



Article

Urban Outmigration and Student Mobility towards Rural Schools: Are We in an Early Stage of Rural Revival?

Carmen Gloria Núñez 1,* D, Víctor Salinas-Silva 2, Pablo Cáceres-Serrano 1 and Bryan González-Niculcar 1 D

- School of Psychology, Pontificia Universidad Católica de Valparaíso, Valparaíso 2340000, Chile; pablo.caceres@pucv.cl (P.C.-S.); bryan.gonzalez@pucv.cl (B.G.-N.)
- Institute of Geography, Pontificia Universidad Católica de Valparaíso, Valparaíso 2362807, Chile; victor.salinas@pucv.cl
- * Correspondence: carmen.nunez@pucv.cl

Abstract: Rural education is a strategic sector for rural revival projects. The presence and state of rural schools is an indicator on the sustainability of rural communities in its economic, social, and ecosystemic interactions. This study explores the Chilean case as it shows a movement in student mobility towards rural schools. Based on new data from the Ministry of Education, the study shows that primary school students indicate a shift in tutors and families' preferences for rural schools, as rural schools' enrolment has increased by 1% in the 2015–2020 period. In the context of a market-based education system, the data indicate a process in which rural systems are seen as viable alternatives for families. There is a clear landmark in rural mobility during the pandemic years; however, the study concludes that there is no indication of a catalyst for migration different from previous years or signs of rural revival yet. We suggest that further studies should be conducted to map how this trend may be replicating in different countries and geographies, as well as to ponder its implications for rural communities and its capacity to harbor urban out-migration.

Keywords: urban outmigration; rural revival; rural education; rural decline; new rurality



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1. Introduction

Trends in rural migration are complex and influenced by various factors such as population concentration, migration flows between different areas, school shortage, or even rural urbanization. However, a closer examination of student mobility can help us to consider the different approaches to population redistribution or domestic migration and the multiplicity of socio-spatial clusters as a result of school systems approaches to school choice, funding, and historical trends molding public perceptions of rural spaces. We argue that urban students' migration into rural schools compels us to revisit the importance of rural education in the production of rural spaces and indicate its relevance to explore the sustainability of rural revival hopes and plans.

In this paper, we aim to shed some light on new trends in student mobility based on an empirical study focused on the case of Chile. For most of the twentieth century, Chile has shown a consistent trend of rural to urban outmigration, much like other countries in the world [1,2]. However, new data on its' primary school students show a shift in tutors and families' preferences for rural schools. It is significant that for the period between 2015 and 2020, there is a growth in rural schools' enrolment at the regional and national levels, according to Ministry of Education data. This is meaningful in contexts where governments have state-based subsidies to private investors that provide incentives for school choice to families and tutors, as it challenges historical trends and market influences in education.

2. Literature Review

2.1. How School Enrolment Shapes Rural Education Planning?

2.1.1. Class Size and Quality of Education

a. Multigrade teaching

The implications of an increment in rural school enrolment are significant because the number of students has shaped how rural schools have structured their management and even their type of pedagogy.

The catchment area of rural or isolated schools implies a reduced number of potential pupils, which in turn influences the allocation of resources for any given rural school. Public policy around the world [3] has discussed this matter around the optimal number of pupils or minimum class size to enable the administration or even the sustainability of rural schools in a particular rural village or town. Nevertheless, there is no consensus regarding an optimal number for the administration of rural schools, indicating that partly the decision to maintain it is mostly political or social rather than resource oriented [4].

Historically, the pedagogy of rural schools has adapted to smaller classes, consequently merging different levels into one class. Multigrade teaching is one of the most challenging pedagogies, as it requires experienced teachers who have to deploy multiple and diverse learning strategies to secure the educational provision for rural pupils that are enrolled in different educational levels and have to be engaged according to their diverse cognitive development [5]. In Chile, multigrade teaching emerged as a common practice in rural areas experiencing processes of population decline as well as more traditional and steady rural localities in which the school population has stagnated. It has been incentivized by the country's public policy as a matter of the efficiency of resources to help sustain rural schools.

b. High quality education provision

Rural education in the context of Chile has been conventionally characterized as a subsystem second to urban schools. This is to some extent due to student performance comparisons in which urban schools are perceived to perform better than rural schools. However, that statement is a matter of perception. Echazarra and Radinger [6] have shown that rural schools' performance around the world is similar to that of urban schools. If the comparison accounts for socio-economic status, the gap between rural and urban learning outcomes is not statistically significant.

