University of Groningen

Qualitative sampling in research on international student mobility

Aksakal, Mustafa ; Bilecen, Basak; Schmidt, Kerstin

Published in:
Globalisation, Societies and Education

DOI:
[10.1080/14767724.2018.1525282](https://doi.org/10.1080/14767724.2018.1525282)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2019

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Aksakal, M., Bilecen, B., & Schmidt, K. (2019). Qualitative sampling in research on international student mobility: insights from the field in Germany. *Globalisation, Societies and Education*, 17(5), 610-621.
<https://doi.org/10.1080/14767724.2018.1525282>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Qualitative sampling in research on international student mobility: insights from the field in Germany

Mustafa Aksakal, Başak Bilecen & Kerstin Schmidt

To cite this article: Mustafa Aksakal, Başak Bilecen & Kerstin Schmidt (2019) Qualitative sampling in research on international student mobility: insights from the field in Germany, *Globalisation, Societies and Education*, 17:5, 610-621, DOI: [10.1080/14767724.2018.1525282](https://doi.org/10.1080/14767724.2018.1525282)

To link to this article: <https://doi.org/10.1080/14767724.2018.1525282>

Published online: 13 Nov 2018.

Submit your article to this journal [↗](#)

Article views: 248

View related articles [↗](#)

View Crossmark data [↗](#)

Citing articles: 1 View citing articles [↗](#)

Qualitative sampling in research on international student mobility: insights from the field in Germany¹

Mustafa Aksakal ^a, Başak Bilecen ^{b,c,d} and Kerstin Schmidt ^a

^aFaculty of Sociology, Bielefeld University, Bielefeld, Germany; ^bDepartment of Sociology, University of Groningen, Groningen, Netherlands; ^cCenter for European Studies, Harvard University, Cambridge, MA, USA; ^dCenter on Migration, Citizenship and Development, Bielefeld University, Bielefeld, Germany

ABSTRACT

Although over the past decades the numbers of studies investigating international student mobility and migration (ISM) increased, methodological challenges in empirical research on the topic have remained mainly unaddressed. This is particularly the case for sampling, which is a crucial but often less considered part of qualitative research designs. In this article, we identify three main challenges in qualitative sampling for research into ISM: time, space and international students' heterogeneities. In addressing those challenges, we theoretically discuss their implications and give empirical examples drawing on our research experiences. We argue for a more reflexive research procedure in studying educational mobility.

ARTICLE HISTORY

Received 9 April 2018

Accepted 14 September 2018

KEYWORDS

International student mobility; qualitative sampling; qualitative interview; time; space; heterogeneities

Introduction

International student mobility and migration (ISM), which can be defined as the spatial movement of young people with the purpose to pursue education abroad, represents a phenomenon that gained growing relevance in contemporary societies over the last decades (King and Raghuram 2013; Teichler 2015). According to the OECD, the number of international students rose from '0.8 million worldwide in 1975 to 4.5 million in 2012, a more than fivefold increase' (OECD 2015: 360). Also, in the European Union, the numbers of international students migrating from non-EU countries to the EU increased significantly by more than 200% over the last years (Eurostat 2016).² The expansion of international students is accompanied by a diversification of both students' destinations and countries of origin (Brooks and Waters 2011). Student mobility and migration is driven by the increasing value of educational stays abroad for future careers, particularly in high-end jobs (Brooks and Waters 2010) and increasing internationalisation efforts of universities (Mosneaga and Agergaard 2012). Therefore, ISM is contemporarily one of the most significant migratory phenomena (Bilecen 2014a; Findlay et al. 2012), which is related to a substantial increase in the amount of empirical research on ISM (Bilecen and Van Mol 2017; King and Raghuram 2013). Existing studies usually focus on the causes, processes, and consequences associated with ISM, for instance through addressing higher education and student mobility in the context of globalisation (Findlay et al. 2012; Kritz 2006; Kuptsch 2006; Shields 2013) and their transnational ties and practices (Beech 2015; Bilecen 2014a; Bilecen and Faist 2015), or on international students' perceptions of mobility and motivations and experiences during their stays (Aksakal and Schmidt 2017; Brooks and Waters 2011; Martin 2017; Sondhi and King 2017).

While the number of studies investigating ISM is still on the rise, methodological considerations seem to be less discussed in the literature. As international students tend to be young, educated, and

often possess adequate language skills, they are not only enjoying generally a positive reputation in policy and academic debates but are also frequently perceived as an ‘unproblematic’ group of mobile people in comparison to other migrant categories (Aksakal et al. 2017). To some extent this is also reflected in the academic methodological literature addressing research designs and procedures which tends to assume that empirical research on ISM should be more straightforward or even ‘easier’ than research of other migrant groups (Bilecen 2014b). While part of this understanding can be confirmed by our experiences in the research projects on ISM, nevertheless, there are several challenges remaining, which we consider worth exploring. In order to address one significant gap in the literature, we focus in this article on the sampling procedure for qualitative research in ISM as the selection of respondents can strongly influence the ‘knowledge production in research’ (Korsnes Kristensen and Noem Ravn 2015: 723).

