, and definitions of success (Quinn & Cameron, 2011; Hofstede Insights, n.d.). According to Weiner (2009), analyzing people's attitudes and behaviors is one way to understand the assessment culture in a given institution. The same is true according to Cameron and Quinn (2011, p. 22) who stated that "an organization's culture is reflected by what is valued, the dominant leadership styles, the language and symbols, the procedures and routines, and the definitions of success that make an organization unique."

There are many models available for assessing organizational culture and effectiveness. A literature study by David, Valas, Raghunathan (2018) described 14 models of organizational culture assessment tools available. Some models include the Organizational Culture Inventory, Hospital Culture Questionnaire, Organizational Culture Survey, Nursing Unit Cultural Assessment Tool, and the Organizational Culture Assessment Instrument (OCAI). According to David et al. (2018), OCAI by Cameron and Quinn (2011) has more advantages: "it is a validated research method for examining organizational culture, it shows better validity and reliability, it is an instrument used by numerous researchers, it is a model that is still in use today, and it is quick and simple to assess" (pp. 183-186).

Given that schools had to adjust to new surroundings and policies during the pandemic, it was determined that the OCAI was a suitable conceptual model for this study's exploration and investigation of organizational culture types in Indonesian schools. First, the OCAI's conceptual advantage is that it emphasizes a dynamic alignment of the internal-external and stability-flexibility dimensions rather than a single, definitive 'best' organizational culture (Cameron & Quinn, 2011). Successful organizations, according to Cameron and Quinn (2011), are adaptable and make use

of all four sets of values when necessary. Second, according to Caliskan and Chu (2019), the OCAI survey instrument has been extensively utilized and has proven to be successful in classifying various organizational cultures. Finally, the OCAI underpins organizational cultural dynamics, in which these organizational cultural types are crucial for organizational effectiveness (Cameron & Quinn, 2011; Caliskan & Chu, 2019).

The Organizational Culture Assessment Instrument (OCAI)

The OCAI employs Quinn and Rohrbaugh's (1983) four value quadrants to represent the four types of organizational culture. It, shown in Figure 1, combines two dimensions of competing values, reflecting the degree of flexibility to control and the internal emphasis on external focus, to produce four quadrants. The four quadrants symbolize the four major cultural typologies that describe the various dimensions and competing values that characterize human behavior: adhocracy, hierarchy, market, and clan culture. The four quadrants of culture are described in greater detail below.

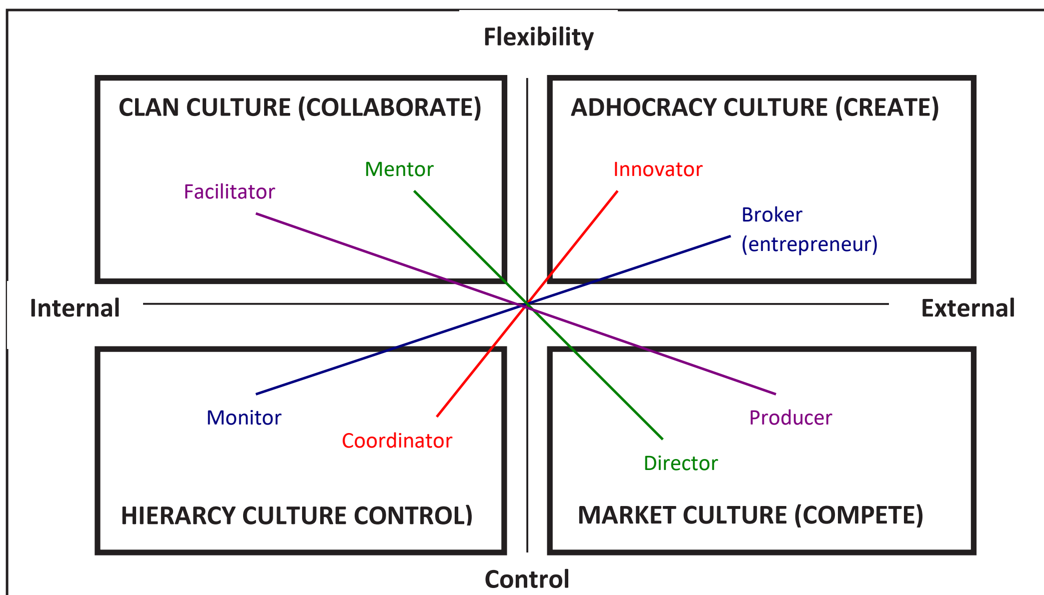


Figure 1. The OCAI based on the Competing Values Framework
Source: Cameron and Quinn (2011), adopted from Figure 3.1, p. 39

The (Four) Culture Types

The Clan Culture (the Collaborative) is located in the upper left quadrant and represents a flexible and internally focused organization. This culture provides a happy atmosphere while working, and each member's place where they work together to share disclosure of personal information, much like a family (Ngo, de Boer & Enders, 2014; Tyler, 2018). It implies that loyalty, interpersonal relationships, teamwork, open communication, and tradition are adhered to by an organization (Cameron & Quinn, 2011). As a result, members are extremely dedicated to the organization (Tyler, 2018). Leaders are viewed as mentors and facilitators with a collaborative attitude.

The Adhocracy Culture (the Create) is represented in the upper-right quadrant by flexibility and external focus. This culture fosters a dynamic and creative work environment where employees are encouraged to take calculated risks with every decision they make (Tyler, 2018). Leaders in this culture act as innovators and risk-takers in every decision (Cameron & Quinn, 2011). Every innovation

serves as an organizational link to a culture that is constantly evolving. This culture is characterized by constantly evolving behavior that seeks out novel resources and innovations (Tyler, 2018). As a result, the availability of new products or services is regarded as a result of an organization's success. The output result that innovates, transforms, and exhibits freedom is the driving value (Tyler, 2018).

The Market Culture (the Compete) is located in the lower-right quadrant, opposite the clan, where control and external focus are important dimensions. This culture is typical of a results-oriented workplace, emphasizing long-term concern for competitiveness and winning (Cameron & Quinn, 2011). In this culture, efficiency in finishing tasks on time is valued above all else. Organizations always have a competitive focus with competitors in achieving objectives (Tyler, 2018). Thus, the primary goals of these organizations with this culture are goal achievement, consistency, and competitiveness. Leaders are hard-drivers and producers (Cameron & Quinn, 2011).

The Hierarchy Culture (the Control) is located in the lower-left quadrant, with control and internal focus being the key dimensions. Workplace culture is very structured and formal. Every action is a structured activity. Based on existing procedures, by applicable regulations. The following values are regarded as important: formal policies and the smooth operation of the organization (Tyler, 2018). This culture promotes long-term goals such as organizational stability, performance, efficiency, and smooth operations (Cameron & Quinn, 2011). The success of an organization can be measured by its level of management reliability, smooth running scheduling, and cost efficiency. Furthermore, employee management must be done by focusing on each guaranteed job and the predictability of results (Tyler, 2018).

OCAI Research in the Educational Sector

Aside from business, some studies look into the organizational culture found in schools and academic institutions. Ramachandran et al. (2011), for example, investigated organizational culture in Malaysian public and private higher education institutions. Market and adhocracy cultures, according to the study's findings, are prevalent in public institutions. In general, the hierarchical dimensions of public and private institutions are high. Because their income is dependent on the market, public institutions have a stronger clan culture than private institutions. Zhu and Engels (2014) investigated teachers' and students' perceptions of instructional innovation and its relationship to organizational culture in Chinese universities. The study, which took place at six different universities, found that educational innovations and institutional culture are inextricably linked. Goal orientation and collegial relationships were the most important aspects of organizational culture for practicing instructional innovation. Berkemeyer et al. (2015, p.94) validated "the OCAI-SK instrument based on Cameron and Quinn's OCAI which can be used to investigate school culture in German-speaking countries". The findings from 40 schools revealed that the "majority of them had a clan culture and only a few were adhocratic" (ibid, p. 95). Based on this, it was proposed that schools in Germany are internal-process oriented, but organizationally flexible due to their governmental embedment. The low-reliability values and the prevalence of the adhocracy culture may raise concerns about whether educational institutions are innovative or willing to take risks.

Caliskan and Zhu (2019) investigated student perceptions of the current organizational culture type in four Turkish public universities using OCAI. The findings through surveys and interviews revealed and validated that the "dominant culture type of Turkish universities regarding students is hierarchy followed by market culture" (p. 282). Kheir-Faddul et al. (2019) studied principals' perceptions of their values and the type of organizational culture in schools in Northern Israel's Druze sector, where "clan culture was found to be the most dominant, followed by market and adhocracy culture" (p. 216). The principals foster trust within teams, provide guidance, and inspire employees to be creative and innovative. In addition, Johansyah (2022) investigated organizational culture mapping at the Faculty of Economics, University of Borneo Tarakan, using the organizational culture assessment instrument (OCAI). According to the findings, the Faculty of Economics' current

and expected organizational culture is more akin to a Clan culture, with a focus on human resource development, loyalty, and organizational function as a family.

Research Objectives and Research Questions

This study aimed to identiy school principals' perceptions of organizational culture types in Indonesian schools during COVID-19. This study sought to:

1. to investigate the organizational culture of Indonesian schools, and
2. identify the predominant culture item(s) that contributed to the organizational culture of Indonesian schools.

The research objectives define the main research question of the study: How do principals perceive the organizational culture of Indonesian schools? What culture item(s) contributed most to the organizational culture of Indonesian schools?

Methods

Research Design and Rationale

The objective of this research was to examine the organizational culture of Indonesian schools as perceived by principals, as well as the factors that contribute to this culture. In this study, a questionnaire survey was used as the best approach in order to achieve the intended objectives. Although employing multiple methods may produce more accurate results, this study considered other constraints such as cost, available budget, and time (Remenyi et al., 1998). The primary benefit of survey research is that it requires less time and money than face-to-face interviews (Babbie, 2013). Furthermore, it is the most effective method for covering a large geographical area like Indonesia while representing a specific population (Bacon-Shone, 2022). As a result, broad standardized information from samples can be extracted (Babbie, 2013). Furthermore, unlike face-to-face interviews, respondents can complete the questionnaire at their own pace (Bacon-Shone, 2022). This survey method is also widely used in social science research, making it a reliable empirical validation method (Babbie, 2013; Bacon-Shone, 2022).

This study used the Organizational Culture Assessment Instrument (OCAI) (Cameron & Quinn, 2011) along with a four-Likert scale survey. When analyzing the data, we followed this reasoning. Fundamentally, the Likert-point scale allows people to express how much they agree or disagree with a specific statement, as well as their positive-to-negative level of agreement or feeling about the question or statement (Mcleod, 2023). The study's survey asked principals whether they strongly disagreed, disagreed, agreed, or strongly agreed with each OCAI statement. However, the distinction between the four Likert-point scales is frequently subtle (Ellis, 2024). Because the response categories in Likert scales are ranked, the frequency procedure is appropriate for ordinal data (Jamieson, 2004). It is possible to present the frequencies of each scale in a table for our study (see Table 1 for sample frequencies), but this provides little additional information. To identify the dominant school culture in Indonesia, we divided survey scores into four rating categories, in addition to 'unfavorable' (strongly disagree and disagree) and 'favorable' (agree and strongly agree). We transformed and recoded the scale scores, combining 'strongly agree' and 'agree' to create the 'favorable' variable. To see the results of our recoding, we run the Frequencies command with the new variable 'favorable'. The findings allow us to identify the principals' perceived dominant culture type(s), as well as the most commonly imbibed cultures in Indonesian schools. This analysis, while logical and meaningful, limits the study's results. The findings of this simple analysis may be insignificant for each culture; however, the purpose of this study is not to investigate the significance of each culture type, but rather to report on the dominant types and most contributing cultural items within that culture.

Table 1. Sample Descriptive Statistics Organizational Culture

Dominant Characteristics		Frequency (Percentage) (N = 93)			
Culture Type	During the pandemic, …	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Clan	Q1. The school is a very personal place. It is like an extended family. People seem to share a lot of themselves.	-	4 (4.3)	37 (39.8)	52 (55.9)
Adhocracy	Q2. The school is a very dynamic and entrepreneurial place, and people are willing to take risks.	10 (10.8)	13 (14)	40 (43)	30 (32.3)
Market	Q3. The school is very results oriented, and the main concern is getting work done.	3 (3.2)	13 (14)	45 (48.4)	32 (34.4)
Hierarchy	Q4. The school is a very controlled and structured place. Formal procedures generally govern what people do.	-	6 (6.5)	49 (52.7)	38 (40.9)

Sample and Data Collection

Participants were school principals who attended the Teacher Professional Education Program and the Teacher Training and Science Education Program, both of which were held online in September 2020. The Indonesian principals were from private and public schools in 30 cities across Sumatra, Kalimantan, Sulawesi, Java, Madura, Bali, and East Nusa Tenggara. The Google Forms online survey was distributed to 101 principals and was open for two weeks, from February 1 to February 15, 2021. There were 93 valid responses, for a 97 per cent response rate. Figure 2 in the Findings depicts the demographic data of research participants.

We are aware of the study's main limitations regarding the generalizability of the results. First, the survey was limited to school leaders involved in educational programs. Second, the number of respondents is considered small. Arguably, the data and results have limited generalizability to other schools. Despite its limitations, the findings of this study have the potential to add to the literature and future research, particularly in terms of understanding the challenges faced by school leaders during the COVID-19 pandemic. The new organizational culture profile of Indonesian schools will undoubtedly aid them in more effectively implementing *Merdeka Belajar* (see Contribution and Implications section).

Measures

The Organizational Culture Assessment Instrument (OCAI) (Cameron & Quinn, 2011) was used in this study to help principals identify, analyze, and eventually understand the organizational culture of schools in Indonesia (Cameron & Quinn, 2011). The OCAI is a validated organizational culture assessment tool and the most useful framework for determining organizational effectiveness criteria with competing managerial leadership roles (Quinn & Rohrbaugh, 1981, 1983; Nguyen et al., 2020). The self-reporting OCAI survey has six criteria: Dominant Characteristics, Organizational

Leadership, Management of Employees, Organizational Glue, Strategic Emphases, and Criteria of Success. Each criterion has four substitutes, totalling 24 items that comprise the four culture types: Clan, Adhocracy, Market, and Hierarchy culture.