It is significant that alongside student performance, there is evidence indicating that rural pedagogy reunites several quality standards associated with teacher-student interaction, place-based learning, and school-community engagement that are lacking in urban schools but are inherited from rural school practices. According to the OECD [7], smaller classes are often seen as an indicator of higher quality education provision; it has been documented "the benefits of smaller classes for students of younger ages and specific groups, such as primary school pupils and students from disadvantaged backgrounds" [7] (68). In the country case, a change in the school population for rural areas can potentially transform the main asset that rural schools have in comparison with urban schools. Planification and the creation of learning strategies should be considered accordingly.

2.1.2. School Size and Professional Development

The number of students has influenced the staff size of schools. In a number of countries, this has been analyzed as a problematic issue that has prevented teachers from accessing further education and building synergies with the local school system [8].

In the country case, rural schools with the smallest number of students or those that are more isolated exist with only one teacher who has the responsibility of teaching and running the school as a principal. Special development programs have been developed to respond to the need for collaboration and further education for this type of rural teacher. In Chile, one-teacher schools and multigrade schools in a nearby geographical area are typically expected to associate with a Microcentro (Micro-center), a state-led organization,

that operates with public funding and has been particularly effective since its origin in the mid-1990s to enable teachers from rural and isolated areas to gather together, collaborate, and learn from their peers.

Paradoxically, an increase in pupil numbers can hinder public policies that have traditionally favored small-sized schools since more students can potentially increase the staff. Although this process could hypothetically affect rural schools with an explosive enrollment, it is relevant to monitor changes in the demography of schools depending on how widespread the geographical distribution of the population changes among rural pupils. This is of particular relevance for the planning of professional development [9]. There is a precedent in the country studied for policies that enabled schools to hire temporary personnel and, therefore, increase the staff number [10]. Although this was received positively on a country level, administrators on a local level could deny teachers the possibility of participating in the microcentros professional development program because the entry criteria were not updated as they were originally meant for one-teacher or isolated schools.

2.1.3. Access to Qualified Teachers

Enrolment rates are key in defining the extent to which teachers' positions are made available in rural areas. Similarly, the provision of teachers for rural areas has not been properly addressed globally. According to Salinas [11], the narrative of rural depopulation has been met with mixed messages on the importance of rural education, therefore neglecting teacher education programs for rural teachers as they have to formulate their own strategies to develop professional competences.

Access to qualified teachers is of the utmost importance for rural communities. Sipple et al. [12] have argued that the proximity of schools is significant if accounted for by businesses and local enterprises. There are, therefore, economic benefits associated with nearby rural schools. Furthermore, the OECD [13] has supported this argument by identifying rural teachers' significance in communities and amplifying the geographical opportunities that pupils have in a particular locality. Rural teachers and schools provide an increment in rural well-being across different countries.

2.2. Market Forces Influence in School Choice and Rural Outmigration

In the Chilean case, funding follows the student, not the school as the country is organized as a market-based education system in which neoliberal policies foster competition between schools [14]. The structure of incentives has favored urban schools that can assemble a volume of students to make them financially sustainable. Conversely, rural schools do not have the structural capacity to gather large numbers of students. Underfunded and marginalized, rural schools have sustained decades of school closure trends [15] that in turn have accelerated rural outmigration.

School choice is an important matter within the country, which can be significant in other contexts. Burgess et al. [16] have indicated how relevant it is to commensurate the scale of families and tutors choices in connection with founding driven on voucher systems. In rural contexts, this could mean unfearful competition between urban and rural schools, and special measures of quality should be accounted for to effectively compare the school systems of both geographical areas.

2.3. Urban Outmigration and New Rurality

Rural revival is intertwined with the processes of urban–rural migration. According to Latocha-Wites and others [17], the process of revitalization and transformation occurring in rural areas globally occurs in places that were previously experiencing depopulation and decline. In South America, rural depopulation has been studied from a territorial perspective [18] that involves spaces in dispute, often in reference to movements of farmers without land, forced migration, peri-urban poverty, or land grabbing [19,20].

Among the concepts that have been developed to understand the transformations of the boundaries between urban and rural are rurbanization and new rurality [21]. Rurban-

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ization refers to urban expansion in rural areas, where there is a translocation of the urban way of life to the countryside [22,23]. One of the aspects of urbanization is the demand for public services, such schools, which directly challenges school planning systems.

The other concept is that of new rurality, which is coined as a conceptual alternative to those analyses that propose the disappearance of the rural in the face of the expansion of the urban [24], where the potentialities of life are highlighted over the deprived view that has taken precedence over it [25].

This dichotomous reality of rural vs. urban is the basis on which society is then organized, and the design of public policies is a good example of this. In the case of Chile, official definitions regarding rural are often by default; that is, rural is understood as that which is not urban. There is no specificity to the rural, but rather it is understood as a residue of the urban. In Chile, the case of rural schools illustrates this situation very well, since their name as such is based solely on their geographical location with respect to urban areas. This is how it is defined by the Ministry of Education: "a rural establishment will be understood as one that is located more than five kilometers from the nearest urban limit" [26].

