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Temporary destudentification caused by COVID-19: Motivations and effects on social relations in a Chilean university city

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Abstract

The arrival of the coronavirus in 2020 brought major changes to education, with the rapid transition to online classes being the most significant. In the case of university students, the pandemic meant returning to their homes, which can be interpreted as a temporary destudentification. This manuscript analyses and interprets the motivations of university students from Temuco (Chile) to change their social relations and place of residence as a consequence of the COVID-19 pandemic. Through a quantitative methodology that used more than 800 online surveys and a principal component analysis, it was concluded that the psychological well-being and the security provided by the family were the main causes for changing accommodation; but a total of four main components related to material conditions, economic aspects, family and psychological and physical well-being were identified. Similarly, although with the pandemic the family was the most reinforced dimension in terms of social relations, there were groups of students who were more connected to friends and colleagues or neighbours. The results point to a partial and temporary destudentification, explainable by the nature of the lease contract and the dependent role of the students with respect to the landlords.

KEYWORDS

Chile, coronavirus, destudentification, motivations, social relations

1 | INTRODUCTION

Undoubtedly, 2020 will be remembered as the year in which the coronavirus disrupted multiple dimensions of society that until then were thought to be stable. This virus generated traumatic effects on the life and health of many people and even affected aspects of daily life such as commuting or shopping. Education, work and leisure have been profoundly transformed in a few months, mutating towards new modalities. University education has been a highly studied aspect during the first decades of the 21st century due to its relationship with urban dynamics. The study of the social, physical, economic and cultural changes or impacts that occur in some neighbourhoods as a consequence of the increase in the student population has coined the term *studentification* to analyse and interpret these processes (Kinton et al., 2016; Sage et al., 2012; Smith & Holt, 2007). In recent years, some authors have analysed the progressive withdrawal of students from certain neighbourhoods as a consequence of the search for specialised accommodation with better services, which is known as *destudentification* (Kinton et al., 2016; Mulhearn & Franco, 2018). Today, the COVID-19 pandemic forced many universities to implement online teaching, which have affected student accommodation again. Therefore, neighbourhoods with a strong presence of students could have been affected by the temporary decisions that students would have made as a result of the implementation of online classes.

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The main objective of this study was to analyse and interpret how the transition to online classes caused by the COVID-19 pandemic affected student accommodation in a context of temporary destudentification. To do this, this work focused on three issues: first, on whether or not the students stayed in their prepandemic accommodation, from a spatial perspective; second, in the main motivations of those students who decided to change their residence as a result of the pandemic; and finally, in the variation of the social relations of the students during the pandemic. In this way, it was sought to interpret whether the coronavirus led to a temporary destudentification of sectors with a strong student presence, analysing the causes and consequences of this phenomenon. For this, an eminently quantitative methodology was used, through an online survey carried out in December 2020 to students from the four main universities of Temuco (Chile).

The choice of Temuco as a case study responds to two reasons. On the one hand, most of the studies on studentification and destudentification have been developed in the Anglo-Saxon area, with very few studies in Latin America. Despite this, in this region, the number of university students has grown exponentially in recent decades, with important consequences in certain cities, which have been configured as university poles in their respective countries (Prada-Trigo, 2019). On the other hand, Temuco faithfully represents the typology of a university city: intermediate size in the Chilean urban system, two important higher education centres based in Temuco with supraregional influence, existence of other smaller university centres, growth of the real estate sectors and services in recent years and a significant percentage of university students with respect to the total population (13.1% in 2019). Although there are some studies regarding studentification in Latin America, there are none from a destudentification perspective. Along with this, the fact of approaching this process as something temporary resulting from the pandemic is doubly novel.

The following section briefly addresses the theoretical framework of this research, which stresses on the phenomenon of studentification and destudentification and the effects of the pandemic on university education. Then, the methodology used, as well as its limitations, is detailed. Subsequently, results are interpreted and analysed through a principal component analysis that seeks to simplify the results and interpret them from new categories. It is applied to the analysis of motivations when changing residence and also to analyse the evolution of students' social relations during the pandemic. Finally, the discussion and conclusions of this work are presented, summarising those aspects that affect the strong withdrawal of students as a consequence of the pandemic, and extending the destudentification debates. This work, despite following motivations already identified in other studies, performs an interpretation in relation to urban causes and effects and contextualises it together with the variation of social relations. In this way, the return to the family and the physical and psychological well-being would be the cause of the students' decision, which would have influenced the destudentification of certain urban sectors.

2 | LITERATURE REVIEW: FROM STUDENTIFICATION TO DESTUDENTIFICATION

The term studentification is a neologism that refers to the social, physical, economic and cultural changes or impacts that occur in some residential neighbourhoods as a consequence of the increase and concentration of the student population in them, which generates transformations in the structure of the homes and in the population and businesses of the neighbourhood (Hubbard, 2008; Kinton et al., 2016; Nakazawa, 2017; Prada-Trigo, 2019; Sage et al., 2012). A considerable part of the studies on studentification, mostly from the Anglo-Saxon field, have analysed this phenomenon from the evolution of student accommodation from Houses in Multiple Occupation (HMO), managed by private individuals, to the appearance of Purpose Built Student Accommodation (PBSA), managed by private companies specialised in student rental (Chatterton, 2010; Holton & Riley, 2013; Kenna, 2011). As a consequence of this, there is a segregation of students between those who can pay more, accessing a PBSA, and those who stay in lower value accommodations, generally with worse characteristics or in less prestigious areas (Hubbard, 2009; Revnolds, 2020). The result is a financialisation of education and the search for profitability from students, which has been highlighted in several studies (Kallin & Shaw, 2019: Smith & Holt, 2007).

proliferation of PBSA, together with social and The neighbourhood pressure in some 'traditional' studentified neighbourhoods, would have produced a destudentification phenomenon that led to the departure of many of the students, causing economic, social, physical and cultural consequences comparable with those of 'urban decline' (Kinton, 2013; Kinton et al., 2016; Mulhearn & Franco, 2018). Kinton et al. (2016) distinguish between different stages in the destudentification process: empty beds, empty houses and empty streets, which stand for the social, economic, physical and cultural decline of the neighbourhood. At the end of this process, the wealthier student population will be replaced by other students with lower requirements, or other nonstudent groups, such as migrants, precarious workers and families.