The major objective in employing qualitative research is to shed light on and to understand social actors’ life worlds from their own perspectives (Flick, von Kardorff, and Steinke 2005; Geertz 1973). The population of interest, from which the sample is drawn, is to a large extent determined by the research question(s). A carefully developed sampling strategy is therefore necessary in order to assure that the collected data can be used to answer the research question(s), which to a large extent determines the success or failure of an investigation. The need for an adequate sampling strategy, mainly for qualitative studies utilising interviews, is linked to the idea that researchers ‘typically want to ensure that they gain access to as wide a range of individuals relevant to their research questions as possible, so that many different perspectives and ranges of activity are the focus of attention’ (Bryman 2012: 416). Unlike quantitative approaches, qualitative studies do not mainly seek to be representative of the population at hand but rather to investigate phenomena by considering both typical and atypical cases (Patton 1990). In order to achieve this objective, not only do individual traits have to be taken into account ‘but also temporal, spatial and situational influences, that is, the context of the study’ should be considered (Marshall 1996: 524). This means that time and geographical space, in addition to the heterogeneities of respondents have to be considered in qualitative sampling.

Through reflecting on our research experiences with particular emphasis on time, geographical space, and heterogeneities, this article contributes to the literature on qualitative research and migration studies. We acknowledge that some of the issues we address are also relevant for other mobile populations (and to a certain extent for immobile populations). However, we argue that research into ISM requires taking into account the different national education systems in which students are embedded, international students’ agency as well as the particular ways structure and agency interact. The former aspect includes, for instance, academic calendars, the courses and degrees offered by universities, and their internationalisation strategies, and the latter involves international students’ social relationships, actions and interactions under these structural conditions.

The remaining part of the article is divided into four sections. In the following section, we briefly introduce the international research projects in which the authors are involved. The third section of the article is divided into three subsections discussing the main challenges related to time, geographical space, and heterogeneities in sampling the international student population while also giving examples based on experiences during our own empirical work. The fourth section concludes the article with the main argument that the aforementioned issues are interdependent and influence students’ experiences and researchers’ understanding of them, where the need to be reflexive at all stages of research is highlighted.

Project descriptions

All authors of the article are engaged in conducting research with international students and this article is based on four international projects all using qualitative interviews as a method of inquiry.

The first and the third authors run the German part of the international research project called EURA-NET³ on the qualitative features of temporary cross-border migration and its transformative

characteristics within Asian-European transnational social spaces. The project addressed the following research question: What are the transformative characteristics, (national, regional and international), policy implications, and development impacts of temporary transnational migration of people? To address migration motives and experiences, qualitative interviews were conducted with temporary migrants and experts. Expert interviews were conducted with specialised actors deemed knowledgeable in diverse migration processes and were chosen in the areas of civil society, policymaking, and academia. An operational definition of temporary migrants as persons who had stayed between three months and five years in Germany was applied. A sample of this population was drawn using purposive stratified sampling, which is usually applied when the population to be studied is expected to be heterogeneous with respect to certain characteristics (Bryman 2012; Patton 2002). Stratification criteria in this project were different legal categories of migrants, including international students, as well as the most significant countries of origin in Europe and Asia. Respondents were accessed using personal networks, different civil society associations and to some extent social media. In addition, in recruiting twenty-six international students as respondents snowball sampling was used, a strategy in which respondents who have already participated in the research are asked to identify other persons who might be willing to be interviewed (Bernard 2011).

The same authors were engaged in another international research project called YMOBILITY,⁴ in which they researched intra-EU youth mobility to Germany. The project used secondary statistical data as well as primary data in the form of qualitative interviews with young intra-EU migrants, an online survey and experimental methods to investigate the effects of mobility on young people's transitions from youth to adulthood. More precisely, it focused on the following questions: How does the mobility and migration of young people affect their life courses, contribute to aggregate human capital outcomes, and shape development in both destination and origin regions? The population of interest for the qualitative interviews were migrants between 18 and 36 years of age from Italy, Latvia, Romania, Slovakia, and Spain residing in Germany. The stratification of the sample was based on two dimensions: first, the country of origin, and second, the purpose of stay in Germany, which is defined as low-skilled and highly-skilled work, or tertiary education. A total of thirty-two international students were recruited using the researchers' own networks including professional and personal contacts, attending social events of associations, posting on internet fora (e.g., Facebook, Twitter and Instagram), using mailing lists of associations, and contacting international student offices. These strategies were used as entry points into different snowball systems, similar to the procedure in the previously described project.

The second author has been working on international PhD students' transnational friendship networks, support systems, and identifications (Bilecen 2014a). Recently, she has been involved in two related international collaborative research projects, called Bright Futures and Asian Mobilities,⁵ where the main focus is on international Chinese and Japanese students' motivations and experiences of international education, friendship networks, as well as their life-course orientations in Germany, the UK, Japan, and China. The main research questions guiding those two projects are the following: (1) What explains individual decisions to move internally and internationally for higher education? (2) What is the role of education migratory process in shaping life course aspirations, projections, and orientations of Chinese and Japanese students? International students' experiences are being compared to internally mobile students within China and to native students in Germany, the UK, and Japan. For the purpose of these two international collaborative projects, qualitative data through fifty-five semi-structured interviews is collected and a Germany-wide representative quantitative survey is being conducted. In these projects, purposive sampling was used for the qualitative part. As the main interest in these projects is to understand the underlying determinants of and the implications for expected life course trajectories and personal networks of BA and MA international students originating from China and Japan, we made sure that there is enough variance in the sample. Based on this initial step of purposive sampling through different entry points into the field, snowball sampling has been done (Bryman 2012).