2.4. Education as a Catalyst for Rural Revitalization

Rural revival has been understood as the process of revitalizing and rejuvenating rural areas that have been facing challenges such as population decline, economic stagnation, and inadequate infrastructure [27]. It involves implementing strategies and initiatives to promote economic development, improve living conditions, preserve cultural heritage, and enhance the overall quality of life in rural communities.

In education, rural outmigration is associated with rural school closures. The decline of over a fifth of rural schools for the past two decades in the case of Chile [21,28] is intertwined with the story of rural communities not offering opportunities to young people. Thus, any significant shift in this historical trend can mean both an indication of economic and social revitalization and the promise of a future for pupils at schools located in these areas. Previous research has reported that in the case of Chile, the adverse funding context for rural schools has been met with adaptation from rural teachers who have created strategies that are tailored to local communities in small villages, fostering alternative pedagogies [11], and creating opportunities for children with different capacities [29,30].

Perhaps the biggest contribution of considering education in the equation for rural revitalization is the promise that it upholds about creating rurality and shaping its cultural horizons. According to Albagli [31], rural outmigration involves spatial injustice and cultural loss. Conversely, rural revitalization can foster the positive growth of rural populations and villages as it creates a new territorial project. This is rurality as the production of space [32] in its material, lived, and symbolic meaning. Territory is a socially produced project that reshapes rural spaces.

Similarly, Shi and Yang [33] characterize rural revitalization as a strategy that aims to address the imbalances between urban and rural areas, promote sustainable development, and meet the growing needs and aspirations of rural residents. It often involves the development of industries such as agriculture, tourism, and renewable energy, as well as the improvement of infrastructure, education, healthcare, and social services in rural areas. The goal is to create vibrant and sustainable rural communities that offer opportunities for residents, preserve local traditions and resources, and contribute to the overall development of the region.

2.5. Research Questions

The existence of urban outmigration challenges decades of conventional wisdom on how rural education is an appurtenance to urban schools. It is important then to commensurate the scale of recent changes to be able to chart possible pathways into sustainable rural revitalization. This paper sets out to explore the questions of how rural enrolment has changed in the recent period in the case of Chile and to what extent new

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enrolments in rural schools are associated with urban-to-rural student migration. Empirical studies on a country level are needed to understand the extent of the migratory state of pupils across different geographies and to check conventional understandings that are guiding territorial planning in rural areas.

3. Materials and Methods

A quantitative analysis was carried out in order to measure the phenomenon of mobility from urban to rural schools among primary education students. This analysis involved a follow-up of those students who, as of 2020, were in the 6th grade of primary school in a rural school. This group is segregated from the base, and its trajectory is described from that year backwards, with the intention of determining who has moved from one school to another. The reason for following 6th grade students specifically is based on the need to include all rural schools, including both complete schools (up to 8th grade) and incomplete schools (up to 6th grade).

3.1. Participants

For the purposes of this study, the population selected consisted of students who, in 2020, were enrolled in 6th grade in both public and private-subsidized schools at the national level; from there, the total number was 221,265 students. From this initial total, only those students who were enrolled in 2020 in schools characterized as rural were selected, making the final number of the student sample 26,611. The analyses that follow were carried out on the totality of the collectives, and neither sampling procedures nor random selection of units were applied.

3.2. Research Design

This study was developed according to a quantitative, non-experimental, and descriptive design and focused on dimensioning the urban-rural mobility of students and their general characteristics.

3.3. Data Collection

The data utilized correspond to secondary sources, obtained from the data tables provided by MINEDUC through the site of the Centro de Estudios del Ministerio de Educación [Center for Studies of the Ministry of Education], in the open data section https://centroestudios.mineduc.cl/datos-abiertos/ (accessed on 30 April 2021). This database is freely available for download without the need for registration. It adheres to a government policy of transparency that allows all interested parties to access the information collected by state institutions. The databases consist of lists of unique enrollments reported each year for all schools nationwide. These lists include a PDF version of the document "Esquema de registro matrícula única oficial 2004–2020 por estudiante" [Official Single Enrollment Registration Scheme 2004–2020 by Student], which explains the names of the variables and their corresponding codes. Initially, we worked with all the variables in these data tables and filtered them according to the needs of the analysis.

