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The impact of the Covid-19 pandemic on social inequalities in international student mobility: a scoping review

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Abstract

This systematic literature review sheds light on social inequalities in students' access to and experiences of international student mobility (ISM) in the context of the Covid-19 pandemic. Following a scoping approach based on the 2020 PRISMA guidelines, it synthesises 48 empirical studies published in the most intense phase of the Covid-19 pandemic, namely between January 2020 and June 2022. The findings demonstrate that the social inequalities that became visible due to the pandemic relate to different study abroad phases (before, during, and after ISM) and levels of analysis (micro, meso, and macro level). At the micro level, the four most frequently examined dimensions of social inequality comprise (1) students' mental health and wellbeing, (2) experiences of exclusion, discrimination, or racism, (3) financial vulnerability, and (4) determinants of study abroad plans. At the meso level, the reviewed studies mostly address (5) institutional support services. Macro-level studies focus on (6) governmental policies and negative public perceptions of international students. The review demonstrates that the pandemic not only exacerbated previously known social inequalities, but also created new ones, which were experienced by students mostly whilst they were abroad. It also highlights that different social inequalities are connected to specific study abroad phases, student groups, and social structures. Moreover, it shows that the inefficiency or lack of support of both meso- and macro-level structures may enhance the social vulnerability of specific groups of international students. Overall, the review indicates that during the most intense phase of the Covid-19 pandemic, scholarly attention has shifted from inequalities in access to ISM to the lived experiences of international students.

Keywords International student mobility, Covid-19, Social inequality, Higher education, Systematic literature review, Scoping review

Introduction

The Covid-19 pandemic had profound consequences for higher education across the globe. Shortly after its outbreak, researchers from different disciplines directed their attention towards the impact of the pandemic on students' learning modes and educational attainment (e.g., Di Pietro, 2023; Donnelly & Patrinos, 2022), and specifically on academic achievement in online learning settings (e.g., Abu Talib et al., 2021; Mutalib et al., 2022). Considering the international nature of higher education and the restrictions placed on movement following the pandemic, scholars also devoted considerable attention to the impact of the pandemic on internationalisation strategies and international student mobility (ISM) (e.g., Huang et al., 2022). In this context, they raised considerable concerns about social inequalities in students' access to and experiences of ISM (e.g., Almukhambetova & Kuzhabekova, 2022; Cairns et al., 2021; Lai et al., 2021a, b; Mok & Zhang, 2022).

Since the start of the pandemic, a plethora of studies have been published on various social inequalities in the context of ISM.[1] While highly relevant from both scientific and societal points of view, these studies have not yet contributed to a systematic knowledge base because they are scattered across different disciplinary discourses, research communities, and publication outlets. Moreover, they tend to use a variety of different conceptual approaches and terminologies, while rarely attempting to synthesize knowledge on social inequalities in ISM.

As much as research interest in social inequalities in ISM predates the pandemic, so do some of the knowledge gaps outlined. This is not only due to the dearth of syntheses of research on social inequalities in ISM, but also the result of the inconsistent use of terminology, which has made it difficult to aggregate evidence from studies on this topic. In fact, the pre-pandemic literature often examined social inequalities using different terminology, such as privilege (e.g., Waters & Brooks, 2010), advantage reproduction (e.g., King et al., 2011), and social selectivity (e.g., Netz & Finger, 2016). Related to the use of such concepts, the pre-pandemic literature tended to centre on equity of access to ISM to demonstrate that privileged students were more likely to study abroad, even if some studies alerted readers to the issue of the unequal treatment of international students based on their countries of origin and relevance as a source of institutional cash flow (e.g., Cantwell, 2015; Choudaha, 2017). As a result, the pre-departure period and student decision-making processes were often the focus of analysis, with less attention paid to students' experiences of exclusion in their host countries or to social inequalities in the outcomes of studying abroad. Also, the pre-pandemic literature has rarely simultaneously considered different levels of analysis: it comprises studies focussing on inequalities arising from the ISM-related decision making of students at the micro level, which are, however, rather disconnected from the macro-level studies examining inequalities in ISM stemming from the broader policy framework for education abroad (Riaño et al., 2018). Finally, despite being conceptually highly relevant, part of the pre-pandemic literature may have limited generalisability to the post-pandemic world. In summary, there

[1] In our view, a closer look at social inequalities in ISM is relevant for several reasons. First, enabling ISM and ensuring equitable access to and experiences of ISM are key political priorities in the European Higher Education Area (Ministerial Conference, 2012, 2020). Second, ISM is not a niche phenomenon, but a social phenomenon of substantial quantitative volume. In fact, the number of international students has increased by a factor of four since the 1970s, making them the fastest growing group of international migrants over the past decades (Czaika, 2018). In 2021, UNESCO counted about 6.9 million international students globally (Kercher et al., 2025).

is thus a pressing need to synthesise empirical research on social inequalities in ISM in the context of the Covid-19 pandemic.

Against this background, we conducted a scoping review (Arksey & O'Malley, 2005) aggregating 48 empirical studies that assess the impact of the Covid-19 pandemic on various social inequalities in ISM. We not only consider *inequality of opportunities* (resulting from a socially stratified distribution of risks and resources across student groups), but also *inequalities of treatment* (for instance, due to national policies discriminating against international students) and *inequalities of outcomes* (concerning the differentiated psychological, socio-cultural, and educational outcomes of studying abroad). We examine this range of social inequalities at different levels of analysis (*micro*, *meso*, *macro*) and study abroad phases (*before*, *during*, *after*) from the perspective of both the sending and receiving countries and institutions. By intersecting social inequalities with levels of analysis and study abroad phases, we aim to (1) identify and discuss established and emerging social inequalities in ISM, and (2) detect knowledge gaps to outline directions for future research. The resulting systematic synthesis is not only important to inform future research on an interdisciplinary knowledge base (Almeida, 2020; Lipura & Collins, 2020), but also to help design policies that may prevent social inequalities in ISM in future crisis situations.

Methods

Review approach

To provide a comprehensive overview of the state of knowledge on the impact of the Covid-19 pandemic on social inequalities in physical ISM, we adopted a scoping approach (Arksey & O'Malley, 2005). Accordingly, we mapped existing research threads and trends regarding this topic rather than assessing the quality of reviewed studies in detail, as other types of systematic literature reviews would do (e.g., meta-analyses). Besides quantitatively mapping the examined research fields and identifying the major dimensions of social inequality in ISM in the context of the Covid-19 pandemic, our review may also serve as a basis for future full systematic literature reviews examining, inter alia, the long-term consequences of the pandemic.

Inclusion and exclusion criteria

To guide our review process, we developed a protocol that outlined the rationale and methods of our review. This protocol was piloted on an initial pool of 36 studies to test its systematicity and accuracy. We then further refined our inclusion and exclusion criteria as team members– 10 researchers and one practitioner– familiarised themselves with the literature. We included studies fulfilling the following three inclusion criteria:

1. Studies explicitly analysing social inequalities in ISM in the context of the Covid-19 pandemic, irrespective of the methodological paradigm and research design.
2. Studies explicitly examining international students in higher education, including prospective international students or comparisons between domestic and international students.
3. Empirical papers (peer reviewed and non- peer reviewed) published in English between January 2020 (when Covid-19 was declared a worldwide health emergency) and June 2022, thus relating to the most intense phase of the Covid-19 pandemic.

Given our goal of empirically ascertaining the impact of the pandemic on social inequalities in ISM, we excluded theoretical papers, opinion pieces, reports, and lengthier publications such as books and book chapters. For similar reasons, we excluded PhD theses and MA dissertations, which were scarce at the time this review was conducted (our screening process only yielded one MA dissertation).