The OCAI survey was slightly modified to meet the goal of this context-based study. First, at the beginning of each item, the phrase "during the COVID-19 pandemic..." [*Di masa pandemik...*] was added. Second, all 24 items were translated into Bahasa Indonesia using simpler statements while maintaining the original meaning. The goal of the translated survey was to clearly convey the messages of the statements to avoid any misinterpretation of the meaning and to become more familiar with the subject and context under study, which were school principals and the pandemic, respectively. Third, the assessment of the OCAI survey for this research was limited to the organizational culture of Indonesian schools at the time it was conducted. The preferred culture that Indonesian principals perceive is not evaluated in this study. Fourth, the response of the 24 items adopted from the OCAI survey (Cameron & Quinn, 2011) was changed from an ipsative response format (in which participants allocate 100 points among four statements to indicate organizational relevance to the four cultures) to a 4-Likert scale, with 1 being strongly disagree, 2 being disagree, 3 being agree, and 4 being strongly agree. This modification was made to accommodate the online testing format. Previous research has confirmed the instrument's validity and reliability in both testing versions. Di Stefano and Scrima (2016) conducted a validation study using both its ipsative and Likert versions adapted to the Italian context. The results showed that both exploratory factor analysis (EFA) on Likert response scale data and multidimensional scaling (MDS) on ipsative response scale data yielded good validity and reliability estimates for measuring the CVF model.

The Reliability and Validity of the Current OCAI Survey

The current research survey included 24 OCAI items (six items for each cultural type), with responses using a 4-point Likert scale: 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree). Demographic characteristics such as age, gender, years of service, type of school (public or private), and place of residence are also included to describe the test sample. A pilot survey was conducted, with five principals from 101 serving as the sample population. Some additional COVID-19-related questions (non-OCAI items) were removed from the survey due to redundancy, and the survey was revised in response to group feedback. The five pilot study respondents were excluded from the analysis, leaving 96 principals as the sample population. To validate the final instrument, the survey was distributed to five of the 96 respondents. Following approval of the final instrument by the five respondents, the survey was sent to the remaining 91 principals in the sample population. We received 96 total responses after combining the five and 91 respondents. Out of 96 respondents, three did not complete all of the survey questions, leaving 93 valid responses. As a result, it received 97% of all responses.

In terms of the research instrument's reliability and validity, this study confirmed that the modified instrument had good construct validity and reliability. Clan culture factor loading ranged from .578 to .830, Adhocracy culture factor loading ranged from .585 to .827, Market culture factor loading ranged from .624 to .788, and Hierarchy culture factor loading ranged from .678 to .775. Scale reliability has been demonstrated to be adequate for each of the four cultures, with Cronbach's alpha values ranging from .76 to .82, which are higher than the recommended value of .70 (Babbie, 2013). The findings of this study are consistent with those of prior studies. Choi et al. (2010) used internal consistency and factorial validation analyses to evaluate and confirm the validity of the Korean translation of the OCAI. The use of OCAI in the Australian setting was verified by Heritage et al. (2014). Using CFA, Heritage et al. (2014) discovered that a good model fit was found for both existing and expected cultures. The OCAI has moderate reliability and construct validity in measuring four types of organizational culture in a healthcare environment in Vietnam, according to Nguyen et al. (2020). Our findings support Cameron and Quinn's (2011) contention that the OCAI is a reliable tool for determining organizational cultural types.

Data Analysis

The SPSS statistical program version 26 was used to analyze the data collected from 93 respondents. The OCAI survey included 24 items from six key dimensions of OCAI and used a Likert-style rating scale of 1 to 4, with 1 indicating strongly disagreed and 4 indicating strongly agreed. In this section, we followed the rationale explained earlier in the Method (see Research Design and Rationale section). To answer our first research question, we first classified 24 items into four organizational culture types: clan, adhocracy, market, and hierarchy, with each culture type containing six items. Second, we recoded each item variable in each culture type as a unique variable by combining the Agree and Strongly Agree categories to create the favorable category. Finally, we calculated the frequencies of the six items in each cultural type; the results are shown in Table 2. The higher favorable score represents the more dominant culture, while the lower favorable score represents the less dominant culture, as depicted in Figure 3 of the Results section.

To answer our second research question, we followed a similar procedure. We classified 24 items into six dimensions of OCAI, with each dimension containing four culture types. We recoded each item in each dimension by combining the Agree and Strongly Agree categories to create the favorable category. Appendix A displays the frequencies for each cultural item across dimensions. The high frequency of principals' perceived responses to items representing each cultural type in each dimension determines which items contribute most to the organizational culture of Indonesian schools (see Appendix B).

Results

Sample Profile

Figure 2 depicts demographic information from the first OCAI survey participants. The study included 93 school principals, 57% of whom were females, 52% worked in private schools, 26% were under 30 years old, and 26% were between 41 and 50 years old. Almost 51% of principals have served for less than 5 years, while 23% have served for more than 10 years.

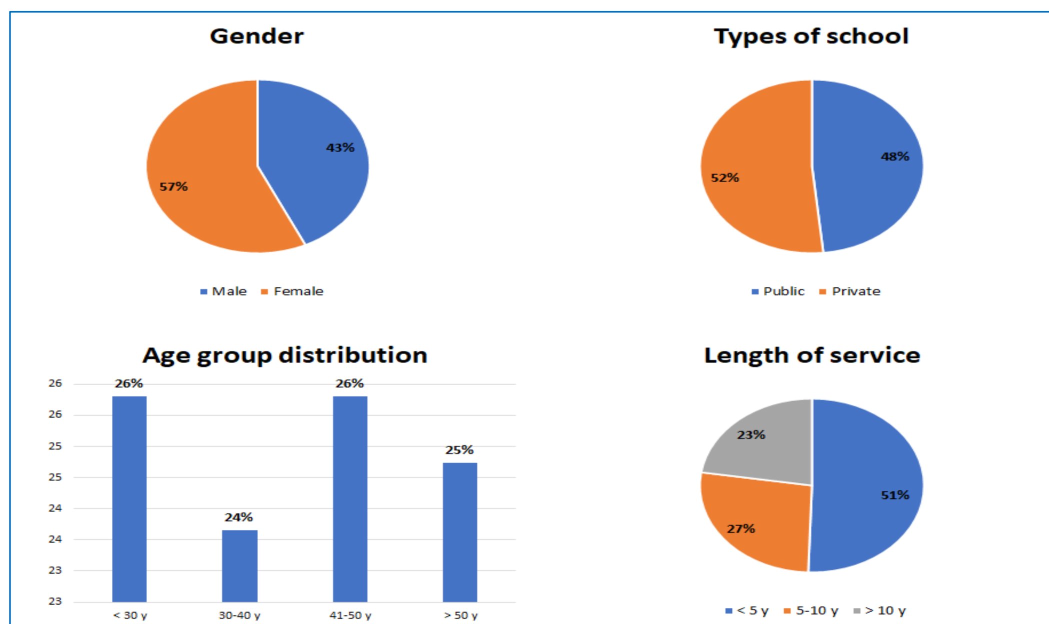


Figure 2. Demographic Information from the First OCAI Survey Participants

School Organizational Culture in Indonesia.

Respondents were asked to rate 24 items related to the four different cultural types to answer our first research question. According to Table 2, school culture in Indonesia is a unique blend of four culture types: Clan culture (544), Hierarchy culture (541), Adhocracy culture (497), and Market culture (459). A higher score indicates that the culture type is more dominant. According to the findings, Clan and Hierarchy culture predominates among organizational cultures in Indonesian schools, followed by Adhocracy culture, and, to a lesser extent, Market culture. Based on human collaboration and teamwork, Indonesian schools were portrayed as a family where people are loyal and trustworthy. Simultaneously, schools were a formalized and structured workplace, characterized by inter-relationship stability, and people were committed to innovation in response to the pandemic's sudden shift to online education. To some extent, we can see that schools emphasize competitive activities and achievement. Figure 3 depicts the organizational culture of Indonesian schools during the pandemic, which is a synthesis of all four cultures, with a dominant clan and hierarchy, some adhocracy, and, to a lesser extent, market culture, answering our first research question.

Table 2. Descriptive Statistics of School Organizational Culture in Indonesia

Culture	Sum of Agree and Strongly Agree (N of Items = 6; N = 93)	Cronbach's Alpha (N of Items = 6; N = 93)
Clan	544	0.80
Hierarchy	541	0.81
Adhocracy	497	0.76
Market	459	0.82

Figure 3. School Organization Culture in Indonesia

The Items Contributing to the Organizational Culture of Indonesian Schools

As shown in Appendix B, the 24 items that comprise the six dimensions of OCAI were evaluated using frequencies in the favorable category. For this study, the items that contributed the most to

Indonesian school organizational culture were determined by the high frequency of responses to the items representing each culture type in each dimension. The high frequency assigned to a specific culture type determines the strength of culture. The more dominant the cultural type, the higher the score (Cameron & Quinn, 2011).

1) The dominant characteristics dimension indicates which criteria identify a school. According to the findings in Appendix B, Clan culture has the highest frequency score (89) for dominant characteristics. The other culture types respectively scored as follows: Hierarchy culture (87), Market culture (77), and Adhocracy culture (70). Most principals strongly agreed that their schools have a family-like culture that emphasizes internal focus and integration based on trust and collaboration. Appendix A number 1 depicts the cultural profile of dominant characteristics of Indonesian schools.
2) The organizational leadership dimension is the school's leadership style. In Appendix B, Clan is the organizational leadership dimension with the highest frequency score of 92, followed by Hierarchy culture at 91. Other cultural types include Market culture (88) and Adhocracy culture (86). To ensure the smooth operation of online education, most principals strongly agree that the school's leadership should focus on mentoring, facilitation, as well as stability and control via coordination. Furthermore, the study's principals believed that planning and goal setting was seen as a way to increase productivity and efficiency. Simultaneously, innovative school leadership is critical during times of crisis. When an organization clarifies its tasks and establishes objectives for online learning, its employees are ready to take action, guided by mentors, to keep schools stable and education running smoothly. Appendix A number 2 depicts the cultural profile of organizational leadership in Indonesian schools.
3) The employee management dimension reflects how schools manage their employees. Appendix B shows that the dimension of employee management strongly correlates with hierarchy (f = 92) and clan culture (f = 91). Job security and inter-relationship stability, as well as teamwork, collaboration, and participation, are all highly valued by the principals in this study. Furthermore, 75 principals agree that online education innovation is critical. Market culture exists to some extent, with 73 principals in the study agreeing that the school's management style values competition and achievement. Appendix A number 3 depicts the cultural profile of school management employees in Indonesia.
4) The organizational glue dimension refers to the mechanisms that keep schools together. Appendix B shows that loyalty, trust (Clan culture = 93), and a commitment to online education innovation and development (Adhocracy culture = 90) are the strongest school-binding agents. Principals in this study agreed that formal rules and policies are essential for a well-functioning school (Hierarchy culture = 88). To some extent, principals concur that goal achievement is important (Market culture=76). Appendix A number 4 depicts the cultural profile of organizational glue in Indonesian schools.
5) The strategic emphasis dimension explains what motivates the school's objectives. As shown in Appendix B, Indonesian schools place a high value on permanence and stability. It implies that efficiency, control, and smooth operation are essential in Indonesian schools. These are the strategic emphases of Hierarchy culture (90). The school's strategic emphases include human development (Clan culture = 88), resource acquisition (Adhocracy culture = 88), and, to a lesser extent, competitive actions and achievement (Market culture = 77). The cultural profile of strategic emphases in Indonesian schools is depicted in Appendix A number 5.
6) The criteria of success dimension represent the definition of success in schools. Appendix B shows that efficiency (Hierarchy culture = 93) and human resources, teamwork, employee commitment, and concern for people (Clan culture = 91) are critical to success. Following that, schools define success as the outcome of online education innovation (Adhocracy culture, 88), and, to a lesser extent, as winning in the marketplace and outperforming the competition (Market culture, 68). The cultural profile of success criteria in Indonesian schools is depicted in Appendix A number 6.

Discussion

The study investigated organizational culture types in Indonesian schools and determined which dominant culture item(s) contributed the most to it. The results identified and validated the organizational culture type in Indonesian schools. Based on the research questions, the discussion is divided into two sections. In addition, contributions and implications are presented.

First, this study suggests that the organizational culture of Indonesian schools, as perceived by principals, is a mix of four cultural types, with clan and hierarchical cultures dominating, followed to varying degrees by adhocracy and market culture (see Table 2). In this study, conducted in the context of COVID-19, principals in Indonesian schools perceived a dominant clan and hierarchy culture. Despite the pandemic context, the dominant Clan and Hierarchy culture is also found in previous studies before COVID-19. An earlier study of Indonesian deanship (Ngo, de Boer & Enders, 2014), for example, discovered that clan culture and hierarchical culture dominated the leadership styles of Indonesian deans. Similarly, Johansyah's (2022) study of organizational culture discovered that the Faculty of Economics at the University of Tarakan in Borneo, Indonesia, has a combination of clan culture centered on personal development, loyalty, and collaboration, as well as hierarchy culture with firm control.

Because of the similarities found in some studies conducted before and during the pandemic regarding Clan and Hierarchy culture, we assume that the dominant hierarchical and clan culture found in this study is most likely due to the national cultural structure of Indonesian society. The strong dominance of clan and hierarchy culture reflects gotong royong (mutual corporation) traditions (Irawanto, 2009) and the country's family and power-hierarchy culture (Hofstede Insights, n.d.), influencing people's beliefs, values, and attitudes (Ngo, de Boer & Enders, 2014). According to Geert Hofstede of the Global Culture Study (Hofstede Insights, n.d.), Indonesian society is collectivist (individualism index score = 5), implying that clan culture's influence is growing. Power distance is ingrained in Indonesian society (power distance index score = 78), implying that as power distance grows, so does the influence of hierarchical culture (Hofstede Insights, n.d.). Indonesian society's strong collectivism (clan culture) and high-power distance (hierarchy culture) may have a significant impact on how people perceive, behave, and reflect in their organizations (Ngo, de Boer & Enders, 2014). Furthermore, the research backs up previous findings that "a strong sense of group cohesiveness" with trust and confidence (Notman, 2015, p. 452), as well as school control and stability, are critical to keeping schools open and running smoothly (Argyropoulou et al., 2021; Thornton, 2021). The findings of this study are consistent with previous research emphasizing the importance of people development, collaboration with staff, and interpersonal interactions (Harris & Jones, 2020; Argyropoulou et al., 2021; Thornton, 2021).

Moreover, this study revealed the existence of an adhocracy culture in Indonesian organizational culture (see Table 2). The study's principals perceived an adhocracy culture to be prevalent during the crisis period. Due to school closures during the pandemic, schools were committed to innovation in online learning which was cited as the glue that held their school together by 90 out of 93 principals (see Appendix B, Q14). It is reasonable to believe that learning quality in Indonesian schools has been prioritized, which includes "online teaching models, distance learning infrastructure, technology-focused teacher foundational skills, and transitioning offline course materials to online models" (Nurdiansyah, 2021, p. 377). The study's findings show that there has been a significant wind of change from face-to-face classrooms to online classrooms in the Indonesian educational context. Moreover, these findings are consistent with previous research that has highlighted the growing importance of technological knowledge and pedagogy during the pandemic, particularly in terms of digital teaching and the transition from classroom to virtual classroom (Frattini, 2021; Nurdiansyah, 2021).

