Social Inclusion of German Students who Complete an Academic Stay Abroad

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Abstract: More and more student trajectories involve an academic stay abroad. To achieve the intercultural, personal or linguistic objectives associated with such placements, social inclusion with peers and faculty in the place of study is needed. This paper applies Bourdieu's theory of capital as a conceptual framework to examine the experiences of students who have competed a placement abroad, in particular students from educationally disadvantaged families, students with disabilities, and migrant students. Longitudinal data were taken from the German National Education Panel Study (NEPS) with N=8.469 students. The findings show the interrelatedness of social inclusion and a placement abroad: students who experience high social inclusion with peers and faculty at the beginning of their studies are more likely to study abroad. Social capital with faculty increases after such a placement, in particular for at-risk student groups, while no difference in the increase in social inclusion is observed between student groups. The findings imply a need for early interventions as some of the effects already take place in the first semester.

Keywords: *Academic stay abroad, international student mobility, social inequality, social inclusion, Bourdieu.*

Introduction

According to the current European Higher Education Area (EHEA, 2020), the European higher education area wishes to intensify its efforts to promote the social dimension in all areas of higher education. These efforts should serve to broaden access to higher education, reduce drop-out rates, and expand international student mobility. Accordingly, one of the policy objectives is to increase the share of students from educationally disadvantaged families who complete a stay abroad. Despite having been widely acknowledged by policy makers in the Bologna process, social inequalities still influence international student mobility (Sherry et al., 2010). Nonetheless, an increasing number of students now seek to incorporate a period of 'residence abroad' into their studies because they recognize the numerous advantages of doing so. A period of 'residence abroad' can take different forms, including teaching assistantships, work placements, and participation in student exchange programs (Coleman, 2013). In the present study, we use the term 'academic stay abroad' to refer to a specific period of time in which a student engages in an educational activity or internship in another country.

Completing a stay abroad is generally considered to make a positive contribution to the development of a person's identity as a global or European citizen. It allows students to experience other cultures, norms, and values, strengthen their foreign language skills, and establish contacts with peers from other nations and backgrounds (Hernandez, 2018; Johnstone & Edwards, 2020; O'Callaghan, 2006; Osiadacz, 2018). According to Coleman and Parker (2001), the motives for a placement abroad can be grouped into six categories, namely academic, cultural, intercultural, linguistic, personal, and professional objectives. These objectives can, however, only be fully achieved through social interactions with others and therefore require the building of relationships and a certain degree of social inclusion (Hernandez, 2018). In essence, these relationships are created through the social, cultural, and day-to-day activities undertaken by students during their study abroad (Hernandez, 2018).

Social inequalities in international student mobility

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International students are sometimes referred to as a 'migratory elite' (Van Mol, 2013, p. 210) who have made a conscious decision to participate in a student mobility program. Indeed, studying abroad may function as a means of horizontal distinction for students from higher social backgrounds (Reimer & Pollak, 2010). The opportunity to study abroad is not equally available to all student groups, as social inequalities shape decisions for mobility (e.g. age, study program, gender, socio-economic background, chronic illness, or disability) and thus result in educational inequalities (Sherry et al., 2010). In Germany in particular, studying abroad was found to be socially selective in the period from 1991 to 2003, and few changes to this situation have since been observed (Netz & Finger, 2016). This mechanism of social disadvantage may transfer inequality from the higher education system to the labor market in the long run. Research confirms the unequal distribution of possibilities for students from socially disadvantaged backgrounds to study abroad, with specific student groups continuing to be under-represented in the population of students who do so (Johnstone & Edwards, 2020; Netz & Finger, 2016). Indeed, the recent EUROSTUDENT survey on the 'Social Dimension of Student Life in the European Higher Education Area in 2019' underlines the fact that social inequalities still shape mobilities. This survey of students in 26 countries aims at 'fostering inclusive environments for vulnerable, disadvantaged, and underrepresented students, so that Europe's student populations reflect the heterogeneous social profile of society at large' (EUROSTUDENT, 2019). However, this is not yet the case. While inequalities connected to individual aspects of an academic stay abroad have been investigated (Rienties & Tempelaar, 2013), policy frameworks like the EHEA (2020) continue to set new standards for the social inclusion of all students and show the need to tackle inequalities.

Students with a lower socio-economic status tend to feel inadequately prepared for 'university culture' (Fergy et al., 2011; Hughes, 2015), which can ultimately lead to experiences of 'culture shock' (Hanassab, 2006; Rienties & Tempelaar, 2013; Zhou et al., 2008). Only 18% of students from educationally disadvantaged families (in which at least one parent has only completed compulsory level education) do a placement abroad. This figure rises to 35% for students who have at least one parent with a doctoral degree (Engleder & Unger, 2020). The lower the level of education attained by the parents, the lower the mobility pattern of the student. In addition, students who elect to do a study placement abroad have to adapt to a new culture and can also face language problems or financial challenges (Sherry et al., 2010). In Germany, the government aid program for students from educationally disadvantaged families (Bundesausbildungsförderungsgesetz, BAföG) was reformed in 2001 to also make them eligible for financial support when studying abroad (Netz & Finger, 2016). Furthermore, students from non-academic family backgrounds may need more time and other forms of support to adjust to their new situation than 'traditional students' with academic family backgrounds. Some groups of students find studying abroad to be a considerable challenge from a personal, emotional and social adjustment perspective, while others adjust more easily (Rienties & Tempelaar, 2013). Students who do a placement abroad are also three times more likely to be in a relationship with a partner from a different country than their counterparts who remain at home (European Union, 2014). More than half of all students who study in their home country state social relationships as one of their main reasons for not going abroad.