We deemed sources ineligible if they neither addressed social inequalities nor physical ISM in the context of the pandemic and higher education. However, we retained studies simultaneously examining physical and virtual mobility.[2]

Search strategy

Following the PRISMA 2020 guidelines for reporting systematic reviews and meta-analyses (Page et al., 2021), we identified relevant empirical studies through database, citation, and hand searches.[3] We searched seven databases (Academic Search Complete, EBSCO, ERIC, JSTOR, Web of Science, Scopus, and Google Scholar) in two stages. The first-stage searches took place in March 2022 to develop our review protocol, while the second-stage searches took place between April and June 2022. Simultaneously, we conducted backward- and forward-citation searches, as well as hand searches across 11 key academic journals[4] on study abroad, international education, and migration.

We derived the search terms from our central research question, thereby balancing sensitivity and specificity to identify all relevant studies and minimise irrelevant retrievals. Our main search string was based on Boolean operators and had the following form:

> inequalit* **AND** Covid **AND** student mobility **OR** study abroad **OR** international student.

We used additional search terms for ISM (*exchange student* **OR** *student exchange* **OR** *Erasmus*) and different dimensions of social inequality (*vulnerability* **OR** *inequity* **OR** *precarity* **OR** *discrimination* **OR** *disadvantage*). However, these terms did not yield more hits. We stopped screening in June 2022, as additional searches did not add new entrances to our tally of included studies.

Selection of studies

Following the search strategy described above, we identified 92 potentially relevant studies by screening their title and abstract, while exporting all references to the reference management software Zotero. Upon excluding duplicates and studies that did not meet our inclusion criteria, 48 studies ended up being eligible for our scoping review (Fig. 1).

[2] We define physical ISM as the relocation of students to countries other than the ones where they attained their higher education entrance qualification or where they first enrolled in higher education. Virtual ISM denotes the use of information and communication technologies (ICT) to pursue distance higher education in countries other than the ones where students are currently located.

[3] Hand searches describe the process of seeking relevant studies in selected journals that are particularly relevant to a specific topic (for further details, see footnote 4). We screened all articles published in these journals during the review time frame.

[4] (1) Frontiers: The Interdisciplinary Journal of Study Abroad, (2) Journal of International Students, (3) Journal of Studies in International Education, (4) Journal of Research in International Education, (5) Research in Comparative and International Education, (6) Study Abroad Research in Second Language Acquisition and International Education, (7) Higher Education, (8) Studies in Higher Education, (9) Research in Higher Education, (10) Mobilities, (11) Population, Space and Place.

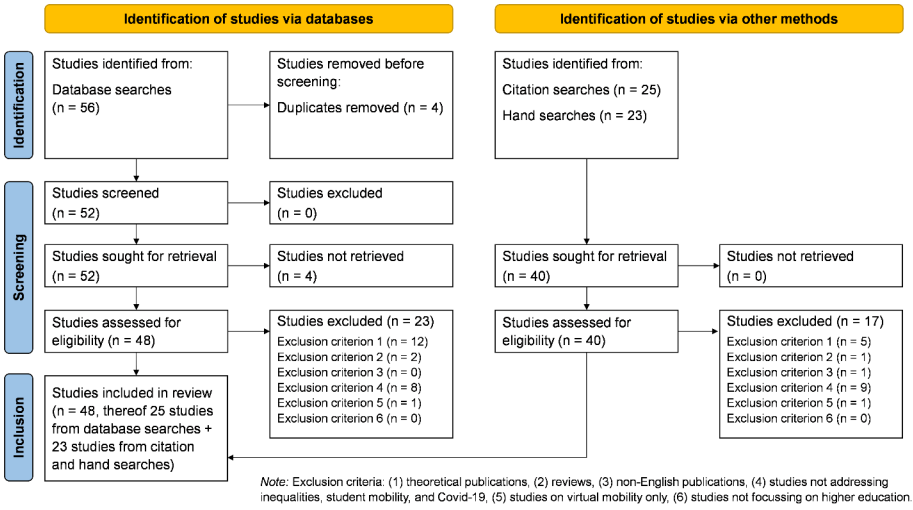

Fig. 1 PRISMA 2020 flow diagram of the review process

Data extraction and aggregation

We performed data extraction and aggregation using an Excel file on a shared drive. To retrieve the relevant information from all included studies according to thematic analysis principles (Braun & Clark, 2006), this file listed 16 analytical categories (Table 1). Besides allowing us to quantitatively map the examined research field (categories 1–15), these categories served to identify different dimensions of social inequality in ISM in the context of the Covid-19 pandemic (category 16).

To ensure interrater reliability, three team members read an initial pool of 12 studies to develop the first-level categories of analysis and a codebook. These categories were further refined after all team members had read (the same) three additional studies. Moreover, second-level categories were added to reduce bias through deductive coding approaches, wherein analytical categories are guided by existing theories or concepts, as in categories 8, 10, 11 and 12 (Table 1). As a result, we adjusted the codebook to ensure consistency of judgement across first and second-level categories before the remaining papers were divided up between all team members. The lead author oversaw this process and the categorisations in Excel for accuracy and subsequent statistical processing. We resolved any cases in which disagreements arose between reviewers by means of discussion.

Results

Mapping the research area

Time and outlets of publication

The first notable publication activity occurred at the end of 2020 (Fig. 2). However, the bulk of the studies we reviewed (more than 60%) were published in 2021. Fewer studies were published in the first half of 2022. It is likely that other studies appeared in the second half of the year– and thus after the end of our review time frame.

By far, most of the reviewed studies (42; 88%) are based on fieldwork that was completed (at least in part) in 2020 and in 2021, although predominantly in 2020 (Table 2). This implies that our analysis deals with social inequalities in ISM during the first two years of the Covid-19 pandemic and thus primarily captures its short-term effects.

Table 1 Categories of analysis for data extraction

	First-level categories	Second-level categories
1.	Publication outlet	Journal name
2.	Year and month of publication	Publication date (months and years)
3.	Year and month of fieldwork	Data collection (months and years)
4.	Types of ISM	4.1. Credit-seeking 4.2. Degree-seeking
5.	Examined countries of origin	Identified inductively
6.	Examined countries of destination	Identified inductively
7.	Examined direction of student mobility flows	7.1. Incoming 7.2. Outgoing
8.	Main disciplinary areas	As per Scopus list of subject areas
9.	Main theories and/or concepts	Identified inductively
10.	Methodological paradigm*	10.1. Quantitative 10.2. Qualitative 10.3. Mixed
11.	Methodological approach*	11.1. Experimental research 11.2. Survey research 11.3. Phenomenology 11.4. Ethnography 11.5. Narrative inquiry 11.6. Case study research 11.7. Grounded theory 11.8. Mixed methods designs
12.	Methods of data collection*	12.1. Tests 12.2. Questionnaires 12.3. Interviews 12.4. Focus groups 12.5. Observation 12.6. Constructed, secondary, existing data
13.	Sample size	Number of research participants
14.	Levels of analysis	14.1. Micro 14.2. Meso 14.3. Macro
15.	Study abroad phases	15.1. Before 15.2. During 15.3. After
16.	Dimensions of social inequality	Conceptual matrix of dimensions of social inequality (Table 3)

*According to Johnson and Christensen (2019)

The range of publication outlets is extremely diverse. Out of 48 studies, 32 were published in different journals, reflecting the disciplinary silos across which publications are spread in the field of ISM (Almeida, 2020). A somewhat broader, yet still nascent, discussion is taking place in the *Journal of International Students* (5 studies), *Frontiers in Psychiatry* (4 studies), and the *Journal of Studies in International Education* (3 studies), with 12 papers published in these three outlets alone.