Time, geographical space, and heterogeneities in ISM research

This article draws on our empirical journeys and uses practical illustrations from the presented collaborative research projects. The following sections address our common observations regarding the aspects of time, space, and heterogeneities in sampling for qualitative interviews with international students in Germany.

The issue of time

Time is one of the most important aspects when choosing the respondents in every empirical study. In studying international students time is related to at least two issues: first, their length of stay in the country of education, and second, the academic calendar.

With respect to the former, although we can presume that student experiences might vary depending on their length of stay in the countries of education, time spent abroad seems to be a subtle issue in the empirical studies of ISM. In particular, the temporariness of mobility for study abroad is generally understood as a sign of a high level of students' geographical mobility compared to many other mobility categories (Schmidt and Aksakal 2018). However, less attention has been paid to the fact that the timing of the interviews during the stays of international students can have implications not only about the way interviewees express, for instance, their well-being and their social integration, but also their future plans to stay in the countries of education, to move on to another country, or to return to the country of origin after graduation (Aksakal and Schmidt 2017).

Previous research has identified that over time, international students will adjust to the new environment while their stress levels would decrease (Brown and Holloway 2008), they will learn the language of the country better (Brown 2008), and their well-being changes (McLachlan and Justice, 2009). According to a qualitative longitudinal study conducted by Schartner (2015) in the UK, post-graduate students make close friendships with other international students, as they stay longer at higher education institutions abroad. Furthermore, quantitative studies illustrated perceptions of social acceptance (Ying and Han 2006) and psychological well-being (Leung 2001) can be closely related to academic performance of students. In that line of research, it is found that international students' confidence in their own academic achievements can change during their academic stay abroad (Putwain and Sander 2016).

One major way of addressing the time spent in countries of education, exemplified by previous research, has been the differentiation of student groups according to degree types. In so doing, the aspect of time has been incorporated into the study of ISM as those students pursuing a complete degree would remain in the countries of education longer than exchange students (King and Raghuram 2013). In that vein, results from EURA-NET and YMOBILITY projects showed a strong difference between those international students who pursue credit (short-term) mobility and those who pursue degree (long-term) mobility. Therefore, more and more studies tend to differentiate the study length as the time aspect that influences students' experiences (for PhD students see Bilecen 2014a and for Erasmus students see Van Mol 2014). For example, the Bright Futures and Asian Mobilities Projects investigated only degree-seeking students and not exchange students as the exchange ones tend to stay for shorter periods of time. Thus, the aim is not only to understand the influence of the type of the degree on students' experiences, but also to investigate the effects of time spent in the country of education.

Similarly, the authors involved in the EURA-NET and YMOBILITY projects found that the experiences of international students in the country of education are closely linked to the motivations of student mobility. Respondents perceived their mobility as advantageous for their future careers, or as an academic or cultural experience. International students who pursue a full academic degree in Germany, and who had been to Germany before, as an Erasmus exchange student, often perceived their second stay in a different manner. Many remembered their Erasmus exchange as a

pleasant time, when they were part of a group of other young people exploring life abroad. In contrast, during their second stay they experienced more pressure to accomplish academic achievements and to prepare their entry into the labour market. This situation was often accompanied by feelings of uncertainty, loneliness, and isolation. Therefore, students' perceptions about their current life situation, their life in Germany, and their future plans significantly differ depending on whether their stays are intended to be only of a short-term nature or if they aim to qualify for an academic career in Germany or elsewhere. When formulating the research questions and selecting the research population, researchers need to consider if they are interested in both groups of students or only one.

The second issue, with respect to time in the sampling process, is related to the choice of the most appropriate timing for interviewing in the course of the academic year. It is particularly linked to the fact that not all international students might be present at the place of their studies when they do not have to attend classes, such as during holidays and semester breaks. As a consequence, the sample might fail to reflect the broad range of international students with different socio-economic backgrounds and personal preferences. As our research showed, European students often could afford to travel back home regularly. However, for students from Asia this was often not possible due to the geographical distance between their countries of origin and Germany, which required more time and financial means for home visits. International students from Asia who could afford to, engaged in long-distance travel to their country of origin during longer breaks between classes, and often stayed for several weeks, while Asian students from families with a more modest income were not able to do so (Aksakal and Schmidt-Verkerk 2014). Furthermore, many international students use their free time to travel around and explore other regions within Germany or Europe (Aksakal and Schmidt 2015). Another aspect demonstrating the importance of the timing of interviews is that during times of examinations students might not be willing to participate in often time-consuming qualitative interviews.