However, this phenomenon would not only be explained by the supply side and the construction of new PBSA around universities but would also respond to the changing needs, expectations and preferences of students (Kinton et al., 2016), which lead them to search for student accommodations of higher quality and new 'student experiences' often in more prestigious neighbourhoods (Holton & Riley, 2013). The result, according to Mulhearn and Franco (2018) would be a decaying neighbourhood, local business and investor indebtedness due to lack of students, and fewer alternatives for the neighbourhood. For Kinton et al. (2016) this urban decay can lay the grounds for a gentrification phenomenon, creating a possible 'rent gap'. However, the process of deconverting student HMO to housing suitable again for family occupation can require major investment, according to Sage et al. (2011), which often discourages the in-movement of families to destudentified areas.

Although the destudentification concept is promising for this research, its capacity to interpret the case study can be limited by the temporality of the coronavirus pandemic and the Latin American context itself. As mentioned, most of the research on studentification has been carried out in the Anglo-Saxon setting, with relatively few studies in other contexts: China (He, 2015), Australia (Fincher & Shaw, 2009), Israel (Avni & Alfasi, 2018) or Spain (Garmendia et al., 2012). In this sense, the case of Latin America is relevant, where there is a notorious lack of work apart from the research of Prada-Trigo (2019) and Prada-Trigo et al. (2020) in Chile. These authors analyse a case study where PBSA as student lodgings have not proliferated, so that rents are directly handled by private individuals, establishing clear differences with other international studies. These gaps highlight the urgency of expanding the interpretation of this phenomenon to little-explored contexts (Smith, 2019).

3 | COVID-19 AND ITS IMPACT ON UNIVERSITY EDUCATION

2020 will be remembered for the COVID-19 pandemic and the disruption it caused throughout the planet. One of the structures most altered by this pandemic was the educational system. Most of the universities had to interrupt their activities and adapt to online teaching strategies and methodologies (Aucejo et al., 2020; Gelles et al., 2020; Mertens et al., 2020). This posed a series of problems for the students: the scarce availability of equipment and adequate internet connection to follow online classes, suitable spaces for learning that are not crowded, problems adapting to online teaching or the reduction in income due to loss of their job (Gelles et al., 2020). This last situation affects their purchasing power and their possibility for autonomous living, favouring a return to their family homes.

All this caused greater anxiety and a general demotivation in students, aspects that have been analysed in other works (Aristovnik et al., 2020; Mertens et al., 2020). In addition, a withdrawal of students with respect to social relations with their environment was identified (Al-Dwaikat et al., 2020), which in many cases led to problems of anxiety, stress, isolation and loneliness (Tull et al., 2020; Unger & Meiran, 2020). Similarly, lockdown has led to students, along with the rest of the population, facing limited mobility. This is more important in students' cases, because they have fewer motor vehicles, as some studies have indicated that the greatest drop in mobility was in public transportation, versus a strong increase in mobilisation in private vehicles (Parady et al., 2020). Although some of these works were interested in the benefits of returning to the family home as a strategy to mitigate the psychological and material problems caused by the pandemic, there is a gap around how this pandemic affected student accommodation in the context of studentified spaces. The place of residence of students is closely linked to issues such as student income, availability of optimal conditions for work or a good internet connection and having a direct effect on the mood of students.

Therefore, this research focused on the effects that COVID-19 caused on student accommodation, in the sense of having caused a process of temporary destudentification in cities with a significant presence of students, as the case study. In addition, changes in students' social relations as a consequence of the pandemic were analysed. Our main hypothesis is that COVID-19 caused a massive return of students to their homes, explained by different causes (psy-chological, economic and material), generating a temporary destudentification, with strong effects on social relations and the economy of the neighbourhoods, but reversible in the medium term.

4 | METHODOLOGY

To carry out the analysis, a quantitative methodology was used through an online survey of students from the four main universities in Temuco (Table 1). To do this, we contacted the Career Headquarters and Student Centers, informing them about the nature, purpose and use of the information collected and inviting them to complete the survey throughout the month of December 2020. More than 800 responses were collected, of which the incomplete, repeated responses, with the same option in all the items or of doubtful origin, were eliminated, which gave a total of 729 valid questionnaires. It is worth mentioning that, although the survey was anonymous and no personal data was requested from the students who answered it, they were asked to include at the end an institutional e-mail that would allow them to corroborate their enrolment in one of the surveyed universities, an aspect that they were informed previously. Once the valid surveys were selected, the e-mail was deleted to perform the statistical analysis. The 729 validated surveys yielded a sampling error of 3.59% with a confidence level of 95%, taking into account that the population, represented by all the students enrolled in Temuco universities in 2020, was 33,653 (CNED, 2021). The tabulation and statistical analysis of the data was performed using the software SPSS v.22.

TABLE 1 Survey sample design

Universe	University students in Temuco
Scope	Main universities in Temuco
Information collection method	Personal survey with structure questionnaire
Sample unit	University student
Population size	33,000
Type of sampling	Nonprobabilistic convenience
Confidence level	95%
Sample error	±3.59%
Date	December 2020
Number of valid surveys conducted	729

Source: Authors.

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The validity of the questionnaire was determined in two stages. Prior to its implementation, we analysed the content validity as a consistency parameter (Drost, 2011). To do this, a panel of experts from the Department in which the authors work reviewed the questionnaire and confirmed that the questions were representative of the theoretical framework and the research objectives that were to be evaluated with it. Then, once the results were refined, a reliability test was carried out using Cronbach's alpha with those questions that used a Likert-type scale. This analysis gave a coefficient of 0.740, indicating good internal consistency of the data. Regarding the limitations of this study, it should be noted that conducting an online survey requires greater conciseness, as the response rate is lower than that of faceto-face surveys and tends to decrease as the number of questions increases, which meant a limitation when collecting additional information. Similarly, the fact of working with an online survey meant not being able to control the response process of the participants (body gestures, doubts and personal appreciations) that were outside the scope of the study. It should be noted, however, that in relation to other studies carried out with online questionnaires during the pandemic (Aguilera-Hermida, 2020; Baber, 2020; Tull et al., 2020), we obtained a high number of responses, reducing the sample error.