Studies about the mobility patterns of students with disabilities are rare. Between 10 and 20% of the students who participated in the EUROSTUDENT survey reported having a disability, impairment, long-standing health problem, or functional limitation that had resulted in lower levels of social inclusion in higher education (EUROSTUDENT, 2019). Students with impairments are less likely to plan and complete a placement abroad than those without. Gender likewise plays a role: female students in Austria, for example, are more likely to study abroad than their male counterparts (Engleder & Unger, 2020). Rienties and Tempelaar (2013) also show that students find it easier to adjust when they make a 'small' cross-cultural transition (e.g., from Denmark to Germany) rather than a broader one (e.g., from India to Germany). Students from Africa find it especially difficult to adjust to studying in Europe (Maringe & Carter, 2007), while students from Asia who study abroad score substantially lower on academic inclusion with faculty than Western students. Migrant students with a non-Western background are less socially included than Western international students (Rienties et al., 2012) but do perform at a similar level in academic terms. Researchers also report a significant difference between first-year students and those from subsequent years in terms of their levels of social inclusion (Aypay et al., 2012), which would suggest that this changes over time.

Given the lack of longitudinal studies in this particular field of research, it is unclear at present whether the degree of social selectivity in studying abroad has changed over time (Netz & Finger, 2016). This paper seeks to address this gap by studying the social inclusion of higher education students from Germany who have completed an academic stay abroad. Our longitudinal design uses representative data from the German National Education Panel Study (NEPS) (Blossfeld et al., 2011; Dahm et al., 2016) to investigate social inequality for students from educationally disadvantaged families, migrant students, female students, and students with self-reported disabilities and compare their likelihoods of studying abroad compared to other student groups. Our particular interest thereby lies in a longitudinal design on how social inclusion develops over time and how it is affected by an academic stay abroad.

Theoretical framework

The conceptual framework we use in this paper is based on Bourdieu's (1986) distinction between economic, social, and cultural capital. Bourdieu already explored the effects of inherited cultural capital on academic success in the early 1960s (Bourdieu & Passeron, 1964). Students from disadvantaged households have less access to such capital, which explains their reduced propensity to study abroad. Their economic capital is likewise generally lower than that of other student groups, thus reducing their ability to cover the costs of a stay abroad. A study by Hauschildt et al. (2015) also shows that the need to work in paid employment while studying at university decreases for students from higher socioeconomic backgrounds. Social capital, in turn, can be acquired through contact with other students and faculty when studying abroad. Students from disadvantaged families or backgrounds tend to be less embedded in international networks and less likely to have parents who had themselves studied abroad. Social networks with relevant experiences can support students who plan to study abroad and provide them with appropriate information or practical assistance (Van Mol & Timmerman, 2014). Students who are more connected to other people with personal experience of studying abroad have an increased probability of completing their own stays abroad (Brooks & Waters, 2010). The same applies to students with closer contact to faculty (Finger, 2013). According to social capital theory, the fact that students from high-income families are more likely to have gained first-hand international experience prior to entering higher education and thus already have the necessary cultural capital (e.g., foreign language skills or bilingualism) is an explanatory factor for the likelihood of studying abroad (Gerhards & Hans, 2013). Bourdieu (1984) argues that the exposure to specific values during primary or secondary socialization engenders a habitus that incorporates these values.

Tinto's (1975) 'model of student departure', in which social capital plays a vital role in explaining student dropout, should also be mentioned here. Low degrees of social inclusion and insufficient collective affiliations can lead to different forms of 'dropout' from society. A lack of social inclusion in higher education will lead to low commitment. Following this argumentation, we understand social inclusion to mean relations with peers and faculty as part of university life – both inside and outside the classroom (Souza et al., 2017). For Tinto (1975), student dropout can also be explained by analyzing social inequality, such as family background, gender, and prior schooling. However, his model has not yet been adapted to explore students who complete an academic stay abroad.

Social inclusion in student mobility

Social inclusion affects all students at risk of segregation, regardless of their gender, culture, language, special needs, or social background (Haug, 2017). Students studying abroad often report difficulties in achieving social inclusion with locals during their time abroad (Meier & Daniels, 2013). International students who are new to campus in their host country can find it a challenge to adjust to the new campus culture (newcomer adjustment) (Souza et al., 2017). This cross-cultural adjustment process can entail different aspects of culture, e.g. national, urban or rural, gender, or student culture. In this paper, we use the term 'culture' in the broader sense, e.g. as a set of beliefs, norms, and values specific to a social group, and define adjustment (enculturalisation) as the process of engaging and interacting with cultural and social practices. During cross-cultural adaptation phases, the capacity to establish relationships is essential for social inclusion (Byl et al., 2016). Students are confronted thereby with new tasks, requirements, norms, and relationships. From a micro-sociological perspective, they shift between contexts, cultures, and sub-cultures as well as between roles and role requirements (Schaeper, 2019).

According to the German Academic Exchange Service (Deutscher Akademischer Austauschdienst, DAAD), while 86% of German students who study abroad spend time with other international students in their host country, only 51% have regular contact with local students. 65% spend time with other German students who are also studying abroad (Maiworm & Over, 2013). King and Ruiz-Gelices (2003) find that 30% of students studying abroad only have contact with students from their home country, while 39% also have contact with students from the host country. Coleman (2013) explains this behavior using a model based on three concentric circles: (a) engagement with students from the same country (inner circle), (b) engagement with other international students (middle circle), and (c) engagement with local students (outer circle). According to Van Mol (2011), European students tend to keep company with other students from Europe when studying abroad because they are familiar with the culture(s) in which they were socialized.