To achieve a diverse sample, the Bright Futures and Asian Mobilities projects followed recruitment during both the academic year as well as during the semester breaks in Germany. In so doing, we could also capture those international students at a later stage of their studies. For example, one of the respondents who just handed in his Master thesis one week before the interview stated that if we would have scheduled the interview next month he would have highly likely returned to China. Moreover, we included international students with different socio-economic backgrounds, i.e., those who could afford to travel during semester breaks and those who could not.

This means that when choosing respondents to conduct an interview, researchers need to take into account semester breaks and examination intervals so that they can reach more students to draw their sample from. A combination of interviews conducted during semesters and semester breaks would yield a more inclusive sample in terms of students' socio-economic backgrounds and preferences. In addition, in international collaborative research projects, in which the aim is often to conduct interviews simultaneously, it is important to consider that the most suitable time to reach international students depends on the different academic calendars in each national context.

The role of geographical space

There is a broad consensus that geographies play an important role in academic inquiries (Corbin and Strauss 2008; Miles and Huberman 1994) including previous studies on international students particularly on their decisions where to study (Ball 2003; Brooks and Waters 2011) or where to live after completion of their study abroad (Bryła 2018). Much of the existing research is concerned with broader internationalisation processes in higher education, such as in certain world regions or states in the global North (Altbach and Knight 2007; Findlay et al. 2012; Kuptsch 2006) or in the global South (Gunter and Raghuram 2018). Moreover, several other studies are devoted to students' motivations to study abroad within the European Union (Beech 2015; Caruso and de Wit 2015; Findlay et al. 2018) or in the US (Zhou 2015). A recent study of Van Mol and Ekamper (2016) shows that Erasmus exchange students in the European contexts often chose their place of education

not necessarily based on the prestige of the university but on the size and reputation of the city. In line with the previous research and our research experiences, there are two main issues related to geographical space worth considering in shaping international students' motivations: (1) the size of cities and (2) the degree of internationalisation of universities.⁶

Our research involvement has shown that young people's education experiences abroad can be importantly shaped by where the university is located. Based on the EURA-NET project, international students living in larger cities in Germany often prioritise the cosmopolitan atmosphere that prevails in these places. Since metropolitan areas offer better opportunities for cosmopolitan lifestyles, in which international students integrate evidently 'very easily' and consequently these conditions were perceived as fostering their social inclusion in Germany. Evidence also indicates that interviewees living in bigger cities can also develop different feelings of belongingness and identification patterns (e.g., the feeling of belonging to a certain city), leading sometimes to considerations for longer term stays than initially anticipated. Meanwhile, international students who lived in smaller cities stated that they experienced frequently discrimination or even verbal and physical assaults in their everyday life creating fear or feelings of exclusion from the society.

With respect to universities, many respondents argued that the preparedness of educational institutions, including the support they received, influenced their perceptions of successful inclusion into the educational system. This preparedness of universities was often reflected based on the large number of classes offered in English, international academic staff, experienced mentors, and the availability of student associations that are committed to supporting students in their stays in Germany. Meanwhile, several students enrolled in less internationalised universities narrated that there were not sufficient support programmes fostering their integration or helping with bureaucratic tasks or searching internships by the university staff.

Both the feelings of being well-included into a metropolitan society and into an international university often led to very similar considerations, namely to be part of the host society. In cases where students felt disintegrated from the society, university environment or from both, they repeatedly reported feelings of loneliness, isolation, and psychological stress. This indicates that the characteristics of cities and universities not only shape students' perceptions but can even cause health problems. Interestingly, in several cases the feeling of being integrated did not necessarily mean to have strong social ties to German nationals but to have relationships with other international students or migrants. While in bigger cities, international students could meet fellow migrants, other students located in smaller cities or studying in less internationalised universities in certain regions of Germany could not at the same level. It might be partly related to the extremely uneven regional distribution of migrants and foreign students in Germany.⁷ This situation indicates that while the majority of international students are concentrated in a few regions in Germany, some of them are still situated in regions where very few international students live. As a consequence, cities make a difference for building relationships and receiving support for international students.

In the Bright Futures and Asian Mobilities projects, all respondents were enrolled in the same higher education institution which is not located in a big city, but rather in a middle sized one. While the city was not attractive during the initial decision of students, they indicated that the reputation or course subjects were decisive in their selection of universities. Some of them have either studied or attended language courses in another city in Germany. Moreover, for the project in which Japanese international students were targeted, there were too few enrolled in only one higher education institution. As a result, interviewees were recruited through other entry points such as Twitter and Facebook accounts and participation was advertised on the most widely read newsletter by Japanese students in Germany, which yields a sample that is much more geographically diverse in the country of education, which should be reflected also during the analysis. Thus, a mix of universities located in various states and cities yielded more heterogeneous perspectives not only in terms of inclusion and belonging, but also the selection criteria to study where and what.

With respect to research on ISM, location signifies that although there is no ideal sampling strategy, the spatial influences on students' perceptions need to be seriously taken into account in the

sampling to avoid bias in the analysis of students' social realities and to capture a fuller analytical picture. Prospectively, this can be carried out through a stratified sampling strategy, meaning an out-weighted selection of inquired international students from different cities and universities from the beginning, and retrospectively by a methodological reflection on the chosen sampling strategy.

