



Bright Futures Surveys in the UK, Germany, China and Japan

Technical Report and User Manual

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“Bright Futures”: A Comparative Study of the Internal and International Mobility of Chinese Higher Education Students

Overview of the Project

Young people moving away from home to seek 'bright futures' through higher education are a major force in the urbanization of China and the internationalization of global higher education. Chinese students constitute the largest single group of international students in the richer OECD countries in the world, making up 20 percent of total student migration to these countries. Yet systematic research into a representative sample of these student migrants is scarce, and, more generally, theoretical frameworks for migration may not always be relevant to students moving for higher education reasons. Bright Futures is a pioneering study that investigates key dimensions of this educational mobility through large-scale representative survey research in China, the UK and Germany. We explore this phenomenon in terms of two related aspects: the migration of students from the People's Republic of China to the UK and Germany for higher education reasons, and internal migration in order to study within China. This research design provides a rare opportunity for direct comparisons between those who stay and those who migrate, both within China and beyond its borders. We also compare Chinese students in the UK and Germany with domestic students in the same two countries. Through such comparisons we are able to address a number of theoretical questions such as selectivity in educational migrations, aspirations beyond returns, the impact of transnationalization of higher education on individual orientations and life-course expectations, and the link between migration and the wellbeing of the highly educated.

Bright Futures is a collaborative project (ESRC project number ES/L015633/1), involving researchers from the University of Essex, the University of Edinburgh, UNED, the University of Bielefeld and Tsinghua University. The research was funded by the Economic and Social Research Council (ESRC, UK), the German Research Foundation (DFG, Germany) and the National Natural Science Foundation (China).

A related project, Asian Educational Mobilities: A Comparative Study of International Migration of Japanese and Chinese Higher Education Students (ESRC project number ES/N019024/1, funded by the ESRC and the DFG) collected data for a smaller-scale survey of Chinese and Japanese students in Japan which supplements the other surveys. This survey provides data on Chinese international students in another destination country and includes domestic students for comparison.

Table 1 provides an overview of the groups included in the two studies. As part of the Bright Futures project we also conducted surveys of Japanese students in the UK and Germany as a further comparison group. This international Japanese student sample have not been deposited due to the sample size and total population of Japanese students in these countries being small, thus making the data highly disclosive. The data for the Japanese (i.e. domestic) student sample in Japan are part of the deposit.

Table 1 Surveyed groups by survey country

Surveyed Students	Survey country (study country)			
	UK	Germany	China	Japan
Chinese Students	X	X	X	X
Japanese Students	X (not deposited)	X (not deposited)		X
UK Students	X			
German Students		X		

Survey Instruments

For the surveys in the different countries, different online questionnaires were developed, each adapted to the respondent group and survey country. The starting point was the questionnaires for the main population group of interest: Chinese international students. For the comparison groups of students studying in their home country, instruments as similar as possible were developed.

The questions in the questionnaire mainly follow a temporal structure, starting from students' past backgrounds, then moving to prior-migration and academic experiences/decisions and current well-being/experiences, through to future life-course orientations. More specifically, the following areas are covered:

- Sociodemographic characteristics and course details
- Family background (parental education and occupation, household income, siblings)
- Prior education (academic achievement and educational migration)
- Motivations for studying abroad and decision-making processes
- Individuality traits and values (e.g. achievement orientation, risk-taking attitudes)
- The study experience on the current course
- Health and wellbeing
- Future life course aspirations
- Cosmopolitan vs national orientations

Where available, suitable questions from other social surveys, such as the Chinese General Social Survey, China Family Panel Studies, the Chinese College Student Survey, the European Social Survey and the World Values Survey were used.

To address the key research questions in the project, a large number of survey questions were developed by the Bright Futures research team. Questions related to the studying abroad decision-making process were based on the factors identified in the annual report of the Education International Cooperation Group (EIC), adapted and further expanded for the project's purposes (<http://www.eic.org.cn/special/report/>; accessed March 2016). A number of survey experiments were used to produce answers that would otherwise have been susceptible to a high risk of suffering from social desirability biases. This would include questions related to racism and xenophobia (list experiments) as well as respondents' positions on the axis of 'cosmopolitan-national' orientation (donation game). The newly developed questions were pre-tested with cognitive interviews to ensure students understood the question as intended. This was followed by a small-scale pilot survey of the whole questionnaire for Chinese and home students in the UK in one university in

December 2016. Separate pilots were conducted in Germany in the summer of 2016 and in China in July 2017.

The questionnaire for Chinese international students in the UK and Germany takes 15 to 20 minutes to complete. The questionnaire for UK and German home students is shorter as some aspects are not applicable to domestic students (e.g. migration decision). The questionnaires for Chinese students in Japan and Japanese students in Japan had to be shortened considerably due to being administered via a fieldwork agency.

The questionnaires were administered online and in the students' own languages, i.e. for Chinese students in Chinese, for UK home students in English, for German students in German and for Japanese students in Japanese. As recommended for translations into languages not belonging to the same linguistic family, we opted for the use of multiple translators (Harkness et al 2010). Three different professional translators provided independent translations from English into Chinese. Where the questions were extracted from existing Chinese surveys, the original wording in the Chinese surveys was used. A synthesized version of the translations was then verified by another translator by comparing it with the original English version.