In terms of disciplinary representation, most studies were published in the fields of education and sociology, with 18 studies each (Fig. 3). While health and medicine were previously not known for producing knowledge on inequalities in education abroad, these disciplines rank third in our pool of studies (14 studies). When grouping studies in health and medicine with psychology and psychiatry, they even rise to first place (21 studies)– the reason being that the most frequently examined social inequalities relate to mental health and psychological distress (as Section "Summary of evidence on dimensions of social inequality in ISM" shows).

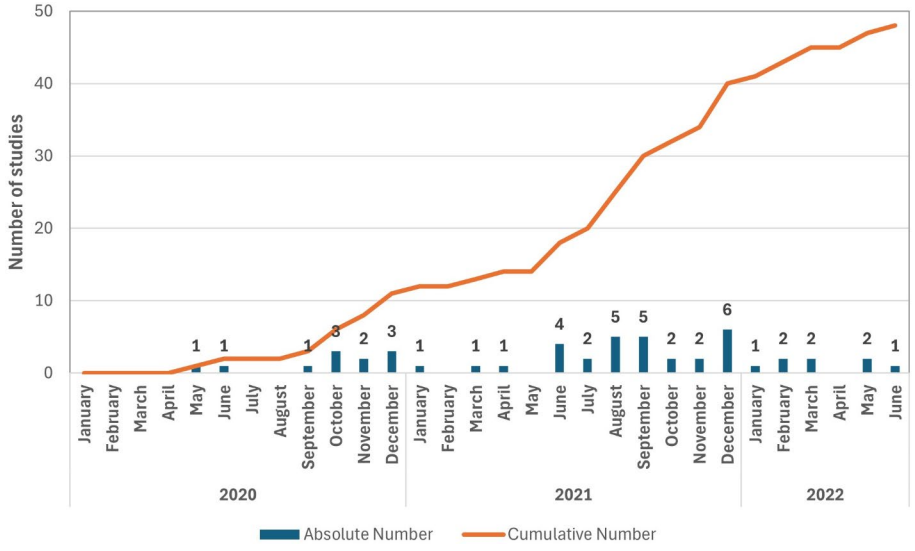

Fig. 2 Number of reviewed studies by year of publication
Note: Where available, we extracted the date of the online publication. Otherwise, we extracted the date of the publication in print. Our intention was to best approximate publication dates to when results first became publicly available. In the reference list of this article, we used the in-print publication date as per APA7 guidelines

Table 2 Year of fieldwork of reviewed studies

Year of fieldwork	*N*
1st half 2020	22
2nd half 2020	6
1st half 2021	4
2nd half 2019; 1st half 2020	1
1st half 2020; 2nd half 2020	6
1st half 2020; 1st half 2021	1
1st half 2020; 1st half 2021; 2nd half 2021	1
2nd half 2020; 1st half 2021	2
Not specified	5
Total	48

Note: Studies conducted in the two halves of the same or a different year aremarked with a semicolon (e.g., 2nd half 2019; 1st half 2020)

Examined types of international student mobility

Regarding the types of ISM, more than half of our studies (33) examine degree-seeking students (defined as students pursuing a full degree abroad), while 11 look at credit-seeking students (students who spend part of their degree abroad and intend to acquire credits for a degree obtained in their 'home country'). Three studies do not specify the examined type of ISM, and one study addresses both degree- and credit-seeking students.

In line with research on education abroad in general, most of the reviewed studies (34) address incoming students, i.e., students sampled in their host country. Only 14 studies examine outgoing students, i.e., students sampled in their home country.

The reviewed studies primarily sampled students coming from Asian countries, most prominently China (17) and its special administrative regions Hong Kong (5) and Macau (1) (Fig. 4). This trend might mirror global student flows, as students from Asia form the largest incoming student group abroad in post-secondary education across OECD

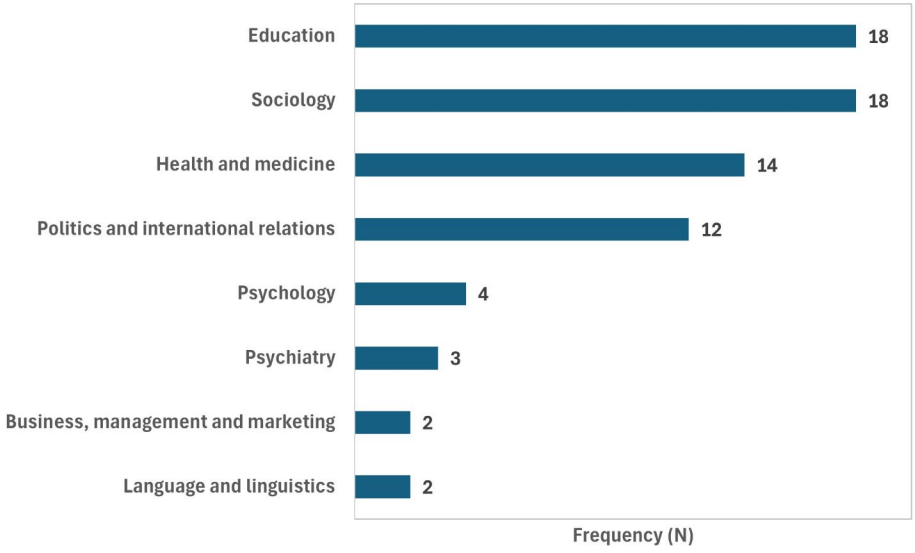

Fig. 3 Main disciplines of the reviewed studies, as per Scopus classification of subject areas (multiple answers possible)

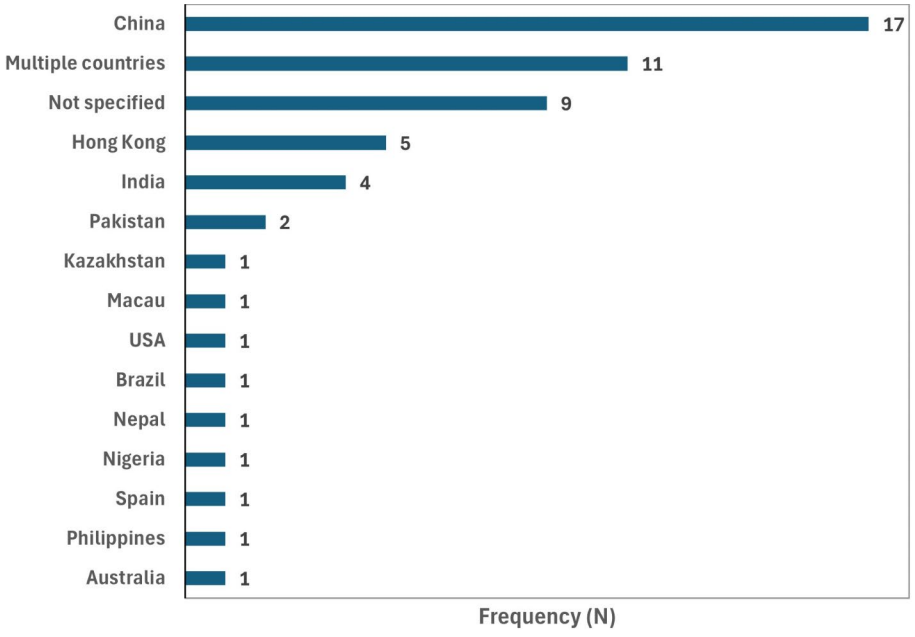

Fig. 4 Students' countries of origin (multiple answers possible)
Note: Some studies examine students from several countries. These countries are indicated separately if studies examined up to *three* different countries. Studies examining students from *more than three* countries or broader world regions of origin (e.g., Asian countries) were assigned to the category "Multiple countries". The category "Not specified" contains studies not indicating the countries of origin of the examined students

countries (OECD, 2023). However, it might also reflect the fact that the Covid-19 pandemic first broke out in China. As will be discussed in Section "Summary of evidence on dimensions of social inequality in ISM", East Asian students frequently emerge as the student group being most excluded or discriminated against. By contrast, very few studies examine students coming from countries in North America (USA: 1), Africa (Nigeria: 1), Europe (Spain: 1), or Australia (1). As with the types of ISM, there are several studies

(10) that either did not capture or report the country of origin or prior education of the examined students, thus limiting the interpretability of their results.