Heterogeneity of international students

Another aspect to consider in the sampling process for research into ISM is the heterogeneity of this population in terms of their gender, age, and social background, motivations for their stay abroad and future aspirations. As any other mobile population, the international student population is also too diverse to be simply grouped according to their purpose of stay in a country of education. Existing qualitative research on ISM tends to draw samples from students with particular countries or regions of origin in certain countries of education (e.g., Baas 2010; Brooks and Waters 2011). However, the second author elsewhere warned about a 'homogenizing tendency, especially one based on nationality [...], which fails to understand or take into account cultural differences'. This tendency would already begin with the ambiguous use of terms such as 'Asian' or 'German' as it builds on assumed types of cultures in a way that neglects intercultural parallels, takes nationality for granted, and homogenises 'German-ness', 'European-ness' or 'Asian-ness' (Bilecen and Faist 2015). In addition, the length of study has been a differentiation aspect of international students. However, as argued before (Bilecen 2014a), the groupist tendency in the literature overlooks the internal differences among international students. Concomitantly, going beyond groupism (Brubaker 2004) we need to rethink categories and processes used in empirical research. Here we want to pinpoint the heterogeneity of international students in general, which necessitates a sampling procedure to be aware of such diversity.

Despite the growing amount of work on differentiating study levels of students (e.g., King and Raghuram 2013; King and Ruiz-Gelices 2003), the sampling used usually either lacks important categories' influences on the research outcomes such as the study level, gender, age, and nationality/ethnicity or the analysis seems to be more important than reflecting on the 'technical' procedure, which is commonly skipped or very shortly touched upon, if at all. However, we argue for being sensitive to heterogeneities of international students in general and want to draw attention to the need of considering the ways in which these heterogeneities within the sample influence findings, thus extending both the sampling and scope of research. In that vein, recent efforts pinpoint the need to raise awareness and sensitivity in conducting research with international students while taking into account multiple categories including ethnicity, class, and gender (Bilecen and Van Mol 2017). For instance, in the Bright Futures and Asian Mobilities projects, particular attention has been paid to have a sample of international students with an equal distribution of gender and different study levels which are considered relevant in the later analysis phase. However, one also needs to be cautious in order not to sample based on the dependent variable that has been the case in migration studies (Portes 2001).

Recently, studying inequalities faced by internationally mobile students and faculty members, the second author argued elsewhere that a diverse set of heterogeneities needs to be taken into analysis (Bilecen and Van Mol 2017). The study conducted by Jöns (2011) on the mobility of Humboldt research fellows and award winners demonstrated that although there is an improvement since the 1980s, female academics are less represented in the transatlantic mobility schemes compared to their male counterparts, especially in the natural sciences. Recent empirical evidence pinpoints the increased presence of female students at both Bachelor's and Master's studies level (degree and exchange) from particular countries of origins (Böttcher et al. 2016; Van Mol 2014) despite the strong opposition of families in some cases due to gendered expectations (Matsui 1995). For example, in Germany the gender ratio of Chinese students is balanced, however, not automatically reflected in all universities and subject of studies. For example, in the second author's experience, recruiting Chinese female international students was rather quicker than the recruitment of male

respondents as in the university where the interviews were conducted there were more female students than their male counterparts. Perhaps female respondents were also more willing to be interviewed. Moreover, it might also be explained by the similar gender effects of the author and the other female researchers in the project. Even though it has slightly extended the duration of fieldwork, we decided to include male respondents as we thought experiences might vary based on gender. However, we also observed that not all international student populations are as balanced as the Chinese case in Germany. For example, the Indian student population in Germany is rather male dominated (Aksakal and Schmidt 2017), which could be different in other countries.

Likewise, in the EURA-NET project gender had strong effects on the feelings of well-being of the respondents. Particularly women, on the one hand, mentioned their increased possibilities for a self-determined life, as opposed to the situation in their country of origin. On the other hand, this perception of more personal freedom was also often accompanied by feelings of loneliness due to the fact that many lived in the parental home previous to their arrival and therefore separation from their relatives was particularly difficult. In a similar vein, very young students interviewed in the context of the YMOBILITY project mentioned that studying in Germany was also a step towards more independence from their parents, sometimes accompanied by feelings of distress and anxiety pinpointing to the different experiences based on age.

Therefore, a sampling strategy for research on international students' needs to take into account a variety of heterogeneities. Most importantly, researchers should be aware of them and their implications on the phenomenon they are investigating in the analysis phase while being reflexive about them as all phases of the research necessitates the acknowledgement of personal involvement of the researcher which might determine not only the analysis of empirical material but also whom to choose as interviewees (Berger 2015).

Concluding remarks

In this article we have sought to explore the challenges of qualitative research on mobile populations, particularly in the case of international students, based on our experiences in four international collaborative research projects. We have identified three major issues in sampling: time, geographical space, and heterogeneities. With respect to the first aspect, we suggest considering not only the effects of time on international students' experiences and aspirations but also ways in which the time frame has an effect in sampling as students are bound to certain structures of higher education institutions such as academic calendars. Moreover, studies of ISM focusing on one particular point in time should first take into account that students' attitudes towards their migration experience, their country of origin and their country of education are likely to change during the course of their stay. In addition, researchers should also consider that many international students move back and forth between their place of origin, the city where they study, and other destinations depending on semester breaks, which might not necessarily be the same in all countries. Conducting interviews or selecting interviewees when many students are away, such as during semester breaks or study periods, might therefore influence the sample. This is not to suggest that other populations are not as mobile as students, but rather that international students tend to be mobile in certain times of the year in relation to the academic calendar, which often also depends on the national context. We argued that researchers need to be familiar with these time frames to avoid unintentional selective sampling, which might affect the research results.

