



Barriers and facilitators to the retention and participation of socially, economically, and culturally disadvantaged university students. An international systematic review

María R. Belando-Montoro^{*}, María Naranjo-Crespo, M. Aranzazu Carrasco-Temiño

Complutense University of Madrid. C/ Rector Royo Villanova, 1. 28040 Madrid, Spain, 91 394 6190

ARTICLE INFO

Keywords:

Participation
Retention
University
Systematic review

ABSTRACT

One of the major challenges still facing universities is the achievement of inclusion in all its areas since the main progress made so far has been in terms of access. The aim of this systematic review is to detect the barriers and facilitators for the retention and participation of university students with social, economic, and/or cultural disadvantages. The search conducted of the Scopus and Web of Science databases yielded 31 articles (between 2015 and 2020) that met the inclusion criteria. Findings indicate a notable coincidence between the barriers and facilitators: economic, cultural, linguistic, family and motivation. These data will help universities design actions that make it easier for all students to attend and participate fully in university life under conditions of equality.

1. Introduction

Higher education currently plays a fundamental role in the development of societies, as well as in the promotion of lifelong learning opportunities for all. Its commitments include ensuring inclusive, equitable, and quality education for all (United Nations for Education, Science, and Culture Organization [UNESCO], 2016). The concept of inclusive education must go beyond the simple elimination of physical barriers and prejudice towards minorities (Malins, 2016; Miskovic & Curcic, 2016). It represents a broader and more complex concept that seeks the full participation of students in the entire education process.

The principles of inclusion and equity are not only about ensuring access to education, but also about providing quality learning spaces and pedagogies that allow students to progress, understanding their realities, and working towards a fairer society (UNESCO, 2017, p. 18)

The principle of universal access to education has led in recent decades to *mass* admissions to university. International literature has shown that the dimension of university access has undergone a transformation, moving away from a model designed for students from privileged economic, social, and cultural backgrounds towards a model *that opens its doors* to students who were not previously represented in the institution (Dovigo, 2017; Gause, Dennison & Perrin, 2010). However, this model based on universal access to education does not address the institutional barriers that students with non-traditional identities face once they have been admitted to the institution. Hence, the current scenario is shaped by *an exclusive inclusion* that perpetuates situations of inequality (Ezcurra, 2011; O'Shea, Lysaght, Roberts & Harwood, 2016; Posselt, Reyes, Slay, Kamimura & Porter, 2017).

^{*} Corresponding author.

E-mail address: mbelando@edu.ucm.es (M.R. Belando-Montoro).

Arana and Bianculli (2005) suggests that, while the university education community is currently very diverse in terms of socio-economic and cultural background, it is imperative to address the challenge of student retention if it is to move towards a more equitable system. In terms of studying the phenomenon of university drop-outs, it is essential to shift the focus from the personal, socio-economic, and cultural characteristics of students to the analysis and transformation of institutional barriers. In this regard, Donoso and Schiefelbein (2007) emphasise that the principle of universal access has been linked to the principles of equal opportunities (not equity) and meritocracy, ignoring the elements that determine differences in educational opportunities for students, and avoiding the responsibility of ensuring the fairness of the system. This approach perpetuates educational processes aimed at students from privileged backgrounds with a high social, cultural, economic, and previous educational capital.

Regarding student participation, Soler, Pallisera, Planas, Fullana and Vilà (2012) note that universities today are still seen as a strictly academic space, without considering their potential as a space for transformation. This makes it difficult for students to participate effectively in the different university spaces, from the classroom to university leadership structures. However, while the challenge of participation in different university spaces affects all students, some encounter additional barriers when it comes to exercising their right to participation. In this regard, about the case of refugee students, Naidoo (2017) points out that it is required, amongst other things, to break away from the generic model of one-size-fits-all academic support, which does not take into account elements such as life experiences and previous education of these students.

Therefore, it is imperative to continue examining institutional policies and practices to promote the development of inclusive educational processes in universities, thereby feeding into institutional transformation (Bowles & Brindle, 2017). This analysis must not only take into account the dimension of student access to university, a journey that began several decades ago with the first policies based on the principle of universal access to education and equal opportunities. By contrast, there are other dimensions of inclusion that deserve reflection because these aspects are indispensable for the achievement of effective equity, like student retention and participation in the university institution.

2. Methodology

The aim of this systematic review is to detect the main barriers and facilitators identified in the international literature for the retention and participation of university students who are at a social, economic, and/or cultural disadvantage. Accordingly, we began by setting the research aims of the study and the criteria for inclusion and exclusion in the review. We then conducted a bibliographic search of the databases. Thirdly, the articles included were selected in the following way: 1. Title and abstract evaluation; 2. Full-text evaluation; 3. Quality evaluation; 4. Data extraction. Finally, the data obtained were analysed, results and conclusions were obtained.

2.1. Inclusion criteria

The following criteria were defined to determine the inclusion or exclusion of articles in the systematic review:

- 1) Relevance of the subject: the study focuses on university retention and participation of socially, economically, and/or culturally disadvantaged students.
- 2) Setting: the study was conducted in a university setting. Therefore, studies encompassing other stages within the education system or non-formal learning environments are excluded.
- 3) Date of publication: the article was published between January 2015 and December 2020.
- 4) Design: the article uses qualitative, quantitative, or mixed research methods. Theoretical proposals, literature reviews, systematic reviews, meta-analyses, and scoping reviews are excluded.
- 5) Language: the article is published in English or Spanish.
- 6) Open Access: only articles with full-text open access are included.
- 7) Barriers, facilitators, or actions: the study should address barriers, facilitators, or actions for the retention or participation of university students who are at a social, economic, and/or cultural disadvantage.

2.2. Literature search

The bibliographic search was carried out in three stages. Firstly, we conducted a preliminary search in high-impact journals (Q1 and Q2) specialising in university and inclusive education. The objective here was to determine which search terms would later be used in the databases based on the identification of the main groups of students who have traditionally been excluded, discriminated against, or made invisible within university institutions on account of social, economic, and/or cultural factors. The groups identified were Indigenous students in South America, Canada, Australia, and New Zealand; students of a Roma Gypsy ethnicity in Spain and Portugal; students of African descent in the United States and South Africa. Secondly, we performed a title search in the Scopus and Web of Science databases using the terms identified in the previous step, as well as other terms, so as to narrow the search to the university field. Thirdly, after evaluating the eligibility of the articles obtained from the previous search (title and summary evaluation, full-text evaluation, quality evaluation, and data extraction), another title search was performed in the databases including terms referring to other groups of students who had not been considered in the first search: native ethnic students, Aboriginal students, refugee students, first-generation students, Latino students, Muslim students, and albino students. The two searches of the two databases retrieved a total of 1184 documents.