5 | ANALYSIS OF THE RESULTS: ACCOMMODATION, MOTIVATIONS FOR CHANGING RESIDENCE AND SOCIAL RELATIONS DURING THE PANDEMIC

5.1 | Case study

Temuco is located in the Araucanía Region, 680 km south of the capital, Santiago de Chile (Figure 1). It has an area of 464 km² and a population of 282,415 inhabitants (Instituto Nacional de Estadística [INE], 2019), although it forms a conurbation with the commune of Padre Las Casas, which contributes an additional 72,892 inhabitants. Temuco is the regional capital and presents a role as a city-region with a strong centralising character on its surroundings and as a provider of services for the rest of the region, this being its main economic activity. This situation derives from its own history, as a city founded in 1881 with a strong military character to exercise the sovereignty of the Chilean State over Mapuche territory (Mansilla & Melin, 2019), centralising the economy and services of its environment since then. In addition, Temuco is one of the most attractive options to study within Chile, being the fourth city with the highest number of

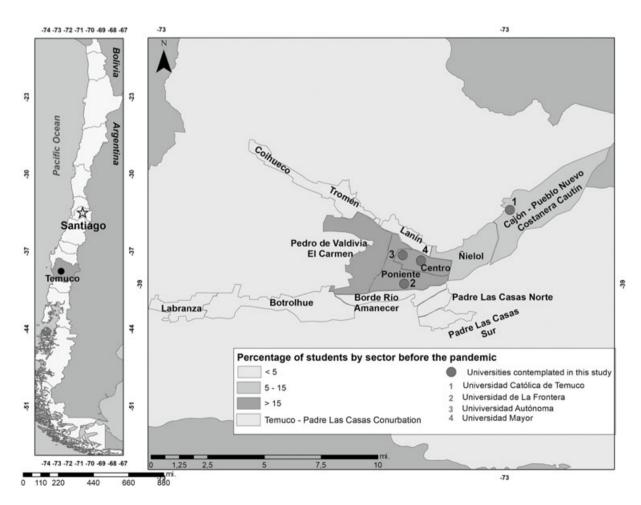


FIGURE 1 Location, sectors and main universities of Temuco. Source: Authors

university students after Santiago, Concepción and Valparaíso. For this reason, Temuco is currently considered a 'university city' (Riquelme, 2017; Schnettler et al., 2015), an identity that acquired in 2009, when there was a significant increase in enrolled students compared with the previous year (from 21,404 to 25,946). Since then, this number has continued to increase to exceed 33,000 university students, with another 20,000 from professional technical institutes.

Its main university centres are the Catholic University of Temuco (with 10,916 students enrolled in 2020), the University of La Frontera (10,164), the Autonomous University (6563), the Mayor University (3452) and the Santo Tomás University (1457), according to data from the National Council of Education (CNED, 2021). In addition, since 2015, this university boom was materialised in an alliance between the six main universities present in Temuco, the Municipality of Temuco and the private sector, constituting the *Temuco Univerciudad*, a platform that seeks to position Temuco nationally and internationally as a university city and promote a better perception of its academic and cultural offer. In this way, upon the arrival of students, a public-private initiative was added to underpin the 'university' character of the city.

5.2 | Principal results and residency changes during the pandemic

The information collected showed that before the pandemic (Figure 1), students were mainly concentrated in certain central areas of Temuco: Centro (24%), Pedro de Valdivia-El Carmen (16.5%) and Poniente (15.1%) sectors and in the peripheral sector of El Cajón (12.2%). These sectors, which correspond to areas relatively close to the main universities, accounted for 67.9% of the total declared accommodation, showing an important differentiation between sectors, with some spaces more studentified. Regarding the type of accommodation prior to the COVID-19 pandemic (Table 2), 49.8% of the students indicated HMOs, followed by accommodation in an apartment (33.4%), university residence (8.6%) and a room within a family home (7.8%). In this sense, it should be noted that, as in other Chilean cases, such as Concepción (Prada-Trigo, 2019), accommodation in PBSA is a minority, with the student rental market being

TABLE 2 Basic lodging statistics before and during the pandemic

dominated by private individuals who invest in HMOs or small apartments. Regarding the time that the students had been staying in that accommodation, an important continuity was found, as 29.4% of those surveyed mentioned living there for more than 4 years. This strong continuity in housing prior to the pandemic contrasts with other studies in Chile that indicate less continuity (Prada-Trigo, 2019). As a whole, students who had been in the same accommodation for more than a year were 72% of the total respondents, which indicates a low annual turnover according to the duration of university courses, different from that indicated by Smith et al. (2014) in their work on the United Kingdom.

In relation to the pandemic, only 35.7% of those surveyed indicated having staved in the same accommodation once it began (Table 2), the remaining 64.3% having moved to another sector of Temuco (6.7%), to another commune in the region (27.2%) or to another region (30.5%). Similarly, the pandemic would explain the return to the family nucleus, because 79.9% of those surveyed affirmed that they lived with their family nucleus, to which should be added 11.3% who resided with other relatives. On the contrary, more frequent options in periods of academic normality received low response percentages, as was the case of living with other students (1.9%), with friends (0.7%), with other people not included in the previous groups (2.9%) or living alone (3.3%). However, despite this return to the family nucleus. 44.4% of all students stated that they continued to pay full rent or a percentage of it. Among the causes of this, without considering those students who did not change their accommodation and continued to stay there indefinitely or sporadically, would be the desire of the students to maintain the accommodation or to safeguard their belongings (66.3%), or being forced by the lease contract (16.3%). This can be related to the aforementioned search for profitability from the rental of accommodation to students (Kallin & Shaw, 2019).

Analysing the variation in student numbers by sector before and after the pandemic began (Figure 2) shows a general drop in Temuco (56%), with areas where student numbers have fallen beyond the average (Poniente, Ñielol and Centro). Generally, the decrease has been over 60% in areas near the main universities, with only small increases standing out near the periphery, corresponding to areas with low student presence where variation has been minimal. The fact

Prepandemic situation		Situation during pandemic					
Prepandemic residence	e	Time living there		Current residence		Cohabitants	
House	49.8	Under 1 semester	15.0	Same	35.7	Nuclear family	79.9
Apartment	33.4	Over 1 semester, under 1 year	13.0	Same city, different sector	6.7	Other family members	11.3
НМО	7.8	1 to 2 years	25.9	Same region, different town	27.2	Living alone	3.3
University residence	8.6	2 to 4 years	16.8	Other region	30.5	Other students	1.9
Other option	0.4	Over 4 years	29.4			Friends	0.7
						Other people	2.9
Total	100		100		100		100

Source: Authors.