The ranking of the examined students' host countries looks entirely different (Fig. 5). Apart from four studies sampling incoming students in China, most studies focus on Western education hubs, i.e., Anglophone countries such as the USA (14), Australia (7), and the UK (6). Four studies examine students in multiple countries (i.e., students in more than three countries) and seven do not specify the examined countries but speak of regions instead (e.g., Asian countries or Portuguese-speaking countries).

Adopted methodological paradigms, approaches, and sample sizes

The reviewed studies mostly adopt qualitative methodological paradigms (25), followed by quantitative (15), and mixed paradigms (8). This finding generally aligns with ISM literature, which is often characterised by single-institution case studies with small samples (Almeida, 2020; Streitwieser et al., 2012).

While all 15 quantitative studies adopt one type of methodological approach (survey research), the qualitative studies are guided by different approaches. Besides case studies (5), these include narrative-like methodological approaches centred on the experiences of research participants, such as phenomenology (7) and narrative inquiry (6). Only one study adopted an ethnographic approach, while eight studies selected a mixed methods approach.

The predominance of qualitative research designs is also reflected in the predominance of small sample sizes. More than half of all reviewed studies (27) are based on less than 100 observations, and 13 studies examine between 100 and 999 observations. Only five studies use samples of 1,000 to 4,999 observations, and merely two studies analyse 5,000 or more observations. One study did not provide corresponding information.

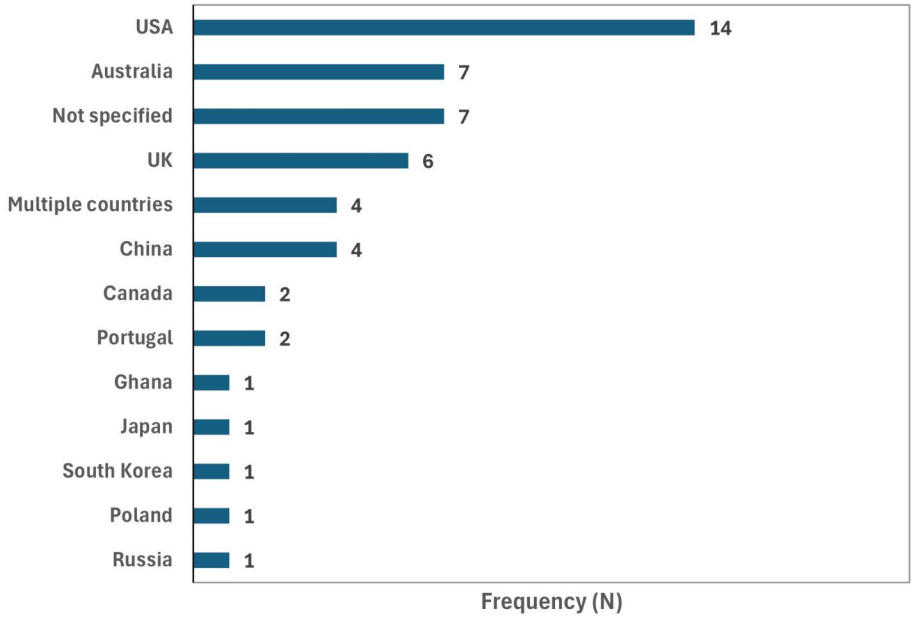

Fig. 5 Students' host countries (multiple answers possible)
Note: Some studies examine students in several countries. These countries are indicated separately if studies examined up to *three* different countries. Studies examining students in *more than three* host countries or broader world regions (e.g., Asian countries) were assigned to the category "Multiple countries". The category "Not specified contains studies not indicating the host countries of the examined students

Thus, most studies are neither likely to be representative at the country level, nor representative for the sampled student groups.

Following the mapping of the research area of interest in quantitative terms, the next section provides a qualitative synthesis of the six most frequently examined dimensions of social inequality in our pool of studies.

Summary of evidence on dimensions of social inequality in ISM

To summarise existing evidence on the studied dimensions of social inequality, we adopted a multidimensional approach considering the societal level and moment when these inequalities occurred in the ISM trajectory of students. We therefore categorised all reviewed studies according to (1) the examined dimensions of social inequality vis-à-vis (2) the level of analysis (*micro*, *meso*, *macro*), and (3) study abroad phase (*before, during, and after*). The resulting conceptual matrix is shown in Table 3.

The examined dimensions of social inequality were primarily identified inductively by reading the corpus of studies. Some dimensions, however, were also identified deductively through logical reasoning or pre-existing theory. This explains the nil occurrences of some dimensions of social inequality.

As Table 3 demonstrates, most reviewed studies examine the lived experiences of inequalities of students at the micro level, including: inequality of treatment through increased psychological distress or the exclusion of certain student groups, inequality of opportunities through unequally experienced financial vulnerability, and inequality of outcomes in the form of differential psychological and socio-cultural adjustment outcomes. Most studies focus on social inequalities during the stay abroad (38 studies),

Table 3 Conceptual matrix of dimensions of social inequality in ISM in the context of the Covid-19 pandemic (number of studies in parentheses)

Levels of analysis	Before (access)	During (host-country experience)	After (outcomes)
Micro (individual level)	Experiences of exclusion, discrimination, or racism (0)	Experiences of exclusion, discrimination, or racism (13)	Experiences of exclusion, discrimination, or racism (0)
	Determinants of study abroad plans (7)	Mental health, psychological distress, and wellbeing (14)	Learning outcomes (linguistics, intercultural, academic) (0)
		Determinants of further study abroad plans (0)	Determinants of further study abroad plans (2)
		Financial vulnerability (6)	Labour market outcomes and/or career development (0)
		Socio-cultural adjustment (2)	
Meso (institutional level)	Institutional support services in response to Covid-19 (0)	Institutional support services in response to Covid-19 (8)	Post-pandemic management and attraction of (prospective) international students (0)
		Learning and/or educational adjustments (e.g., inclusive curriculum development) (0)	
Macro (country/ governmental level)	Policies on international students' access to higher education abroad (1)	Societal support services in response to Covid-19 (1)	Immigration policies (0)
		Governmental policies in response to Covid-19 (4)	Policies to integrate graduates in the labour market and/or immigration measures (0)
		Higher education response to Covid-19 (0)	
		Perceptions of international students and/or public discourses (1)	

Note: Multiple answers possible because studies could be assigned to more than onedimension of social inequality

while only eight studies focus on inequalities experienced by students in the pre-departure phase and only two on the time after their return.