The use of virtual communication methods to keep in touch with family and friends at home has made social inclusion more difficult for international students (Coleman, 2015). Since one factor that significantly aids integration is language competence, and students acquire this more quickly when they interact with their peers in the outer circle, Hernandez (2018) recommends that they move out of their comfort zones as soon as possible when studying abroad and interact with students from this outer circle. The widespread availability of digital media around the globe means that international students are at risk of not having to negotiate cultural meanings with local students and can remain in touch easily with their relatives and friends at home, thus inhibiting their social inclusion (Citron, 2002).

While the classroom is viewed as the most important setting for social inclusion (Fergy et al., 2011), the university experience is by no means limited to the classroom. Indeed, Fergy et al. explicitly mention peer support, making friends,

and engagement with lecturers as positive factors for retention and progression in higher education. Social relations inside and outside the classroom are considered part of the campus way of life (Rankin & Reason, 2008; Souza et al., 2017). Students who report having more contact to their peers also report higher levels of learning (Fergy et al., 2011). Having friends from both the host and home cultures (inner and outer circles), sharing accommodation, and joining a student association all have a positive influence on the social inclusion of international students (Rientiens & Tempelaar, 2013).

While faculty is also viewed as essential for the social inclusion of students in higher education, there is still a lack of research on student-faculty interaction and on the influence of academic inclusion with faculty for different student groups. In Tinto's (1975) model, academic integration is conceptualized as faculty-student interaction and acceptance by staff members.

Methodology

Research Goal

Acknowledging the social dimension in higher education is a key imperative for higher education policy and an explicit objective of the European higher education area by 2030. Social inclusion is also essential for a positive experience of higher education and an enriched student life. However, since studying abroad is socially selective based on previously acquired economic, cultural, and social capital, our study seeks to answer the following questions: What are the probabilities of different student groups completing a placement abroad (group differences, differentiated effects)? Are students from educationally disadvantaged families, students from migrant backgrounds, female students, and students with disabilities as likely as other students to study abroad and become mobile students? It also focuses on questions regarding the determinants of studying abroad and the social inclusion of students: How does social inclusion develop over time? How is this development affected by an academic stay abroad?

Method

This paper uses data from a representative student sample in the German NEPS (Blossfeld et al., 2011). The NEPS surveyed a sample of first-year students who enrolled in higher education in Germany in the 2010/2011 winter semester 2010/2011 on an annual basis. Its longitudinal design allowed it to investigate at-risk students who did an academic stay abroad during their course and examine how this may have affected the development of social inclusion in higher education.

Sample

In 2010, a total of 17.910 university students gave their informed consent to participate in the NEPS longitudinal study. Following an initial survey in their first year at university, these students were surveyed twice a year by means of computer-assisted telephone interviews during the summer semesters or online questionnaire during the winter semesters (Brachem et al., 2019). The interviews were conducted by professionally trained interviewers, who also asked the students whether they had completed a placement abroad since their last interview. Variables were collected within the first nine panel waves, which equates to the first five years after enrolling in higher education.

Our analytic sample consists of 8.469 first-year students, around 64 % of whom are female. The majority of the participants (95.3%) were born in Germany, while 1.8 % were born in another European country, and 2.9 % in non-European countries. Based on the internationally comparable CASMIN classification (Müller et al., 1989), almost 10% of the students in the sample were raised in educationally disadvantaged families (i.e., their parents had acquired no or only the lowest school leaving certificate; n= 822). A small share of the students reported having an acknowledged disability (n= 63).

Instruments/variables

Academic stay abroad: In the NEPS study, an academic stay abroad was defined as a specific period of time in which a student had engaged in an educational activity or internship in another country. During each interview, the students were asked whether they had studied abroad since their last interview. In our analyses, a placement abroad is defined as having lasted at least four months (one semester) and includes either studying at a university in another country or completing an internship in another country related to the subject being studied in the home country.

Social inclusion

Social inclusion was assessed four times annually during the winter semester for two dimensions (student peers and faculty) and is measured by three items on a four-point Likert scale. It shows acceptable internal consistency at each measurement point (Cronbach's alpha >= 0.83 in each of the four waves; example item: "I have been successful in building contacts with other students during my studies up to now."). The scale for social inclusion with faculty rates four items related to relationships between students and faculty on a four-point Likert scale and also shows good

internal consistency in all waves (Cronbach's alpha >= 0.87 in each of the four waves; example item: "Most of the instructors treat me fairly.").

Analyzing of Data

To investigate the probabilities of diverse students completing a stay abroad, we carried out a descriptive examination of likelihoods. We then applied logistic regression analyses to further investigate the dependent variable of studying abroad for academic reasons. Relevant variables associated with lower probabilities of completing a stay abroad were entered into the model first ('being socialized in a disadvantaged family', 'being a student who had been born abroad and migrated to Germany', and 'having reported having a disability'). To investigate whether country of origin shows differentiated effects, the variable was entered dichotomously ('having been born in Germany or abroad') and as a factor ('having been born in Germany, in another European country, in a non-European country'). Reports of social inclusion were likewise included into the model to investigate whether the likelihood of studying abroad is influenced by social inclusion reported at the beginning of a study program.