The findings of this study, however, contradict previous research that found adhocracy with an emphasis on innovation played a less dominant role long before the COVID-19 pandemic (Ngo, de Boer & Enders, 2014). Before the COVID-19 crisis, classrooms in Indonesia were lecture-driven,

with teachers providing a variety of resources (UNICEF, 2020). As a result, many schools and teachers were unfamiliar with online learning platforms and had yet to integrate them into their curriculum (UNICEF, 2020). When the pandemic hit, schools were forced to adapt to become more dynamic and adaptable, and schools began using virtual classrooms for both synchronous and asynchronous learning (Ngo, Budiyono & Ngadiman, 2021), resulting in the adhocracy culture observed in this study. This research shows, both conceptually and empirically, that Indonesian schools are capable of transcending their culture and moving in a new direction, namely, Adhocracy culture.

When compared to other cultures, principals in this study perceived that schools were less likely to engage in outcome-oriented and competitive activities during the pandemic (Market culture, see Table 2). In this context, it is reasonable to assume that during times of uncertainty, Indonesian schools faced enforced business restrictions, quarantines, and decreased activity (ILO-OECD, 2020). As a result, they believed that competitive advantage was not the most important consideration (Alsaqqa & Akyurek, 2021). As a result, Indonesian school principals engaged in fewer market behaviors associated with market dominance during COVID-19.

Second, Appendix B shows that cultural items related to clan and hierarchy dominate the key dimensions of organizational culture in Indonesian schools. As we can see, clan and hierarchy cultural items are highly embedded in the dominant characteristic of Indonesian school culture (89 and 87, respectively). During the pandemic, a notable change was the widespread adoption of remote learning and working from home (Krajcsák & Kozák, 2022), which was new in the Indonesian school system (Kemendikbud, 2020b; Ngo, Budiyono & Ngadiman, 2021) and which required organizations to prioritize the health and safety of their employees (Mikusova et al., 2023). Staying in close contact with teachers, staff, students, and parents to listen to concerns and provide daily online advice has proven critical in responding to the pandemic (Brackett et al., 2020). Adamu and Mohamad (2019) state that people feel included and cared for as the school fosters a family-like environment (see Appendix B, Question 1) and prioritizes staff well-being during the COVID-19 pandemic (Mikusova et al., 2023). This school's clan-dominant characteristics influence its organizational leadership, with principals acting as mentors and facilitators for their teachers and academic staff (see Appendix B, Question 5). As a result, school principals prioritize fostering trust, openness, and participation among teachers (see Appendix B, Question 17) through empathy and optimism, which may provide better support during the pandemic (Kaul et al., 2020). Accordingly, the school management style is defined by collaboration, consensus, and participation (see Appendix B, Question 9) in order to define success during the pandemic.

To keep school structure and workflow intact during the pandemic, schools needed to establish a stable and controlled environment (hierarchical culture) with formal procedures in place to govern and delegate tasks to teachers (see Appendix B, Question 4). To ensure that remote online education ran smoothly, schools had to implement strict schedules and monitor teaching processes (Appendix B, Question 8) due to the rapid acceleration of pedagogical shifts to online classrooms (Frattini, 2021). They standardized work processes to ensure coherence, stability, and control as schools' strategic focuses (Appendix B, Question 20). As a result, schools measure their success in terms of efficiency during the pandemic (Appendix B, Question 24). Debski et al. (2020) provide further support for the findings of this study. Their research (Debski et al., 2020) discovered that public universities in Poland have a predominantly hierarchical culture, which is a desirable organizational culture during COVID-19.

One of the predominant factors related to hierarchy culture is job security and inter-relationship stability (see Appendix B, Question 12). In this study, 92 principals out of 93 identified immediate job safety and stability concerns as a manifestation of the situation in which "by August 2020, the pandemic had affected around 29 million workers in Indonesia, [...], 2.6 million workers lost their jobs, and 24 million workers suffered from cuts in hours of work and wages due to the pandemic" (International Labour Organization, 2021, paragraph 2). Furthermore, Haiyani Rumondang, Director General of the Ministry of Manpower's Labor Inspection and Occupational Safety and Health in Indonesia, stated that "ensuring safe workplaces for businesses and workers has become a critical

priority throughout the pandemic" (International Labour Organization, 2021, paragraph 3). This could be one of the main reasons why schools prioritized internal stability and control during the pandemic.

The commitment of Indonesian schools to innovation and development during the pandemic is one of the factors influencing their organizational culture (Adhocracy culture, see Appendix B, Question 14). The pandemic transformed schools into dynamic and innovative online educational environments (Bush, 2021). Zhu and Engels (2014) argue that educational innovation is inextricably linked to institutional culture because the interpersonal relationship between employees based on loyalty and mutual trust (Clan culture, Appendix B, Question 13) is an essential component of the organizational culture for implementing classroom innovation. Octavia (2020) found that for Indonesian school principals to fulfil their duties, they should prioritize collaborative work patterns (Clan culture) and envision innovation (Adhocracy culture), which is in line with this research.

According to Appendix B, Adhocracy and Market cultural items in the Dominant characteristic dimension (70 and 73, respectively) had a lower impact on the organizational culture of Indonesian schools. According to the findings of this study, online learning is a novel concept in Indonesian schools. Schools were hesitant to take risks because they lacked experience with online education, internet access was difficult, and internet data packages in Indonesia were expensive (Yarrow and Bhardwaj, 2020; Paddock and Sijabat, 2020; Firman and Rahman, 2020). Due to a lack of online education infrastructure in Indonesia, schools, including teachers, students, administrators, and parents, are unprepared to work and learn from home (Yarrow and Bhardwaj, 2020; Paddock and Sijabat, 2020). All of this could have influenced both innovation (in this case, online learning) and academic performance (Vincent-Lancrin, 2019).

Furthermore, Appendix B demonstrates that the management style in the school with a strong Clan and Hierarchy culture (Question 9 = 91 and Question 12 = 92, respectively) causes the other culture types to decline. Conceptually, an adhocracy culture values adaptability and is concerned with the outside world. In contrast, a hierarchical culture stifles innovation because the values it emphasizes hinder it: control, stability, and an internal orientation (Naranjo-Valencia et al., 2016; Aichouche et al., 2022). Internal stability and job security, both of which are characteristics of hierarchy cultures, are associated with lower levels of innovation, as reflected in this study.

Contributions, Implications and Limitations of the Study

The current study adds to the existing body of knowledge in several ways. First, this study fits into the OCAI concept of a dynamic alignment of the internal-external and stability-flexibility dimensions rather than a single best organizational culture. This study shows that schools can deal with complex and dynamic environments conceptually. This study, in addition to validating existing literature, empirically demonstrated that schools can use the four competing culture types to identify the underlying organizational culture. Second, this study indicates a breakthrough in organizational culture in Indonesia, with an adhocracy culture coexisting with the dominant clan and hierarchical culture. For this study, schools are conceptually capable of transcending their culture to Adhocracy culture. Moreover, this study has demonstrated how schools in Indonesia have evolved to be more flexible and externally oriented as a result of the pandemic, in which innovation (Adhocracy culture) in online education has emerged. Third, by identifying the organizational culture profile of Indonesian schools, this study can provide insights into how schools can succeed and aid in understanding how to work more efficiently, productively, and creatively. As a result, this study has the potential to improve school effectiveness by encouraging better performance (Octavia, 2020). Lastly, in the broader context of organizational culture, this study confirms previous COVID-19 research (Harris & Jones, 2020; Argyropoulou et al., 2021; Thornton, 2021; Bush, 2021) that, during times of crisis, organizations emphasize clan and hierarchy culture, in which leaders manage the organizations through control, policies, and procedures, and lead the employees with trust, collaboration, and care.

Implications beyond COVID-19

This is the first empirical study of how principals perceive organizational culture, particularly during the pandemic. The findings indicate that schools are employing more cutting-edge teaching technologies than ever before and that an Adhocracy culture has emerged. COVID-19 has altered the culture of Indonesian schools, allowing education to continue to operate effectively by promoting positive emotions in the virtual classroom via video conference meetings. COVID-19 has also highlighted the value of commitment, collaboration, stability, control, integrity, people-centeredness, and innovation. These values are more important than ever, and school cultures have shifted to prioritize values that will be useful in a post-COVID world, particularly regarding the Indonesian government's new policy *Merdeka Belajar* (Independent Learning) (Kemendikbud, 2020).

The *Merdeka Belajar* policy emphasizes student-centered classrooms (Uswatiyah et al., 2021) and innovation that uses technological advancements to improve educational quality (Sherly et al., 2020), which are consistent with the impact of the COVID-19 pandemic on teaching and learning. The findings of this study can guide and assist schools in implementing *Merdeka Belajar* by understanding their post-COVID-19 organizational culture. The adhocracy culture found in this study may help schools establish an integrated mechanism in curriculum and instructional technology to enhance autonomous learning through innovation and planned change efforts in schools (Istianda & Anthony, 2022). In practice, schools can form a dynamic team of change agents (principals, teachers, and curriculum designers) to collaborate (clan culture) to carry out independent learning and facilitate the teaching and learning system. The success of *Merdeka Belajar* depends on school leaders, teachers, and administrators as crucial actors in the change process (Octavia, 2020).

Clan culture, one of the dominant cultures identified in this study, has the potential to facilitate the implementation of *Merdeka Belajar* in schools. In a collectivist society, everyone in the school values loyalty to network members and is emotionally dependent on their group (Hofstede Insights, n.d.). Collectivism provides group members with security and resources (Suh & Son, 2016) while increasing employee loyalty to the organization (Zhang et al., 2023). Furthermore, it has a significant positive effect on team performance (Mayfield et al., 2016). Teachers are more likely to cooperate and share knowledge in a collaborative environment, which may improve innovation efficiency and organizational performance (Zhang et al., 2023). Schools in Indonesia can implement Teacher Training Programs and hold teacher workshops to improve teachers' skills and abilities to learn educational technology (Kemendikbud, 2022), which are essential for implementing classroom innovation (Zhu & Engels, 2014). Teachers' cooperative nature and willingness to grow can help schools successfully implement *Merdeka Belajar*, which aims to significantly improve educational quality (Octavia, 2020).

Another prevalent organizational culture discovered in this study was the hierarchical culture. To survive COVID-19, schools must establish a stable and controlled environment (hierarchical culture), emphasizing internal focus and efficiency to ensure that educational processes run smoothly (Petrova et al., 2023), which is essential in times of crisis. However, when a high-power distance culture exists within an organization, managers tend to make decisions based on authority and power, communicate less with employees, and pay little attention to employee input, limiting opportunities for employees to express and implement innovative ideas (Zhang et al., 2023). To foster educational innovation following COVID-19, schools should reduce hierarchy culture while increasing clan culture. The nature of collectivism (Clan culture) not only fosters a positive, innovative team climate (Zhang et al., 2023), but it also aligns individual goals with collective goals (Jackson et al., 2006) to adhere to the Independent Learning policy: student-centered and educational technology. As a result, Clan culture is critical for improving school innovation performance.

Limitations of the Study

Aside from the contributions and implications, a few limitations should be mentioned. To begin with, the study's sample size limited its findings, which were not sufficiently representative of the

Indonesian archipelago's diverse populations. While we could argue that this study reflects the overall picture of Indonesian school culture types, the study's findings should be considered in other contexts. Second, the respondents were limited to principals from schools in Java, Indonesia's most populous island, who had participated in Teacher Professional Training and Science Education Programs. A survey of more principals in schools throughout the Indonesian archipelago would be extremely beneficial. As a result, we acknowledge that the study's findings may not apply to all Indonesian schools. Third, this study conducted a simple analysis to investigate and identify the organizational culture of Indonesian schools by converting principals' perceived agree and strongly agree scales into a positive variable. While we argue that the simple analysis was logical and meaningful in answering our research questions, the results between cultures may not be significant.

Conclusions and Suggestions for Future Research

Schools in Indonesia are a unique blend of the four cultural types, with clan and hierarchy culture dominating, followed by adhocracy culture and market culture to varying degrees. As a result, the most frequently ingrained concepts in school culture are clan, hierarchy, and, to some extent, adhocracy. Job security and internal stability, coordination to ensure the smooth operation of online education, efficiency and control, school commitment to innovation in online education, family-like schools, and school success through collaboration, teamwork, and employee commitment have all influenced the school's organizational culture.

The findings of this study, as the new profile of organizational culture in Indonesian schools, will serve as a starting point for a more in-depth analysis in future research, and similarities between schools will be apparent. The findings will also help schools understand their organizational culture and create and develop strategic plans to support the *Merdeka Belajar* policy in Indonesia.

Note

[1] The author thanks all participants and the two anonymous reviewers for their insightful comments.

References

Adamu, A. A., & Mohamad, B. (2019). Developing a strategic model of internal crisis communication: Empirical evidence from Nigeria. *International Journal of Strategic Communication, 13*(3), pp. 233-254. https://doi.org/10.1080/1553118X.2019.1629935

Aichouche, R., Chergui, K., Brika, S. K. M., El Mezher, M., Musa, A., & Laamari, A. (2022). Exploring the relationship between organizational culture types and knowledge management processes: A meta-analytic path analysis. *Frontiers in Psychology, 13*:856234. https://doi.org/10.3389/fpsyg.2022.856234

Alsaqqa, H. H., & Akyürek, Ç. E. (2021). Assessment of organizational culture types, leadership styles and their relationships within governmental and non-governmental hospitals in Gaza Strip of Palestine. *BMC health services research, 21*, 356. https://doi.org/10.1186/s12913-021-06351-1

Annur, C. A. (2021a). *Siswa SD Dominasi Jumlah Pelajar di Indonesia pada Tahun Ajaran 2020/2021*. [Elementary school students dominated the number of students in Indonesia in the 2020-2021 academic year]. Available at https://databoks.katadata.co.id/datapublish/2021/11/26/siswa-sd-dominasi-jumlah-pelajar-di-indonesia-pada-tahun-ajaran-20202021 [Accessed 7 October 2023].

Annur, C. A. (2021b). *Berapa Jumlah Sekolah di Indonesia pada Tahun Ajaran 2020/2021?* [How many schools exist in Indonesia in the 2020/2021 academic year?]. Available at https://databoks.katadata.co.id/datapublish/2021/11/26/berapa-jumlah-sekolah-di-indonesia-pada-tahun-ajaran-20202021 [Accessed 7 October 2023].

Argyropoulou, E., Syka, C. H., & Papaioannou, M. (2021). School leadership in dire straits: Fighting the virus or challenging the consequences? *International Studies in Educational Administration, 49*(1), pp. 18-27.

Babbie, E. (2013). *The Practice of Social Research*. (13th ed.). Singapore: Wadsworth and Cengage Learning.