The four most frequently analysed dimensions of social inequality at the *micro* level relate to students' mental health, psychological distress, and wellbeing (14 studies), their experiences of exclusion, discrimination, or racism (13 studies), the determinants of study abroad plans (9 studies), and financial vulnerability (6 studies).

From a *meso* and *macro* perspective, institutional support services (8 studies), and governmental policies or public perceptions in the light of Covid-19 (7 studies) are the most frequently analysed social inequalities. Like the micro-level analyses, these studies mainly looked at social inequalities while students were in their host countries (*during*).

The following subsections provide a qualitative discussion of the six most frequently examined dimensions of social inequality.

Mental health, psychological distress, and wellbeing (micro level)

The most frequently examined dimension of social inequality at the micro level is *mental health, psychological distress, and wellbeing*, which gathers 14 studies describing the mental health threats or disorders experienced by international students, and the related stress and coping mechanisms.

Considering all 14 studies from a double-coding[5] perspective, four studies ascertain the relationships between mental health issues and perceived discrimination or prejudiced attitudes (Ge, 2021; Lai et al., 2021a; Maleku et al., 2022; Zhao et al., 2022). In addition to *experiences of exclusion, discrimination, or racism*, the poor mental wellbeing of international students may be also intersected with *financial hardships and/or work or academic precarity*, as demonstrated by Maqbool et al. (2022), and Xu and Tran (2022). The remaining eight studies exclusively address mental health issues and/or disorders: fear of being infected, depression, anxiety, stress, insomnia, loneliness, and negative coping.

Most studies fall short of specifying their theoretical frameworks, either by not identifying any theories or by simply relying on the description of the key constructs (e.g., depression, anxiety, or stress) underpinning the adopted psychometric scales (e.g., Collins, 2021; Song et al., 2021; Teng & Takemoto, 2022). Of those studies that identify the theories they adopted (e.g., Chen et al., 2021; Lai et al., 2020, 2021b), the most common are theories of resilience, agency, social support, stress and coping (e.g., the Buffering Model of Social Support, the Transactional Model of Stress and Coping Theory).

The empirical evidence indicates heightened psychological distress, with loneliness, anxiety, depression, and fear of prejudice increasing during the pandemic (Ge, 2021; Lai et al., 2021a; Ma & Miller, 2021; Maleku et al., 2022; Zhao et al., 2022). International students emerge as a vulnerable group, experiencing more mental health issues when surveyed longitudinally (pre- vs. post-Covid) or vis-à-vis other student groups (domestic students). The fact that international students are foreign-born residents made them vulnerable to psychological distress not only due to their weaker social bonds and fewer resources, but also because they were beyond the remit of the governmental protection afforded by their host countries.

[5] Double coding refers to cases where different dimensions of social inequality have the same relative importance in a single study and were, therefore, assigned to two different dimensions (e.g., mental health and experiences of exclusion).

Equally, discriminatory behaviour and the rise of anti-Chinese prejudice during the pandemic left international students psychologically distressed (e.g., Ge, 2021; Lai et al., 2021a; Ma & Miller, 2021; Maleku et al. 2022; Zhao et al., 2022). Studies at the intersection of *mental health* and *exclusion*, but also those primarily addressing mental health (e.g., Alam et al., 2021; Chen et al., 2021), indicate that Chinese students were more likely to experience discrimination due to the misconception that they were carriers of the virus.

Most studies call for a wider understanding and recognition of mental health problems among international students. They also call for the provision of macro and meso support systems, from both universities and governments, e.g., in the form of training programmes or psychological interventions and contingency plans, to avoid similar situations during future crises.

Experiences of exclusion, discrimination, or racism (micro level)

The second most frequently examined dimension of social inequality (13 studies) deals with *experiences of exclusion, discrimination, or racism*. Most studies concentrate on *inequality of treatment* via students' lived experiences of exclusion abroad (e.g., Koo et al., 2023; Rzymski & Nowicki, 2020; Zhang et al., 2020). Only two studies address *inequality of outcomes* by looking at psychosocial adjustment levels (Baharloo et al., 2021; Tikhonova et al., 2021).

However, exclusion happens in different shapes, whether through racial discrimination and xenophobic behaviour (Koo et al., 2023; Rzymski & Nowicki, 2020; Zhang et al., 2020), social and economic hardships (Malet Calvo et al., 2022), financial vulnerability (Cairns et al. 2021; Coffey et al., 2021), or lower levels of psychosocial adjustment (Baharloo et al., 2021; Tikhonova et al., 2021). According to three of the four studies focusing exclusively on this topic, discriminatory behaviours were frequently geared towards East-Asian students in Western destinations (USA and Poland). However, as discussed in Section "Directions for future research", this finding is not necessarily substantiated when controlling for socio-demographic variables to determine which student groups were most affected by the pandemic. In fact, only one of the three studies includes students from different countries of origin, but its scope is confined to 18 focus group participants, 12 of whom were from China and South Korea (Koo et al., 2023). The remaining study (Malet Calvo et al., 2022) addresses Portuguese-speaking African and Brazilian students; it does not focus on overt discrimination, but rather on unjust treatment.

From a double-coding perspective, this group of studies is the richest of the six most frequently examined dimensions of social inequality, by also addressing four other dimensions of social inequality: *mental health* (4 studies), *financial vulnerability* (2 studies), *determinants of study abroad plans* (1 study), and *socio-cultural adjustment* (2 studies).

As discussed in the previous section, studies addressing both *mental health* and *exclusion* show how poor mental health might be linked to social exclusion and discrimination (Lai et al., 2021a; Ge, 2021; Maleku et al., 2022; Zhao et al., 2022). Exclusion can also be related to *financial vulnerability*, as demonstrated by the two studies at this intersection (Cairns et al., 2021; Coffey et al., 2021). In a similar vein, the study that links *exclusion* and *determinants of study abroad plans* (Yu, 2021) indicates that the pandemic

might have exacerbated economic difficulties and negatively influenced students' educational decision making (which is further discussed in Sections "Determinants of study abroad plans (micro level)" and "Financial vulnerability (micro level)"). Finally, the two studies on *socio-cultural adjustment* show how pandemic-related anxiety and perceived discrimination not only led to a weaker psychosocial adjustment (Baharloo et al., 2021), but also to a re-assessment of adaptation barriers (e.g., increased language difficulties due to remote teaching, as well as new temporalities and physical constraints arising from restrictions to visas, work permits, and physical movement– Tikhonova et al., 2021).

Not all studies specify their theoretical foundations, centring instead on concepts and/or ideologies such as prejudice, xenophobia, discrimination, neo-racism, social imaginaries, and neoliberalism. The few studies identifying their adopted theoretical lenses rely on psychological theories such as acculturation and resilience theory, postcolonial theory (the Global North-Global South framework as an epistemological paradigm), and intersectionality theory.

The empirical evidence indicates a shift from perceiving international students as a mobile elite to seeing them as a vulnerable population group that might be socially excluded on the grounds of race, nationality, or fear of being carriers of the virus, or simply due to their foreign-national status that renders them socially and financially vulnerable (Coffey et al., 2021). Another central theme is that experiences of exclusion might lead to poor psychosocial adjustment (Baharloo et al., 2021; Tikhonova et al., 2021) and mental health (Maleku et al., 2022; Zhao et al., 2022). The latter facet emerged more strongly, however, reinforcing the results yielded by mental health studies, in that the pandemic appeared to have stronger adverse psychological effects among specific student groups.