In addition, we paid attention to the ways in which international students are being recruited in different geographical spaces of study. Certain criteria such as the population size, the presence or absence of a metropolitan environment in cities and the degree of the international orientation of universities are relevant aspects to consider in sampling international students. This means that during the research design and analysis of the results, researchers should be aware of the type and geographical space of higher education institutions in which the interviewees are selected. In our experience some institutions are more devoted to international education and highly likely to be

located in bigger cities, thus willing to attract international students, while some others do not. Nevertheless, conducting research with international students enrolled in different types of institutions would yield more diverse experiences and perspectives.

We have also illustrated heterogeneities of a sample and the implications of diversity in studying ISM. Our concern here was to raise awareness of international students' heterogeneities as a population and not only with respect to their countries of origin or study subjects that are often the main selection criteria in empirical research. We discussed manifold issues induced by their differences particularly with respect to gender, age, socio-economic background, and ethnicity.

These three issues time, geographical space heterogeneities of international students appear to have far reaching consequences and they require a matching acknowledgement and particular reflection from researchers going beyond a mere technical consideration. Based on our involvement in international research projects, we have illustrated the influences of time and space while considering heterogeneities of international students in empirical research. We argue that they are all interdependent and influence students' experiences and researchers' ways to understand them. Therefore, they are of particular relevance for international comparative research projects, which not only need to consider different national tertiary education systems but also different characteristics of international students. The existence and implications of these differences are also contingent upon nation-states' mobility and education policies as well as higher education institutions' involvement in internationalisation efforts.

As in any other qualitative research, we argue that being reflexive is also crucial in empirical studies on ISM as it influences the intricate relationship between empirical evidence and theoretical claims. Being reflexive and aware of the positioning of the researchers' self does not neutralise power dynamics in qualitative research but can highlight such hierarchies not only between themselves and the research participants. Furthermore, we suggest that being aware of the three challenges addressed in this article is critical as a starting point for deeper reflection on the research design and empirical findings in ISM studies.

Notes

1. Author names are in alphabetical order indicating that all authors contributed equally to this paper.
2. That represents an increase in absolute numbers from 145.364 in 2011 to 470.033 in 2015.
3. For further details on the project, please refer to: <http://www.uta.fi/edu/en/research/projects/aura-net/index.html>.
4. Funded by the European Union, for more information on YMOBILITY project please refer to project website: <http://www.ymobility.eu>.
5. Both projects were funded by the Open Research Area Initiative and the German part is funded by German Research Council. For more details on both of the projects, please refer to: <http://brightfutures-project.com/>.
6. Certainly both aspects are interconnected. On the one hand, universities in bigger cities are becoming more internationally-oriented due to the fact that many international students select these universities, because they want to live and study in metropolitan areas. On the other hand, universities in larger cities can represent a magnet for ISM, since they are internationally more visible. Nevertheless, there are also higher education institutions in smaller cities with high reputation attracting a substantial number of international students, that are being transformed due to students' presence.
7. While in 2015, around 52% of all foreign students and 59% of all international migrants were concentrated often in larger cities within three federal entities (North Rhine-Westphalia, Baden-Wuerttemberg and Bavaria), only 12% of all foreign students and 5% of all international migrants were living in one of the five Eastern German states in the same year (Federal Statistical Office 2016).

Acknowledgements

We would like to thank Thomas Faist, Russell King, Susanne Schultz, Joanna J. Sienkiewicz, Inka Stock, and Mengyao Zhao for their useful comments and feedback. We are also grateful to German Research Foundation (DFG) and EU Horizon 2020 Framework for their funding of the international collaborative projects all authors are involved in.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by Deutsche Forschungsgemeinschaft; Horizon 2020 Framework Programme.