2.3. Article selection

To select the items, we first excluded documents that were not available in full-text open access, as well as duplicate documents. Two authors then independently assessed the eligibility of the articles. Disagreements between the two authors were resolved by including the third author in the evaluation of eligibility for articles where no agreement was initially reached. Firstly, the title and abstract were evaluated to determine whether the article met the inclusion criteria. In cases where the title and abstract did not include sufficient information to determine eligibility, a full-text evaluation was conducted. Secondly, the articles selected were evaluated in their full text version. At this stage, the quality of the articles was also assessed, and a bias risk assessment was. The evaluation tools developed by Long, Godfrey, Randall, Brett and Grant (2002) for quantitative and qualitative studies were used for this purpose. Bias risk was assessed with low to high-risk scores. When the quality assessment indicated a low risk of bias, data were extracted from the study. No articles were excluded because of a high risk of bias. The process for evaluating the eligibility of the studies included in the review is presented in Fig. 1, based on the PRISMA system (Moher, Liberati, Tetzlaff, Altman & Group, 2009).

2.4. Data extraction

Having selected the studies included in the review, a data extraction table was created, and a pilot test was performed on the first 10 articles included in the review. The data were extracted by one author and confirmed by another. In this case, there were no disagreements between the two authors. The data extracted from each of the studies include: country, dimension (participation, retention), and protected group (Indigenous, Aboriginal, and ethnic native students; Refugee and international students; African American and native African students; Roma Gypsy and albino students; Students in situations of economic and social vulnerability; First-generation students; Muslim students; Other ethnic minorities). The presence of the *barriers and facilitators* categories in the studies was also identified as a preliminary step in conducting the content analysis Table 1. presents the basic data extracted from the 31

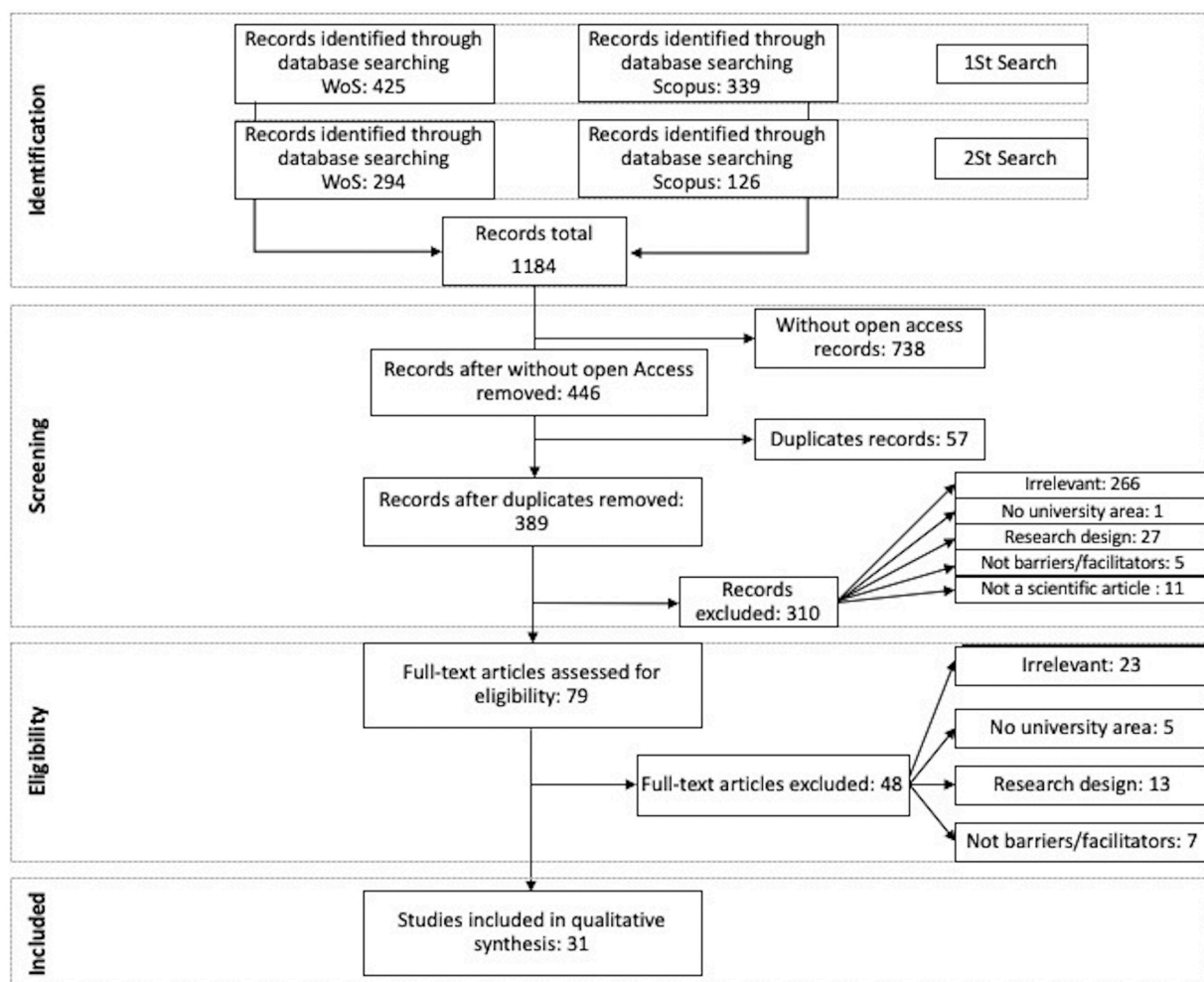


Fig. 1. Flow chart. The flow of the selected items according to the indicated criteria.

documents included in the review.

3. Results

This section presents the main barriers, facilitators, and actions identified by the international literature for the inclusion of university students at an educational disadvantage, focusing on the main protected groups in terms of their participation and retention.

3.1. Indigenous, aboriginal, and native ethnic students

It is important to note the significantly higher number of articles published in recent years on this group of students about other protected groups linked to situations of socio-economic and cultural disadvantage. In this regard, the scientific production on the subject is contextualised in Australia, New Zealand, Brazil, Canada, the United States, Colombia, Costa Rica, and Argentina.

Usma et al. (2018), Hearn, Benton, Funnell and Marmolejo-Ramos (2021); Oliven and Bello (2016); Hanne (2018), and Holsti et al.

Table 1

The codes are related to the database searched (S: Scopus/W: WOS) and the search number (1: 1st search/2: 2nd search).