Most studies reported discriminatory behaviours towards Chinese students (from mainland China and Hong Kong) studying in Canada, the USA, and the UK (Ge, 2021; Koo et al., 2023; Lai et al., 2021a; Maleku et al., 2022; 2021; Zhang et al., 2020). Other destinations are also mentioned in this regard (e.g., Poland, Rzymski & Nowicki, 2020). Racist incidents occurred on and off campus, in physical and online spaces (Koo et al., 2023; Maleku et al., 2022; 2022), and they extended to students' wider social circles (Koo et al., 2023; Rzymski & Nowicki, 2020).

Determinants of study abroad plans (micro level)

The third most frequently examined dimension of social inequality at the micro level refers to the determinants of study abroad plans in the context of the pandemic, with a total of nine studies.[6] Seven of these studies refer to the pre-departure phase, more specifically to how prospective international students conceived the possibility of studying abroad in light of Covid-19. The remaining two studies refer to the impact of the pandemic on the future overseas plans of those currently studying abroad (Santiso & Sanz, 2022; Yu, 2021).

Six studies address decision making among Chinese degree-seeking students from China, Hong Kong, and Macau (Cheng & Agyeiwaah, 2022; Mok et al., 2021, 2022; Mok & Zhang, 2022; Wang, 2022; Yu, 2021), and one study among US-American

[6] See the two categories in Table 3: Determinants of study abroad plans (before), and Further determinants of study abroad plans (after).

degree-seeking students abroad (Santiso & Sanz, 2022). The other two studies focus on the decision making of students from India (Singh et al., 2021) and Kazakhstan (Almukhambetova & Kuzhabekova, 2022). The overemphasis on Chinese students might be related to their frequent experiences of exclusion, further emphasised by their over-representation as the largest international student group in Western destinations, as discussed in Sections "Examined types of international student mobility" and "Experiences of exclusion, discrimination, or racism (micro level)".

In terms of theory, most studies refer to the notion of push and pull factors (Almukhambetova & Kuzhabekova, 2022; Mok et al., 2021, 2022; Mok & Zhang, 2022). Additionally, some studies draw on theories of human capital (Mok et al., 2021), actor-networks (Cheng & Agyeiwaah, 2022), or agency (Wang, 2022). The study by Singh et al. (2021) does not refer to any specific theories or concepts.

All studies conclude that the likelihood of studying abroad decreased during the pandemic. Quantitative studies indicate that this likelihood decreased by 13–14% after the onset of the pandemic, resulting roughly in an 8–16% share of students who still intended to study abroad despite the restrictions imposed (Mok et al., 2021, 2022; Mok & Zhang, 2022). However, when asked about their intentions to study abroad after the pandemic, the surveyed students indicated that they planned to study abroad to a similar extent as before the pandemic (Mok et al., 2021, 2022; Mok & Zhang, 2022).

Additionally, Mok and Zhang (2021) contend that students from low-income families were the most affected by the pandemic. Arguably, this social group was already less prone to studying abroad before the pandemic, making it difficult to maintain, based on Mok and Zhang's (2021) design, that students from low-income families were affected more strongly by the pandemic than those from higher income families. Regarding gender, Singh et al. (2021) report that women were more likely than men to postpone their overseas plans due to the pandemic.

Only one (doubled-coded) study can be situated at the intersection of two dimensions of social inequality, by analysing how *experiences of exclusion or discrimination* may influence student decision making (Yu, 2021).

Overall, the empirical evidence indicates that the main explanations for the decreasing participation in international mobility opportunities were personal reasons, familial or parental health concerns, diplomatic frictions between home and host countries, worries about anti-China sentiment abroad (a recurring topic also in other groups of studies in our review– see Section "Experiences of exclusion, discrimination, or racism (micro level)"), and fear of not being able to return to the home country (Almukhambetova & Kuzhabekova, 2022; Cheng & Agyeiwaah, 2022; Mok et al., 2022; Singh et al., 2021). Students who still intended to study abroad during the pandemic pointed to opportunities for high-quality learning and the prestige of the potential host universities (Almukhambetova & Kuzhabekova, 2022; Mok et al., 2022).

Taken together, this set of studies not only demonstrates how the pandemic acted as a disruptor of access to international mobility opportunities, but also how it exacerbated social inequalities– because some students already belonged to economically disadvantaged groups (Mok & Zhang, 2022), due to governmental responses to Covid-19 (e.g., Mok et al., 2022; Cheng & Agyeiwaah, 2022), or because of increased prejudice against specific student groups (e.g., Yu, 2021).

Financial vulnerability (micro level)

The fourth most frequently examined dimension of social inequality at the micro level relates to students' *financial vulnerability*. A body of six studies examines financial hardships, primarily from a student perspective (*micro* level), but also considering potential macro-structural exclusion.

While all six studies address students' *financial vulnerability*, the discussed reasons for students experiencing economic precarity vary. These reasons range from precarious jobs (Coffey et al., 2021), limited welfare access in the host country due to students' foreign-national status (Ramia et al., 2022), geopolitical and economic asymmetries (Cairns et al., 2021), and students' socio-demographic backgrounds (Hastings et al., 2023) to increasing financial strain arising from travel restrictions (Maqbool et al., 2022; Xu & Tran, 2022).

Within this group of studies, five are at the intersection of different dimensions of social inequality. Ramia et al. (2022) examine international students' financial welfare before and during the pandemic as a policy question, investigating both *financial vulnerability* and *governmental policies in response to Covid-19*. Another intersection concerns two studies examining *students' financial vulnerability* and their *mental health* (Maqbool et al., 2022; Xu & Tran, 2022), which probe into economic hardships arising from border closures or travel bans and the resulting psychological distress of international students pursuing postgraduate studies. Relatdly, two studies show that *financial vulnerability* might lead to *social exclusion*, either due to foreign citizenship status and gender inequalities (Coffey et al., 2021) or lacking economic capital (Cairns et al., 2021).

This group of studies clearly states the adopted theoretical frameworks, which comprise citizenship/non-citizenship frameworks (Hastings et al., 2023; Ramia et al., 2022), bioecological systems and needs-response agency theory (Xu & Tran, 2022), intersectionality theory (Coffey et al., 2021), and Bourdieu's theory of social, economic, and cultural capital (Cairns et al., 2021). Only Maqbool et al. (2022) lack a clear theoretical background, despite drawing on the existing academic literature to contextualise a less frequently examined flow of ISM, namely from Pakistan to China.

The empirical evidence shows that international students experienced heightened financial vulnerability during the Covid-19 pandemic. This finding becomes evident in both studies adopting a longitudinal approach (pre- vs. post-Covid) and studies comparing study abroad students and domestic students cross-sectionally (Cairns et al., 2021; Coffey et al., 2021; Hastings et al., 2023; Maqbool et al., 2022; Xu & Tran, 2022; Ramia et al., 2022).

Similar to the studies on mental health (see Section "Mental health, psychological distress, and wellbeing (micro level)"), these studies show that financial vulnerability was exacerbated by the foreign-national status of international students, as it hindered their access to financial assistance in the host country (Hastings et al., 2023; Ramia et al., 2022). However, due to students' diverse socio-economic backgrounds and the intersection with other social vulnerabilities, the impact of the pandemic on their financial precarity was uneven. Students from low-income countries and working-class backgrounds had to rely on precarious jobs for financial survival even before the Covid-19 pandemic. Consequently, the adverse impacts of the pandemic were more pronounced than for their counterparts from affluent families in high-income countries (Cairns et al., 2021;

Maqbool et al., 2022; Hastings et al., 2023). Additionally, the pandemic intensified the pre-existing financial vulnerability of female students (Coffey et al., 2021).