To analyze the development of social inclusion, we adopted a multilevel approach with four measurement points nested within students. These data provide information on how social inclusion develops during a course and how this might differ for at-risk students. We used studying abroad for academic reasons as a time-variant variable to investigate its impact on social inclusion. In this multilevel approach, within-individual changes can be accounted for by modeling a random slope. Longitudinal measurement invariance of social inclusion was proven using a two-factor model in a confirmatory multi-group comparison. Thus, analyses over time are eligible. The dependent variable was z-standardized to generate standardized coefficients. Assumptions for regression analysis in a multilevel approach (e.g. normal distribution of residuals, homoscedasticity) were checked and confirmed. All regression analyses were conducted in R (R Core Team, 2013) using the package Linear and Nonlinear Mixed Effects Models (nlme) (Pinheiro et al., 2021).

Findings / Results

Completing a stay abroad

Overall, around 15.5 % of the students in the sample completed a stay abroad related to their study program. Female and male students are alike in their willingness to study abroad. Students from educationally disadvantaged families have a lower probability of studying abroad; only 9.9 % complete a stay abroad for academic reasons. Students who were born outside Germany are likewise less likely to study abroad (11.5 %), with significant differences found for the countries of origin: migrant students who were born in Europe have a significantly higher probability of going abroad to study than their counterparts from non-European countries (17.7 % vs. 7.7 %; $\chi^2(1) = 8.41$; $p = 0.004$). Students who reported a disability show no significantly reduced likelihood of studying abroad; around 12.7 % of this group complete an academic placement abroad. Taken as a whole, migrant students, students from educationally disadvantaged families, and students with disabilities have a lower likelihood of doing an academic stay abroad (10.9 % vs. 16.3 %; $\chi^2(1) = 23.81$; $p < 0.001$).

These results are replicated in a logistic regression (see Table 1), with the aforementioned effects remaining stable when social inclusion at the beginning of their studies is included in the model. Students who reported higher social inclusion with peers and faculty at the beginning of their studies are more likely to study abroad at a later stage. This also applies for students from migrant backgrounds and educationally disadvantaged families.

Table 1. The predictors of completing an academic stay abroad.

	Beta	SE	B	SE	B	SE	B	SE
Intercept	0.19*	0.02	0.19*	0.02	-0.03	0.04	-0.03	0.04
Gender (reference male)	-0.02	0.01	-0.02	0.01	-0.02*	0.01	-0.02*	0.01
Low education of parents (reference high education of parents)	-0.06*	0.01	-0.06*	0.01	-0.05*	0.01	-0.05*	0.01
Born abroad (reference Germany)	-0.03	0.02			-0.02	0.02		
Born in another European country (reference Germany)			0.03	0.03			0.06	0.03
Born in a non-European country (reference Germany)			-0.07*	0.03			-0.07*	0.03
Disability (reference no)	-0.03	0.05	-0.03	0.05	-0.03	0.05	-0.03	0.05
Social inclusion with peers at beginning of studies					0.04*	0.01	0.04*	0.01
Social inclusion with faculty at beginning of studies					0.04*	0.01	0.04*	0.01

Note. * = significant at p < 0.05.

Development of social inclusion

Two patterns emerged when we investigated the means of the two subscales (inclusion with faculty and inclusion with peers) for the full sample of students: while inclusion with faculty tends to increase with time spent at university, inclusion with peers decreases over time. These patterns are stable over all subgroups of students (see Table 2). However, although the development pattern of both dimensions of social inclusion is comparable for different subpopulations of students, the reported extent of integration into the social environment at the university differs between the groups.

Table 2. Means and standard deviations for dependent variables.

Study Year	Students from low-educated families	Born abroad in a European country	Born abroad in a non-European country	Students with disability	Fellow students	All students
			Social Inclusion with Faculty			
2nd	2.94 (0.46)	2.86 (0.51)	2.88 (0.44)	2.93 (0.51)	2.98 (0.44)	2.97 (0.45)
3rd	3.03 (0.48)	2.94 (0.52)	2.95 (0.52)	2.94 (0.48)	3.06 (0.47)	3.06 (0.47)
4th	2.99 (0.47)	2.91 (0.46)	2.97 (0.52)	2.97 (0.40)	3.03 (0.47)	3.02 (0.47)
5th	3.04 (0.53)	2.99 (0.48)	3.00 (0.54)	3.05 (0.51)	3.10 (0.50)	3.09 (0.50)
			Social Inclusion with Peers			
Study Year	Students from low-educated families	Born abroad in a European country	Born abroad in a non-European country	Students with disability	Fellow students	All students
2nd	2.96 (0.70)	3.01 (0.72)	2.94 (0.70)	2.94 (0.78)	3.10 (0.65)	3.08 (0.66)
3rd	2.96 (0.72)	2.90 (0.73)	2.94 (0.75)	2.78 (0.73)	3.09 (0.67)	3.07 (0.68)
4th	2.95 (0.70)	2.92 (0.67)	2.80 (0.73)	2.76 (0.86)	3.05 (0.67)	3.03 (0.67)
5th	2.96 (0.70)	3.16 (0.64)	2.83 (0.68)	2.92 (0.67)	3.06 (0.68)	3.04 (0.68)

Note. All differences between individual subgroups and the 'fellow students' group are significant. Standard deviations reported in brackets.

We then investigated the development of social inclusion further using a multilevel approach in which the two scales serve as dependent variables in two lines of modeling which reveal differentiated patterns.