	Cod.	Author and date	Country	Categ.	Protected Group
Retention	49 (#W1:51)	Mayer & Cerezo, 2018	Argentina	F	Economically and socially vulnerable students, and first-generation students
	47 (#W1:40)	Walker-Janzen et al., 2019	Chile	B / F	
	33 (#S2:84)	Flanagan, 2017	Chile	B / F	
	58 (#W1:63)	Hanne, 2018	Argentina	B / F	Indigenous, Aboriginal, and Native Ethnicity students
	9 (#S1:29)	Hearn et al., 2021	Australia	B	
	53 (#W1:56)	Méndez & Delgado, 2018	Colombia	B / F	
	6 (#S1:21)	Pihama et al., 2019	New Zealand	B / F	
	15 (#S1:39)	Usma et al., 2018	Colombia	B	
	37 (#W1:7)	Murphy et al., 2020	USA	B / F	African American and Native African students / Latin Students / Economically and socially vulnerable students, and first-generation students
	80 (#W2:132)	Holsti et al., 2015	USA	B / F	Other ethnic minorities
Part. Ret.	43 (#W1:26)	Pino et al., 2019	Costa Rica	F	Indigenous, Aboriginal, and Native Ethnicity students
Participation	54 (#W1:57)	Boonzaier & Mkhize, 2018	South Africa	B / F	African American and Native African students
	13 (#S1:35)	Thompson-Rogers, Davis, Davis-Maye & Turner, 2018	USA	F	
	55 (#W1:58)	Vincent & Hlatshwayo, 2018	South Africa	B / F	African American and Native African students / Economically and socially vulnerable students, and first-generation students
	1 (#S1:4)	Hearn & Kenna, 2020	Australia	F	Indigenous, Aboriginal, and Native Ethnicity students
	77 (#W2:119)	Oliven & Bello, 2016	Brazil	B / F	
	79 (#W2:126)	Brown & Saeed, 2015	United Kingdom	B	Muslim students
	78 (#W2:120)	Soto, 2016	Chile	B	Economically and socially vulnerable students, and first-generation students
	68 (#W2:23)	Bacher et al., 2020	Austria	B / F	Refugee and international students
	65 (#W2:8)	De Wit et al., 2020	Braszil	B / F	
	25 (#S2:16)	Farrell et al., 2020	Irlanda	B / F	
Others	52 (#W1:55)	Sato et al., 2018	USA	B	Economically and socially vulnerable students, and first-generation students
	3 (#S1:6)	Goenechea et al., 2020	Spain	B / F	Romani and albino students
	65 (#W1:115)	Phatoli et al., 2015	South Africa	B / F	
	7 (#S1:22)	Cook et al., 2019	Canadá	F / F	Indigenous, Aboriginal, and Native Ethnicity students
	69 (#W2:31)	Manejwala & Abu-Ras, 2019	EEUU	B / F	Muslim students
	71 (#W2:35)	Degli & Scott-Baumann, 2019	United Kingdom	F	
	29 (#S2:46)	Grüttner, 2019	Germany	F	Refugee and international students
	31 (#S2:71)	Streitwieser & Brück, 2018	Germany	F	
	5 (#S1:17)	Dos Santos, 2019	USA	B	
	27 (#S2:43)	Jack et al., 2019	United Kingdom	B	

B: Barriers; F: Facilitators.

(2015) have identified barriers faced by Indigenous, Aboriginal, and Native Ethnic Students in higher education.

Regarding student retention, authors such as Usma et al. (2018) focused their study on English learning as required by Colombian universities in order to graduate. While Indigenous students have a positive attitude towards learning this language, they reported encountering difficulties related to its use, both for personal and academic purposes.

Hearn et al. (2021), within the Australian context, pointed out that the main barriers to the retention of these students are their family responsibilities, linked to caring for parents, children, and even other members of the extended family. In Brazil, Oliven and Bello (2016) noted that the institution did not take into account the reality of new students, who often work and need more time to meet academic requirements, adding to this a discriminatory environment that considers these students to be inferior. In this regard, in Argentina, Hanne (2018) indicated that the main barriers are: related and relational aspects (lack of funding, competition, incomprehension, absence of dialogue, lack of support in adaptation, lack of communication, lack of integration, poor coexistence, prejudices); material resources (lack of specialised bibliography, infrastructure, lack of up-to-date books, access to technologies, request for material resources that are not available to all people); teachers (lack of dedication amongst some teachers, lack of commitment amongst teachers, discouragement from teachers, lack of help from teachers, lack of teachers, disregard for the economic realities of students, some teachers generate fear); academic and formative aspects (incomprehensible bibliography, contents of subjects, entrance exams, academic requirements, lack of professional practices, lack of workshops or courses concerning the degree, work in groups or out in the field, system of regularities); administrative and organisational aspects (disorganisation, course hours, inflexibility in schedules, the university is not prepared for students who need to work and study, university bureaucracy, the roster is not adhered to). In the United States, about Native Americans in Alaska, Holsti et al. (2015) point out that the obstacles to choosing biomedical careers include poorly funded tribal schools, lack of mentors, cultural barriers, and rural geography.

Hanne (2018); Cook, MacKinnon, Anderson and Whetter (2019); Holsti et al. (2015); Méndez and Delgado (2018); Oliven and Bello (2016); Pihama, Lee-Morgan, Smith, Tiakiwai and Seed-Pihama (2019) and Hearn and Kenna (2020); Pino, Cerdas and González (2019) have discussed facilitators for Indigenous, Aboriginal, and Native Ethnic students in higher education.

Hanne (2018), once again in the Argentine context, identifies the main facilitators for retention based on three dimensions: 1. Socio-personal dimension (individual characteristics, presence of *significant others*, attachments, and family); 2. Academic and formative dimensions (accessibility of the subjects, support from the tutorial programme, remedial classes, amongst others); 3. Material aspects (accommodation, financial support, study grants, materials grants, free university, university residence, work).

In the Brazilian context, Oliven and Bello (2016) refer to the Affirmative Action Programme (run by the Federal University of Rio Grande do Sul) based on quotas of places in all undergraduate courses reserved for Black and Indigenous applicants from primary and secondary schools in the public system. They also mention financial support and research grants.

In their study on Native Americans in Alaska, Holsti et al. (2015) identified as facilitating action several programmes that include a series of adaptations designed to promote confidence, student engagement, and retention in scientific disciplines. The programme offers a residential experience on the University of Utah campus, and students receive a stipend, food plans, and access to campus services. Students stay together to avoid social isolation and participate in educational activities alongside social events to create supportive relationships between peers and mentors. In Canada, a plan was implemented to, amongst other things, support Indigenous students from rural communities during and after their admission to health degrees. Teachers are actively involved in this programme (Cook et al., 2019).