ORCID

Mustafa Aksakal <http://orcid.org/0000-0003-3255-4262>

Başak Bilecen <http://orcid.org/0000-0002-8545-9739>

Kerstin Schmidt <http://orcid.org/0000-0003-0080-508X>

References

- Aksakal, M., and K. Schmidt-Verkerk. 2014. "New Migration Trends in Germany. Characteristics, Actors and Policies." COMCAD Working Paper No. 128. Bielefeld: Center on Migration, Citizenship and Development.
- Aksakal, M., and K. Schmidt. 2015. "Mobilities in Asian-German transnational Spaces: Temporary Migrants' Experiences, Perceptions and Motivations." COMCAD Working Paper No. 133. Bielefeld: Center on Migration, Citizenship and Development.
- Aksakal, M., and K. Schmidt. 2017. "Temporary Migrants' Experiences, Perceptions and Motivations in Asian-German Transnational Spaces." In *Characteristics of Temporary Migration in European-Asian Transnational Social Spaces*, edited by P. Pitkänen, M. Korpela, M. Aksakal, and K. Schmidt, 177–192. Dordrecht: Springer.
- Aksakal, M., K. Schmidt, M. Korpela, and P. Pitkänen. 2017. "Introduction: Temporary Migration in European-Asian Social Spaces." In *Characteristics of Temporary Migration in European-Asian Transnational Social Spaces*, edited by P. Pitkänen, M. Korpela, M. Aksakal, and K. Schmidt, 1–26. Dordrecht: Springer.
- Altbach, P. G., and J. Knight. 2007. "The Internationalization of Higher Education: Motivations and Realities." *Journal of Studies in International Education* 11 (3–4): 290–305.
- Baas, M. 2010. *Imagined Mobility: Migration and Transnationalism among Indian Students in Australia*. London: Anthem Press.
- Ball, S. 2003. *Class Strategies and the Education Market: The Middle-Classes and Social Advantage*. London: Routledge.
- Beech, S. E. 2015. "International Student Mobility: The Role of Social Networks." *Social & Cultural Geography* 16 (3): 332–350.
- Berger, R. 2015. "Now I see it, now I Don't: Researcher's Position and Reflexivity in Qualitative Research." *Qualitative Research* 15 (2): 219–234.
- Bernard, R. 2011. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Oxford: AltaMira Press.
- Bilecen, B. 2014a. *International Student Mobility and Transnational Friendships*. Basingstoke: Palgrave.
- Bilecen, B. 2014b. "On the Tide Between Being an Insider and Outsider: Experiences From the Research on International Student Mobility in Germany." In *Insider Research on Migration and Mobility – International Perspectives on Researcher Positioning*, edited by L. Voloder and L. Kirpitchenko, 53–68. Farnham: Ashgate.
- Bilecen, B., and T. Faist 2015. "International Doctoral Students as Knowledge Brokers: Reciprocity, Trust and Solidarity in Transnational Networks." *Global Networks* 15 (2): 217–235.
- Bilecen, B., and C. Van Mol. 2017. "Introduction: International Academic Mobility and Inequalities: Opportunities and Outcomes." *Journal of Ethnic and Migration Studies* 48 (3): 1241–1255.
- Böttcher, L., N. A. M. Araújo, J. Nagler, J. F. F. Mendes, D. Helbing, and H. J. Herrmann. 2016. "Gender Gap in the ERASMUS Mobility Program." *PLoS ONE* 11 (2): e0149514. doi:10.1371/journal.pone.0149514.
- Brooks, R., and J. L. Waters. 2010. "Social Networks and Educational Mobility: the Experiences of UK Students." *Globalisation, Societies and Education* 8 (1): 143–157.
- Brooks, R., and J. L. Waters. 2011. *Student Mobilities: Migration and the Internationalization of Higher Education*. Basingstoke: Palgrave.
- Brown, L. 2008. "Language and Anxiety: An Ethnographic Study of International Postgraduate Students." *Evaluation & Research in Education* 21 (2): 75–95.
- Brown, L., and I. Holloway. 2008. "The Adjustment Journey of International Postgraduate Students at an English University." *Journal of Research in International Education* 7 (2): 232–249.
- Brubaker, R. 2004. *Ethnicity Without Groups*. Cambridge, MA: Harvard University Press.
- Bryła, P. 2018. "International Student Mobility and Subsequent Migration: The Case of Poland." *Studies in Higher Education*, doi:10.1080/03075079.2018.1440383.