These studies also highlight a dearth of institutional responses to the hardships brought about by the pandemic (Cairns et al., 2021, Ramia et al., 2022). Although both home- and host-country higher education institutions were aware of the financial struggles of students, the measures they implemented to ease these burdens proved insufficient in many cases. Most studies call for a broader understanding and better acknowledgment of the financial vulnerability of international students, emphasising the importance of providing appropriate support via both governments and universities to improve working conditions and welfare provisions.

Institutional support services in response to Covid-19 (meso level)

The only dimension of social inequality we carved out at the meso level relates to the nature and efficacy of institutional support services to address the challenges faced by international students during the Covid-19 pandemic. Four out of a total of eight studies analyse such institutional support services of higher education institutions (HEIs) based in the USA. The remaining studies look at HEIs in the UK (1), Australia (1), South Korea (1), or the USA and the UK simultaneously (1).

These studies examine students' satisfaction with a range of institutional interventions or support mechanisms, including financial support, hygiene and social distancing, effective communication, measures to ensure students' wellbeing and mental health (Greenland et al., 2021), remote teaching, and pastoral care services such as counselling, tutoring, and mentoring (Honegger & Honegger, 2020; Krsmanovic, 2021). Some studies focus on specific support mechanisms, such as remote teaching (Eboka, 2021; Han et al., 2022) and quarantine support (Stewart & Kim, 2021).

These studies assess the adequacy of support services according to the challenges faced by international students (Whatley & Fischer, 2022), including their access to resources like housing, food, and essential supplies. Other common challenges include travel restrictions, visa issues, and the impact of the digital divide (Eboka, 2021; Han et al., 2022).

While these studies do not overtly intersect with other dimensions of social inequality, they frequently explore the psychological dimension of students' experiences abroad by ascertaining how the provision (or lack thereof) of institutional support can influence students' mental health issues, isolation, and the stress associated with meeting online educational requirements during a global health crisis. The arrow connecting mental health to institutional support services in Fig. 6 shall reflect this implicit thematic connection.

The theoretical foundations are notably diverse, with each study employing distinct theories or frameworks, such as narrative theory (Honegger & Honegger, 2020), sociology of conventions theory (Ye, 2022), and the adaptive leadership framework (Krsmanovic, 2021). Other studies incorporate concepts related to online learning (Han, 2022) or broader theories like social constructivism (Whatley & Fischer, 2022). Three studies (Eboka, 2021; Greenland et al., 2021; Stewart & Kim, 2021) do not explicitly articulate their theoretical foundations.

Overall, the findings emphasise the need for effective responses from HEIs that do not only address immediate educational challenges, but also the broader psychosocial and

economic impacts of the pandemic on international students. Another recurrent theme is the call for more research from a student perspective that goes beyond market-driven approaches in order to harness more socially equitable and supportive educational environments.

Governmental policies and public perceptions in light of Covid-19 (macro level)

The most frequently examined dimension of social inequality at the macro level relates to governmental policies in response to Covid-19 and negative perceptions of international students. Seven studies look at international students within their macro contexts and address how pandemic-related governmental policies affect different aspects of the study abroad experience. These policies range from limiting access to international mobility opportunities, disrupting transnational infrastructures that sustain international migration, and restraining citizenship rights or access to societal services to shaping public perceptions of international students. The examined host countries primarily constitute Anglophone education hubs, including Australia, the USA, and the UK. China is the sending country in three out of seven analysed studies; four studies do not specify the countries of origin or education of the examined students.

The inequalities these studies highlight concern degree-seeking students and arise from governmental policies in response to Covid-19 (4 studies), societal support services in response to Covid-19 (1), policies regarding international student access to higher education abroad (1), and perceptions of international students and/or public discourses (1). While one study focuses on access policies in the pre-departure phase (Buckner et al., 2022), the other studies scrutinise policies, services, or public perceptions affecting students' time abroad (Table 3).

The reviewed studies are mainly descriptive and have limited theoretical foundations. Four studies do not specify the adopted theoretical framework (Buckner et al., 2022; Ma & Zhan, 2022; Mittelmeier & Cockayne, 2023; Younis et al., 2021), and the remaining three conceptualise their work from different angles, drawing on concepts such as risk conceptualisation and family-mediated migration infrastructures (Hu et al., 2022), stigma and coping mechanisms (Ma & Zhan, 2022), and social citizenship (Ramia et al., 2022).

Overall, findings from the macro-level studies highlight the fragile position of international students during the pandemic. International students' perspectives and needs were not necessarily addressed when governments pursued national interests in policymaking (Qi & Ma, 2021). Furthermore, public narratives about international students fuelled racism when tweets portrayed them as spreaders of the virus (Mittelmeier & Cockayne, 2023). The studies analysing pandemic-related governmental policies and practices portray international students as a migrant group irrespective of national and institutional contexts. Future research could, thus, seek to understand international students in light of both their student status, and their home and host countries and institutions.

Discussion and conclusion

Summary of main findings

Our scoping review indicates a shift in research on social inequalities in ISM following the outbreak of Covid-19. The pre-pandemic literature on social inequalities in

ISM tended to focus on equity of access to ISM. It commonly examined how students' resources– e.g., their economic, social, and cultural capital– differed across social groups, and how such unequal resources led to socially stratified chances of studying abroad (for an overview, see Netz et al., 2020). With the start of the Covid-19 pandemic, however, research interest shifted from *equity of access* to the *lived experiences of inequalities* and, by implication, from the pre-departure (*before*) to the in-country-phase of study abroad (*during*). During the most intense phase of the Covid-19 pandemic, post study-abroad social inequalities (*after*) were hardly analysed, except by two studies addressing the impact of the health crisis on future study abroad plans (Santiso & Sanz, 2022; Yu, 2021).

The reviewed studies highlight the intersection of different social inequalities that were experienced by international students during the most intense phase of the pandemic (Fig. 6). At the *micro level*, major dimensions of inequality relate to students' *mental health or wellbeing* and *experiences of exclusion*, or both in tandem, as exclusion and discrimination might trigger mental health issues among those studying abroad. Financial vulnerability, while less frequently discussed in our pool of studies, can also be linked to psychological distress, as illustrated by the two studies at this intersection (Fig. 6).

In terms of the concerned *meso* and *macro* contexts, our findings show that institutional *support services* and *governmental policies* can exacerbate social inequalities by making international students more prone to psychological, financial, and social hardships. Already prior to the pandemic, institutional and governmental policies– such as

Fig. 6 Intersecting dimensions of social inequality in ISM in the context of the Covid-19 pandemic

stringent visa requirements and higher tuition fees for non-national students– contributed to structural inequalities between national and international students (Lomer, 2018; Tannock, 2013). However, several institutional and governmental policies issued during the pandemic– including border closures, scholarship withdrawals, mandatory quarantines and online learning, and the exclusion from welfare and health facilities– seem to have worsened the situation of specific groups of international students in their host countries, and thus exacerbated pre-existing structural social inequalities (e.g., Buckner et al., 2022; Farbenblum & Berg, 2020; Hastings et al., 2023; Maleku et al., 2022; Ramia et al., 2022; Younis et al., 2021).

Clearly, the intersection of different dimensions of social inequality received heightened attention in the pandemic-related ISM literature. Researchers probed multiple dimensions of social inequality and, albeit rarely, the importance of socio-demographic variables for identifying the most vulnerable student groups (e.g., Chinese students in Western destinations).