The experience of the National University of Costa Rica with the implementation of the Plan for Indigenous Peoples has led, amongst other things, to an increase in the enrolment of Indigenous students and the visibility of that population. To this end, grants, inductions to university life, and support for academic work have been provided. In this experience, the active participation of Indigenous university students in the planning and implementation of the various actions is key (Pino et al., 2019). In Colombia, an intervention was designed and implemented through pilot mathematics courses with the aim of improving the drop-out rate amongst Indigenous and Afro-Colombian students from the university education system. A project-based learning methodology was used to place the student in the heart of their own education and help them to deal with everyday problems (Méndez & Delgado, 2018). Another article in the study focuses on the doctoral level, in particular a Māori and Indigenous PhD support programme in New Zealand. The programme included, amongst other features, the creation of spaces for the inclusion of Māori cultural approaches and pedagogies and included Māori and Indigenous academics as supervisors. The work of these supervisors went beyond support in the planning of research and writing of doctoral theses, offering students opportunities to present their work and publish or advice to attend the appropriate conferences, amongst other things (Pihama et al., 2019).

The study conducted by Hearn and Kenna (2020) about Australian universities found that high success rates for Indigenous students were achieved at universities with support programmes (including scholarships, study spaces, and senior/executive Indigenous staff, amongst others), although the most effective strategies and programmes were not identified.

About university participation, no articles have been identified that specifically address this dimension, although it is included within some of them, for instance, the research of Hearn and Kenna (2020).

3.2. Refugee students and international students

The international literature on barriers and facilitators for the participation of refugee students in higher education is also prolific. The scientific production found is contextualised in Brazil, Austria, Germany, the United States, and Ireland.

Barriers to inclusion in higher education for refugee students have been studied by De Wit, Leal and Unangst (2020), Bacher (2020), Farrell et al. (2020) and Jack, Chase and Warwick (2019).

Regarding participation, in Brazil, De Wit et al. (2020) identify barriers related to racism, xenophobia, learning, and language

difficulties. For Bacher et al. (2020), in Austria, the main barriers are associated with the level of language (a C1) and, where appropriate, the passing of graded tests for specific courses or subjects.

In Ireland, Farrell et al. (2020) identified financial, structural (for example inadequate facilities in direct provision centres, like a lack of broadband and quiet space to study, had a negative impact on participants' learning experiences), cultural and digital equity barriers (the study is from a university that has online programmes) to accessing higher education. The difficulty in accessing information on grants and higher education is also discussed. In response to these barriers of access, Dublin City University became a "University of Sanctuary" in 2017, offering grants to refugees.

Jack et al. (2019) detected barriers to seeking institutional support to improve student health and welfare. Students were not aware that the university had a health and welfare service. Even those who knew of its existence did not have a real idea of what support was available and how they could access it. Participants also placed significant emphasis on stigma linked to their cultural identity as a barrier to why they do not seek help. Almost all of the students involved described their community's attitude to talking about mental health and that they are expected to simply "get on with things". They were reluctant to openly acknowledge that they had a mental health problem. They also showed distrust of talking to a stranger about their life and history. Some students believed that the services were not equipped to help them or other students who might come from a traumatic environment. Many of the current constraints identified in university health and welfare services were attributed to structural and resource constraints.

De Wit et al. (2020), Streitwieser & Bruck (2018) and Gruttner (2019) identify facilitators that help refugee students in higher education.

The main facilitators found at the two Brazilian universities explored in the De Wit et al. study (2020) include legal assistance to help them, for example, with applications for asylum or the recognition of foreign qualifications, amongst others. Events are also organised on issues including migration and refugees, and social actions are carried out to assist vulnerable immigrants (Portuguese language courses, cultural activities, computer classes, psychological assistance, etc.). Other facilitators are related to language training (Bacher et al., 2020).

In Germany, Streitwieser & Bruck (2018) observed different facilitators, for example German classes, campus, and library visits to get information about university facilities and academic provision, peer support programmes in which national students assist refugees with different academic issues, meetings to discuss traumatic experiences, and intercultural workshops. However, the services offered did not go beyond information on higher education. The authors suggest, in this regard, that instead of rejecting refugees who lack the necessary credentials, they should be redirected towards other viable avenues, such as vocational training.

Research by Gruttner (2019) in Germany showed that international and refugee students are preparing for higher education degree programmes through language courses and specific subject preparation courses at universities and colleges. Course membership can act as a social resource of resilience for refugee students in preparing for their studies.

With respect to international students, the two articles identified (Dos Santos, 2019; Sato, Hodge & Eckert, 2018) are situated in the American context. Regarding Chinese international students, Dos Santos (2019) points to situations of discrimination linked to language learning, skin colour, and place of origin as the main barrier. About the experiences of international student-athletes at a *Historically Black University*, Sato et al. (2018) highlight that the main barriers are cultural and linguistic differences, translated into the additional effort, limited class participation, and differential treatment from teachers as a result of stereotyped images; negative social experiences due to situations of racial discrimination and a lack of support from peers; the lack of institutional resources, in terms of funding and teachers, who point out that they have additional tasks, which gives them less time to pay attention to students.

3.3. African american and native african students

The international literature on inclusion in higher education amongst African American and Native African students has identified different barriers and facilitators for the participation and retention of these students in university institutions. It is also relevant to note that some of the studies identified adopt a cross-sectional approach, linking the category studied with other conditions that may result in disadvantaged situations such as gender, sex-gender identity, and socio-economic background. The scientific production identified on the subject is contextualised within South Africa and the United States. Even so, while the literature on the inclusion of African American and Native African students in higher education is extensive, few studies address barriers and facilitators for inclusion.

In terms of participation and the intersectionality approach, Boonzaier and Mhize (2018) point to the persistence of an institutional culture based on power relations rooted in racialisation, gender, heteronormativity, and cisgender norms as the main barriers for native African Transgender students. This translates into experiences of alienation, invisibility, a feeling of being *on the other* side of the norm, and experiences of interpersonal discrimination. In terms of facilitating elements, the literature has highlighted the vision of the university as a space for freedom and recognition of cross-sectionality.

Also in relation to barriers to participation, in this case, of native working-class African students, Vincent and Hlatshwayo (2018) highlight the feelings of alienation, isolation, and exclusion generated by previous experiences and schooling, cultural and class backgrounds, the language barrier, the lack of financial resources to participate in activities, *institutional rituals* that selectively expose disadvantaged students to promote inclusion, manifest racism, and shame about academic failure.

Regarding student retention, in the US, Murphy et al. (2020) evaluate a random intervention aimed at strengthening the sense of belonging of first-generation and racial minority students. amongst barriers reported by students highlighted living far away, which not only reduces their study time but also their ability to participate in student groups and campus events. In response, an intervention was carried out in which, through reading about the academic and social challenges of other students and writing about their own experiences, there was a greater sense of social and academic adjustment that led these students to remain at university for the next two

academic years.