Social inclusion with faculty

Overall, the reported level of social inclusion increases on average over time for all students. Female students feel significantly less included by faculty. Students from educationally disadvantaged families and migrant backgrounds initially report lower levels of social inclusion than their peers. Students with disabilities experience the same level of social inclusion as their fellow students. A negative effect on social inclusion is observed, however, when using a combined variable of belonging to an at-risk student group (educationally disadvantaged family, being born abroad, or reporting a disability). The development – and also the increase – of social inclusion over time does not differ from the rest of the sample. An academic placement abroad leads to a significant growth in social inclusion with faculty for all student groups regardless of their risk status (see Table 3).

Table 3. Multilevel analyses results on social integration with faculty.

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Beta	SE	Beta	SE	Beta	SE	Beta	SE	Beta	SE
Intercept	0.00	0.01	0.00*	0.02	0.05*	0.02	0.05*	0.02	0.06*	0.02
Time	0.03*	0.002	0.03*	0.002	0.03*	0.002	0.01*	0.002	0.01*	0.002
Female			-0.03*	0.01	-0.02*	0.01	-0.02*	0.01	-0.02*	0.01
Low education of family			-0.04*	0.02						
Born abroad			-0.07*	0.02						
Disability			-0.07	0.05						
At-risk students					-0.05*	0.01	-0.05*	0.01	-0.04*	0.01
Stay Abroad							0.04*	0.01	0.07*	0.01
Time * At-risk students									-0.01	0.01
Stay abroad * At-risk students									0.08*	0.04
BIC	27062.33		23600.74		27072.11		27074.82		27103.58	
AIC	27013.69		23520.95		27007.25		27001.86		27014.40	

Note. * Significant at p < 0.05.

Social inclusion with peers

In contrast to social inclusion with faculty, social inclusion with peers is higher in its initial assessments but decreases over time. Female students feel significantly less socially included than their male peers. Moreover, students from educationally disadvantaged families, migrant students, and students with disabilities initially report lower social inclusion with peers than their fellow students. The strongest effect occurs for students with disabilities. A negative effect on social inclusion remains when using a combined variable of belonging to an at-risk student group (either being socialized in an educationally disadvantaged family, being born abroad, or having a disability). The development of social inclusion for these groups does not differ from that of their fellow students. Unlike the findings for social inclusion with faculty, an academic placement abroad does not affect social inclusion with peers either for at-risk students or for their fellow students (see Table 4).

Table 4. Multilevel Analyses Results on social integration with peers.

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Beta	SE	Beta	SE	Beta	SE	Beta	SE	Beta	SE
Intercept	0.01	0.01	-0.11*	0.03	-0.11*	0.02	-0.11*	0.02	-0.11*	0.02
Time	-0.02*	0.01	-0.03*	0.01	-0.03*	0.01	-0.03*	0.01	-0.03*	0.01
Female			0.09*	0.01	0.09*	0.02	0.09*	0.01	0.09*	0.01
Low education of family			-0.10*	0.02						
Born abroad			-0.15*	0.03						
Disability			-0.20*	0.07						
At-risk students					-0.13*	0.02	-0.13*	0.02	-0.13*	0.03
Stay Abroad							0.03	0.02	0.03	0.02
Time * At-risk students									0.002	0.01
Stay abroad * At-risk students									0.01	0.05
BIC	40237.56		35177.46		40180.76		40193.73		40225.67	
AIC	40188.91		35097.65		40115.89		40120.75		40136.47	

Note. * Significant at $p < 0.05$.

Discussion

Our study investigated the outward mobility of different German student groups and examined how their social inclusion is related to an academic placement abroad. Using the longitudinal sample from the NEPS in Germany, we investigated the development of two dimensions of social inclusion and a placement abroad. When we reflected on the outcomes of our study, we were particularly struck by the differences in the effects on social inclusion with faculty and with peers.

First, our results indicate that a relatively high share of German students complete a stay abroad. One in every six to seven students in the sample and analysis took advantage of outward student mobility. According to Eurostat (Eurostat, 2017), around 8.1% of students in Germany are so-called mobile tertiary students. Interestingly, no gender gap was found for German students who complete a stay abroad – a situation that is not always repeated in other countries. For instance, only about one third of students from the United States who study abroad are male (Institute of International Education, 2019), while female students in Austria are also more likely to do a placement abroad than their male counterparts (Engleder & Unger, 2020). A recent study from Germany suggests that the quality of peer interactions (social capital) seems to be more important for female students, while interactions with faculty seem to have more influence on male students completing their studies (Petzold-Rudolph, 2018). Our results also reveal that students from educationally disadvantaged families are underrepresented among outwardly mobile students: Fewer than one in ten German students from educationally disadvantaged families studies abroad. This is worrying, since it implies that such students are still faced with strong barriers when it comes to completing a study abroad – despite the scholarships and diverse funding opportunities that are available to them through the DAAD or the European Union's student mobility program. Possible explanations for this might be the selectivity of international student mobility, the ongoing inequalities, and the differences in the social and cultural capital of students (Bourdieu, 1984; Netz & Finger, 2016). The latter leads to a lack of practical knowledge, appropriate arrangements, and support for these student groups. It also means that they have fewer academic contacts within the university (peers, mentors) who might promote or recommend a stay abroad. Another explanation might be that at-risk students rate the performance-related preconditions for studying abroad worse than their peers (Lörz et al., 2016). Our study revealed that the probability of studying abroad was more than two times lower for students born in a non-European country than for students born in a European country. This might be related to pragmatic conditions such as fewer travel restrictions within Europe (e.g. visa regulations) and the availability of inner-European student mobility programs or indeed to the cultural closeness of national cultures within Europe compared to those outside Europe.