3.4. Procedure

First, the filtering was implemented starting with the year 2020, since it was the most up-to-date information available, and it showed the current enrollment status of the students. Some specific filters were applied, considering: dependency, teaching codes, grade codes, and, of course, whether the establishment was still in operation or not. After this filtering, we proceeded to match the 2020 database with that of 2015 by means of the primary code MRUN, or the identification number of each student that allows us to track them individually and anonymously. Through this procedure, we ensured that we only had students who were in sixth grade in 2020 and in first grade in 2015. Subsequently, after evaluating that there were no repeated MRUNs before and after the procedure, all

intermediate databases were matched, thus ensuring that there were no cases outside the previously defined population.

By selecting only currently operating schools, 628 cases were eliminated. By limiting the population of students to only those of primary education, the number of possible units decreased to 2,017,007 observations, losing one-third of the original sample. Please take into consideration that, since the sample should only be of students who attended all years from first to sixth grade, eliminating all students from other levels in the preceding years, the total number of cases decreased ostensibly, as reported in the Participants section. Based on this last filtering, we always worked with these groups as a function of the complete population. No random selection was made at any step of the procedure.

3.5. Data Analysis

The applied analysis involved a first stage of data cleansing, where the correction of poorly tabulated, repeated, or omitted data was carried out, although in the latter case, no omissions to be considered were observed. Subsequently, a re-coding of variables was conducted, mainly to facilitate the matching of data tables. The analysis with the integrated databases involved a descriptive statistical analysis of frequencies and percentages in contingency tables and graphic tools such as bars and lines to represent qualitative variable data. No estimations were made because the work was always carried out with the entire population or subsets of the population for purely descriptive purposes.

3.6. Reliability of Data

One of the advantages for mobility analysis in this study stems from Chile's centralized identification system, in which each student is assigned an ID called MRUN. As a case, Chile provides a precise landscape on a census level. Furthermore, publicly available access to this type of data increases the reliability of the study by enabling tracking of individual movements, which ensures the anonymity of the data. Thus, we were able to track back the trajectory of all 221,265 6th-grade students across the entire system.

The method used to follow the student registry—instead of raw numbers per school, ensures that the 1% of rural schools' enrolment growth involves pupils within the system. It does not correspond to new enrolments from other sources but to the urban-to-rural movement of pupils from one school to another. Furthermore, pupil enrollment is randomly distributed between female and male students.

4. Results

4.1. Distribution of Rural Enrollments between 2015 and 2020

Considering all students who meet the original definition of the population, that is, students who were in 6th grade in the year 2020 (221,265), the analysis shows that the population of rural students increased by approximately 1% from 2015 to 2020 (Figure 1). It should be kept in mind that the total number of students corresponds to all those who have remained in school from first to sixth grade, therefore, the changes from urban to rural occurred within this observed population. As a result, the number of sixth grade students enrolled in rural schools in 2020 was 26,611, representing 12% of total enrollment, while urban enrollment in the same year was 88%.

Figure 2 shows the increase in rural enrollment from 2015 to 2020. It is not steady, but it is always increasing. From 2015, the 2016 period showed that the rural enrollment increased to 428 students; the following year, it was 532 more; then there was a decrease, but the growth remained.

Regarding the composition of enrollment by sex, minor changes were observed. There was a 0.1% increase in enrollment in rural schools among male students, while among female students there was a decrease of almost 1%.

If the distribution by agency is considered, the rurality arrangement is as shown in Table 1. In this table, it is possible to observe that some administrations have been in

operation for a short time; therefore, the associated information is scarce, as is the case of the Servicios Locales de Educación Pública [Local Public Education Services, SLEP]).

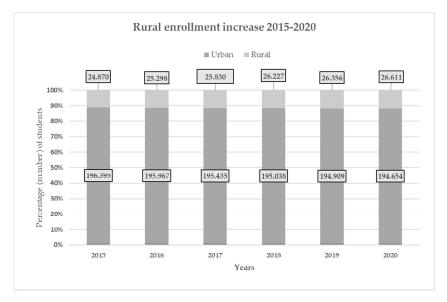


Figure 1. Changes in rural education between 2015 and 2020.

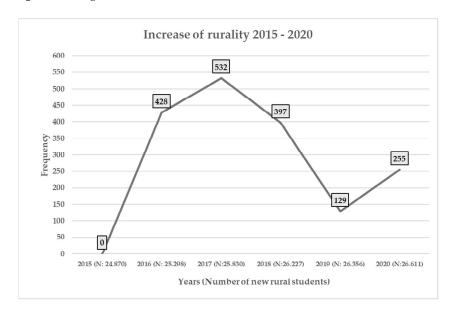


Figure 2. Shift in rural enrolment.

However, if the two administrations with the largest number of students, both public and private subsidized, are considered, there is a growth in rurality of about 1% in the first case and 0.5% in the second. In contrast, private schools, which appear in this study as a result of internal changes among students, have decreased their rural presence.