Bacon-Shone, John. (2022). *Introduction to Quantitative Research Methods*. Available at: https://www.researchgate.net/publication/265793712_Introduction_to_Quantitative_Research_Methods [Accessed 7 October 2023].

Berkemeyer, N., Junker, R., Bos, W., & Müthing, K. (2015). Organizational cultures in education: Theory-based use of an instrument for identifying school culture. *Journal for Educational Research Online, 7*(3), pp. 86-102.

Brackett, M., Cannizarro, M., & Levy, S. (2020). *The Pandemic's Toll on School Leadership is Palpable. Here's what is Needed for a Successful School Year*. Available at https://www.edsurge.com/news/2020-07-16-thepandemic-s-toll-on-school-leaders-is-palpable-here-s-what-s-needed-for-asuccessful-school-year [Accessed 3 January 2024].

Bush, T. (2021). Leading through COVID-19: Managing a crisis. *Educational Management Administration and Leadership, 49*(3), pp. 373-374. https://doi.org/10.1177/1741143221997267.

Caliskan, A., & Zhu, C. (2019). Organizational culture type in Turkish universities using OCAI: Perceptions of students. *Journal of Education Culture and Society, 10*(2), pp. 270-292. https://doi.org/10.15503/jecs20192.270.292.

Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework* (3rd ed.). San Francisco: Jossey-Bass.

Choi, Y. S., Seo, M., Scott, D., & Martin, J. (2010). Validation of the organizational culture assessment instrument: an application of the Korean version. *Journal of Sport Management, 24*(2), pp. 169-189. https://doi.org/10.1123/jsm.24.2.169

David, S.N., Valas, S., & Raghunathan, R. (2018). *Assessing Organization Culture – A Review on the OCAI instrument*. Available at: http://www.icmis.net/icmis18/ICMIS18CD/pdf/S216-final.pdf [Accessed 3 January 2024].

Debski, M., Cieciora, M., Pietrzak, P., & Bolkunow, W. (2020). Organisational culture in public and non-public higher education institutions in Poland: A study based on Cameron and Quinn's model. *Human Systems Management, 39*(3), pp. 345-355. https://doi.org/10.3233/HSM-190831

Di Stefano, G., & Scrima, F. (2016). The psychometric properties of the Italian version of the Organizational Culture Assessment Instrument (OCAI). *Applied Psychology Bulletin, 276*(64), pp. 51-63.

Ellis, J (2024). *Difference between Scores of Strongly Agree and Agree*. Available at https://support.cultureamp.com/en/articles/7048403-difference-between-scores-of-strongly-agree-and-agree [Accessed 1 March 2024].

Farrell, M. A. (2000). Developing a market-oriented learning organisation. *Australian Journal of Management, 25*(2), pp. 201-222. https://doi.org/10.1177/031289620002500205

Firman, F. & Rahman, S. R. (2020). Pembelajaran online di tengah pandemi Covid-19 [Online learning during the Covid-19 pandemic]. *Indonesian Journal of Educational Sciences (IJES), 2*(2), pp. 81-89. https://doi.org/10.31605/ijes.v2i2.659

Frattini, F. (2021). *The Acceleration of Digitalization within Education as a Result of COVID-19*. Available at https://www.globalfocusmagazine.com/the-acceleration-of-digitalisation-within-education-as-a-result-of-covid-19/ [Accessed 7 October 2023].

Haffar, M., Al-Karaghouli, W., Djebarni, R., Al-Hyari, K., Gbadamosi, G., Oster, F., Alaya, A., & Ahmed, A. (2023). Organizational culture and affective commitment to e-learning' changes during COVID-19 pandemic: The underlying effects of readiness for change. *Journal of Business Research, 155*, Part A, 113396. https://doi.org/10.1016/j.jbusres.2022.113396

Harris, A., & Jones, M. (2020). COVID 19 – school leadership in disruptive times. *School Leadership and Management, 40*(4), pp. 243-247. https://doi.org/10.1080/13632434.2020.1811479

Heritage, B., Pollock, C., & Roberts, L. (2014). Validation of the organizational culture assessment instrument. *PLoS One, 9*(3): e92879. https://doi.org/10.1371/journal.pone.0092879.
Hofstede Insights. (n.d.). *Hofstede Insights: Indonesia*. Available at https://www.hofstede-insights.com/country/indonesia/ [Accessed 7 March 2022].
ILO-OECD. (2020). *The Impact of the COVID-19 Pandemic on Jobs and Incomes in G20 Economies.* Available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_756331.pdf [Accessed 3 January 2024].
International Labour Organization (ILO). (2021) *Indonesia and Japan Work Hand in Hand Enhancing COVID-19 Prevention at Workplaces*. Available at https://www.ilo.org/jakarta/info/public/pr/WCMS_811274/lang--en/index.htm [Accessed 3 January 2024].
Irawanto, D. W. (2009). An analysis of national culture and leadership practices in Indonesia. *Journal of Diversity Management, 4*(2), pp. 41-48. https://doi.org/10.19030/jdm.v4i2.4957
Istianda, M., & Anthony, S. (2022). Budaya organisasi dalam mendukung Merdeka Belajar-Kampus Merdeka. [Organizational culture in supporting Independent Learning-Independent Campus.] JIAPI: *Jurnal Ilmu Administrasi Dan Pemerintahan Indonesia, 3*(2), pp. 136-147. https://doi.org/10.33830/jiapi.v3i2.66
Jackson, C. L., Colquitt, J. A., Wesson, M. J., & Zapata-Phelan, C. P. (2006). Psychological collectivism: A measurement validation and linkage to group member performance. *Journal of Applied Psychology, 91*, pp. 884-899. https://doi.org/10.1037/0021-9010.91.4.884
Jamieson, S. (2004). Likert scales: How to (ab)use them. *Medical Education, 38*(12), pp. 1217-1218. https://doi.org/10.1111/j.1365-2929.2004.02012.x
Johansyah. (2022). *Analisis Pemetaan Budaya Organisasi Menggunakan Organizational Culture Assessment Instrument (OCAI) Pada Fakultas Ekonomi Universitas Borneo Tarakan*. [Analysis of Organizational Culture Mapping Using the Organizational Culture Assessment Instrument (OCAI) at the Faculty of Economics, University of Borneo, Tarakan]. Bachelor Project: Universitas Borneo Tarakan.
Kaul, V., Shah, V. H., & El-Serag, H. (2020). Leadership during crisis: Lessons and applications from the COVID-19 pandemic. *Gastroenterology, 159*(3), pp. 809-812. https://doi.org/10.1053/j.gastro.2020.04.076
Kemendikbud (Indonesian Ministry of Education and Culture). (2020). *Kebijakan Pemerintah Terkait Kurikulum Merdeka* [Government Policy Related to Independent Curriculum]. Available at https://pusatinformasi.guru.kemdikbud.go.id/hc/en-us/articles/6824815789465-Kebijakan-Pemerintah-Terkait-Kurikulum-Merdeka [Accessed 7 December 2022].
Kemendikbud (Indonesian Ministry of Education and Culture). (2020a). *Kemendikbud Gandeng Swasta Siapkan Sistem Belajar Daring*. [Ministry of Education and Culture Collaborates with Private Sector to Prepare Online Learning System.] Available at https://www.kemdikbud.go.id/main/blog/2020/03/kemendikbud-gandeng-swasta-siapkan-sistem-belajar-daring [Accessed 20 May 2020].
Kemendikbud (Indonesian Ministry of Education and Culture). (2020b). *Pembelajaran secara Daring dan Bekerja dari Rumah untuk Mencegah Penyebaran Covid-19*. [Learning Online and Working from Home to Prevent the Spread of Covid-19]. Available at https://www.kemdikbud.go.id/main/blog/2020/03/se-mendikbud-pembelajaran-secara-daring-dan-bekerja-dari-rumahuntukmencegah-penyebaran-covid19 [Accessed 20 May 2020].
Kemendikbud. (2022). *Peran Guru Dalam Menghadapi Inovasi Merdeka Belajar*. [The Role of Teachers in Facing Independent Learning Innovation]. Available at https://gurudikdas.kemdikbud.go.id/news/peran-guru-dalam-menghadapi-inovasi-merdeka-belajar [Accessed 3 January 2024].
Kheir-Faddul, N., Bibu, N., & Nastase, M. (2019). The principals' perception of their values and the organizational culture of the junior high schools in the Druze sector. *Revista de Management Comparat International, 20*(3), pp. 210-225. https://doi.org/10.24818/RMCI.2019.3.210

Krajcsák, Z., & Kozák, A. (2022). The moderating role of remote work in the relationship between organisational culture and OCB: case studies from the financial sector. *Journal of Advances in Management Research, 19*(2), pp. 300-315. https://doi.org/10.1108/jamr-07-2021-0247

Mayfield, C.O., Tombaugh, J.R., & Lee, M. (2016). Psychological collectivism and team effectiveness: Moderating effects of trust and psychological safety. *Journal of Organizational Culture, Communications and Conflict, 20*(1), pp. 78-94.

Mcleod, S. (2023). *Likert Scale Questionnaire: Examples & Analysis*. Available at https://www.simplypsychology.org/likert-scale.html [Accessed 1 March 2024].

Mikusova, M., Klabusayova, N., & Meier, V. (2023). Evaluation of organisational culture dimensions and their change due to the pandemic. *Evaluation and Program Planning, 97*:102246. https://doi.org/10.1016/j.evalprogplan.2023.102246

Naranjo-Valencia, J. C., Jiménez-Jiménez, D. J., Sanz-Valle, R. (2016). Studying the links between organizational culture, innovation, and performance in Spanish companies. *Revista Latinoamericana de Psicología, 48*(1), pp. 30-41. https://doi.org/10.1016/j.rlp.2015.09.009

Ngo, J., & Ngadiman, A. (2019). The impacts of Edmodo on students' performance in ESP classrooms. *International Seminar on Language, Education, and Culture, KnE Social Sciences*, pp. 369-378. https://doi.org/10.18502/kss.v3i10.3918

Ngo, J., Budiyono, & Ngadiman, A. (2021). Investigating student satisfaction in remote online learning settings during Covid19 in Indonesia. *Journal of International and Comparative Education, 10*(2), pp. 73-95. https://doi.org/10.14425/jice.2021.10.2.0704

Ngo, J., de Boer, H., & Enders, J. (2014). The way deans run their faculties in Indonesian universities. *Tertiary Education and Management, 20*(1), pp. 1-13. https://doi.org/10.1080/13583883.2013.848924

Nguyen, V.H., Nguyen T.H.T., Nguyen L.T.A, Nguyen T.H.A, Nguyen T.P., Nguyen T.C. & Pham D.M. (2020). The validation of organizational culture assessment instrument in healthcare setting: results from a cross-sectional study in Vietnam. *BMC Public Health, 20*(316). https://doi.org/10.1186/s12889-020-8372-y

Notman, R. (2015). Seismic leadership, hope, and resiliency: Stories of two Christchurch schools post-earthquake. *Leadership and Policy in Schools, 14*(4), pp. 437-459. https://doi.org/10.1080/15700763.2015.1039137

Nurdiansyah, Y. (2021). The role of Indonesian school principals' leading distance learning during Covid-19 pandemic. *Advances in Social Science, Education and Humanities Research 526*, pp. 374-378. https://doi.org/10.2991/assehr.k.210212.080

Octavia, M.V. (2020). Perspektif kepemimpinan kepala sekolah di era milenial. [Principal's leadership perspective in the millennial era]. *Terampil: Jurnal Pendidikan dan Pembelajaran Dasar, 7*(1), pp. 29-34.

Paddock, R. C., & Sijabat, D. M. (2020). *When Learning Is Really Remote: Students Climb Trees and Travel Miles for a Cell Signal*. Available at https://www.nytimes.com/2020/09/05/world/asia/coronavirus-indonesia-school-remote-learning.html [Accessed 16 September 2021].

Petrova, K., Konecna, Z., & Hornungova, J. (2023). The impact of Covid-19 on organization: A case study from the IT area on changing culture perceptions in organization. *Journal of Eastern European and Central Asian Research, 10*(2), pp. 152-163. https://doi.org/10.15549/jeecar.v10i2.1140

Quinn, R. E., & Rohrbaugh, J. (1981). A competing values approach to organizational effectiveness. *Public Productivity Review, 5*(2), pp. 122-140. https://doi.org/10.2307/3380029

Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science, 29*(3), pp. 363-377. https://doi.org/10.1287/mnsc.29.3.363

Ramachandran, S., Chong, S. C., & Ismail, H. (2011). Organizational culture: An exploratory study comparing faculties' perspectives within public and private universities in Malaysia. *International Journal of Educational Management, 25*(6), pp. 615-634. https://doi.org/10.1108/09513541111159086

Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing Research in Business and Management*. London: Sage Publications. https://doi.org/10.4135/9781446280416

Sherly, S., Dharma, E., & Sihombing, H. B. (2020). Merdeka Belajar: Kajian literatur [Freedom to learn: A literature review] *UrbanGreen Conference Proceeding Library, 1*, pp. 183-190.

Suh, J. & Son, B. (2016). What is the role of collectivism in channel marketing? *Journal of Marketing Thought, 3*, pp. 53-63.

Thornton, K. (2021) Leading through COVID-19: New Zealand secondary principals describe their reality. *Educational Management Administration and Leadership, 49*(3), pp. 393-409. https://doi.org/10.1177/1741143220985110

Tyler, U. T. (2018). *Report Organizational Culture Assessment Instrument.* Available at: https://www.uttyler.edu/faculty-senate/files/ocaisurveyfinalreportforuttyler.pdf [Accessed 3 January 2024].

UNICEF. (2020). *Strengthening Digital Learning across Indonesia: A Study Brief*. Available at https://www.unicef.org/indonesia/media/10531/file/Strengthening%20Digital%20Learning%20across%20Indonesia:%20A%20Study%20Brief.pdf [Accessed 3 January 2024].

Uswatiyah, W., Argaeni, N., Masrurah, M., Suherman, D., & Berlian, U. (2021). Implikasi kebijakan kampus Merdeka Belajar terhadap manajemen kurikulum dan sistem penilaian pendidikan menengah serta pendidikan tinggi. [Implications of the independent learning campus policy for curriculum management and assessment systems for secondary and higher education.] *Jurnal Dirosah Islamiyah, 3*(1), pp. 28-40. https://doi.org/10.47467/jdi.v3i1.299

Vincent-Lancrin, S., González-Sanchoi, C. Bouckaerti, M. de Lucai, F. Fernández-Barrerrai, M., Jacotini, G., Urgeli, J. & Quentin Vida, Q. (2019). *Fostering Students' Creativity and Critical Thinking: What it Means in School.* Paris: OECD Publishing, Paris. https://doi.org/10.1787/62212c37-en

Weiner, W. F. (2009) Establishing a culture of assessment: Fifteen elements of assessment success. *Academe, 95*(4), pp. 28-32.