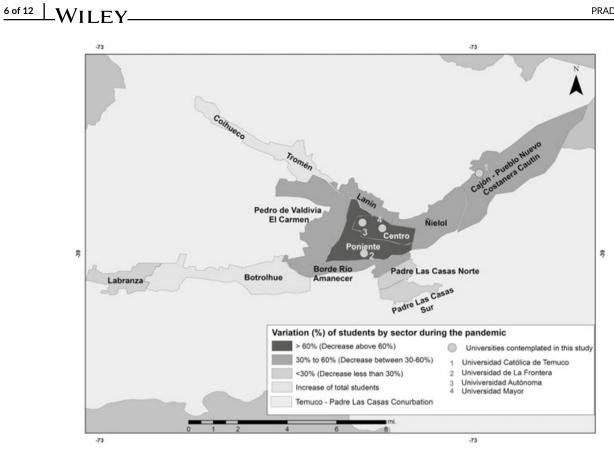


FIGURE 2 Variation (percentage) of students by sectors in Temuco during the pandemic. Source: Authors

that sectors with the greatest drop in student numbers are those which had the majority of students before the pandemic is indicative of the strong drop in student population.

5.3 Motivations to change residence due to the pandemic

Among the motivations to change residence due to the pandemic, the majority of respondents were inclined, on a Likert-type scale of 1 to 5 with 1 being not important and 5 very important, for the search of psychological well-being and the feeling of security provided by the family in these circumstances, obtaining an average above 4 (Table 3). There was also a concern for physical well-being, for the difficult economic situation they were experiencing or the need to save money in the face of the uncertainty caused by the pandemic. Along with this, two 'material' aspects also stood out, such as having a better internet connection and more space, two fundamental issues to appropriately attend to online teaching, and which have been highlighted in other studies (Gelles et al., 2020; Mertens et al., 2020). To a lesser extent, obtaining an average below 3, aspects related to the family appeared, such as the need to care for a relative or to be cared for by the family in case of illness, or that the family exerted pressure to force the student to return to the family home. In summary, the main motivations of the students were psychological and physical, linked to the need to

TABLE 3 Average of the main motivations to change place of residence

Motivation	Average
Psychological well-being	4.25
Security provided by the family	4.19
Physical well-being	3.91
Difficult economic situation	3.83
Save money	3.68
Better internet connection	3.67
More space	3.62
Need to take care of a family member	2.92
Need for family care	2.66
Forced by the family	2.04

Source: Authors.

feel protected and accompanied, along with economic and practical aspects related to the availability of adequate conditions for online classes.

Finally, a principal component analysis was carried out, with the aim of interpreting to what extent certain factors could explain most of the responses and identifying sets of representative variables. Using the SPSS software, four main components were selected, which explained 65.3% of the total variance (Table 4). The first component,

TABLE 4Coefficient matrix for scorecalculation in residency changemotivation components

	Component				
Motivation	1 Well-being	2 Spatiality	3 Family	4 Economy	
Difficult economic situation	-0.136	0.017	0.068	0.433	
Security provided by the family	0.206	-0.057	0.003	-0.024	
Need for family care	0.305	-0.074	0.367	-0.178	
Need to take care of a family member	0.143	-0.185	0.498	0.248	
Forced by the family	-0.323	0.136	0.526	-0.139	
Save money	0.000	-0.115	-0.200	0.721	
Physical well-being	0.433	-0.021	-0.094	-0.065	
Psychological well-being	0.366	-0.038	-0.111	-0.029	
Better internet connection	-0.053	0.578	-0.033	0.096	
More space	-0.105	0.635	0.005	-0.167	

Source: Authors.

called 'Well-being' (29% of the total variance explained) referred to those students who gave high scores to the physical and psychological well-being, related to prioritising mental and physical health over other aspects, which is clearly connected with other studies in the field of the current pandemic that highlight the importance of this dimension (Gelles et al., 2020; Kyne & Thompson, 2020). It should also be mentioned that these responses tended to be opposed to the imposition of return by families, whose coefficient was very negative for this component (-0.323). Therefore, this could be interpreted as a situation in which the return to the family home is not an obligation, but something related to the search for physical and psychological well-being, as mentioned in the answers.

The second component, called 'Spatiality' (15% of the total variance explained), which included internet connection and the availability of larger spaces, can be interpreted from two dimensions. From a general point of view, it can be interpreted as a need caused by the pandemic to spend the confinement period in the best possible conditions, and the relevant role that housing has in this regard (Patel et al., 2020), with the complement of a good internet connection as a channel for leisure and communication with the rest of the world (Kyne & Thompson, 2020). From a more specific point of view, for the student population it means going from a 'part-time' accommodation where little time was spent due to long hours at the university and where the internet was used above all for leisure time, to a 'full-time' accommodation as a consequence of the pandemic and in which a good internet connection is essential for online classes. In this way, previously not so important elements would be prioritised, such as having enough space to rest and work with privacy and an internet connection that allows to follow online classes properly, something that has been mentioned in other works (Blagg et al., 2020) and is indicated in Table 3. Therefore, it is logical that in the assessment of the respondents these two components are the ones that synthesise one of the most acute problems for students during the pandemic.

Component 3, called 'Family' (11% of the total variance explained), has the family as a structuring element, referring to those

students who gave high values to the need to care for a relative or to be cared for by the family, and who were pressured by their family to change residence. In this way, the family nucleus or a part of the extended family (with which more than 11% of the respondents would find themselves living) would explain the abandonment of the habitual residence. It is possible that the high correlation between these responses could be due to the fact that the family would have forced the student to return, either to be cared for or to care for a relative. In this component, the relatively high negative coefficient obtained by the motivation to save money (-0.200) is striking, and it would reinforce the decision to change accommodation as something fundamentally linked to the emotional and not to the economic. Finally, Component 4, called 'Economy' (10% of the total variance explained), would be linked to the need to save money or the economic difficulties caused by the pandemic. This motivation can be interpreted as a prioritisation of the economic, understanding it as a reaction to an adverse situation (loss of employment of the student or their family), something mentioned by Gelles et al. (2020). It can also be interpreted as a savings strategy, given that online classes would facilitate the return to the family and not paying the rent, especially in a context in which almost 30% of those surveyed paid a rent equivalent to at least 66% of the basic salary in Chile, year 2019. In any case, the answers reinforced the idea that the economic, although important, would have been a minority factor when changing accommodation.

5.4 | Changes in social relations from the pandemic

Finally, the respondents were asked to indicate on a Likert-type scale from 1 to 5 with 1 being *significant reduction* and 5 *significant increase*, how their social bonds changed during the pandemic in relation to friends, classmates, family, neighbours, neighbourhood organisations and neighbourhood businesses. The results, visible in Table 5, show

TABLE 5 Average variation in social relations during the pandemic

Social relationships	Average
Family	3.73
Neighbourhood businesses	2.77
Friends	2.53
Neighbours	2.27
Classmates	2.25
Neighbourhood organisations	1.83

Source: Authors.