Surprisingly, this sample shows an equal representation of students with and without disabilities among German students who do a placement abroad. Data from the United States likewise shows an equal representation, but also indicates that the reported disability plays a role: students with physical disabilities, multiple disabilities, and sensory disabilities are less likely to study abroad, for example, than those with learning disabilities (National Survey on Student Engagement, 2017). According to the European Union's Erasmus mobility program, supplementary grants are available for students with special needs who take part in student mobility programs (European Commission, 2015). Arguably, international study programs require specific preparations, coordination, contextual knowledge, and funding in order to respond to students' real needs, especially those who would otherwise have been less likely to study abroad.

Academic and student life play a vital role in students' personal development and experience of a different culture while studying abroad. Our study indicates that social inclusion with faculty and peers is significantly related to an academic placement abroad. German students who reported higher social inclusion with both peers and faculty at the beginning of their studies were more likely to study abroad at a later stage. This implies that higher education institutions are successful in socially including at-risk students. Social capital can be interpreted as resources that increase the likelihood of completing a stay abroad (Netz & Finger, 2016), with supportive student-faculty interactions and enriching educational experiences abroad with peer students constituting possible explanations for this effect. According to the Erasmus Impact Study, 46% of Erasmus students in Europe have a non-academic family background (European Union, 2014), which implies a great level of inclusiveness in international study programs. However, high levels of social inclusion cannot buffer the negative effects of cumulated disadvantages such as coming from an educationally disadvantaged family or being born in a non-European country (intersectionality). This underlines the fact that social inequality is still strongly connected to educational inequality. When it comes to studying abroad, this 'revolving door' effect might lead to closed doors for students who are not equally included and supported (Clarke et al., 2020). The results of our study indicate that social inclusion with faculty increases over time, while the opposite is the case for social inclusion with peers. These patterns were similar for students from diverse subgroups who completed a stay abroad. Identifying diverse groups and widening their participation in higher education are seen as major challenges for higher education (Batchelor, 2006). The social connectedness of international students with their fellow students declines while abroad, and social inclusion within the peer community at their home university reduces in intensity.

Conclusion

The objective of our study was to provide new insights into the social inclusion of students completing a stay abroad. Despite the aforementioned limitations, this paper makes a meaningful contribution to ensuring a more equal and increased social participation of at-risk students in international higher education student mobility. Our study identified the need to intervene to decrease the barriers to studying abroad that are faced by students from educationally disadvantaged families. As these barriers enlarge future academic and career possibilities, this downward propensity needs to be stopped in order to promote social inclusion of all student groups from an early stage. A promising topic for future research would be to focus on the interplay between social inclusion with peers and faculty between home and host universities. We are convinced that studies of this kind will advance research on the sectorial development of higher education and its determinants for international student mobility.

Recommendations

Our results indicate that belonging to a minority student group in Germany (e.g. migrant students, students from educationally disadvantaged families) is linked to lower social inclusion. Recommendations in this area include the need for universities to adopt retention strategies that create a socially inclusive and supportive academic environment to foster social inclusion for newcomers, including international students. According to our findings, there is a need for early interventions as some of the effects already emerge in the early semesters at university. Last, but by no means least, we would also like to mention one finding that pertains to gender. Female students reported lower social inclusion with faculty throughout the longitudinal study, an effect which will probably vary according to academic discipline and could be explained by the higher number of male academics in hierarchical positions.

Further research needs to shed light on more differentiated aspects of social inclusion before, during, and after an academic stay abroad. Long-term effects, how a placement abroad affects academic and professional careers of minority student groups would also add value to this field of research. We recommend more qualitative research in this field, extending our quantitative perspective with in-depth findings about experiences of social inclusion or exclusion of students when abroad. Moreover, experiences of specific barriers and obstacles that hinder students from minority groups to participate in study abroad programs would be worth investigating in the future in order to overcome these barriers at long sight.

Limitations

Despite the care taken in the design of our study, it also has certain limitations. First, the analytic data is probably not representative. More than half of the records in the available NEPS dataset could not be used in our analysis due to missing data about a study abroad. It might therefore be possible that the number of students without information

about studying abroad is overrepresented, which would have implications for representativity. Moreover, even if the total number of participants was high, the sample size for at-risk students was limited. We were therefore unable to analyze the intersectionality of variables. Likewise, as in all studies, we only analyzed a limited picture of the complex pattern of influencing factors for studying abroad. Several meaningful reasons for not studying abroad were not included in the survey (e.g., non-availability of scholarships, having a child). Furthermore, since the actual form or type of disability was not stated for students with disabilities, no conclusions can be drawn regarding the possible barriers to studying abroad that are posed by specific disabilities. Students who did not report having done a stay abroad (missing values) and students studying at universities of applied sciences were excluded from the study.

In addition, longitudinal studies tend to contain data from more non-mobile students, as mobile students tend to drop out of such studies as their address or country of residence changes. The study also does not consider the structural variables for an academic stay abroad, as integration only refers to the individual intersecting with the institution (e.g., size of the higher education institution, number of services available, number of formal partnerships with other institutions, etc.). Only a few studies take into account both individual characteristics (e.g. diversity) and institutional factors – a fact that is criticized in the literature (Schaeper, 2019). Another limitation lies in the NEPS data, which does not measure interaction with faculty in wave 1. Data on social inclusion are available from wave 2 (3rd semester) onwards. Furthermore, the academic stay abroad cannot be precisely allocated to a specific month or time period in the current NEPS data, which only contain the information that the student was abroad (and was not abroad in the last wave). Accordingly, the academic stay abroad can be said to lie within the time period between one wave and the next but cannot be determined precisely. The waves themselves are integrated into the academic study periods, with the data collection taking place in the winter and summer semesters.