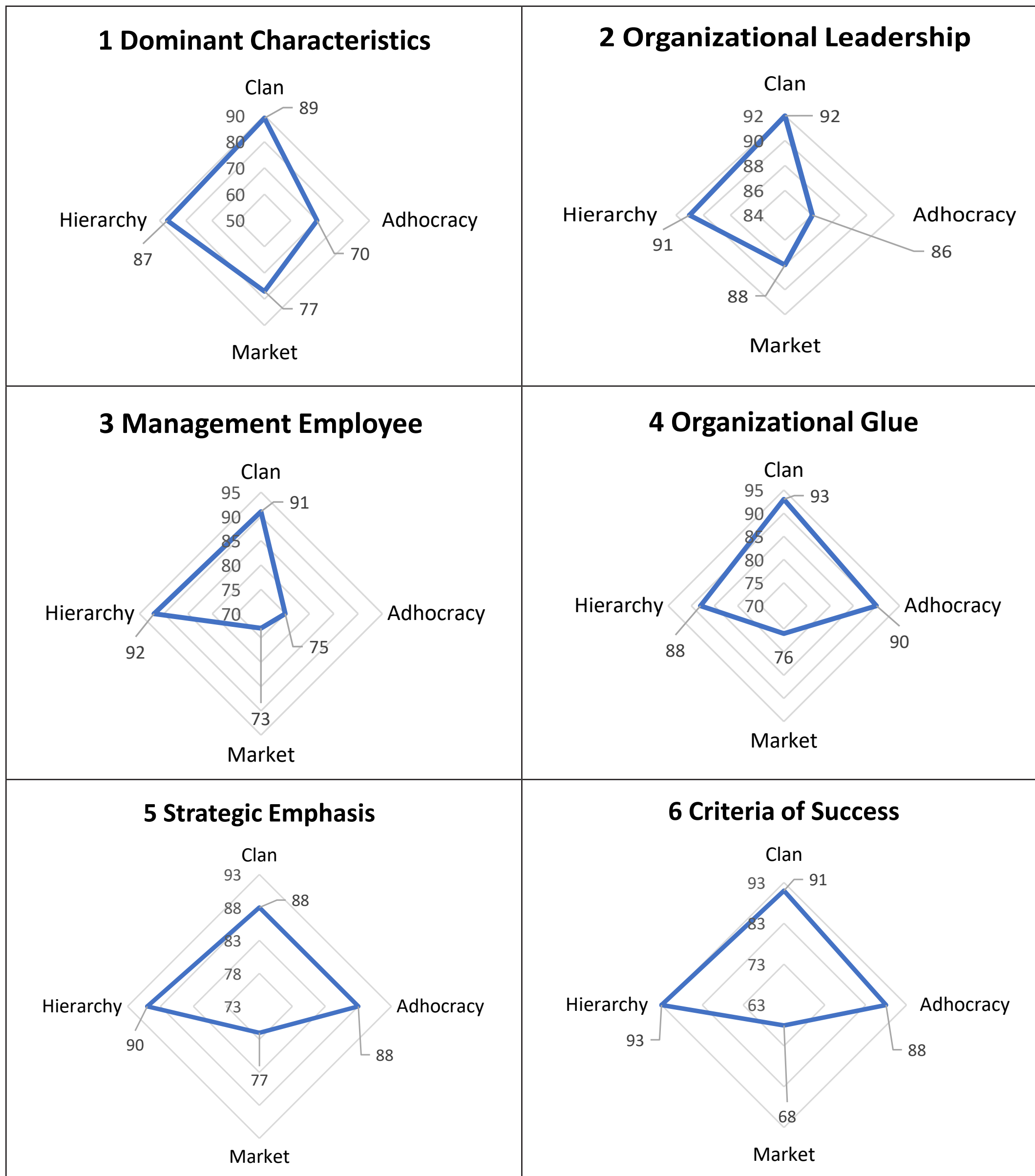
World Bank. (2020). *Lessons for Education during the COVID-19 crisis*. Available at https://www.worldbank.org/en/topic/edutech/brief/lessons-for-education-during-covid-19-crisis [Accessed 3 January 2024].

Yarrow, N., & Bhardwaj, R. (2020). *Indonesia's Education Technology during COVID-19 and Beyond*. Available at https://blogs.worldbank.org/en/eastasiapacific/indonesias-education-technology-during-covid-19-and-beyond [Accessed 16 September 2023].

Zhang, W., Zeng, X., Liang, H., Xue, Y., & Cao, X. (2023). Understanding how organizational culture affects innovation performance: A management context perspective. *Sustainability, 15*, 6644. https://doi.org/10.3390/su15086644

Zhu, C., & Engels, N. (2014) Organizational culture and instructional innovations in higher education: Perceptions and reactions of teachers and students. *Educational Management Administration & Leadership, 42*(1), pp. 136-158. https://doi.org/10.1177/1741143213499253

Appendix A. Indonesian School Culture Profiles on Six Dimensions



Appendix B. Descriptive Statistics for the Six Key Dimensions of Organizational Culture based on the Agree and Strongly Agree Categories

Dominant Characteristics		Frequency (N = 93)
Culture Type	During the pandemic, …	Sum of A and SA
Clan	Q1. The school is a very personal place. It is like an extended family. People seem to share a lot of themselves.	89
Adhocracy	Q2. The school is a very dynamic and entrepreneurial place, and people are willing to take risks.	70
Market	Q3. The school is very results oriented, and the main concern is getting work done.	77
Hierarchy	Q4. The school is a very controlled and structured place. Formal procedures generally govern what people do.	87
Organizational Leadership		
Culture Type	During the pandemic, …	Sum of A and SA
Clan Culture	Q5. The leadership in the school is generally considered to exemplify mentoring, and facilitating.	92
Adhocracy Culture	Q6. The leadership in the school is generally considered to exemplify entrepreneurship, innovation, or risk taking.	86
Market Culture	Q7. The school's leadership is widely regarded as exemplifying a results-oriented focus.	88
Hierarchy Culture	Q8. The school's leadership is widely regarded as exemplifying coordination to ensure the smooth operation of online education.	91
Management Employees		
Culture Type	During the pandemic, …	Sum of A and SA
Clan Culture	Q9. The management style in the school is characterized by collaboration, consensus, and participation.	91
Adhocracy	Q10. The management style in the school organization is characterized by individual risk taking, and innovation.	75
Market	Q11. The school's management style is defined by competitiveness, high expectations, and achievement.	73
Hierarchy	Q12. The management style in the organization is characterized by security of employment and inter-relationship stability.	92
Organizational Glue		
Culture Type	During the pandemic, …	Sum of A and SA
Clan Culture	Q13. Loyalty and mutual trust are the glue that holds my school together.	93
Adhocracy	Q14. A commitment to innovation and development is the glue that holds the school together.	90
Market	Q15. The emphasis on goal achievement is the glue that holds the school together.	76
Hierarchy	Q16. Formal rules and policies are the glue that holds the school together. It is critical to keep the school running smoothly.	88

Strategic Emphases		
Culture Type	During the pandemic, …	Sum of A and SA
Clan	Q17. The school places a strong emphasis on human development, including trust, openness, and participation.	88
Adhocracy	Q18. The organization places a strong emphasis on acquiring new resources and developing new challenges.	88
Market	Q19. The school emphasizes competitive actions and achievement.	77
Hierarchy	Q20. The school emphasizes permanence and stability. Efficiency, control and smooth operations are important.	90
Criteria of Success		
Culture Type	During the pandemic, …	Sum of A and SA
Clan	Q21. The school defines success on the basis of human resource development, teamwork, employee commitment, and concern for others.	91
Adhocracy	Q22. The school defines success on the basis of a product innovation in online education.	88
Market	Q23. The school defines success as outperforming the competition and winning in the marketplace.	68
Hierarchy	Q24. The school measures success based on efficiency. It is critical to have consistent delivery, smooth scheduling, and low-cost production in online education.	93

Communities of Practice and Acculturation: How International Students in American Colleges Use Social Media to Manage Homesickness

Michael Schwartz[a]
St. Cloud State University

Kikuko Omori
California State University, Sacramento

Abstract: *Homesickness, a distinctly human phenomenon, is common among college students, domestic or international and is the focus of this research. In this study, we focused on international students in American institutions to better understand the relationship among homesickness, acculturation, and social media use. Through focus group interviews, international students shared their lived experiences of homesickness, use of social media, and acculturation. Four themes (i.e.1. Social media as conflict, 2. Social media as distraction, 3. Social media as frenemy, and 4. Social media as functional) surfaced in the data to describe the relationships among social media use, homesickness, and acculturation. Our participants used social media mainly to communicate with people back home when they felt homesick, yet the use of social media did not help their homesickness. The results are discussed through the lens of communities of practice. The researchers offer practical implications for institutions and people directly involved with international and study-abroad education programs.*

Keywords: *homesickness, acculturation, social media, international students, communities of practice, focus group interviews*

Introduction

Homesickness, sometimes characterized as a "mini-grief" (Stroebe, van Vliet, Hewstone, & Willis, 2002), affects people when they have left their familiar context, e.g., home environment, for an extended period and are charged, formally or informally, with learning to live and function in a new environment. Frequent symptoms reported by individuals experiencing homesickness include a longing for family and friends back home (Furnham, 2005; Thurber & Walton, 2007).

Homesickness and the challenges of learning to function in a new sociocultural context is a complex process that includes more than simply learning where essential places like banks, grocery stores, and places of entertainment are relative to residences, schools, and work. Homesickness and its symptoms, in many ways, may actually be said to be outward manifestations of the need to belong to a community (Glass & Westmont, 2014) coupled with the challenges and anxieties brought on by the effects of entering and leaving a variety of Communities of Practice (Wenger, 1998).

Because homesickness is induced by a strong desire for the home context, communication with family and friends is considered a mainstay for mitigating the effects of homesickness. Before the ubiquity of social media, coping strategies for managing homesickness included scheduled telephone calls, letter writing, and, when feasible, short trips home (Thurber & Walton, 2007).

a Correspondence can be directed to: mwschwartz@stcloudstate.edu

ISSN 2232-1802 doi: 10.14425/jice.2024.13.1.0612

Interacting socially with the new context has also been identified as being critical for successfully mitigating the symptoms of homesickness (Thurber & Walton, 2007).

With improved communication technology and the expansion of social media, there has been some interest in investigating the effects that social media, primarily social network sites (SNS), have on international students. These studies have primarily been quantitative studies investigating the relationship of homesickness to acculturation stress (Iorga, Soponaru, Muraru, Socolov, & Petrariu, 2020; Jackson, & Ray, Bybell 2013;) culture shock (Chapdelaine & Alexitch, 2004), attachment theory (Nauta, Rot, Schut, & Stroebe, 2020), belongingness (Glass & Westmont, 2014), depression (Shoukat, Callixte, Nugraha, Budhy, & Irene 2021), social media use (Poyrazli & Devonish, 2020) discrimination (Poyrazli & Lopez, 2007) and adjustment (Thurber & Walton, 2012).

Further, limited studies directly tested the relationship between social media use and homesickness (Billedo et al., 2020; Hendrickson et al., 2011). Studying international students living in the U.S., Poyrazli and Devonish (2020) reported that the intensity of social media use to communicate with people back home was positively associated with homesickness. However, Billedo et al. (2020) reported that the use of Facebook to communicate with people back home was not associated with homesickness whereas the use of Facebook to communicate with people in the host country was associated with less homesickness. Based on these incompatible results, Billedo et al. (2020) advocated for more research on this topic with a more "in-depth examination of the dynamic processes within the various types of social interactions and their impact on homesickness" (p.127) because the nonsignificant association between the use of social media to communicate with people back home and homesickness could be the co-existence of positive and negative effects. As such, the contradictory results in the previous literature warrant more research. Additionally, in its current iterations, social media serves a variety of functions. Previous studies did not clarify the functions for which international students use social media. Rather, they mainly focused on the frequency or length of time students use social media. Zhang (2012), for instance, found that Chinese international students used Facebook to read the posts of others in the host country and to stay current with the news while using Chinese SNS (Renren) to maintain relationships with people back home. As such, not just the frequency of use or length of usage, but types of activities and functions, not to mention the different types of social media should be included in the research.

As mentioned above, most of the previous literature on social media use, homesickness, and acculturation was conducted using quantitative methodology. With the quantitative research methods, it is difficult to understand "why" social media use helped or did not help international students' homesickness, or "what" facilitated more social media use during bouts of homesickness. Thus, the aim of this study is to delineate international student sojourner's use of social media in the host country more clearly using their lived experiences to better understand the relationship between the use of social media, homesickness, and acculturation among international student sojourners in the U.S.

Literature Review

Homesickness and International Students

People have never been more mobile than they are today. With the exception of the Covid lockdown year, the United States hosted an average of one million students in higher education institutions between 2015 and 2019 while the United States sent an average of 300,000 students abroad during the same time frame (Open Doors, 2023). While international exchange student numbers have not yet returned to pre-pandemic levels, 2022 saw an uptick in international student immigration to the United States, giving colleges and universities reason to believe that international education will rebound and exceed the 2018/2019 peak enrollment of 1,095,295 students, and that outward bound, study abroad students to international college and university destinations will eclipse the 320,939 peak also witnessed in the same 2018/2019 academic year (Open Doors, 2023). Thus, understanding

homesickness, its effects on international student sojourners, and being knowledgeable of known strategies for coping with homesickness is of import to the various communities connected, directly and indirectly, with international education including family members, friends, administrators, advisors, and faculty regardless of origin or host country.

Communities of Practice, Homesickness, and Acculturation

The phenomenon of homesickness, as reported by Thurber and Walton (2007), has been observed since antiquity. Fisher and Hood (1987) define homesickness as "… a complex cognitive-motivational-emotional state concerned with grieving for, yearning for and being preoccupied with thoughts of home… with protracted grief and somatic symptoms such as giddiness, weakness, and insomnia" (p. 426). Expanding on Fisher and Hood's definition, Götz, Stieger, and Ulf-Dietrich (2019) state "…homesickness represents a multifaceted cognitive-motivational-affective state of distress, distinguished by a strong preoccupation with the home environment following relocation" (p. 691). They continue stating, "Homesickness is believed to result from a complex interplay of personality, situational circumstances, and environmental factors, and may also manifest itself on somatic and social levels (*ibid*). Likewise, Furnham (2005) identifies features of homesickness to be "… a strong preoccupation with thoughts of home, a perceived need to go home, a sense of grief for the home (people, place and things) and a concurrent feeling of unhappiness, disease and disorientation in the new place which is conspicuously, not home" (p. 20). They continue, "Home represents both people and places and is specifically about the familiar, safe and predictable environment. It represents, in its mildest form, a longing to be back home, and in its most severe form, an obsession" *(ibid).* Archer, Ireland, Amos, Broad, and Currid (1998) delineate the physical and psychological symptoms of first-year college students dealing with homesickness. These symptoms may include 1) missing parents or family, 2) missing friends or familiar faces, 3) missing familiar surroundings, 4) feeling insecure, and 5) missing comforts or the bedroom at home (p. 205). In summary, these definitions have in common the following psychological and emotional features: 1) Missing the familiar (people and context), 2) Nostalgia, and 3) A loss of security. Feature 3, a loss of security, may be thought of as a sub-feature of both the first and second features, since, if we feel safe and secure, then that is a community where the "rules" are known, where we interact freely, where we are known and where we know, where we are respected and respect, and where we can, unconsciously, satisfy essential human needs.