 TABLE 6
 Coefficient matrix for score calculations in social relation evolution components

	Component			
Social relationships	1	2	3	
Friends	-0.071	0.486	0.052	
Family	-0.060	-0.065	0.986	
Classmates	-0.090	0.701	-0.165	
Neighbours	0.372	0.037	-0.059	
Neighbourhood organisations	0.351	0.056	-0.175	
Neighbourhood businesses	0.563	-0.282	0.178	

Source: Authors.

that with the exception of the family, the rest of the social bond were diminished, coinciding with what Elmer et al. (2020) and Odriozola-González et al. (2020) reported. Especially striking is the case of neighbours, classmates and neighbourhood organisations, whose decline was more pronounced in relation to neighbourhood businesses and friends, who resisted relatively well the conditions of the pandemic. These results somehow confirm the previous idea that the family was the institution most strengthened by the pandemic, whereas other entities such as the neighbourhood or the university suffered from the change of residence and online education.

Through the principal component analysis, three components of the evolution of social relationships were identified that explained 73.5% of the total variance, which are shown in Table 6. Component 1 (39% of the total variance explained) refers to those who indicated that their bonds with neighbours, neighbourhood organisations and neighbourhood businesses increased with the pandemic, with businesses close to their place of residence being especially important. The importance of these is logical, because the media and the political class made a general call to support neighbourhood businesses, which were one of the segments more affected by the pandemic (Montiel, 2020). In view of this, 42% of the students, who stayed in the same accommodation, probably decided to approach their neighbourhood through commerce and to a lesser extent through contact with their neighbours and neighbourhood organisations. In fact, only 16% of this student segment indicated that prior to the pandemic, on a scale of 1 to 5, their participation in neighbourhood

activities was quite a bit or a lot, whereas 62% indicated that their participation was little or none. Although this number may seem small, it is actually higher than the average for the entire surveyed population, which gave percentages of 8.9% and 75.2%, respectively, for these questions. Hence, the average participation in neighbourhood activities prior to the pandemic for this group was 2.19, higher than the 1.79 for all those surveyed. For this reason, it is not surprising that within this component, the percentage of those who increased their participation in neighbourhood activities during the pandemic was 24.9%, much higher than the other two components and the average number of respondents (7.4%). Therefore, this group corresponds to students who previously participated in neighbourhood activities and who tried to maintain relationships with neighbours, organisations and businesses in their environment during the pandemic, demonstrating an attachment to their place of residence.

Component 2 (20% of the total variance explained) refers to those respondents who indicated an increase in their relations with friends and classmates due to the pandemic. In this case, the second variable would have greater weight for this component, which can be explained by the importance that social networks and online communication have had on learning since the beginning of the pandemic. Probably the emergence of online teaching led to greater organisation and communication among some of the students, as mentioned by Schlenz et al. (2020). Although this student group stayed in the same accommodation in a similar percentage to Component 1 (40%), it differs from the previous one in that their participation in neighbourhood activities was already much lower before the pandemic (only 10.4% indicated that it was guite a bit or a lot) and the pandemic caused a greater decrease in it, an aspect that was indicated by 19.1% of those surveyed, compared with 8.7% who increased these activities. This would be, therefore, a group that during the pandemic was strongly linked with their academic peers and friends, being perhaps representative of those students mentioned in other works (Asanov et al., 2021), who with the coronavirus were able to maintain their routines and time dedicated to studying, staying in many cases in the same accommodation. This would be, therefore, a group less linked to their immediate environment and more related to their social environment, despite the physical distance from it.

Finally, Component 3, which explains 13.6% of the total variance, refers to those respondents who indicated a notable increase in family relationships during the pandemic, being representative of those students who returned home after the closure of the universities and the beginning of online teaching. In fact, the percentage of respondents in this group who continued to live in the same accommodation decreased to 29.4%, which contrasts with the previous groups and with the total group of respondents, where this percentage was 35.7%. This group, which prior to the pandemic was the one that least participated in neighbourhood activities (only 8.4% indicated quite a bit or a lot), dissociated themselves even more as a result of the pandemic. Its decrease in participation was 20.6%, compared with 4.6% that indicated an increase in it. Therefore, this group is representative of those students with a low interaction with their neighbourhood who, in the face of the COVID-19 pandemic, decided to return to

their families, possibly looking for the material, emotional and affective elements indicated above. This group would be the one that contributed the most to the destudentification process, by abandoning their place of residence in a higher percentage.

6 | DISCUSSION

This manuscript confirms the role of students as a group with great influence on the dynamics of those urban spaces with a high student concentration. The evolution of these neighbourhoods can be linked to phases or cycles of growth and decline, related to different factors (economy, entry of specialised companies in the rental market and actions of neighbours). In this way, the majority of destudentification processes have been approached from the PBSA as a triggering factor and of a permanent nature (Kinton, 2013; Kinton et al., 2016; Mulhearn & Franco, 2018). However, there are other disruptive events that can influence student preferences and a withdrawal from their traditional neighbourhoods, as was demonstrated in this research. Therefore, destudentification would be a phenomenon that can be interpreted not only from the offer of PBSA or the expectations and demands of students but also from the appearance of disruptive elements with an external or temporary character that influence this phenomenon.

Related to this, the concept of destudentification can be useful in this study, but there are some gaps in its capacity to interpret the consequences of COVID-19 on studentified sectors. First, in Temuco, this phenomenon does not arise from excessive student housing supply, as indicated by Kinton et al. (2016), but from demand collapsing due to COVID-19. Furthermore, although there is an emptying of the sector (Kinton, 2013), there is no physical downgrading nor any creation of the basis for a gentrification phenomenon, in contrast with the situation described by these authors in the case of Loughborough. Finally, the case of Temuco shows a situation where the decision to leave the neighbourhood is not totally personal but is conditioned by an external factor (the pandemic).

Also, destudentification due to COVID-19 is not permanent and would not present different phases, as indicated by Kinton et al. (2016), but would rather be transitory and swift. Because of this, its effects on the neighbourhood will also be temporary, although in the short term they may be as negative for local businesses and small property investors as those described by Mulhearn and Franco (2018) in their work on Liverpool. Thus, this study, based on the concept of destudentification, allows us to extend the debate over its various dimensions and manifestations.