In Thompson-Rogers's et al. study (2018) on a postsecondary programme developed to increase the population of black doctors and health workers in the United States, the main facilitator found in the study is mentoring. Mentoring is developed between staff and students as well as peer mentoring and informal mentoring relationships. This has led to an increase in the retention rate for black students.

3.4. Roma gypsy and albino students

Two groups that suffer a major disadvantage as a result of a history of discrimination are albino students in South Africa and Roma Gypsy students in Spain.

With reference to albino students, Phatoli, Bila and Ross (2015) noted that the main barriers to the inclusion of these students are situations of discrimination, stereotypes, myths, and beliefs; religious views about albinism; ignorance and lack of knowledge about the albino condition; difficulties in reading notes; negative thoughts and emotions about their own condition. With respect to facilitators for the inclusion of these students in university contexts, the support of family and friends and university support systems are highlighted.

Concerning Roma Gypsy students, Goenechea, Gallego, Amores and Gómez (2020) noted that the main barriers are the absence of references to the Roma Gypsy people in subjects, the absence of concrete measures for the reception and presence of minority groups, *insults* from teachers and other professionals (e.g., work placement supervisors) and racist and stereotypical comments from their peers. The key facilitating elements are family role models, family support, the motivation to demonstrate that Roma Gypsies can study at university, the visibility of renowned and esteemed Roma Gypsies, institutional intervention in situations of discrimination, the visibility of Roma Gypsy students in the university, the training of university professors on Roma Gypsy culture, tradition, and history; the inclusion of Roma Gypsy culture on degree syllabuses, and positive discrimination actions.

3.5. Students in situations of economic and social vulnerability, and first-generation students

The international literature on inclusion in higher education amongst students in situations of economic and social vulnerability, and first-generation students has identified different barriers and facilitators for the participation and retention of these students in university institutions. No articles have been identified that specifically address the challenge of participation. The scientific production identified on the subject is contextualised within Chile and Argentina

Firstly, in relation to the challenge of retaining students in situations of economic and social vulnerability, Mayer and Cerezo (2018) point to the system of grants and scholarships as the main facilitator. This allows students to lead the life of a regular university student and expand their educational horizon; meeting their needs in terms of food and accommodation; a sense of *relief* and having achieved a *milestone*; autonomy, stability, and possibilities of planning; it promotes self-imposed standards of excellence and commitment to studies; it improves group membership and the possibility of establishing new links. Another element would be the mentoring system, which contributes to improving relational aspects, confidence, motivation, and perceived distance from institutional culture. In the case of Argentina, two elements (grants and the mentoring system) are included in the University Social Programme for young people facing situations of social vulnerability.

In the study conducted in Chile by Walker-Janzen, Véliz-Campos and Veliz (2019), students identified not only grants, but also family support, the learning environment, and faculty members as facilitators. And the faculty interviewed related the academic achievement of these students to their tenacity and determination in their academic goals.

Regarding first-generation students at university in Chile, Soto (2016) detected various barriers, such as the higher academic requirements of the university and, in some cases, the recreational possibilities offered by the university space that negatively affect their academic performance. As facilitators, the research highlights the support of parents and, also various motivations including social mobility, vocation, and recompense for the efforts made by parents to support them in their academic careers.

Also in Chile, Flanagan (2017) found numerous barriers to retention: a) cultural capital: first-generation students had less help and academic support from their family when doing their work, and even to adapt to university life; b) their socio-economic status, which, on the one hand, caused stress wondering whether they would be able to afford all their expenses until graduation and, on the other hand, meant that they had to find jobs to cover their academic expenses, so they were more overburdened with work and sometimes did not attend classes so they could rest; c) the differences between secondary school and university, which put them at a disadvantage because they were ill prepared, and, in some cases, they even needed more time to complete university studies, consequently putting them under even more economic strain; d) living far from university, which prevented them from participating in group work or meant they had to leave class before the end in order to catch a train or bus home; e) characteristics of the faculty staff and their ability to adjust the standards to the needs of first-generation students; f) some first-generation students were mothers and had parental responsibilities whilst also meeting the demands of university, causing them additional stress.

And as facilitators, most respondents indicated the importance of family and friends' support, especially in the emotional aspect. Certain personal components were also highlighted, for instance having clear academic goals and a strong motivation to achieve. Another facilitator is related to the existence of spaces in the university where their ethnic identity was recognised and promoted. And another important factor for their adaptation and academic success is having university friends.

3.6. Muslim students

International literature identifies Muslim students as a protected group in the university field. Research conducted into this subject is mainly concentrated in the United Kingdom, although one article from the US was also found.

Regarding the participation of these students, the following barriers have been identified. In the US, [Manejwala and Abu-Ras \(2019\)](#) found that the main barrier is the stereotype whereby this minority group is associated with terrorism [Brown and Saeed \(2015\)](#)., conducting their study in Britain, explored the question of the radicalisation of this group. In particular, and in the case of Muslim women, wearing a veil is seen as a threat to the liberal tradition of British values and academia.

As facilitators, [Degli & Scott-Baumann \(2019\)](#) refer to the Muslim Student Council as a coordinating body to oversee the activities and organisational structure of ABSocs (IAhlulBayt Islamic Society at British university campuses). The study conducted by [Manejwala and Abu-Ras \(2019\)](#) also referred to an association, the Muslim Student Association (MSA) on campus, but also the students turned to trusted family, friends, and teachers for support.

4. Discussion and conclusion

One of the major challenges still facing universities is to achieve inclusion in all their areas. In recent years, progress has been made especially in the area of access (UNESCO-IESALC, 2020), but complete inclusion is not achieved through access alone. Students must be able to stay for as long as it takes to complete their university degree and participate in university life, both socially and on the purely academic side. Knowing the factors that influence student participation and retention is essential to improve participation and retention rates in university institutions ([Bowles & Brindle, 2017](#); [Millea, Wills, Elder & Molina, 2018](#); [Skopek, Triventi & Blossfeld, 2020](#)), especially for the most vulnerable students considering, amongst others, their already low rate of admissions. This is the case of refugees ([Molla, 2020](#)), Indigenous people ([Gore et al., 2017](#)), or Black students and Ethnic minorities ([Arday, Branchu & Boliver, 2021](#)).