Essentially, the home context, if associated with positive feelings, may fulfill Maslow's (1943) Hierarchy of Needs for the physiological, as well as safety and security, love and belonging, and self-esteem (Mcleod, 2023). As summarized by Mcleod (2023) the Hierarchy of Needs claims that first, humans have a fundamental need for food, water, and shelter. Second, humans require safety and security, which can be understood to be personal security, employment, resources, health, and property. Third, love and belonging, or friendship, intimacy, family, and a sense of connection, are required. Fourth, seeking esteem from the self as well as from others in the form of respect, self-esteem, status, recognition, strength, and freedom. Self-actualization, the fifth layer, fulfills the need to grow "morally, intellectually, spiritually, creatively" (Mcleod 2023). In summary, leaving the familiar and entering the unfamiliar is a life disruption that necessarily requires attention to satisfying essential human needs.

While the Hierarchy of Needs adds a behavioral psychology perspective to homesickness, and its triggers, and offers a coping path, social learning theory (Lave & Wenger, 1991; Wenger, 1998) theory, specifically, "communities of practice" (Wenger, 1998) provides yet another framework for understanding the causes for homesickness as well as identifying potential coping strategies. As Wenger (1998) observes, humans all belong to myriad communities of practice. In fact, they are as ubiquitous to human behavior as language and culture, functioning virtually unconsciously. Humans, like other mammals, are communal beings, requiring community for survival. We depend on countless communities of practice to help us put food on the table, to provide a roof over our heads, and to

help us learn new concepts, practices, and behaviors. Communities are sites of contention, fraught with agreement and conflict, praise and punishment, and are highly fluid. At the same time, they are cohesive because members, knowingly and unknowingly, share or wish to share common knowledge, experiences, resources, and histories. We may know the members in a community of practice such as the nuclear family, or we may belong to a community of practice that is so large that it would be impossible to know every member, such as the community of motherhood. Yet, when a woman speaks of her experience with childbirth, mothers the world over will nod knowingly. In summary, communities of practice are everywhere, continuously functioning. We form and participate in communities of practice because they appeal to our core social behavior as humans. They scaffold our learning and facilitate the co-construction of our identities. Communities of practice, by their very nature, also serve as the conduit to helping humans satisfy their basic needs and facilitate belongingness.

What happens when our communities of practice are disrupted? Wenger (1998) proposes five trajectories of participation that describe people's positionality and by extension their identities as they navigate their communities of practice: peripheral, inbound, insider, boundary, and outbound (pp. 154-155). We enter, interact, and leave each of these communities of practice routinely with great facility. We do so partly because we, like others in the community of practice, know the rules of engagement, e.g., the language, the behaviors, and the pragmatics. As Furnham (2005) says, we know the "grammar" of the culture.

International student sojourners leave their home country communities of practice as they embark on their journeys. In so doing, international student sojourners are propelled into a world where unconscious acts necessarily become conscious again and where their identities are challenged, shaped, and reshaped as they learn to be in a new culture.

As international student sojourners' periphery and inbound trajectories begin to take shape, their boundary and outbound trajectories, i.e. home culture communities of practice become both a reaffirming source during the adjustment period while also a source for acculturative stress and a potential barrier to host country communities of practice.

Social Media Use, Homesickness, and Acculturation

Acculturation, originally defined as "those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups" (Redfield, Linton, & Herskovits, 1936, p. 149). Today, scholars tend to view acculturation not as a group phenomenon, but as an individual one and that it is a process of social, psychological, and cultural adjustment and adaptation (Berry, 1992).

As social media became ubiquitous gaining popularity across cultures, an increased number of studies on the use of social media among international students in relation to acculturation and adjustment proliferated, yet few studies were conducted to analyze the relationships between social media use and homesickness (Hofhuis et al., 2023; Poyrazli & Devonish, 2020; Wong & Liu, 2024; Yu et al., 2019). Social media is one such technology available to international sojourners that can facilitate communication with home communities. Posting, reading, and viewing are largely seen as a means of staying in touch with family and friendship networks when separated by distance. As such, people use social media to stay connected with people who are already in their social network (boyd & Ellison, 2008, Omori & Schwartz, 2022). Posting a selfie while lounging on a beach with a favorite beverage is the modern-day substitute for handwritten letters and long-distance telephone calls. To connect with various communities, people create profiles on social network sites (SNS), such as Facebook, Instagram, and Snapchat. SNS, thus, have become virtual mechanisms for expanding, entering, bordering, and even exiting the myriad communities of practice in which people participate. Thus, people receive information that theoretically helps maintain an interpersonal relationship (Allabash & Ma, 2017).

Baines, Ittefaq, and Abwao (2022) suggest that social media serves three primary social support functions: emotional, informational, and instrumental. For example, international students might feel better by knowing someone cares through social media (emotional support). International students might also receive necessary information through social media to navigate life in a designated location (informational support). Lastly, international students might receive specific instruction from social media (instructional support).

Previous literature on social media use, homesickness, and acculturation reports incompatible results. For example, Li and Tsai (2015) reported that the use of Facebook facilitated international students' adaptation to US society. Billedo et al. (2020) reported that homesickness affected international students' social-cultural adjustment negatively in the short term. Hofhuis et al. (2019) reported that short-term international student sojourners who communicated with people back home felt homesickness and loneliness and tended to retain their home cultural values. As such, more studies are needed to clarify the relationship between social media use, homesickness, and acculturation.

Based on the literature review, this study asked the following research question:

RQ: What is the relationship between social media use, acculturation, and homesickness?

Method

The researchers chose to use a qualitative study method combined with a brief demographic questionnaire to investigate the intersections of acculturation, homesickness, and social media. We believe that each international student's situation varies. Thus, we thought using qualitative data is important to hear each person's lived experiences including the contextual and situational information. Further, some students might misunderstand the questions asked in online surveys. Thus, we decided to use a focus group interview so that we could ensure participants understood our questions and we understood their stories.

Using phenomenology as a guide, the researchers created seven open-ended questions and invited participants to join a focus group session on Zoom. During the focus session, the participants discussed and described their experiences with homesickness, their coping strategies, and the role social media plays during their acculturation process. A phenomenological study, according to Creswell (1998), "…describes the meaning of the lived experiences of several individuals about a concept or **the phenomenon**" (emphasis in original) (p. 51). The primary method for collecting data in a phenomenological study is to write "…research questions that explore the meaning of the experience for individuals and asks individuals to describe their everyday **lived experience** (emphasis in original) (*ibid,* p. 54). Thus, for the current study, the researchers composed several open-ended questions designed to elicit participants' descriptions of homesickness, how they coped with their homesickness symptoms, what triggered homesickness, and the role of social media.

In order to secure validity and reliability, we first shared the definitions of homesickness with our participants in the Zoom chat before asking questions. The definition stayed in the chat so that the participants could refer to it throughout the discussion. Likewise, each focus group question was posted in the chat. Finally, participants were encouraged to ask questions if they didn't understand the questions. Each of these steps were efforts to help ensure validity and reliability.

The researchers arranged the open-ended questions so as to first establish participants' experiences with homesickness, the causes for their homesickness, strategies they invoke when they experience bouts of homesickness, social media's role in their homesickness, and if they were in the United States during the pandemic and how the pandemic influenced their homesickness. The following pre-structure questions were asked.

1. Have you experienced homesickness since coming to the United States?
2. In your experience, what triggers homesickness for you?

3. How often do you feel homesick and has the frequency changed over the time you've been in the United States?
4. Describe a time when you experienced homesickness since coming to the United States.
   a. Describe the kind of support you sought during your homesickness.
   b. Describe the kind of and level of support you had during your homesickness.
5. What do you do when you feel homesick?
   a. Share your strategies you have for helping you with your homesickness.
6. Describe social media's role when you are feeling homesick.
   a. Describe the role friends from here and from home play in coping with homesickness. Do you have many friends from here compared to home?
7. Were you here during the pandemic?
   a. If so, did you change your SM use during the pandemic?
   b. How did the pandemic influence your feelings of homesickness?

Before each focus group interview, we also asked participants to complete a brief demographic questionnaire in which we asked for information about gender, home language, country of origin, level of education, and length of stay in the United States. We also asked participants to self-rate their overall English proficiency using the very broad categories of beginning (CEFR A1-A2), intermediate (B1-B2), and advanced (C1-C2). For the purposes of organizing participant responses and to humanize the experiences of the participants, pseudonyms have been assigned to the participants. See Table 1

Table 1. Participants' Characteristics

Pseudonym	Gender	Age	Country of origin	Home Language	Length in US	Degree	CEFR*
Menna	F	30+	Egypt	Arabic	0-3 months	MA	C1-C2
Kan	M	20-22	Myanmar	Burmese/English	3-6 months	Undergraduate (UG)	B2
Samal	F	26-29	Kazakhstan	Kazakh/Russian	3-6 months	MA	C1-C2
Katrya	F	26-29	Ukraine	Ukrainian/Russian	1-2 yrs	Ph. D.	C1-C2
Asmaa	F	20-22	Jordan	Arabic	1-2 yrs	UG	B2
Hoang	M	26-29	Vietnam	Vietnamese	2+ yrs	UG	C1-C2
Therese	F	23-25	Cameroon	English/French	2+ yrs	UG	C1-C2
Faduma	F	23-25	Ethiopia	Amharic	2+ yrs	UG	B2
Esther	F	23-25	Cameroon	French/Indigenous Language	2+ yrs	UG	C1-C2
Rosine	F	26-29	Rwanda	French, Swahili / Kinyarwanda	2+ yrs	MA	C1-C2
Genji	M	30+	Japan	Japanese	2+ yrs	MA	C1-C2

* Common European Framework of Reference for Languages

After receiving IRB approval, the researchers contacted the international office at the university where the study was conducted to ask that their office email an invitation to participate in the study to their international student listserv.

Thirteen participants completed the demographic survey; however, only 11 individuals completed both the demographic survey and participated in a Zoom focus group session. To accommodate people's schedules and to increase the number of participants, we offered two different Zoom focus group sessions on separate days. The researchers allowed the focus group sessions to take their natural conversational course while ensuring that everyone had a chance to share their experiences. The focus group sessions were recorded and then later transcribed using Office 365's

transcription application. Focus group one lasted one hour and 32 minutes and produced 12,501 words of text. Focus group two lasted one hour and 19 minutes and produced 12,700 words of text.

In order to secure validity and reliability, the researchers independently read, analyzed, and coded the transcripts for data that addressed the relationship between social media use, acculturation, and homesickness. While "triangulation…corroborating evidence from different sources" (Creswell, 1998, p. 202), is desirable in studies invoking qualitative methods, the researchers did not have access to environmental data, social media sites of the participants, institutional documents, etc, that might verify the comments participants made about homesickness and their use of social media. Another triangulation strategy is to share the researchers' interpretations with the participants and ask for verification of the accuracy of the researchers' interpretations; however, this practice of re-entering the field potentially leads to additional data that then needs to be analyzed, creating a circular dilemma (Bogdan & Biklen, 2007).

Once the focus group sessions had been completed, the researchers, independent of each other, read through the transcripts, identifying comments that emerged as salient to our research question of the relationship between social media use, acculturation, and homesickness. Initial analysis of the data revealed a variety of topics across a wide spectrum of triggers and remedies, including essentials, agency, environmental, fear of missing out, -isms, language & culture, nostalgia, cognitive dissonance, acceptance, returning home, routine, regaining control, institutional, and rationalizing. From these broad categories, the researchers reorganized the data and grouped the categories according to the topics embedded in the focus group discussion questions of homesickness, adjustment, social media, and pandemic.

After the independent analysis, the researchers reconvened, compared coding, and identified the following broad themes as they relate to social media, acculturation, and homesickness: conflict, comfort, distraction, frenemy, and functional. After discussing each theme, we deleted "comfort" from the themes because comfort surfaced in relation to frenemy. As a result, a total of four themes are identified (i.e., 1. Social media as conflict, 2. Social media as distraction, 3. Social media as frenemy, and 4. Social media as functional).

Results

The demographic survey revealed the participants' SNS use preferences. Facebook, WhatsApp, and YouTube are the three sites used most frequently by the participants followed by Instagram and Snap. Messenger, LinkedIn, and TikTok were also used, though not as frequently as the other sites. Finally, Twitter (now X) and Reddit were used the least. WeChat and Line, while listed as an option in the survey, were not used by any of the participants. This can be partly explained by the limited audience for these two sites with WeChat being used primarily in China and Line nearly exclusively for Japan. While we had one participant from Japan, he did not click Line as an SNS that he uses frequently or at all. (Table 2)

Table 2. Social Media Usage

Social media used by order of preference	
Facebook	13
YouTube	13
WhatsApp	13
Instagram	9
Snap	8
Messenger	6
LinkedIn	5
X (Twitter)	3
Reddit	2

At the beginning of the focus group interviews, we asked our participants about their experiences with homesickness and acculturation before they shared their experiences of using social media. As such, for reporting the results, we first explain how our participants experienced homesickness and what their acculturation process looked like. Next, we explain in depth the four themes that emerged in terms of the relationship between social media use, acculturation, and homesickness from our focus group interviews.

Homesickness and Acculturation

All of the participants except one experienced some kind of homesickness although what triggered the feeling of homesickness varies somewhat. Some students experienced more homesickness during special holidays when family and friends back home get together usually. The participants explained that they felt as if they were missing out on important gatherings and events because they were away from home. Also, some participants said that longer vacations such as summer are difficult for them because American students tend to go home when international students, for a variety of reasons, are unable to travel home. In summary, participants cited such things as family, friends, food, the environment, language, absence, routine, and loss of control as things that bring on the symptoms of homesickness much as Furnham (2005) and Thurber & Walton (2007, 2012) found. Supporting Furhnam (2005) and Thurber & Walton (2007, 2012), Rosine from Rwanda explains, "*We are a culture of like, we're very family oriented and my family is very family oriented… You know. It's very difficult*."

At the same time, missing home, food, friends, and family are also explained often as an integral part of "communal" practices in the focus group interviews. Specifically, several of our participants mentioned that missing important events such as the Lunar New Year celebration, family members' birthdays, and weddings or funerals are the times our participants felt homesick regardless of the length of time they are in the U.S. As Asmaa from Jordan says "*You feel like you're not part of everything going there anymore. It just hurt you some way*."