In this case, the coronavirus caused a large part of the students to go back to their family homes, generating a destudentification of those sectors in which they were concentrated; sectors that, using the metaphor of urban vulnerability from a socioeconomic perspective (Andrey & Jones, 2008; Benner & Pastor, 2016; Prada-Trigo, 2018), would be more exposed to these changes. This would produce a proliferation of vacant houses and apartments and a reduction of activity in neighbourhood businesses, especially those focused on students (e.g., bars, stationery stores and liquor stores). The city is then configured as a space that reflects social dynamics, in this case linked to the departure of students.

Regarding the motivations of students to change residence during the pandemic, the main one was the psychological and physical wellbeing and the security provided by the family. In this way, the case analysed would relate the students of Temuco with other works (Kecojevic et al., 2020; Mertens et al., 2020) that highlighted the importance of motivation in relation to the pandemic. Although other relevant issues in the context of the pandemic such as the economy (Gelles et al., 2020) or having a good internet connection or an adequate work space (Famularsih, 2020; Tesar, 2020) were also important, the general assessment of these when changing residence was much lower. Despite this global image, there are interesting internal differences, especially when relating motivations and changes in social relationships. One of these is the fact that there is a student group that is less linked to the family and that in the face of the pandemic decided to stay in the neighbourhood, interacting more with neighbours, surrounding businesses and organisations. This group would be a reflection of the most committed or militant students, indicated by Hargrove et al. (2021) in their work on the role of neighbourhoods during the COVID-19 pandemic or by Long et al. (2020) regarding the contributions of medical students to their communities. This group contrasts with the other two, which are larger groups that prioritise family or relationships with friends and classmates to the detriment of the neighbourhood and neighbourhood organisations. These last two groups are indicative of the progressive reduction of student participation in neighbourhood issues that Prada-Trigo (2019) identified in Concepción (Chile) in the analysis of the recent dynamics of a strongly low-income studentified neighbourhood. This study, although referring to a different context, also highlights the importance of market dynamics in the Chilean student lodging model and is reflected in the high percentage of students who maintain their housing although they do not live there.

Finally, in relation to the evolution of the students' social relations in these months of uncertainty, Elmer et al. (2020) point out that interactions with peers and co-study decreased, increasing the number of university students who study alone (20% more than in 2019). The results of this manuscript point in the same direction, showing a moderate downward variation (2.25 out of 5). On the contrary, family was the institution most reinforced by the pandemic, reproducing the return that Aucejo et al. (2020), Pan (2020) and Husky et al. (2020) pointed out in their respective works in Spain, China and France. In all these countries, family appeared as the psychological or economic support for the students, although sometimes there were conflicts as a result of the student's return to home (Pan, 2020). Therefore, this manuscript provides more information on the causes and motivations of students to remain or not in their prepandemic accommodations, contributing to the understanding of these processes in relation to social bonds. In the future, it would be interesting to continue this research going deeper into the different groups or categories of students, as well as in the implications of COVID disruptions for local businesses and communities.

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7 | CONCLUSIONS

Education has been one of the dimensions most deeply affected by the COVID-19 pandemic, and the effects are not limited only to teaching but also to other aspects such as student accommodation or relationships with classmates and teachers. In relation to housing, as universities moved to online teaching and COVID-19 spread through different countries, students began to leave their prepandemic accommodations. The main result was a return to the family home and a temporary destudentification of some sectors that, until then, had a significant presence of students. However, if the hypothesis raised at the beginning of this research is taken into account, it can be pointed out that this return was important but not massive. Although the majority of those who returned to their families stopped paying for their accommodation, there was also a relatively large group that had to continue paying their rent, either due to the impossibility of moving their personal belongings or due to contractual obligation. These groups of students were caught by the dynamics of the market, being doubly hit by not being able to leave their rent in this context of uncertainties. The result is a significant number of cases in which the student returned to the family home, but the link with the accommodation was maintained, even if its use was sporadic or null. At the city level, Temuco's strong specialisation in recent years in the service sector and the growth in student rents would have made this city more vulnerable to this kind of phenomenon. At a neighbourhood level, the process of destudentification was more intense in the most central sectors. these near to the main universities.

The analysis of the Temuco case showed that the most important reason for students to leave their accommodation was physical or psychological well-being, an aspect present to a greater or lesser extent in almost all responses. However, in some subgroups, other motivations would be responsible for abandoning the accommodation. The greatest effect of this dynamic on social relationships must be understood at the neighbourhood level, where there is a growing disengagement of students from their residential environments, and a functional rather than symbolic relationship with the neighbourhood. One more aspect of the growing weight that market dynamics have on the different dimensions of life can be observed here. In contrast, the family was the social dimension most reinforced by the pandemic, consolidating its central role in many societies. Next were the neighbourhood businesses, possibly as a reflection of the restrictions imposed on mobility in many countries, including Chile, which explain an increase in purchases in nearby businesses.

Most of the papers that study the effects of the pandemic on students are from a pedagogical or health sciences perspective. Therefore, it is still necessary to analyse the effects on housing or social relations from a perspective that takes as a starting point the evolution of the studentified neighbourhoods. This manuscript has tried to shed some light in this direction, highlighting the variety of ways and motivations in which the pandemic affected students in their decisions, the general effect of which was an exit from the neighbourhoods where they were staying. Its importance, in addition to being representative of the current moment, lies in the possibility of establishing differences and parallels with other university cities, to generate a more complete understanding of student dynamics in times of pandemic.

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DATA AVAILABILITY STATEMENT

Data are available in https://drive.google.com/file/d/1LMGDqpNL6 UCdv0bpRn3qDRX1y7anRvy-/view?usp=sharing.