Dropping out of higher education can have a negative impact on both the individual and the institution itself ([Bowles & Brindle, 2017](#); [Jancey & Burns, 2013](#); [Webb & Cotton, 2018](#)). Hence, the initial aim of this systematic review has been to detect the main barriers and facilitators identified in the international literature for the retention and participation of university students who are at a social, economic, and/or cultural disadvantage. The analysis of the literature has revealed a notable coincidence between the barriers and facilitators of the two areas studied (participation and retention) except for specific aspects related to certain vulnerable groups with specific needs, for instance, the language for Indigenous and refugee students or in areas of law (e.g. assistance with asylum applications or the recognition of qualifications) in the case of refugee students, amongst others.

The main barriers highlighted are: economic (allowing them to have a space to study, broadband, technologies, books and financial resources to participate in activities), cultural (differences), linguistic (required language level), discrimination and stereotypes (with the consequent feeling of isolation and exclusion), problems with teachers (discouraged, lack of teachers, disregard for the economic and/or cultural realities of students), shortage of mentors, and family responsibilities (work, child, or parent care).

The most common facilitators are linked to financial support (grants and scholarships to cover tuition fees and materials, housing in university halls of residences, job centres), language training, family support (especially emotional), university support programmes, mentoring (between staff and students, peer mentoring, and informal mentoring); a high level of motivation. Other facilitators refer to teachers, the active participation of vulnerable university students in the planning and implementation of various actions, university associations, social actions to assist vulnerable students, university friends, and reserving places for students from vulnerable groups.

The findings corroborate the three categories identified in the study conducted by [Carroll, Ng and Birch \(2009\)](#): situational, dispositional, and institutional factors. Situational factors correspond to the circumstances of a student's life, including physical health, employment, and family responsibilities. Dispositional (or attitudinal) factors incorporate individual or collective beliefs, values, and attitudes that may inhibit a student's participation. And institutional factors are those controlled by the educational institution, like support programmes, financial aid, and staff responsiveness ([Carroll et al., 2009](#); [Jancey & Burns, 2013](#)). In a later study, [Bowles and Brindle \(2017\)](#) expanded these categories to include subfactors related to the impact of belonging, gender, and being a member of a minority group. These subfactors have also been taken into account in the present study, and a strong relationship has been found between belonging to a minority group and possessing or encountering numerous barriers to participation and retention in the university system, both situational and dispositional as well as institutional. At the same time, it has been found that the feeling of belonging is also affected in the case of the minority groups studied ([Mayer & Cerezo, 2018](#); [Murphy et al., 2020](#)), and gender is a factor of special impact on certain groups, such as that of Muslims ([Brown & Saeed, 2015](#)).

The systematic review also reveals some research gaps and issues regarding students at a social, economic, and cultural disadvantage. Firstly, although the findings are broadly adapted to the three categories identified by [Carroll et al. \(2009\)](#), the present study specifies the barriers and facilitators of different vulnerable groups, finding common factors and specific factors, or with greater weight, in certain groups of students. This leads us to propose certain specifications/nuances to the model developed by [Carroll et al. \(2009\)](#). In the case of students facing social, economic, and/or cultural disadvantages, institutional factors have the strongest presence as facilitators, although dispositional factors are also influential, albeit to a lesser extent (in some studies on the first-generation, Roma Gypsy, and Indigenous students). As far as barriers are concerned, there is greater balance in the presence of the three categories, although dispositional factors should be highlighted, as many studies point to how, on the one hand, cultural differences are an obstacle to developing a sense of belonging to institutions generally orientated towards other cultural profiles and, on the other hand, discrimination and stereotypes within educational institutions (policies, staff, students) cause, or deepen a sense of isolation and exclusion amongst minority students.

The main limitation of the study relates to the identification phase of the systematic review articles. Firstly, a wide number of articles (738) were identified that were not available in full-text open access. Secondly, the study did not identify any articles published in Asia and, in the case of Africa, all articles belong to the southern region. Thirdly, there is great variability in the terms used in the literature to refer to social, economic, and cultural disadvantages. In this sense, although the identification phase of the articles has been repeated twice and all the steps of the review have been followed systematically and rigorously, it is acknowledged that some relevant studies may not have been included in the review. Another limitation identified is that barriers and facilitators have been defined for different protected groups, but no results have been obtained on the effect of the intersectionality of different situations of disadvantage.

As future lines of research, we propose developing analytical studies at a regional level in relation to the different elements of university institutions (leadership, support services, curriculum, culture, etc.) that facilitate or hinder the development of inclusive educational processes for different protected groups. Likewise, it is relevant to change the point of view in the study of educational inequalities and move beyond *discourses of deficit*, characteristic of the integrative paradigm, which focuses on the difficulties of the students and their context instead of institutional barriers (Dovigo, 2017; Meier, 2012; O'Sea et al., 2019).