Faduma from Ethiopia reported losing her independence as something that sets off moments of homesickness. "*…even like being able to go from one place to another easily, because I think at the time I was using like the bus, or I had like family members drive me*." Rosine shared the same sentiment that Faduma shared, "*You, you need to take the bus. Maybe you used to being driven everywhere and then. Now you have to take the bus in the cold. You have to buy new shoes. They're not comfortable because it's so. All that stuff. You just want to go home*." Similarly, Katrya from Ukraine shared her feeling of frustration of not being able to control small chores like banking. As such, many of our participants struggled to learn a new way of life.

In terms of acculturation, learning new practices of the American community, having a routine, and finding a sub-community facilitated our participant's acculturation process. One participant, Menna from Egypt, had only recently arrived and was still in the initial stages of culture shock with everything being new and different, and the unknown dominating her thoughts. "*For me, actually I feel it's. I feel it now more than ever because it's my first month and a half. As I said, but I don't know if it will change over time.*" Yet, others had been in the United States for a year or more and had established new communities and networks. Katrya observed that establishing a routine and making new friends helped. "*I met some friends and just like I started classes and like I kind of established a routine and I felt like, okay*." Menna also learned how to find the food she likes, which helps her adjust to a new place by stating, "*The food is different, but I asked some people say I I'm Muslim as a religion, so I eating halal food. I couldn't find it so easy, but I discovered that the Jewish here in America eating halal food. So I found it easily in some supermarkets*."

Having institutional support was also cited as a significant factor in helping to deal with homesickness. Therese from Cameroon says "*The different cultural events, that's like the best way to like, you know, like it's a hug. It's like a hug that the school is trying to give you. We see the struggle. You're not alone*." Thus, institutional support and planned events that elevate cultures and

diversity communicate to international student sojourners that they belong and that the school is there for them.

The aforementioned strategies for coping with homesickness, communicating with family and friends back home, establishing new routines, and engaging with the local community, along the way to acculturation are tried and true, involving digital technologies minimally if at all. In the following section, we explain four themes that surfaced from the focus group interviews in relation to the social media use and homesickness.

Theme One: Social Media as Conflict

Conflict addressed in our focus group interviews involves the positive and negative impact that social media causes in relation to homesickness. When people feel lonely or they are missing their family and friends back home, social media helps maintain the relationship bonds. A majority of our participants used social media to maintain their relationships back home even if they did not use social media regularly when living in their countries. At the same time, several participants mentioned that using social media can evoke a sense of helplessness or loneliness since it is not possible to be present in the flesh and actively participate as an insider who is physically present. For example, Asmaa of Jordan sums up feelings of conflict explaining that social media can delay the onset of homesickness, but not prevent it.

> *But the thing is here social media help you to know others, like your friends, your close people to you. The people that you love. How they are doing? They're like updates and, but the thing that it doesn't really help with is homesickness other than your knowing about them, but things like I feel it's postponed it like the things like you will still feel like homesickness, but that's like help you a little bit to like kind of if it's not today, but that's gonna be tomorrow.*

When asked specifically if social media helps to mitigate the effects of homesickness the reactions were mixed. Esther from Cameroon said,

> *I would say both. It helps a lot because like it helps with communicate with family members and just know, like everything that is going on in your country or over the world. But then at the same time when you see like other people, like from back home, like just like maybe like celebrating things or just happy things happening or even sad things. And it makes your homesickness worse. So, I don't know both.*

Esther succinctly states, "*sometimes it's [social media] just like it doesn't help homesickness*." Concurring, Asmaa states "*it's have like a both sided effects it somehow negative and positive at the same time. As I already say, if you really look for the good things, you will find that. If you look for the bad thing, you will see it*."

Theme Two: Social Media as Distraction

One of the functions of social media is that of killing or passing time. Further, social media can be used as a medium to avoid the difficulties international students face at the moment, meaning social media serves as a means of distraction from the reality. Social media can also become a distraction or obstruction to acculturation. Faduma explains how spending time on social media to connect with people back home can be a distraction.

> *I'm gonna be on social media and then I'll try to connect the people back home and but it's still it's not good because now even when I'm with people, I'm usually on my phone, maybe I'm scrolling TikTok and it's not a good thing. We don't only use it to find people, but we use it to distract. So like when we use social media and if you are really into it like we are missing*

> *something that's like around us. And I said it before and that's what I noticed. Sometimes even like we are in group of people and talking and everything. You might see all of the peoples all of the sudden they will be on their phone.*

Theme Three: Social Media as Frenemy

Therese names social media a frenemy because it serves as both a friend, something that can provide comfort, or that can connect you with communities, while at the same time, it can be an enemy due to the amount of effort that goes into trying to stay connected and stay relevant with friends back home. This theme involves emotional support and burden. Therese said, "*Here in the US, it hasn't really helped, but now with the ones back home, social media has been more like a frenemy. Because you have to do a lot of work to chase your friends back home. It's like you're wooing back the friendship, you're wooing back people to, like, stay connected with me*."

Hoang concurs with Theresa regarding the duality of social media and maintaining friendships. "*So I would say that was the toughest, and that was one of the worst homesickness that I got ever since I got to the US, but at the same time, I mean, I still I was using social media. I was seeing Facebook and all that. I got data. I got myself informed, but I didn't. It didn't help too much, because as a matter of fact, there's nothing I could do and I don't like that. So that was one of the reason why, after coming back from my country, I know. So I don't use social media much anymore*."

Theme Four: Social Media as Functional

Our participants said that social media facilitates their acculturation by forming new social networks and obtaining the necessary information to understand the rules and cultural norms in a new environment. For example, Katrya stated,

> *So I knew like instead of breaking into an established circle of friends like, I just need to make something new, and I get just like fellow international students really worked out in this. So, of course, you will navigate more towards people that are like you right, that you don't have to explain certain struggles to and you guys will just like be hand in hand support each other. And just drive through it.*

Further, Katrya acknowledges the functionality social media can play for international student sojourners.

> *I use social media to learn more about the culture here and like be a little bit more knowledgeable of how things are working out. Let's say I have some health issues or have a question. I don't have friends or relatives from back home who are from here, so I can't really ask a question like where do I need to go if I need to do something? So instead, I turn to Reddit, and I just like post anonymous. Like say I need to get a new glasses prescription. How do I go about that and just random people kind of give you the info and that's how so, like Reddit is basically taking on parents for me, like helping me out.*

Thus, the emergence of these four themes demonstrates the complexity of social media as both a harbinger of homesickness and a facilitator of acculturation.

Discussion

In this study, the researchers sought to understand the relationship between social media use, homesickness, and acculturation. The condition of homesickness has been observed since the epic adventure of the *Iliad*, and while communication technologies, travel, and educational institutions have changed since the time of the Greeks, homesickness triggers have remained relatively constant

in which people describe nostalgia for home and the familiar, and experience grief, depression, and somatic symptoms of insomnia and a lack of energy (Thurber & Walton 2007). Thus, the research was designed to investigate how people, specifically, the international student sojourner, cope with homesickness in the 21st Century using 21st Century technologies.

Our findings suggest that the causes of homesickness for international student sojourners fall into predictable categories of missing family, and friends, food, loss of control, and language difference, thus supporting previous studies (Stroebe, van Vliet, Hewstone, & Willis. 2002; Poyrazli, Lopez, 2007; Furnham, 2005; Thurber & Walton 2007 2012). At the same time, our participants used social media especially to reconnect with family and friends back home instead of engaging with the local community in the host country as reported in the previous literature (Hendrickson et al., 2011; Hofhuis et al., 2019; Omori & Schwartz, 2022).

Homesickness and Social Media Use

From our focus group interviews, four major themes surfaced: 1. Social media as conflict, 2. Social media as distraction, 3. Social media as frenemy, and 4. Social media as functional. In terms of homesickness, social media can temporally help international students suffering from homesickness by connecting with people back home (themes 1 and 3) and staying up to date with current events in their home countries (themes 1 and 4), or even just avoiding their current situation (theme 2). However, social media was not a "solution" to the feeling of homesickness for many of our participants. Instead, social media can exacerbate homesickness (theme 1) and delay or become a barrier to the development of forming and sustaining new social networks in their new environment (themes 2 and 3). In fact, Hoang from Vietnam stopped using social media because he felt hopeless when he was using social media to connect with people back home because he could not be there physically. Thus, he decided to "be present" and participate more actively in his new community. Inconsistent with Billedo et al. (2020), our participants did not use social media much to communicate with people in the host country. Instead, when our participants felt homesick, they tended to use social media to communicate with people back home, creating a cycle of trying to maintain an insider position by connecting with communities back home while never overcoming or lessening the symptoms of homesickness. As such, encouraging social media use to communicate with people in the host country, as Billedo et al. (2020) advocate, is crucial to breaking the homesickness cycle and facilitating the acculturation process.

As observed earlier, before digital technologies, letter writing was a primary medium for staying in touch with family and friends back home. While social media is more efficient, nearly instantaneous, less time intensive, and cheaper, it may very well be that the less efficient, more time intensive, and more expensive use of international snail mail has the power to preserve and even strengthen ties back home while allowing time for international student sojourners to engage with their new culture. Letters have the potential to be more intimate, are less public, and allow a person to sit and "be" with the letter writer while reading and re-reading the letter whereas social media posts are, by their very nature, more public, less personal, lack depth and intimacy, and are fleeting. "They fill and expand the in-between. Letters are written with the delays of snail mail in mind, if we're lucky, let us develop a voice apart from others, with less (or no) attention to the pings and alerts of harried modern life" (Cave, 2024, p. 8). Thurber and Walton (2007) recommend that families plan and gauge their contact, giving children the emotional space they need to begin participating in their new surroundings. A letter mailed internationally, taking up to a week or more to reach its intended recipient, may provide the emotional space international student sojourners require to shift their focus from home to their new culture. Cave (2024) provides anecdotal support for the emotional, intellectual, and personal benefits letter writing offers, stating letters open up that "…intellectual space and the means to practice a method for asserting and exploring" (p. 9) in a way that social media cannot.

Communities of Practice and Acculturation

Participants acknowledged social media's functionality in learning the "grammar" (Furnham, 2005) of the new culture and in helping to create a local community (theme 4). Several participants commented that connecting with other international students and attending "cultural events" that their campus provided facilitated their ability to create new friendship networks, which in turn helped to mitigate the symptoms of homesickness. The connection with other international student sojourners offered them a place to belong. It bears reiterating what Therese said, "*It's like a hug that the the school is trying to give you. We see the struggle. You're not alone*."

Homesickness involves people's cognitive-motivational-emotional state (Fisher & Hood, 1987; Götz, et al., 2019). Consistent with Baines et al. (2022), our results indicate that social media serves several functions that are related to emotional, informational, and instrumental social functions. Social media *does* provide a mechanism to communicate with people back home, and social media *does* provide functional support for international students. However, our participants did not generally speak positively of social media's role in maintaining insider trajectories with communities back home. Some went so far as to say that they found it frustrating because social media, while enabling contact, could not replace physical presence, thus, perpetuating symptoms of homesickness rather than alleviating them. In order to help international student sojourners' emotionally, it might be important for international students to use social media to connect with people in the host country more, instead of communicating with people back home. In doing so, international student sojourners can begin to feel more comfortable in their new environment, reinforcing feelings of "belongingness" (Glass & Westmont, 2014). Being part of the new community is fundamental was reiterated by several of the participants. Faduma sums up the need to connect with the local community nicely, "*And watching something, talking to people not outside, like, as she said, talking to the people that you know from back home, it's it's really helpful, but like it's just temporary because still they're not here and we still we need, we need to make a connection with people that are like surround us and I'm sure most of the people were not doing that at some point*." Or as Katrya says, "*Making friends over here, making new memories, making having new experiences and just staying in touch with friends from back home.*"

Wenger (1998) claims that we all belong to myriad communities of practice. Our participants shared their experiences of bonding with other international students by talking about the joys and tribulations of learning to live and study in a foreign country, away from the familiar, security, and comforts of home and the home culture. They can talk and connect with other international student sojourners expressing empathy and understanding as only insiders can. Thus, finding and making friends with other international peers, building a new community, and establishing a sense of belonging appear to be common denominators for successful acculturation.

Practical Implications

This study is important to several communities on both sides of the international student sojourner experience. For those in the home culture, this study suggests that it is good to try to maintain contact with the international student sojourner while they are away, but just like Thurber and Walton (2007, 2012) recommend, the contact should be scheduled and initiated by them, not the international student sojourner. Our results suggest that international students can feel more homesick when exerting excessive time and energy to be virtually present back home. In addition, spending too much time on social media to communicate with people in the home culture limits the time available to devote to the here and now, and reduces potential opportunities to create new social networks and interpersonal relationships in the host culture, thus, serving as a barrier to learning about the social norms of the new culture.

Education Policy Implications

Two policy implications in education emerge from our findings. First, it is imperative to establish a robust support infrastructure within campus environments. Responses from our participants revealed a lack of awareness regarding available support mechanisms when experiencing feelings of homesickness. Hoang, for example, stated, "*where to get help, and I didn't know if there's any help available to be honest*." Thus, the international office and other student support offices can communicate to international students about campus resources, including counseling services and healthcare facilities ensuring that international students are well-informed about the social and psychological resources available. Cultural and social system differences might deter international students from seeking assistance or reaching out to faculty or advisors. Many participants resort to social media platforms to manage feelings of homesickness by maintaining connections with people in their home countries. However, awareness of available campus support structures could redirect them towards more effective avenues for assistance.

Secondly, our results underscore the importance of establishing dedicated spaces for fostering communication among international students. Our results suggest that creating a place to communicate and connect with other international student sojourners helps mitigate homesickness and facilitates the creation of a new community of practice for international student sojourners. Social media can provide information and instructional support for newcomers to learn the grammar of the culture (Furnham, 2005) as they navigate their new environment. Many of our participants expressed that engaging with fellow international students provided solace through shared experiences, with some noting the enjoyable aspect of learning about different cultures through intercultural communication. Moreover, the presence of international events and organizations enriches the cultural tapestry of American academic institutions, rendering them a more diverse and intellectually stimulating environment on campus.

Limitations

There are a few limitations to this study, all of which can be taken up in future studies. The first limitation is the smaller sample size although we reached the saturated points. Future studies with a large sample could generate more insight into how social media can both mitigate and exacerbate homesickness as well as how it can facilitate and prevent acculturation. For example, the researchers were not able to detect differences due to the length of stay, home cultures, or language proficiency due to the smaller sample size. Thus, narrowing the parameters for time away from home may help us to understand more about the effects length of stay has on homesickness and acculturation. Furthermore, the current study opened the research to all nationalities. Future studies could utilize multiple homogenous focus groups to try to learn if there are challenges unique to a specific nationality, duration of stay, or language proficiency.