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REFERENCES

- Aguilera-Hermida, P. (2020). College students' use and acceptance of emergency online learning due to COVID-19. International Journal of Educational Research Open, 1, 100011. https://doi.org/10.1016/j. ijedro.2020.100011
- Al-Dwaikat, T., Aldalaykeh, M., & Rababa, M. (2020). The relationship between social networking sites usage and psychological distress among undergraduate students during COVID-19 lockdown. *Heliyon*, *6*, e05695. http://doi.org/10.1016/j.heliyon.2020.e05695
- Andrey, J., & Jones, B. (2008). The dynamic nature of social disadvantage: Implications for hazard exposure and vulnerability in Greater Vancouver. *The Canadian Geographer*, 52(2), 146–168. https://doi.org/10. 1111/j.1541-0064.2008.00206.x
- Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability*, 12(20), 8438. https://doi. org/10.3390/su12208438
- Asanov, I., Flores, F., & McKenzie, D. (2021). Remote-learning, time-use, and mental health of Ecuadorian high-school students during the COVID-19 quarantine. World Development, 138, 1–9. https://doi.org/ 10.1016/j.worlddev.2020.105225
- Aucejo, E., French, J., Araya, M., & Zafar, B. (2020). The impact of COVID-19 on student experiences and expectations: Evidence from a survey. *Journal of Public Economics*, 191, 104271. https://doi.org/10.1016/j. jpubeco.2020.104271
- Avni, N., & Alfasi, N. (2018). UniverCity: The vicious cycle of studentification in a peripheral city. *City & Community*, 17(4), 1248– 1269. https://doi.org/10.1111/cico.12338
- Baber, H. (2020). Determinants of students' perceived learning outcome and satisfaction in online learning during the pandemic of COVID-19. *Journal of Education and e-Learning Research*, 7(3), 285–292. https:// doi.org/10.20448/journal.509.2020.73.285.292
- Benner, C., & Pastor, J. (2016). Whither resilient regions? Equity, growth and community. *Journal of Urban Affairs*, 38(1), 5–24. https://doi.org/ 10.1111/juaf.12194

- Blagg, K., Blom, E., Gallagher, M. & Rainer, M. (2020). Mapping student needs during COVID-19. Available at: https://vtechworks.lib.vt.edu/ bitstream/handle/10919/98460/MappingStudentsNeeds.pdf? sequence=1yisAllowed=y (accessed 10 January, 2021).
- Chatterton, P. (2010). The student city: An ongoing story of neoliberalism, gentrification, and commodification. *Environment and Planning A*, 42, 509–514. https://doi.org/10.1068/a42293
- CNED. (2021). Índices de Educación Superior. Available at: https://www. cned.cl/indices-educacion-superior (accessed 5 January, 2021).
- Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and perspectives*, 38(1), 105–123.
- Elmer, T., Mepham, K., & Stadtfeld, C. (2020). Students under lockdown: Comparisons of students' social networks and mental health before and during the COVID-19 crisis in Switzerland. *PLoS ONE*, 15(7), e0236337. https://doi.org/10.1371/journal.pone.0236337
- Famularsih, S. (2020). Students' experiences in using online learning applications due to COVID-19 in English classroom. *Studies in Learning and Teaching*, 1(2), 112–121. https://doi.org/10.46627/silet.v1i2.40
- Fincher, R., & Shaw, K. (2009). The unintended segregation of transnational students in central Melbourne. Environment and Planning A, 41, 1884–1902. https://doi.org/10.1068/a41126
- Garmendia, M., Coronado, J. M., & Ureña, J. M. (2012). University students sharing flats: When studentification becomes vertical. *Urban Studies*, 49(12), 2651–2668. https://doi.org/10.1177/0042098011428176
- Gelles, L. A., Lord, S. M., Hoople, G. D., Chen, D., & Mejía, J. (2020). Compassionate flexibility and self-discipline: Student adaptation to emergency remote teaching in an integrated engineering energy course during COVID-19. *Education Sciences*, 10(11), 304. https://doi.org/10. 3390/educsci10110304
- Hargrove, T. W., García, C., & Cagney, K. A. (2021). The role of neighborhoods in shaping the aging experience during times of crisis. *Public Policy & Aging Report*, 31(1), 38–43. https://doi.org/10.1093/ppar/ praa041
- He, S. (2015). Consuming urban living in 'villages in the city': Studentification in Guangzhou, China. Urban Studies, 52(15), 2849– 2873. https://doi.org/10.1177/0042098014543703
- Holton, M., & Riley, M. (2013). Student geographies: Exploring the diverse geographies of students and higher education. *Geography Compass*, 7(1), 61–74. http://doi.org/10.1111/gec3.12013
- Hubbard, P. (2008). Regulating the social impacts of studentification: A Loughborough case study. *Environment and Planning A*, 40, 323–341. http://doi.org/10.1068/a396
- Hubbard, P. (2009). Geographies of studentification and purpose-built student accommodation: Leading separate lives? *Environment and Planning* A, 41, 1903–1923. https://doi.org/10.1068/a4149
- Husky, M. M., Kovess-Masfety, V., & Swendsen, J. D. (2020). Stress and anxiety among university students in France during Covid-19 mandatory confinement. *Comprehensive Psychiatry*, 102, 152191. https://doi. org/10.1016/j.comppsych.2020.152191
- Instituto Nacional de Estadística (INE). (2019) Síntesis de resultados Censo 2017. Región de La Araucanía. Available at: https://www. araucaniacuenta.cl/wp-content/uploads/2019/09/S%C3%ADntesisde-resultados-Censo-2017-La-Araucan%C3%ADa.pdf (accessed 4 January 2021).
- Kallin, H., & Shaw, M. (2019). Escaping the parasite of the student flat: Reflections on an experiment in cooperative housing. *Radical Housing Journal*, 1(1), 223–226. https://radicalhousingjournal.org/2019/ escaping-the-parasite-of-the-student-flat/
- Kecojevic, A., Basch, C. H., Sullivan, M., & Davi, N. (2020). The impact of the COVID-19 epidemic on mental health of undergraduate students in New Jersey, cross-sectional study. *PLoS ONE*, 15(9), e0239696. https://doi.org/10.1371/journal.pone.0239696
- Kenna, T. (2011). Studentification in Ireland? Analysing the impacts of students and student accommodation on Cork City. *Irish Geography*, 44(2–3), 191–213. https://doi.org/10.1080/00750778.2011.618073