In line with the shift from *equity of access* to the *lived experiences of social inequalities*, there was also a change in how international students were depicted, that is, from being considered a *mobile elite* to being considered a *vulnerable group*. A prime example of this shift is the Covid-19-related interest in students' experiences of social and economic exclusion (Sections "Experiences of exclusion, discrimination, or racism (micro level)" and "Financial vulnerability (micro level)"), which were rarely addressed in the pre-pandemic literature. Governmental and institutional structures may contribute to such processes of exclusion, as demonstrated by the studies discussed in Section "Governmental policies and public perceptions in light of Covid-19 (macro level)"(e.g., Coffey et al., 2021; Hastings et al., 2023; Ramia et al., 2022).

Limitations of the review

While our review accomplished its purpose in synthesising evidence on the impact of the Covid-19 pandemic on social inequalities in ISM, it has some limitations. First, we did not perform any formal quality assessments of the reviewed studies. As we conducted a scoping review (Arksey & O'Malley, 2005), we rather opted for broadly outlining major themes of discussion in our area of interest. Nonetheless, most reviewed studies were published in peer-reviewed journals, which ensured some level of quality assessment as a requirement for publication.

A second major limitation relates to the time frame of our review. We stopped screening articles in June 2022, meaning that 88% of our studies addressed the first two years of the pandemic (with fieldwork partly completed in 2020 and 2021), which was the most intense phase of the pandemic. A related limitation is the exclusion of books, book chapters, and grey literature. For instance, PhD theses and MA dissertations were few and far between when we stopped searching for studies but might now be more substantial in number. Future reviews should, therefore, include such lengthier publications.

Directions for future research

Our review suggests several avenues for future research. To begin with, there is ample room for applying and developing theories in the examined research field. Many reviewed studies merely relied on broader concepts (e.g., prejudice, mental health), ideologies (e.g., neoliberalism), or research paradigms (e.g., social constructivism). Others

did not specify their theoretical underpinnings at all. Only a few studies built on established theoretical frameworks. In this regard, studies on financial vulnerability are a positive exception. One example is the study by Xu and Tran (2022), who developed a conceptual framework combining bioecological systems theory and needs-response agency to analyse the ripple effects of health crises on the activities, social relationships, and role conceptions of students abroad. Another rare example is Lai et al. (2021b) phenomenological research on mental health, which drew on the Transactional Model of Stress and Coping to develop an interview guide in line with its key components: stressors, cognitive appraisals, coping and support, and outcomes.

Regarding methodology, our review has highlighted that many studies do not precisely define and describe the analysed samples and variables. This lack of transparency currently hinders our understanding and the comparability of findings on social inequalities in ISM. Thus, future research should precisely define, for instance, the examined types of ISM and students' countries of origin or prior education.

Moreover, future research should apply more robust research designs, which allow for causal conclusions. Only a minority of studies used inferential statistics or advanced statistical methods. Using such methods, however, is key to determining which social groups were affected most by the Covid-19 pandemic.

The research field would also benefit from– ideally nationally representative– studies on further countries. This argument particularly applies to the research subfield addressing students' mental health and study abroad plans. Although many studies on the topics adopt quantitative designs, they strongly focus on students from India, Kazakhstan, and especially China, making it difficult to generalise findings to other countries and regions of the world. This concentration of existing research might also create a false impression of which student groups faced the strongest social inequalities during the Covid-19 pandemic. In fact, existing research suggests that Chinese degree-seeking students experienced the greatest inequalities regarding all six most frequently examined dimensions of social inequality. While plausible, it might also simply reflect the current concentration of existing research on Chinese students abroad. Besides country-specific studies, the research field would also need large-scale studies that allow for robust comparisons of social inequalities in ISM across countries, groups of students, and ideally over time.

Relatedly, the frequency of examination of different dimensions of social inequality in our pool of studies does not necessarily indicate their relative importance. Some (so far) less frequently examined dimensions of social inequality might also be highly relevant and, in fact, represent emerging research topics. One example of a less frequently examined topic are inequalities in access to health treatment and, relatedly, students' physical health. A reason for this could be that students are comparatively young and healthy on average, and were therefore less likely to be strongly affected physically by Covid-19 than older people. Still, short- and long-term inequalities could arise from situations in which access to health treatments was difficult or impossible for specific groups of international students.

The temporal aspect of data collection should also be underscored. Different social inequalities might not only relate to specific country contexts and social groups, but also to the study abroad phase and stage of the pandemic under examination. Studies on mental health and financial vulnerability adopted longitudinal perspectives to gauge international students' psychological and financial vulnerabilities before and during the

pandemic. In the other research subfields as well, however, repeat measures would be crucial to ascertain changes in inequality experiences over time. Once the time frames covered by data collection instruments expand, future research could pay closer attention not only to short-term inequalities, but also to the longer-lasting consequences of the Covid-19 pandemic, including scarring effects that might become visible only after several years. In this sense, we consider it important that future research examines *inequalities of opportunities*, *inequalities of treatment*, and *inequalities of outcomes*.

Moreover, a better consideration of socio-demographic variables (e.g., gender, ethnicity, nationality, and social origin) would allow for a more fine-grained examination of the extent to which these variables generate different social inequalities. Only a few of the reviewed studies captured and analysed such key variables to highlight social inequalities in ISM across student groups. Using such variables allows for a stronger link between ISM research and the longstanding scientific debates in social stratification research.

Future research could also delve deeper into the intersections of social inequalities–and how these might be (inadvertently) exacerbated by institutional and governmental structures throughout the study abroad cycle. Generally, more research is needed on the influence of *meso* and *macro* structures on the potentially unequal treatment of international students. Understanding experiences of inequality in education abroad requires attending not only to the complex mix of different social inequalities, but also to the moments in which they occurred and to the social structures that bolstered them. Simply put, the *dimensions of social inequality*, *their temporal scope*, and the *levels* at which they have their origin might have to be jointly considered to fully understand the generation of social inequalities in ISM.

Finally, it would be interesting to compare the generation of social inequalities in ISM in the context of the Covid-19 pandemic to the generation of social inequalities in ISM in other crisis situations. Particularly once evidence relating to the time before, during, and after the Covid-19 pandemic will be available, comparisons could be drawn to other shocks to higher education provision arising, e.g., from financial crises, the start of wars, or the initiation or collapse of political regimes. Such historical analyses would enable a comparative assessment of how long-lasting the social inequalities generated in the context of the Covid-19 pandemic were.

Supplementary Information

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Supplementary Material

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Author contributions

Joana Almeida, Nicolai Netz, David Nika, and Ewa Krzaklewska were responsible for writing this paper. Joana Almeida and Nicolai Netz were also responsible for overseeing the whole paper production and for addressing inconsistencies. Additionally, Joana Almeida wrote the Sections "Mental health, psychological distress, and wellbeing (micro level)" and "Experiences of exclusion, discrimination, or racism (micro level)", David Nika the Section "Determinants of study abroad plans (micro level)", Thais França the Section "Financial vulnerability (micro level)", Joyce Aguiar the Section "Institutional support services in response to Covid-19 (meso level)", and Suvi Jokila the Section "Governmental policies and public perceptions in light of Covid-19 (macro level)". Bernhard Streitwieser conducted linguistic checks. Alina Botezat developed the Venn Diagram (Fig. 6). All authors were involved in the research process by screening, extracting, and/or analysing data. All authors approved the final version of the manuscript.

Availability of data and materials
The data supporting the findings of this study stem from the corpus of reviewed studies, which are marked with an asterisk (*) in the reference list. The review protocol and data extraction form can be made available upon reasonable request.

Declarations

Competing interests
The authors declare that they do not have any competing interests.

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