The information on rural and urban enrollment by region is shown in Table 2 and Figure 3, which show the total number of students by region and the percentage of schooling by area. It should be noted that there has been a decrease in the number of students in the northern macro-zone, in the Tarapacá, Antofagasta, and Atacama regions, apart from the Arica and Parinacota regions, which remain largely unchanged, and the Coquimbo region. In the latter, the total number of students has increased, as has the mobility of students from urban to rural schools, by 0.3%.

Table 1. Urban-rural frequency and percentage considering the establishment's agency.

eriod	Adm.	Adm. Del. Adm. Corporation	m. Corp.	oration		Public	Public Schools			Private	Private Schools		Priva	te Subsi	Private Subsidized Schools	sloc		Local 5	Local Service	
	Ru	Rural	Urk	Urbano	Rural	ral	Urba	ano	Ru	Rural	Urb	Urbano	Rural	ral	Urbano	ou	Rural	ral	Urbano	out
	u	%	u	%	u	%	u	%	u	%	n	%	п	%	u	%	u	%	п	%
2015	0	0	0	0	18.707	21.6	68.026	78.4	13	8.0	1.594	99.2	6.150	4.6	126.722	95.4	0	0	0	0
2016	0	0		100	18.938	21.7	68.215	78.3	13	6.0	1.431	99.1	6.347	4.8	126.320	95.2	0	0	0	0
2017	0	0	70	100	19.300	21.9	68.661	78.1	10	6.0	1.107	99.1	6.520	4.9	125.647	95.1	0	0	0	0
2018	0	0	32	100	19.273	22.7	65.733	77.3	4	0.4	1.104	9.66	6.460	4.9	124.413	95.1	490	11.5	3.756	88.5
2019	0	0	33	100	19.429	22.7	66.194	77.3	3	0.5	546	99.5	6.430	4.9	124.315	95.1	494	11.4	3.821	9.88
2020	0	0	22	100	19.310	23.4	63.351	9.92	0	0.0	0	100.0	6.469	4.9	124.599	95.1	832	11.1	6.649	6.88

 Table 2. Urban-rural percentage considering the country's region.

Regions	,	2015		,	2016		,	2017	,	,	2018			2019			2020	
	Rural	Urban	Total															
Tarapacá	18.0	82.0	4.842	16.9	83.1	4.770	16.8	83.2	4.729	17.3	82.7	4.701	17.1	82.9	4.686	17.2	82.8	4.651
Antofagasta	1.9	98.1	8.028	2.0	0.86	7.878	2.0	0.86	7.753	2.0	0.86	7.645	2.0	0.86	7.585	2.0	0.86	7.527
Atacama	3.6	96.4	4.336	3.8	96.2	4.370	4.0	0.96	4.362	3.6	96.4	4.330	3.5	96.5	4.305	3.5	96.5	4.300
Coquimbo	12.9	87.1	10.551	13.1	6.98	10.640	13.2	8.98	10.709	13.1	86.9	10.838	13.1	6.98	10.916	13.2	8.98	10.984
Valparaíso	4.6	95.4	21.443	4.7	95.3	21.614	5.1	94.9	21.779	5.1	94.9	21.917	5.2	94.8	22.051	5.1	94.9	22.152
Bernardo O'Higgins	23.2	29.9	12.264	23.3	7.97	12.364	23.4	9.92	12.450	23.7	76.3	12.600	23.4	9.92	12.651	23.3	7.97	12.727
El Maule	25.6	74.4	14.210	25.6	74.4	14.340	25.8	74.2	14.511	26.5	73.5	14.693	26.8	73.2	14.837	27.2	72.8	14.990
Bio Bío	13.6	86.4	27.081	13.7	86.3	27.212	14.0	86.0	27.406	14.0	86.0	27.535	11.8	88.2	20.808	11.8	88.2	20.890
La Araucanía	23.6	76.4	13.552	24.0	76.0	13.653	24.1	75.9	13.795	23.9	76.1	13.945	23.9	76.1	14.093	23.9	76.1	14.268
Los Lagos	23.9	76.1	12.037	24.5	75.5	12.092	25.0	75.0	12.120	25.1	74.9	12.177	24.8	75.2	12.235	25.1	74.9	12.329
Aysén	12.1	87.9	1.807	12.2	87.8	1.810	12.3	87.7	1.815	12.1	87.9	1.812	12.0	88.0	1.794	12.0	88.0	1.791
Magallanes	2.6	97.4	1.978	2.9	97.1	1.971	1.5	98.5	1.972	1.7	98.3	1.987	1.4	9.86	1.988	1.4	9.86	2.008
Metropolitana	4.1	95.9	80.742	4.2	8.56	80.115	4.4	92.6	79.356	4.5	95.5	78.518	4.6	95.4	77.825	4.7	95.3	76.995
Los Ríos	26.1	73.9	5.081	26.5	73.5	5.126	26.7	73.3	5.189	27.0	73.0	5.275	27.1	72.9	5.317	27.2	72.8	5.366
Arica y Parinacota	7.4	95.6	3.313	7.4	97.6	3.310	7.1	92.9	3.319	7.0	93.0	3.292	6.5	93.5	3.303	6.4	93.6	3.320
$ ilde{ ext{Nuble}}$	*	*	*	*	*	*	*	*	*	*	*	*	19.9	80.1	6.871	19.6	80.4	6.967