- Kinton, C. (2013). Processes of destudentification and studentification in Loughborough. PhD Thesis, Loughborough University, UK.
- Kinton, C., Smith, D., & Harrison, J. (2016). De-studentification: Emptying housing and neighbourhoods of student populations. *Environment and Planning* A, 48(8), 1617–1635. https://doi.org/10.1177/ 0308518X16642446
- Kyne, S., & Thompson, C. (2020). The COVID Cohort: Student transition to university in the face of a global pandemic. *Journal of Chemical Education*, 97, 3381–3385. https://doi.org/10.1021/acs.jchemed. 0c00769
- Long, N., Wolpaw, D. R., Boothe, D., Caldwell, C., Dillon, P., Gottshall, L., Koetter, P., Pooshpas, P., Wolpaw, T., & Gonzalo, J. D. (2020). Contributions of health professions students to health system needs during the COVID-19 pandemic: Potential strategies and process for US medical schools. *Academic Medicine*, 95(11), 1679–1686. https://doi.org/ 10.1097/ACM.00000000003611
- Mansilla, P., & Melin, M. (2019). A struggle for territory, a struggle against borders. NACLA Report on the Americas, 51(1), 41–48. https://doi.org/ 10.1080/10714839.2019.1593689
- Mertens, G., Gerritsen, L., Duijndam, S., Salemink, E., & Engelhard, I. (2020). Fear of the coronavirus (COVID-19): Predictors in an online study conducted in March 2020. *Journal of Anxiety Disorders*, 74, 102258. https://doi.org/10.1016/j.janxdis.2020.102258
- Montiel, Y. (2020). Municipalidad de Temuco lanza campaña para apoyar almacenes de barrio. Araucanía Diario. Available at: https:// araucaniadiario.cl/contenido/6142/municipalidad-de-temuco-lanzacampana-para-apoyar-almacenes-de-barrio. (accessed 4 January 2021).
- Mulhearn, C., & Franco, M. (2018). If you build it will they come? The boom in purpose-built student accommodation in central Liverpool: Destudentification, studentification and the future of the city. *Local Economy*, 33(5), 477–495. https://doi.org/10.1177/ 0269094218792740
- Nakazawa, T. (2017). Expanding the scope of studentification studies. *Geography Compass*, 11(1), 1–13. https://doi.org/10.1111/gec3.12300
- Odriozola-González, P., Planchuelo-Gómez, A., Irurtia, M., & de Luis, R. (2020). Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university. *Psychiatry Research*, 290, 113108. http://doi.org/10.1016/j.psychres.2020. 113108
- Pan, H. (2020). A glimpse of university students' family life amidst the COVID-19 virus. Journal of Loss and Trauma, 25(6-7), 594–597. https://doi.org/10.1080/15325024.2020.1750194
- Parady, G., Taniguchi, A., & Takami, K. (2020). Travel behavior changes during the COVID-19 pandemic in Japan: Analyzing the effects of risk perception and social influence on going-out self-restriction. *Transportation Research Interdisciplinary Perspectives*, 7, 100181. https://doi. org/10.1016/j.trip.2020.100181
- Patel, J. A., Nielsen, F. B. H., Badiani, A. A., Assi, S., Unadkat, V. A., Patel, B., Ravindrane, R., & Wardle, H. (2020). Poverty, inequality and COVID-19: The forgotten vulnerable. *Public Health*, 183, 110–111. http://doi.org/10.1016/j.puhe.2020.05.006
- Prada-Trigo, J. (2018). When he woke up, the crisis was still there. Consequences of the economic crisis in the city of Madrid and effects on territorial vulnerability. *Geoforum*, 97, 54–65. https://doi.org/10. 1016/j.geoforum.2018.10.012
- Prada-Trigo, J. (2019). Understanding studentification dynamics in lowincome neighbourhoods: Students as gentrifiers in Concepcion (Chile). *Urban Studies*, 56(14), 2863–2879. https://doi.org/10.1177/ 0042098018807623
- Prada-Trigo, J., Cornejo, C., & Quijada-Prado, P. (2020). Neighborhood changes as a consequence of the arrival of university students in two areas of Concepción-Chile. *Revista INVI*, 35(99), 109–129. http://doi. org/10.4067/S0718-83582020000200109

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- Reynolds, A. (2020). Geographies of purpose-built student accommodation: Exclusivity, precarity and (im)mobility. *Geography Compass*, 14(11), e12543. https://doi.org/10.1111/gec3.12543
- Riquelme, H. (2017). Cruzando La Araucanía (Chile). Un análisis de las prácticas de movilidad cotidiana de universitarios adscritos a la gratuidad. *Cultura-Hombre-Sociedad*, 27(1), 23–50. https://doi.org/10. 7770/cuhso-v27n1-art1131
- Sage, J., Smith, D., & Hubbard, P. (2011). The rapidity of studentification and population change: There goes the (student)hood. *Population, Space and Place*, 18, 597–613. https://doi.org/10.1002/psp.690
- Sage, J., Smith, D., & Hubbard, P. (2012). The diverse geographies of studentification: Living alongside people not like us. *Housing Studies*, 27(8), 1057–1078. https://doi.org/10.1080/02673037.2012. 728570
- Schlenz, M. A., Schmidt, A., Wöstmann, B., Kramer, N., & Schulz, N. (2020). Students' and lecturers' perspective on the implementation of online learning in dental education due to SARS-CoV-2 (COVID-19): A crosssectional study. *BMC Medical Education*, 20(1), 1–7. http://doi.org/10. 1186/s12909-020-02266-3
- Schnettler, B., Denegri, M., Miranda, H., Sepúlveda, J., Orellana, L., Paiva, G., & Grunert, K. (2015). Family support and subjective wellbeing: An exploratory study of university students in southern Chile. *Social Indicators Research*, 122, 833–864. https://doi.org/10.1007/ s11205-014-0718-3
- Smith, D. P. (2019). Studentification. In The Wiley Blackwell Encyclopedia of Urban and Regional Studies (pp. 1–3). Wiley Blackwell. https://doi.org/ 10.1002/9781118568446.eurs0325
- Smith, D. P., & Holt, L. (2007). Studentification and 'apprentice' gentrifiers within Britain's provincial towns and cities: Extending the meaning of

gentrification. Environment and Planning A, 39(1), 142–161. http://doi.org/10.1068/a38476

- Smith, D. P., Sage, J., & Balsdon, S. (2014). The geographies of studentification: 'Here, there and everywhere'? *Geography*, 99(3), 116–127. https://doi.org/10.1080/00167487.2014.12094405
- Tesar, M. (2020). Towards a post-Covid-19 'new normality?': Physical and social distancing, the move to online and higher education. *Policy Futures in Education*, 18(5), 556–559. http://doi.org/10.1177/ 1478210320935671
- Tull, M. T., Edmonds, K. A., Scamaldo, K., Richmond, J., Rose, J., & Gratz, K. (2020). Psychological outcomes associated with stay-at-home orders and the perceived impact of COVID-19 on daily life. *Psychiatry Research*, 289, 113098. https://doi.org/10.1016/j.psychres.2020. 113098
- Unger, S., & Meiran, W. R. (2020). Student attitudes towards online education during the COVID-19 viral outbreak of 2020: Distance learning in a time of social distance. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 256–266. https://doi.org/10.46328/ijtes. v4i4.107

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