Finally, with regard to the practical implications of the study, the barriers and facilitators identified in the systematic review allow to lay the foundations so that the different agents of the university community (leadership, teaching staff, administration staff, student associations, etc.) develop actions aimed at guaranteeing equity for all students, including the principle of social justice. In addition, the results obtained allow for specific actions linked to different areas: culture, curriculum, training, support services, leadership, evaluation, research, etc. For example, in relation to the cultural sphere, university leadership or student associations can implement awareness activities aimed at the entire university community to make visible the reality of students in vulnerable situations with the aim of overcoming pre-existing stereotypes and avoiding discrimination. Finally, the identification of barriers and facilitators for the retention and participation of socio-economically and culturally disadvantaged students carried out in this study also allows local and national public administrations to develop lines of action (reports, funding policies, legislative changes, etc.) aimed at guaranteeing equity and participation of all people, without exception, in the Higher Education.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Arana, M., & Bianculli, K. (2005). Anthropology and University Education: Contributions to the diagnosis of enrollment retention. *Universidad Nacional de Mar del Plata. FACES: Revista de la Facultad de Ciencias Económicas y Sociales*, 11(22), 65–77.
- Arday, J., Branchu, C., & Boliver, V. (2021). What Do We Know About Black and Minority Ethnic (BAME) Participation in UK Higher Education? *Social Policy and Society*, 1–14. <https://doi.org/10.1017/S1474746421000579>
- Bacher, J., Fiorioli, E., Moosbrugger, R., Nnebedum, C., Prandner, D., & Shovakar, N. (2020). Integration of refugees at universities: Austria's more initiative. *Higher Education*, 79(6), 943–960. <https://doi.org/10.1007/s10734-019-00449-6>
- Boonzaier, F., & Mkhize, L. (2018). Bodies out of place: Black queer students negotiating identity at the University of Cape Town. *South African Journal of Higher Education*, 32(3). <https://doi.org/10.20853/32-3-2514>
- Bowles, T. V., & Brindle, K. A. (2017). Identifying facilitating factors and barriers to improving student retention rates in tertiary teaching courses: A systematic review. *Higher Education Research & Development*, 36(5), 903–919. <https://doi.org/10.1080/07294360.2016.1264927>
- Brown, K. E., & Saeed, T. (2015). Radicalization and counter-radicalization at British universities: Muslim encounters and alternatives. *Ethnic and Racial Studies*, 38(11), 1952–1968. <https://doi.org/10.1080/01419870.2014.911343>
- Carroll, D., Ng, E., & Birch, D. (2009). Retention and progression of postgraduate business students: An Australian perspective. *Open Learning: The Journal of Open, Distance and e-Learning*, 24(3), 197–209. <https://doi.org/10.1080/02680510903201599>
- Cook, C., MacKinnon, M., Anderson, M., & Whetter, I. (2019). Structures last longer than intentions: Creation of Ongomizwin – Indigenous Institute of Health and Healing at the University of Manitoba. *International Journal of Circumpolar Health*, 78(2), Article 1571381. <https://doi.org/10.1080/22423982.2019.1571381>
- De Wit, H., Leal, F., & Unangst, L. (2020). Internationalization aimed at global social justice. *ETD - Educação Temática Digital*, 22(3), 567–590. <https://doi.org/10.20396/etd.v22i3.8659331>
- Degli Esposti, E., & Scott-Baumann, A. (2019). Fighting for “Justice”, Engaging the Other: Shi’a Muslim Activism on the British University campus. *Religions*, 10(3), 189. <https://doi.org/10.3390/rel10030189>
- Donoso, S., & Schiefelbein, E. (2007). Analysis of explanatory models of student retention in college: A view from social inequality. *Estudios pedagógicos (Valdivia)*, (1), 33. <https://doi.org/10.4067/S0718-07052007000100001>
- Dos Santos, L. M. (2019). Experiences and expectations of international students at historically black colleges and universities: an interpretative phenomenological analysis. *Education Sciences*, 9(3), 189. <https://doi.org/10.3390/educsci9030189>
- Dovigo, F. (2017). Fostering good practices for vulnerable students in higher education: Suggestions from Italy. In F. Dovigo & L. Casanova (Eds.), *Good Practices for Equity and Inclusion in Higher Education* (pp. 12–20). Collana Educazione Inclusiva.
- Ezcurra, A. M. (2011). *Igualdad en Educación Superior. Un Desafío Mundial*. Universidad Nacional de General Sarmiento.
- Farrell, O., Brunton, J., Costello, E., Delaney, L., Brown, M., & Foley, C. (2020). ‘This is two different worlds, you have the asylum world and you have the study world’: An exploration of refugee participation in online Irish higher education. *Research in Learning Technology*, (0), 28. <https://doi.org/10.25304/rlt.v28.2368>
- Flanagan Borquez, A. (2017). Experiences of first-generation students in Chilean universities: Realities and challenges. *Revista de la Educación Superior*, 46(183), 87–104. <https://doi.org/10.1016/j.resu.2017.06.003>
- Gause, C. P., Dennison, S., & Perrin, D. H. (2010). Equity, inclusiveness, and diversifying the faculty: Transforming the university in the 21st Century. *Quest (Grand Rapids, Mich.)*, 62(1), 61–75. <https://doi.org/10.1080/00336297.2010.10483632>
- Goñechea, C., Gallego, B., Amores, F. J., & Gómez, M. Á. (2020). Voces del alumnado gitano sobre su experiencia en la universidad. *Profesorado, Revista de Currículum y Formación Del Profesorado*, 24(2), 462–482. <https://doi.org/10.30827/profesorado.v24i2.15157>
- Gore, J., Patfield, S., Holmes, K., Smith, M., Lloyd, A., Gruppeta, M., et al. (2017). When higher education is possible but not desirable: Widening participation and the aspirations of Australian Indigenous school students. *Australian Journal of Education*, 61(2), 164–183. <https://doi.org/10.1177/0004944117710841>
- Grüttner, M. (2019). Belonging as a resource of resilience: Psychological wellbeing of international and refugee students in study preparation at German higher education institutions. *Student Success*, 10(3), 36–44. <https://doi.org/10.5204/ssj.v10i3.1275>