* The data for this geographical area were not available in these years.

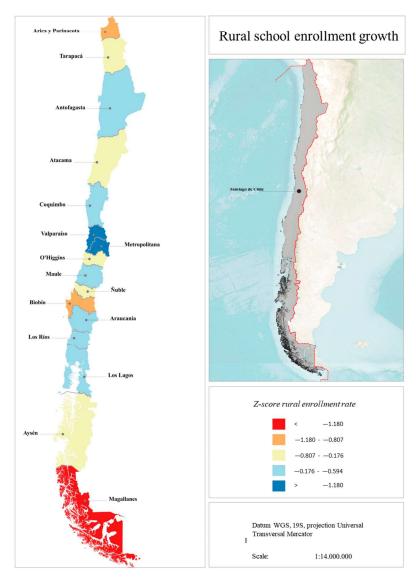


Figure 3. Rural enrollment growth per administrative region.

As for the central macro-zone, there was a decrease in the total number of students in the metropolitan region but an increase of 0.6% in the mobility of students to rural schools. In the Valparaíso region, the total number of students rose, and mobility to rural schools increased by 0.5%. For its part, the Libertador General Bernardo O'Higgins region experienced an increase in the total number of students and a 0.1% increase in mobility to rural areas; in this case, there was a sustained increase between 2015 and 2018, the year from which school mobility to rural areas began to decrease. In the Maule region, there was an increase in the total number of students and an increase of 1.6% in school mobility to rural schools.

And regarding the southern macro-zone, in the Bío Bío region, the total number of students decreased by more than 6000, and student mobility to urban areas increased by 1.8%. In the Araucanía region, there was an increase in the total number of students, and mobility also increased by 0.3% in rural schools. In the Los Ríos region, there was an increase in the total number of students, and mobility to rural areas increased by 1.1%. In the Los Lagos region, the total number of students increased, and mobility to rural areas increased by 1.2%. The Aysén region experienced a small decrease in the total number of students and an increase of 0.1% in urban mobility. In the Magallanes region, there was

a slight increase in the total number of students and a 1.2% increase in mobility to urban areas. In other words, in all macro-zones, there has been an increase in school mobility from urban to rural schools, with some regions in the southern macro-zone showing an inverse movement towards urban areas.

4.2. Mobility of Students from Urban to Rural Schools

After the previous review, with all students in sixth grade in 2020 (n = 221,265; Figure 1), a subset was selected consisting only of students who were enrolled in rural schools in 2020 (n = 26,611). Figure 4 shows the change from urban to rural facilities between 2015 and 2020.

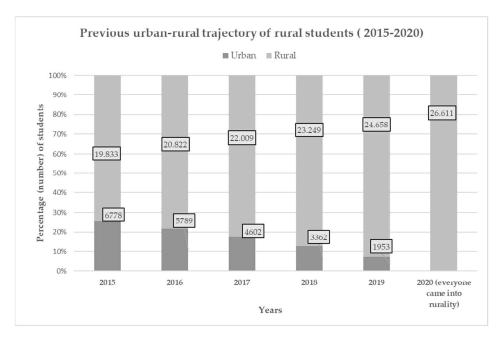


Figure 4. Number of students that changed from urban to rural between 2015 and 2020.

The incorporation of students in rural schools increased until 2019, the year in which the greatest growth is evident, with around 8%.

Contrary to what might be inferred, rural schools have neither maintained nor massively lost students. Although this total in 2020 (n = 26,611) corresponds only to rural schooled students, what can be seen is that their origin is not only rural and that their final composition corresponds to at least 25% of students of urban origin.

A more detailed look at student mobility required working with only a few student profiles. Of the total (n = 26,611) who migrated to rural schools, those from the year 2020 (n = 18,898) were eliminated since they were all rural and it was not possible to evaluate the change. A part of the student population (n = 1172) that migrated alternately, going to and coming from rural schools, was also left out because of their atypical behavior. Only those who had migrated to rurality from 2015 to 2020 (n = 7713) were kept, but only in a sequential manner: those who migrated to rurality in 2015, then those who migrated to rurality in 2016, and so on.