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References

Aypay A., Sever, M., & Demirhan, G. (2012). Social and academic integration of university students: A longitudinal study. *Gaziantep University Journal of Social Sciences, 11*(2), 407-422.

Batchelor, D.C. (2006). Vulnerable voices: An examination of the concept of vulnerability in relation to student voice. *Educational Philosophy and Theory, 38*(6), 787-800.

Brachem, J.-C., Aschinger, F., Fehring, G., Grotheer, M., Herrmann, S., Kühn, M., Liebeskind, U., Ortenburger, A., & Schaeper, H. (2019). Higher education and the transition to work. In H.-P. Blossfeld & H.-G Roßbach (Eds.), *Education as a Lifelong Process* (pp. 297–323). Springer.

Brooks, R., & Waters, J. (2010). Social networks and educational mobility: the experiences of UK students. *Globalisation, Societies and Education, 8*(1), 143-57.

Byl, E., Struyven, K., Meurs, P., Bieke, A., Vanwing, T., Engels, N., & Lombaerts, K. (2016). The value of peer learning for first-year postgraduate university students' social and academic integration. *Procedia – Social and Behavioral Sciences, 228,* 299-304.

Blossfeld, H.-P., Roßbach, H.-G., & von Maurice, J. (Eds.). (2011). Education as a lifelong process. The German National Educational Panel Study (NEPS). VS Verlag.

Bourdieu, P., & Passeron, J. (1964). *The inheritors and French students and their relation to culture.* The University of Chicago Press.

Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste.* University Press.

Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp.241-258). Greenwood Press.

Citron, J. L. (2002). U.S. students abroad: host culture integration or third culture formation? In W. Grünzweig & N. Rinehart (Eds.), *Critical approaches to intercultural education in the age of cyberculture* (pp. 41-56). Lit.

Clarke, A., Fan, X., Webb, A., & Zou, W. (2020). Becoming, belonging, and between: Unexpected outcomes and curricular implications for study abroad. *Teacher and Teacher Education, 90*(2020), 1-11.

Coleman, J. A., & Parker, L. (2001). Preparing for residence abroad: staff development implications. In J. Klapper (Ed.), *Teaching languages in higher education. Issues in training and continuing professional development* (pp.134-162). CILT.

Coleman, J. A. (2013). Researching whole people and whole lives. In C. Kinginger (Ed.), *Social and cultural aspects of language in study abroad* (pp. 17–44). John Benjamins.

Coleman, J. A. (2015). Social circles during residence abroad: what students do, and who with. In R. Mitchell, N. Tracy-Ventura & K. McManus (Eds.), *Social interaction, identity and language learning during residence abroad* (pp. 33–52). EuroSLA Monographs Series 4.

Dahm, G., Lauterbach, O., & Hahn, S. (2016). Measuring students' social and academic integration – Assessment of the operationalization in the National Educational Panel Study. In Blossfeld, H.P., von Maurice, J., Bayer, M., & Skopek, J. (Eds.), *Including students with special educational needs in the competence assessment of the NEPS—results on the comparability of test scores in reading* (pp.313-325). VS Verlag für Sozialwissenschaften.

Engleder, J., & Unger, M. (2020). *Internationale Mobilität. Zusatzbericht der Studierenden-Sozialerhebung 2019.* [International mobility. Additional report on the student social survey 2019]. https://cutt.ly/UcbyIFZ

European Commission. (2015). *Erasmus facts, figures & trends. The European Union support for student and staff exchanges and university cooperation in 2013-2014.* https://cutt.ly/TcbtOL3

Eurostat. (2017). *Study abroad.* https://cutt.ly/IcbtHsX

EUROSTUDENT. (2019). *The social dimension of student life in the European higher education area in 2019. Selected indicators from EUROSTUDENT VII.* https://cutt.ly/5cbtCmY

European Union. (2014). *The Erasmus impact study. Effects of mobility on the skills and employability of students and the internationalization of higher education institutions.* https://cutt.ly/icbt0OW

Fergy, S., Marks-Maran, D., Ooms, A., Shapcott, J., & Burke, L. (2011). Promoting social and academic integration into higher education by first-year student nurses: the APPL project. *Journal of Further and Higher Education, 35*(1), 107-130.

Finger, C. (2013). Diversität im Ausland? Die soziale Selektivität studentischer Mobilität im Rahmen des Bologna Prozesses [Diversity abroad? The social selectivity of student mobility in the framework of the Bologna Process]. *Quality in Research / Qualität in der Wissenschaft, 2*(2013), 37-45.

Gerhards, J., & Hans, S. (2013). Transnational human capital, education, and social inequality: analyses of international student exchange. *Journal of Sociology/ Zeitschrift für Soziologie, 42*(2), 99-117.

Hanassab, S. (2006). Diversity, international students, and perceived discrimination: Implications for educators and counselors. *Journal of Studies in International Education, 10*(2), 157–172.

Haug, P. (2017). Understanding inclusive education: Ideals and reality. *Scandinavian Journal of Disability Research, 19*(3), 206–217.