- Hanne, A. V. (2018). Indigenous students and University: Realities and challenges in the face of cultural diversity. Case of the National University of Salta. *Alteridad*, 13(1), 14–29. <https://doi.org/10.17163/alt.v13n1.2018.01>
- Hearn, S., Benton, M., Funnell, S., & Marmolejo-Ramos, F. (2021). Investigation of the factors contributing to Indigenous students' retention and attrition rates at the University of Adelaide. *The Australian Journal of Indigenous Education*, 50, 20–28. <https://doi.org/10.1017/jie.2019.5>
- Hearn, S., & Kenna, L. (2020). Spending for success: Identifying 'what works?' for Indigenous student outcomes in Australian Universities. *The Australian Journal of Indigenous Education*, 1–10. <https://doi.org/10.1017/jie.2020.27>
- Holsti, M., Hawkins, S., Bloom, K., White, R., Clark, E. B., & Byington, C. L. (2015). Increasing diversity of the biomedical workforce through community engagement: The University of Utah Native American Summer Research internship: Increasing diversity of the biomedical workforce. *Clinical and Translational Science*, 8(2), 87–90. <https://doi.org/10.1111/cts.12258>
- Jack, O., Chase, E., & Warwick, I. (2019). Higher education as a space for promoting the psychosocial well-being of refugee students. *Health Education Journal*, 78(1), 51–66. <https://doi.org/10.1177/0017896918792588>
- Jancey, J., & Burns, S. (2013). Institutional factors and the postgraduate student experience. *Quality Assurance in Education*, 21(3), 311–322. <https://doi.org/10.1108/QAE-Nov-2011-0069>
- Long, A.F., Godfrey, M., Randall, T., Brett, A., & Grant, M.J. (2002). Health Care Practice R&D Unit, U. of S., & Nuffield Institute for Health, U. of L. *Developing Evidence based Social Care Policy and Practice. Part 3: Feasibility of Undertaking Systematic Reviews in Social Care* [Project Report]. University of Salford and University of Leeds. <http://usir.salford.ac.uk/id/eprint/13071/>.
- Malins, P. (2016). How inclusive is "inclusive education" in the Ontario elementary classroom?: Teachers talk about addressing diverse gender and sexual identities. *Teaching and Teacher Education*, 54, 128–138. <https://doi.org/10.1016/j.tate.2015.11.004>
- Manejwala, R., & Abu-Ras, W. (2019). Microaggressions on the University Campus and the Undergraduate Experiences of Muslim South Asian Women. *Journal of Muslim Mental Health*, 13(1), 21–39. <https://doi.org/10.3998/jmmh.10381607.0013.102>
- Mayer, L., & Cerezo, L. (2018). Analysis of the contributions of a social program to the university trajectory of socially vulnerable young people. *Páginas de Educación*, 11(2), 130. <https://doi.org/10.22235/pe.v11i2.1648>
- Meier, K.S. (2012). *Factors Influencing the Institutionalization of Diversity in Higher Education* [Doctoral dissertation]. Minnesota State University.
- Méndez, R. A., & Delgado, C. A. (2018). Integration policies for university education. The case of indigenous and Afro-Colombians and the problem of dropout. *Revista Electrónica Interuniversitaria de Formación Del Profesorado*, 21(2), 109. <https://doi.org/10.6018/reifop.21.2.323221>
- Millea, M. J., Wills, R. C., Elder, A., & Molina, D. (2018). What matters in college student success? Determinants of college retention and graduation Rates. *Education*, 138, 309–322.
- Miskovic, M., & Curcic, S. (2016). Beyond inclusion: Reconsidering policies, curriculum, and pedagogy for roma students. *International Journal of Multicultural Education*, 18(2), 1–14. <https://doi.org/10.18251/ijme.v18i2.1051>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Group, Prisma (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS medicine*, 6(7), Article e1000097.
- Molla, T. (2020). African refugee youth in Australia: Higher education participation. *Higher Education Research & Development*, 1–15. <https://doi.org/10.1080/07294360.2020.1849035>
- Murphy, M. C., Gopalan, M., Carter, E. R., Emerson, K. T. U., Bottoms, B. L., & Walton, G. M. (2020). A customized belonging intervention improves retention of socially disadvantaged students at a broad-access university. *Science Advances*, 6(29), eaba4677. <https://doi.org/10.1126/sciadv.aba4677>
- Naidoo, L. (2017). School to university pathways: Enhancing access and participation in higher education for refugee background students. In F. Dovigo & L. Casanova (Eds.), *Good Practices for Equity and Inclusion in Higher Education* (pp. 12–20). Collana Educazione Inclusiva.
- Oliveira, A., Bello, L., & Federal University of Rio Grande do Sul (Brazil). (2016). African-Brazilians and natives in an elite university: The impact of Affirmative action on Students in Brazil. *Voprosy Obrazovaniya/Educational Studies. Moscow*, 2, 259–285. <https://doi.org/10.17323/1814-9545-2016-2-259-285>
- O'Shea, S., Lysaght, P., Roberts, J., & Harwood, V. (2016). Shifting the blame in higher education – Social inclusion and deficit discourses. *Higher Education Research & Development*, 35(2), 322–336. <https://doi.org/10.1080/07294360.2015.1087388>
- Phatoli, R., Bila, N., & Ross, E. (2015). Being black in a white skin: Beliefs and stereotypes around albinism at a South African university. *African Journal of Disability*, 4(1). <https://doi.org/10.4102/ajod.v4i1.106>
- Pihama, L., Lee-Morgan, J., Smith, L. T., Tiakiwai, S. J., & Seed-Pihama, J. (2019). MAI Te Kupenga: Supporting Māori and Indigenous doctoral scholars within Higher Education. *AlterNative: An International Journal of Indigenous Peoples*, 15(1), 52–61. <https://doi.org/10.1177/1177180119828065>
- Pino, G., Cerdas, Y., & González, C. (2019). University plan for indigenous peoples: Participatory construction experience of the National University. *REDU. Revista de Docencia Universitaria*, 17(2), 127. <https://doi.org/10.4995/redu.2019.10642>
- Posselt, J., Reyes, K. A., Slay, K. E., Kamimura, A., & Porter, K. B. (2017). Equity efforts as boundary work: How symbolic and social boundaries shape access and inclusion in graduate education. *Teachers College Record*, 119(10), 1–38.
- Sato, T., Hodge, S. R., & Eckert, K. (2018). Experiences of international student-athletes at a historically black university. *Journal of International Students*, 8(2), 696–723. <https://doi.org/10.5281/ZENODO.1250372>
- Skopek, J., Triventi, M., & Blossfeld, H.-P. (2020). How do institutional factors shape PhD completion rates? An analysis of long-term changes in a European doctoral program. *Studies in Higher Education*, 1–20. <https://doi.org/10.1080/03075079.2020.1744125>
- Soler, P., Pallisera, M., Planas, A., Fullana, J., & Vilà, M. (2012). Student participation in the university: perceived problems and proposals for improvement. *Revista de Educación*, 358, 542–562.
- Soto, V. J. (2016). First generation students in Chile: A qualitative approach to the university experience. *Revista Complutense de Educación*, 27(3), 1157–1173. https://doi.org/10.5209/rev_RCED.2016.v27.n3.47562
- Streitwieser, B., & Brück, L. (2018). Competing motivations in Germany's higher education response to the "Refugee Crisis". *Refuge*, 34(2), 38–51. <https://doi.org/10.7202/1055575ar>
- Thompson-Rogers, K., Davis, D. J., Davis-May, D., & Turner, C. (2018). Historically black colleges and universities' mentorship of health profession students: A content analysis exploring the north carolina health careers access program. *IAFOR Journal of Education*, 6(2), 17–32. <https://doi.org/10.22492/ije.6.2.02>
- United Nations Educational, Scientific and Cultural Organization [UNESCO]. International Institute for Higher Education in Latin America and the Caribbean [IESALC]. (2020). *Towards universal access to higher education: International trends*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000245656_spa.
- United Nations for Education, Science, and Culture Organization [UNESCO]. (2016). *Education 2030: Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000245656_spa.
- United Nations for Education, Science, and Culture Organization [UNESCO]. (2017). *A Guide for ensuring inclusion and equity in education*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000245656_spa.
- Usma Wilches, J. A., Ortiz Medina, J. M., & Universidad de Antioquia, Gutiérrez, C., & Universidad de Antioquia. (2018). Indigenous students learning english in higher education: What are the challenges? *Íkala, Revista de Lenguaje y Cultura*, 23(2), 229–254. <https://doi.org/10.17533/udea.ikala.v23n02a03>
- Vincent, L., & Hlatshway, M. (2018). Ties that bind: The ambiguous role played by social capital in black working class first-generation South African students' negotiation of university life. *South African Journal of Higher Education*, 32(3). <https://doi.org/10.20853/32-3-2538>
- Walker-Janzen, W., Véliz-Campos, M., & Veliz, L. (2019). Academic journeys of socially disadvantaged students in Chile's more equitable pathways to university entry. *Issues in Educational Research*, 29(4), 1348–1368.
- Webb, O. J., & Cotton, D. R. E. (2018). Early withdrawal from higher education: A focus on academic experiences. *Teaching in Higher Education*, 23(7), 835–852. <https://doi.org/10.1080/13562517.2018.1437130>