- Bryman, A. 2012. *Social Research Methods*. 4th ed. Oxford: Oxford University Press.
- Caruso, R., and H. de Wit. 2015. "Determinants of Mobility of Students in Europe." *Journal of Studies in International Education* 19 (3): 265–282.
- Corbin, J., and A. Strauss. 2008. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 3rd. Thousand Oaks: Sage.
- Eurostat. 2016. *Residence Permits: First permits issued for education reasons by reason, length of validity and citizenship*. http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=migr_resedu&lang=en.
- Federal Statistical Office (Statistisches Bundesamt). 2016. *Bildung und Kultur. Studierende an Hochschulen. Wintersemester 2015/2016* (No. 4.1). Wiesbaden. https://www.destatis.de/DE/Publikationen/Thematisch/BildungForschungKultur/Hochschulen/StudierendeHochschulenEndg2110410167004.pdf?__blob=publicationFile.
- Findlay, A., R. King R, F. M. Smith, A. Geddes, and R. Skeldon. 2012. "World Class? An Investigation of Globalisation, Difference and International Student Mobility." *Transactions of the Institute of British Geographers* 37 (1): 118–131.
- Findlay, A., H. Packwood, D. McCollum, G. Nightingale, and S. Tindal. 2018. "Fees, Flows and Imaginaries: Exploring the Destination Choices Arising From Intra-National Student Mobility." *Globalisation, Societies and Education* 16 (2): 162–175.
- Flick, U., E. von Kardorff, and I. Steinke. 2005. *Qualitative Sozialforschung. Ein Handbuch*. 4th ed. Reinbek bei Hamburg: Rowohlt.
- Geertz, C. 1973. *The Interpretation of Cultures*. New York: Basic Books.
- Gunter, A., and P. Raghuram. 2018. "International Study in the Global South: Linking Institutional, Staff, Student and Knowledge Mobilities." *Globalisation, Societies and Education* 16 (2): 192–207.
- Jöns, H. 2011. "Transnational Academic Mobility and Gender." *Globalisation, Societies and Education* 9 (2): 183–209.
- King, R., and P. Raghuram. 2013. "International Student Migration: Mapping the Field and New Research Agendas." *Population, Space and Place* 19 (2): 127–137.
- King, R., and E. Ruiz-Gelices. 2003. "International Student Migration and the European ?Year Abroad?: Effects on European Identity and Subsequent Migration Behaviour." *International Journal of Population Geography* 9 (2): 229–252.
- Korsnes Kristensen, G., and M. Noem Ravn. 2015. "The Voices Heard and the Voices Silenced: Recruitment Processes in Qualitative Interview Studies." *Qualitative Research* 15 (6): 722–737.
- Kritz, M. M. 2006. *Globalisation and Internationalisation of Tertiary Education*. New York: United Nations Population Division.
- Kuptsch, C. 2006. "Students and Talent Flow – The Case of Europe." In *Competing for Global Talent*, edited by C. Kuptsch, and E. Pang, 33–62. Geneva: ILO.
- Leung, C. 2001. "The Psychological Adaptation of Overseas and Migrant Students in Australia." *International Journal of Psychology* 36 (4): 251–259.
- Marshall, M. N. 1996. "Sampling for Qualitative Research." *Family Practice* 13 (6): 522–526.
- Martin, F. 2017. "Mobile Self-Fashioning and Gendered Risk: Rethinking Chinese Students' Motivations for Overseas Education." *Globalisation, Societies and Education* 15 (5): 706–720.
- Matsui, M. 1995. "Gender Role Perceptions of Japanese and Chinese Female Students in American Universities." *Comparative Education Review* 39 (3): 356–378.
- McLachlan, D. A., and J. Justice. 2009. "A Grounded Theory of International Student Well-Being." *Journal of Theory Construction & Testing* 13 (1): 27–32.
- Miles, M. B., and A. M. Huberman. 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage.
- Mosneaga, A., and J. Agergaard. 2012. "Agents of Internationalisation? Danish Universities' Practices for Attracting International Students." *Globalisation, Societies and Education* 10 (4): 519–538.
- OECD. 2015. *Education at a Glance 2015: OECD Indicators*. Retrieved from OECD Publishing website: [http://www.oecd.org/edu/eag2013%20\(eng\)--FINAL%2020%20June%202013.pdf](http://www.oecd.org/edu/eag2013%20(eng)--FINAL%2020%20June%202013.pdf).
- Patton, M. Q. 1990. *Qualitative Evaluation and Research Methods*. Beverly Hills: Sage.
- Patton, M. Q. 2002. *Qualitative Research and Evaluation Methods*. 3rd ed. Beverly Hills: Sage.
- Portes, A. 2001. "Introduction: the Debates and Significance of Immigrant Transnationalism." *Global Networks* 1 (3): 181–194.
- Putwain, D. W., and P. Sander. 2016. "Does the Confidence of First-Year Undergraduate Students Change Over Time According to Achievement Goal Profile?" *Studies in Higher Education* 41 (2): 381–398.
- Schartner, A. 2015. "'You Cannot Talk with all of the Strangers in a Pub': a Longitudinal Case Study of International Postgraduate Students' Social Ties at a British University." *Higher Education* 69: 225–241.
- Schmidt, K., and M. Aksakal. 2018. "Introduction." In *Temporary Migration, Transformation and Development: Evidence from Europe and Asia*, edited by P. Pitkänen, T. Hayakawa, M. Aksakal, K. Schmidt, and S. I. Rajan, 4–18. New Delhi: Routledge.
- Shields, R. 2013. "Globalization and International Student Mobility: A Network Analysis." *Comparative Education Review* 57 (4): 609–636.
- Sondhi, G., and R. King. 2017. "Gendering International Student Migration: An Indian Case-study." *Journal of Ethnic and Migration Studies* 43 (8): 1308–1324.

- Teichler, U. 2015. "Academic Mobility and Migration: What We Know and What We Do Not Know." *European Review* 23 (1): S6–S37.
- Van Mol, C. 2014. *Europe on the Move. A Study into Intra-European Student Exchanges in Higher Education*. Basingstoke: Palgrave Macmillan.
- Van Mol, C., and P. Ekamper. 2016. "Destination Cities of European Exchange Students." *Geografisk Tidsskrift-Danish Journal of Geography* 116 (1): 85–91.
- Ying, Y. W., and M. Han. 2006. "The Contribution of Personality, Acculturative Stressors, and Social Affiliation to Adjustment: A Longitudinal Study of Taiwanese Students in the United States." *International Journal of Intercultural Relations* 30 (5): 623–635.
- Zhou, J. 2015. "International Students' Motivation to Pursue and Complete a Ph.D. in the U.S." *Higher Education* 69 (5): 719–733.