Figure 5 shows the change in rural schools over the years, considering the administrative units of the establishments. All the units show significant increases year by year in student enrollment in rural facilities. The local service is of recent implementation, hence its low number, but in the other dependencies, it is possible to appreciate the significant increase in rural enrollment as of 2018.

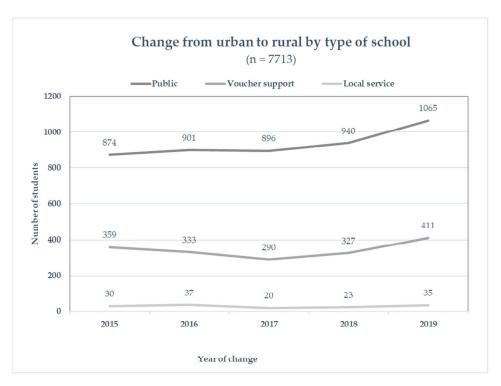


Figure 5. Number of students that migrated to rural facilities considering year and agency.

Lastly, the graph in Figure 6 shows the number of students that migrated from urban to rural schools, in accordance with the year and their region of origin.

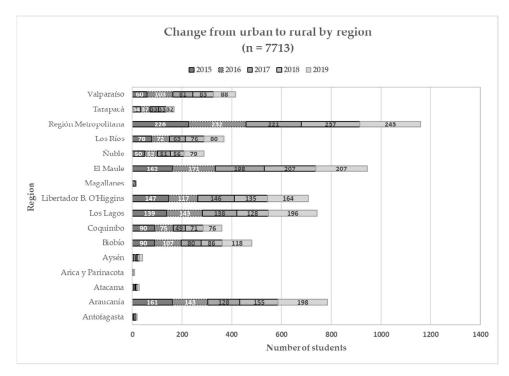


Figure 6. Number of students that migrated to rural facilities considering year and region.

The graph shows—by regions—the annual increases in students who have migrated from urban schools to rural schools. Those regions that exhibit progressively higher

migration frequencies are located in the southern part of the country, such as La Araucanía, Bio Bío, El Maule, Los Lagos, and Ñuble. The notable increase, sometimes substantial, in emigration from the Araucanía and Los Lagos regions between 2018 and 2019 also stands out. In contrast, the northern regions generally show a lower presence of rural students; however, migration from urban to rural, although on a smaller scale, is present.

5. Discussion

5.1. Rural School Population Shift: School Choice in a Market-Based Education System

It is significant that in a market-based education system, families and tutors choose rural schools over urban schools [14]. It indicates that without government support or incentives, rural schools have become a viable option for a wider population.

When it comes to market-based education systems, there is a claim to be made about rural schools becoming more competitive within the national school system. Extant studies indicate that the results reported here might be driven by previous indications of positive perceptions within the public about rural education in Chile or rural schools' performance in standardizing tests. Echazarra and Radinger [6] have confirmed that the urban/rural gap is a matter of perception, not backed up by evidence of actual performance in standardized tests. This type of issue can play a role in rural school attraction. Moreover, rural pedagogy quality is likely to influence families and tutors' decisions to stay at rural schools, improving student retention rates and possibly having larger impacts on rural education enrolment.

Furthermore, results from this study clarify that the preference for rural schools is not a matter of trickle-down effects in which urban schools have exhausted their enrolment capacity, therefore lending pupils to vacant rural schools. The Chilean case shows—for the studied period—that an unprecedented number of families are moving from urban to rural schools as their choice in education for their pupils.

5.2. Education as a Vector to Explor Early Stages of Rural Revival

González-Leonardo, Rowe, and Fresolone [34] have described urban outmigration as a result of the COVID-19 pandemic, indicating that this trend was driven by various factors, including the desire for more space, access to nature, and a perceived lower risk of COVID-19 transmission in rural areas. However, the Chilean case shows that current numbers are part of a process in which rural systems are seen as viable alternatives for families even before 2019. The pandemic indicates a clear landmark in rural mobility; however, there is no indication of a catalyst for migration in the data compared to previous years. Although the shift in historical trends is promising, the data suggests a more cautionary approach, as it is too early to affirm that there are signs of consistent and widespread rural revitalization based on school population figures.

Rural school enrolment has expanded; however, an additional facet of the results suggests that the school catchment area has also widened, incorporating students that are not necessarily residents within the rural locality of the school. This might incorporate pupils from periurban areas [19,35] and residents from newly formed developments in rural areas with access to cars or private transportation that typically attend urban schools as an issue of socio-economic status [36].