Conclusion

Expanding on the previous literature on homesickness and social media use, the results of this study supported the effects of physically leaving existing communities of practice while also striving to enter new communities of practice in a new environment. Homesickness is a malady that has affected people for a thousand years or more. Social media allows international student sojourners to communicate with people back home and stay up to date on current events in their home country instantaneously. By using qualitative data, this study was able to detect four major themes in relation to homesickness, acculturation, and social media use. Most of the previous studies were conducted using quantitative data, which did not provide in-depth information about the reasons why there were no associations between social media use to communicate with people back home and homesickness, such as Billedo et al. (2020). Through the themes, this study found that connecting with people back home can in fact trigger homesickness instead of alleviating

homesickness. Additionally, this study suggests that social media has the potential to disrupt the process of acculturation and obscure a sense of belongingness, making it a challenge to establish local, supportive, social networks in the new environment if social media is used to communicate with people back home excessively. Instead of getting lost in social media, attending cultural events on campus and meeting other international students are mentioned as good tactics to create "new memories" (Katrya) and form new communities of practice for international student sojourners.

References

Alhabash, S., & Ma, M. (2017). A tale of four platforms: Motivations and uses of Facebook, Twitter, Instagram, and Snapchat among college students? *Social Media + Society*, *3*(1). https://doi.org/10.1177/2056305117691544

Archer, J., Ireland, J., Amos, S.-L., Broad, H., & Currid, L. (1998). Derivation of homesickness scale. *British Journal of Psychology, 89*(2), pp. 205-221. https://doi.org/10.1111/j.2044-8295.1998.tb02681.x

Baines, A., Ittefaq, M., & Abwao, M. (2022). Social media for social support: A study of international graduate students in the United States. *Journal of International Students, 12*(2), pp. 345-365. https://doi.org/10.32674/jis.v12i2.3158

Berry, J. W. (1992). Acculturation and adaptation in a new society. *International Migration, 30*(s1), pp. 69-85. https://doi.org/10.1111/j.1468-2435.1992.tb00776.x

Billedo, C. J., Kerkhof, P., & Finkenauer, C. (2020). More Facebook, less homesick? Investigating the short-term and long-term reciprocal relations of interactions, homesickness, and adjustment among international students. *International Journal of Intercultural Relations*, *75*, pp. 118-131. https://doi.org/10.1016/j.ijintrel.2020.01.004

Bogdan, R.C. & Biklen, S.K. (2007). *Qualitative Research for Education: An Introduction to Theories and Methods*. Boston: Pearson Education.

boyd, d. m., & Ellison, N. B. (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication, 13*(1), pp. 210-230. https://doi.org/10.1111/j.1083-6101.2007.00393.x

Cave, D. (2024, March 22). *What We Gained (and Lost) When Our Daughter Unplugged for a School Year.* New York Times.

Creswell, J. W. (1998). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions.* Thousand Oaks, CA: Sage Publications, Inc.

Chapdelaine, R. F., & Alexitch, L. R. (2004). Social skills difficulty: Model of culture shock for international graduate students. *Journal of College Student Development, 45*(2), pp. 167-184. https://doi.org/10.1353/csd.2004.0021

Fisher, S., & Hood, B. (1987). The stress of the transition to university: A longitudinal study of psychological disturbance, absent-mindedness and vulnerability to homesickness. *British Journal of Psychology, 78*(4), pp. 425-441. https://doi.org/10.1111/j.2044-8295.1987.tb02260.x

Furnham, A. (2005). Culture shock, homesickness, and adaptation to a foreign culture. In M. A. L. van Tilburg & J. J. M. Vingerhoets (Eds.), *Psychological Aspects of Geographical Moves*. Amsterdam: Tilburg University Press, pp. 17-34. https://doi.org/10.1017/9789048504169.003

Glass, R. C., & Westmont, M. C. (2014). Comparative effects of belongingness on the academic success and cross-cultural interactions of domestic and international students. *International Journal of Intercultural Relations*, *38*, pp. 106-119. https://doi.org/10.1016/j.ijintrel.2013.04.004

Götz, F. M., Stieger, S., & Ulf-Dietrich, R. (2019). The emergence and volatility of homesickness in exchange students abroad: A smartphone-based longitudinal study. *Environment and Behavior, 51*(6), pp. 689-716. https://doi.org/10.1177/0013916518754610

Hendrickson, B., Rosen, D., & Aune, R. K. (2011). An analysis of friendship networks, social connectedness, homesickness, and satisfaction levels or international students. *International Journal of Intercultural Relations, 35*(3), pp. 281-295. https://doi.org/10.1016/j.ijintrel.2010.08.001

Hofhuis, J., Hanke, K., & Rutten, T. (2019). Social network sites and acculturation of international sojourners in the Netherlands: The mediating role of psychological alienation and online social support. *International Journal of Intercultural Relations. 6*9, pp. 120–130. https://doi.org/10.1016/j.ijintrel.2019.02.002

Hofhuis, J., van Egmond, M. C., Lutz, F. E., von Reventlow, K., & Rohmann, A. (2023). The effect of social network sites on international students' acculturation, adaptation and well-being. *Frontiers in Communication*, *8*, pp. 1-12. https://doi.org/10.3389/fcomm.2023.1186527

Iorga, M., Soponaru, C., Muraru, I.-D., Socolov, S., & Petrariu, F.-D. (2020). Factors associated with acculturative stress among international medical students. *BioMed Research International, 2020*. https://doi.org/10.1155/2020/2564725

Jackson, M., Ray, S., and Bell, D. (2013). International students in the U.S.: Socialand psychological adjustment. *Journal of International Students, 3*(1). pp. 17-28. https://doi.org/10.32674/jis.v3i1.515

Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. New York, NY: Cambridge University Press. https://doi.org/10.1017/CBO9780511815355

Li, C., & Tsai, W. S. (2015). Social media usage and acculturation: A test with Hispanics in the U.S. *Computers in Human Behavior*, *45,* pp. 204-212. https://doi.org/10.1016/j.chb.2014.12.018

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), pp. 370-396. https://doi.org/10.1037/h0054346

Mcleod, S. (2023). *Maslow's Hierarchy of Needs.* Available at https://www.simplypsychology.org/maslow.html. [Accessed 20 July 2023].

Nauta, M. H., Rot, M. a. h., Schut, H., & Stroebe, M. (2020). Homesickness in social context: An ecological momentary assessment of study among 1st- year university students. *International Journal of Psychology, 55*(3), pp. 392-397. https://doi.org/10.1002/ijop.12586

Omori, K. & Schwartz, M. (2022). Acculturation and social media: How do international students engage with Facebook while abroad. *Journal of Comparative and International Higher Education, 14*(5). pp. 197-212. https://doi.org/10.32674/jcihe.v14i5.3640

Open Doors. (2023). *2022 Student Mobility Fact Sheet*. Available at https://opendoorsdata.org/ [Accessed 20 July 2023].

Poyrazli, S., & Devonish. (2020). Cultural value orientation, social networking sites (SNS) use, and homesickness in international students. *International Social Science Review, 96*(3), pp. 1-22.

Poyrazli, S., & Lopez, M. D. (2007). An exploratory study of perceived discrimination and homesickness: A comparison of international students and American students. *The Journal of Psychology, 14*(3), pp. 263-280. https://doi.org/10.3200/JRLP.141.3.263-280

Redfield, R., Linton, R., & Herskovits, M. (1936). Memorandum for the study of acculturation. *American Anthropologist, 38*(1), pp. 149-152. https://doi.org/10.1525/aa.1936.38.1.02a00330

Shoukat, S., Callixte, C, Nugraha, J., Budhy, T. I., & Irene, T. (2021). Homesickness, anxiety, depression among Pakistani international students in Indonesia during Covid-19. *ASEAN Journal of Psychiatry, 22*(7). pp. 1-8. https://doi.org/10.15294/kemas.v17i2.31300

Stroebe, M., van Vliet, T., Hewstone, M., & Willis, H. (2002). Homesickness among students in two cultures: Antecedents and consequences. *British Journal of Psychology, 93*(2), pp. 147-168. https://doi.org/10.1348/000712602162508

Thurber, C., & Walton, E. (2007). Preventing and treating homesickness. *American Academy of Pediatrics, 119*(1), pp. 192-201. https://doi.org/10.1542/peds.2006-2781

Thurber, C. A., & Walton, E. (2012). Homesickness and adjustment in university students. *Journal of American College Health, 60*(5), pp. 415-419. https://doi.org/10.1080/07448481.2012.673520

van Tilburg, M. A. L. & Vingerhoets, J. J. M. (Eds.), *Psychological Aspects of Geographical Moves*. Amsterdam: Tilburg University Press.

Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511803932

Wong, M. L. L., & Liu, S. (2024). The role of online social networking sites in facilitating friendships and adaptation among international students in Malaysia. *International Journal of Intercultural Relations*, *99*, pp. 1-13. https://doi.org/10.1016/j.ijintrel.2024.101942

Yu, Q., Foroudi, P., & Gupta, S. (2019). Far apart yet close by: Social media and acculturation among international students in the UK. *Technological Forecasting and Social Change*, *145*, pp. 493-502. https://doi.org/10.1016/j.techfore.2018.09.026

Zhang, S. (2012). *Babel or Great Wall: Social Media Use in an Acculturation Context*. Unpublished Phd dissertation. Pennsylvania State University. https://doi.org/10.1145/2379057.2379067

BOOK REVIEW

Critical Pedagogical Narratives of Long-Term Incarcerated Juveniles: Humanizing the Dehumanized. By Gregory Barraza (2022), 142 pages. ISBN: 978-1-66691-294-4. Lanham MD: Lexington Books.

In *Critical Pedagogical Narratives of Long-Term Incarcerated Juveniles: Humanizing the Dehumanized*, Gregory Barraza invites the readers to take a critical look at the world of long-term incarcerated juveniles and to adopt a more humanizing gaze at the young lives by considering a broader context of systemic issues and societal neglect that shape the complex intersection of lived experience, education, and incarceration, and how all these aspects transform the lives of one of the most vulnerable segments of the population. The book is divided into six chapters.

Chapter 1, *The Dehumanization of the Marginalized Student*, introduces the readers to the context of the study. Through statistical data and qualitative insights, Barraza illustrates how punitive measures, dehumanizing language and practice, and societal attitudes perpetuate a cycle of trauma and despair for marginalized communities, disproportionately affecting the youth of color and actively pushing them down the school-to-prison pipeline. Barraza argues for the use of the concept of critical pedagogy as a transformative framework with which to make sense of the experiences of currently or formerly incarcerated juveniles and the juvenile justice education system.

Chapter 2, *Inside Voices*, focuses on the methodological approaches employed in the study. Advocating for the use of arts-based research, Barraza argues that this methodology creates space for long-term incarcerated juveniles to exercise their agency and express their voices through artistic representations of their lived experiences. The use of fictive narratives and poems co-created by the author and the research participants creates a window through which the readers can get a glimpse of how the lives of the incarcerated juveniles were affected by their individual experiences and invites the audience to reflect critically on the experiences.

Chapter 3, *Loss and Surrender*, introduces the first three characters of the study – two juveniles and an administrator. The fictive narratives emphasize the theme of loss and surrender that surfaced in many areas of the lives of long-term incarcerated juveniles, including time, death, relationships, and love. Before leading the readers on the journey into the personal narratives of long-term incarcerated juveniles, Barraza provides an analysis of the methodological approaches to help the readers make sense of the story of each character. Through the fictive narratives crafted skillfully by Barraza to present the voices and experiences of the juveniles and to humanize a demographic that is often demonized and reduced to statistics, the readers are offered an opportunity to gain a deep understanding of the complex challenges and struggles faced by the juveniles, shedding light on the failure of the system to equitably attend to the needs of this vulnerable group of the population.

Chapter 4, *Mental Health and Criminality*, similar to Chapter 3, provides heart-wrenching fictive narratives of the other three characters. Unlike Chapter 3, Barraza attends less to the methodological approaches than to analyzing the incarcerated juveniles' narratives, situating their stories and experiences within relevant theoretical lenses and state policies. Backed up by strong evidence, Barraza convincingly argues how undiagnosed mental health issues of the youth, including schizophrenia, were the main drivers that pushed them to engage in criminal behaviors in the first place. Government measures to address youth criminality, such as zero-tolerance policies, argues Barraza, have done nothing but hastened marginalized juveniles' journey through the school-to-prison pipeline. The chapter highlights the severe shortcomings of existing policies and the human cost of the implementation of these measures and humanizes the incarcerated juveniles who have ended up being incarcerated due to reasons or factors beyond their control.

ISSN 2232-1802 doi: 10.14425/jice.2024.13.1.0222

Chapter 5, *Poetry as Reflection*, provides an insightful, artistic, and heart-felt reflection by Barraza on the emotions and experiences of the incarcerated juveniles he interviewed for this book. Highlighting the importance of poetry in academic research and its value in expressing the human experience, Barraza makes a powerful use of poems to emphasize the fluid relationship between freedom and truth, focusing particularly on the intersection between human experience, identity, and society.

Chapter 6, *Rehabilitate the Rehabilitation*, concludes the book, summarizing key insights from the study and highlighting the transformative potential of using a humanizing approach in juvenile justice education. Barraza outlines several crucial and necessary actional steps for scholars, educators, policymakers, and society at large to engage in reshaping the narratives, policies, and practices related to juvenile incarceration and juvenile justice education. The chapter also appeals for a collective responsibility to create a more just, equitable, and compassionate society for one of the most vulnerable segments of the population.

One of the strengths of Barraza's work is his use of a critical pedagogical approach as a transformative force within juvenile justice education; it is empowering and allows the long-term incarcerated juveniles to re-construct their identities and envisage a future in post-incarceration. The pedagogy also challenges policymakers, educators, and the wider public to re-evaluate their approaches and perceptions of vulnerable youth. Barraza's methodological approaches, particularly the use of fictive narratives and poems, not only humanize this often dehumanised demographic but also allow the juveniles to express their voices, creating space for them to exercise their critical consciousness and agency. Moreover, the narratives enable the readers to gain a more in-depth understanding of the complexities faced by the vulnerable youth and are a powerful instrument in fostering empathy among the readers. However, the book could benefit from a little more extensive exploration of the diversity of experiences within the incarcerated juvenile population, particularly the experiences of female juveniles and possibly of Caucasian youth as well. This would have provided an insightful comparison of the experiences and a more complete picture of juvenile incarceration and the juvenile justice education system. Nonetheless, these minor shortcomings are far outweighed by the power of narratives, critical pedagogical approach to education and scholarship, and systemic change in humanizing the currently or formerly long-term incarcerated juveniles, as portrayed, envisioned, and outlined by Barraza in this book. It is a must-read for educators, policymakers, scholars, and anyone interested in and committed to fostering a more just, equitable, and compassionate society for all.

Vicheth Sen
University of British Columbia