Hauschildt, K., Gwosc´, C., Netz, N., & Mishra, S. (2015). *Social and economic conditions of student life in Europe.* EUROSTUDENT. https://cutt.ly/OcLS0hd

Hernandez, R. (2018). Integration or isolation: experiences of Irish students during their study abroad in Spain or Latin America. *The Language Learning Journal 49*(1), 117-130. https://doi.org/10.1080/09571736.2018.1528297

Hughes, K. (2015). The social inclusion meme in higher education: are universities doing enough? *International Journal of Inclusive Education, 19*(3), 303-313.

Institute of International Education (2019). *Profile of U.S. study abroad students, 2005/06-2017/18. Open doors report on international educational exchange*. https://www.iie.org/opendoors

Johnstone, C., & Edwards, P. (2020). Accommodations, accessibility, and culture: Increasing access to study abroad for students with disabilities. *Journal of Studies in International Education, 24*(4), 424– 439. https://doi.org/10.1177/F1028315319842344

King, R., & Ruiz-Gelices, E. (2003). International Student Migration and the European 'Year Abroad': Effects on European identity and subsequent migration behaviour. *International Journal of Population Geography, 9*(3), 229-252.

Lörz, M., Netz, N., & Quast, H. (2016). Why do students from underprivileged families less often intend to study abroad? *Higher Education, 72*(2), 153-174.

Maiworm, F., & Over, A. (2013). *Studie zum Thema „Studentische Mobilität und europäische Identität".* [Study on the topic of "Student mobility and European identity]. DAAD – German Academic Exchange Service.

Maringe, F., & Carter, S. (2007). International students' motivations for studying in UK HE: Insights into the choice and decision making of African students. *International Journal of Educational Management, 21*(6), 459-475.

Meier, G., & Daniels, H. (2013). 'Just not being able to make friends': social interaction during the year abroad in modern foreign language degrees. *Research Papers in Education 28*(2), 212–238.

Müller, W., Lüttinger, P., König, W., & Karle, W. (1989). Class and education in industrial nations. *International Journal of Sociology, 19*(3), 3–39.

National Survey on Student Engagement (2017). *National Survey on Student Engagement 2017.* https://cutt.ly/Rcbyiu1

Netz, N., & Finger, C. (2016). New horizontal inequalities in German higher education? Social selectivity of studying abroad between 1991 and 2012. *Sociology of Education, 89*(2), 79–98.

O'Callaghan, J. A. (2006). *How a one semester study abroad experience affects an undergraduate college student's identity development.* Montana State University.

Osiadacz, E. (2018). Global Citizenship. *Brock Education Journal, 27*(2), 44-47.

Petzold-Rudolph, K., (2018). *Studienerfolg und Hochschulbindung. Die akademische und soziale Integration Lehramtsstudierender in die Universität.* [Study success and higher education. The academic and social integration of student teachers in the university]. Springer VS.

Pinheiro, J., Bates, D., DebRoy, S., Sarkar, D., & R Core Team (2021). *nlme: Linear and Nonlinear Mixed Effects Models. R package version 3.1-152.* R-Project. https://CRAN.R-project.org/package=nlme

R Core Team. (2013). *R: A language and environment for statistical computing. R foundation for statistical computing.* http://www.R-project.org/

Rankin, S. R., & Reason, R. D. (2008). Differing perceptions: How students of color and white students perceive campus climate for underrepresented groups. *Journal of College Students Development, 46*(1), 43-61.

Reimer, D., & Pollak, R. (2010). Educational expansion and its consequences for vertical and horizontal inequalities in access to higher education in West Germany. *European Sociological Review, 26*(4), 415–430.

Rienties, B., Beausaert, S., Grohnert, T., Niemantsverdriet, S., & Kommers, P. (2012). Understanding academic performance of international students: the role of ethnicity, academic and social integration. *Higher Education, 63*(6), 685-700.

Rienties, B., & Tempelaar, D. (2013). The role of cultural dimensions of international and Dutch students on academic and social integration and academic performance in the Netherlands. *International Journal of Intercultural Relations, 37*(2), 188-201.

European Higher Education Area. (2020, November 19). *Rome Ministerial Communiqué* [Rome Ministerial Communicated]. https://cutt.ly/Tcbygxc

Schaeper, H. (2019). The first year in higher education: the role of individual factors and the learning environment for academic integration. *Higher Education 73*(3), 1-16.

Sherry, M., Thomas, P., & Chui, W.H. (2010). International students: A vulnerable student population. *Higher Education 60*(1), 33-46.

Souza, S.B., Veiga Simao, A.M., Ferreira, A.I., & Ferreira, P.C. (2017). University students' perceptions of campus climate, cyberbullying and cultural issues: implications for theory and practice. *Studies in Higher Education, 43*(11), 2072-2087.

Tinto, V. (1975). *Leaving college. Rethinking the causes and cures of student attrition*. The University of Chicago Press.

Van Mol, C. (2011). The influence of European student mobility on European identity and subsequent migration behavior. In F. Dervin (Ed.), *Analysing the consequences of academic mobility and migration* (pp. 29-50). Cambridge Scholars Publishing.

Van Mol, C. (2013). Intra-European student mobility and European identity: A successful marriage? *Population, Space and Place, 19,* 209-222*.*

Van Mol, C., & C. Timmerman (2014). Should I stay or should I go? An analysis of the determinants of intra-European student mobility. *Population, Space and Place 20*(5), 465-479.

Zhou, Y., D. Jindal-Snape, K. Topping & Todman, J. (2008). Theoretical models of culture shock and adaptation in international students in higher education. *Studies in Higher Education, 33*(1), 63–75.