5.3. Turning Point on Rural Narratives

The implications of 1% rural enrollment growth are colossal for rural communities. There are two reasons this should be a matter of concern for the sustainability of the rural school system. First, it involves a shift in a historical trend that has defined the narrative of rurality in the country case. Generations of rural children have grown with the geographical certainty that rural villages are disappearing. Conversely, the preferences of families can produce a new revitalization of the rural image. Haesbaert [20] has argued that, in the context of Latin America, rurality is associated with perceptions of underdeveloped spaces, to which people flee towards the cities. The shift in the historical trend can mean otherwise. However, we have to remain cautious in this matter, as the narrative of urban–rural com-

petition in the case of education does not necessarily mean a return to romanticized ideas of rural spaces. New rurality studies [37,38] have stated the fragmentation of traditional rurality in rural areas where extractivism is the main driver of economic growth at the expense of social integration, environmental degradation, and habitat loss. A new flux of rural pupils and potential dwellers can apply more pressure to an already delicate rural social fabric.

Second, the presence of new students in rural schools involves pondering different questions about the capacity of rural systems to harbor urban out-migration [39,40]. The rural school subsystem has been historically characterized as subordinate to urban education or less competitive. However, the implication for planners and policy makers is that the results of this study show that, from a service delivery point of view [41], the educational project offered by rural schools to pupils is viable for both rural and urban families in search of opportunities. The geographical distribution of this shift has its particularities in the mining regions of the case studied, but again, the trend is shown across the entire country. Similarly, internal mobility was controlled considering recent migratory flows from other countries in Latin America.

Nevertheless, Rao and Ye [42] argue for the case of China that similar trends can derail a virtuous cycle of rural—urban education to urban-oriented rural and therefore provide services that are normally conceived in urban contexts. Growth in enrollment can have disruptive implications for administrators and local educational authorities as it ponders questions on which schools should be included in a cluster, network, or resource center program, what is adequate staffing, or to what extent local administration should provide district level or pedagogical support staff.

Furthermore, previous studies [11,43] have indicated that rural schools have tailored their pedagogy to local communities' cultures and needs. In response to system-wide pressures, this involved a strategy that enabled the survival of rural schools during decades of aggressive rural education fragmentation and school closure. However, these strategies can be faced with resistance from new audiences, and they could put to the test the capacity of integration in rural schools. Conversely, this can also become a scenario in which identity politics flourish, as it can challenge cultural predispositions in local and non-local families [44]. Coca, Fernandez-Portela, Gómez-Arredondo, and Paraná-Diaz [45] argue that rural social solidarity is perceived by rural communities as an asset for inclusion for a diversity of groups. Further qualitative studies are needed to assess the extent to which social solidarity can work in the interaction with urban cultures.

6. Conclusions

This paper sets out to explore the questions of how rural enrolment has changed in the recent period and to what extent new enrolments in rural schools are associated with urban-to-rural student migration. The analysis showed that these questions are positively transformative since there has been a 1% growth in rural enrolment in the studied period. Furthermore, these questions are intertwined with a national trend that challenges the narrative of rural depopulation. In this paper, we suggest that education is important to understand the potential of rural services, in particular rural schools, to attract urban populations and potentially reinvigorate the countryside.

Rural revitalization literature associates a positive demographic change as an indication of rural revival. The case selected provides evidence on a national level of such a positive trend for the school population, which is as significant as the results presented in this paper report on students that move from urban schools to rural schools. Therefore, it is a matter of choice not associated with international migration or rural population growth. As for the matter of whether this is properly a full rural revival on the studied areas, we suggest caution. Further studies are needed to determine if a growth in rural enrolment may indicate migration of the full household or become a vector to dynamize the local society and economy. This may suggest the need for further studies in different country contexts to compare and assess similar population movements.

Future studies should aim to address how geographical disparities influence the shifting trend of urban-to-rural outmigration. In particular, our results indicate that urban-to-rural pupil movement is randomly distributed between female and male students, strengthening rural schools' parity. While rural enrolment rates are almost the same, previous studies indicate that rural women's life paths start to differentiate as early as five to six years old from their male counterparts. Further studies are needed to explore how urban-to-rural migration can bridge or widen the gap regarding gender inequality, particularly as rural schools can contribute to overcoming disparities in attainment and building more equal and resilient rural societies.

Finally, the increment in rural school enrollment brings new challenges for planners and decision makers. Up until now, we have operated under the assumption that people are leaving rural areas, and, therefore, the most common policy in the country studied was to disassemble rural schools by closure, consolidation by merging neighboring schools, or relocating rural pupils to urban schools. Conversely, we are facing a potential scenario of opportunity. It is for planners and decision makers to harness the rural education momentum in the hopes of bringing dynamism to rural areas in a sustainable, planned way.

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