In each country, at the end of the main questionnaire described above, students were invited to complete an additional questionnaire on their social network. The data from this questionnaire are not deposited due to some data issues, e.g. low average number of named contacts (network size).

Sample Design and Fieldwork

The main target populations are four groups of students: Chinese students in UK universities, Chinese students in German universities, Chinese students in Japanese universities and Chinese students in universities in mainland China. The Chinese are defined by having Chinese nationality and being from mainland China (i.e. excluding Hong Kong and Macao). Only students in undergraduate (UG) and postgraduate taught (PGT) programmes are part of the target population, postgraduate research students are not. Students on 'linked programmes' (where part of the degree is provided by a Chinese university and part by a university in the UK or Germany, e.g. 1+3 or 2+2) are included, while students on exchange programmes are excluded. Domestic students, whom we term as home students in this dataset¹ in each of the three international study destinations (the UK, Germany and Japan) serve as a comparison group for Chinese international students in each country.

In the surveys in the UK, Germany and China the sample design was a two-stage stratified sample design. In Japan, a quota sampling approach had to be adopted. In the UK, Germany and China the sampling frame of universities was stratified to form groups of similar universities (based on university prestige and other country-specific university characteristics explained in the sections for each country). University prestige (ranking) and the number of Chinese students already enrolled at a given university are two factors highly associated with the decisions of Chinese students when choosing their university in the UK (Cebolla-Boado, Hu, Soysal 2018). University prestige and the size

¹ The term 'home students' is to be understood as the opposite of 'international' students, that is students holding the nationality of the study country.

of the Chinese student population are therefore two of the stratification criteria used in the design of the sample to achieve a good representation of different types of students.

In each stratum one or more universities are selected. Then, within selected universities, either all eligible Chinese students or a random sample of them are selected, depending on the size of the Chinese student population in each university. In Germany and the UK, a sample of home students in the same universities and of the same size as the Chinese sample in each university is also selected. These comparison samples of home students follow the equivalent criteria, i.e. they consist of UG and PGT students with UK and German nationality respectively. In Japan, due to the different sampling approach, the sample of Japanese home students is drawn from all Japanese universities.

Fieldwork for the surveys, using the online survey platform Qualtrics, took place between March 2017 and October 2018. In the following, the country-specific details of the sample design and implementation and fieldwork organisation are described.

UK Survey

Sample Design and Selection of Students

The sample design is a two-stage stratified sampling, with universities as primary sampling units and the secondary unit being the (Chinese) students at the universities selected for the sample.

Chinese students enrolled on a full (minimum 3-year) undergraduate degree or a taught (minimum 1-year) postgraduate degree in a UK university were eligible. Chinese students on a foundation year were not eligible due to not being enrolled on a full degree course. The same criteria were applied to home students. In addition, the home student sample was restricted to full-time students because Chinese international students in the UK can only study full-time.

Stratification and Selection of Universities

The sampling frame for selecting Chinese students was constructed based on the most up-to-date data from the Higher Education Statistics Agency (HESA) at the time, pertaining to the academic year 2013/2014. Only universities hosting Chinese students at both undergraduate and postgraduate levels and included in the Guardian University Ranking² were included in the sampling frame. This excluded 36 universities hosting a total of 3,679 Chinese students (around 4% of the total Chinese student population in UK universities; the median number of Chinese students excluded per university is 32).

The 115 universities in the sampling frame were sorted according to their position in the Guardian University Ranking, and then divided into quintiles: five groups of universities, each hosting an approximately similar number of Chinese students corresponding to roughly 20%, or around 16,785 of the total Chinese student population of 83,918 in 2013/14.

Within each quintile the universities were then sorted by the size of their Chinese student population to create two sub-strata: one with universities that host more Chinese students (hosting a combined 50% of Chinese students in this quintile), and one with the universities hosting the other

² Other rankings, such as the Times Higher Education University Rankings, were tested and delivered similar results; the Guardian University Ranking was chosen because of its comprehensiveness.

half of Chinese students in each quintile (with each university hosting relatively fewer Chinese students). Of the resulting ten strata nine contain between 4 and 16 universities, while one stratum contains 44 universities due to the very small numbers of Chinese students hosted by many institutions in that stratum.

In each stratum between one and four universities were selected. If a university declined to participate, another university in the stratum was selected as a replacement. With few exceptions due to practical constraints, the selection probability is proportionate to the population of Chinese students. We contacted 47 universities, of which 20 participated.

Sampling of Students within Selected Universities

Depending on the size of the Chinese student population in a sampled university, we asked universities to sample all eligible Chinese students or to take a random sample. Home students were randomly sampled within universities. As home students serve as a comparison group to the Chinese students, they were sampled according to the ratio of UG to PGT Chinese students at each given university. This means that PGT home students are, relative to UG home students, intentionally overrepresented. We sampled a total of 11,046 Chinese students and 10,303 UK home students.

Fieldwork

The survey fieldwork started in April 2017 and ended in April 2018. The majority of the responses are from the academic year 2017/18.

Universities received detailed instructions on how to randomly sample students from their register. With few exceptions, students were invited to take part in the survey by their university via email. We provided email templates in Chinese and English for the survey invitation (see appendix) and with a set of personalised links to the survey which ensured each student could submit the questionnaire only once. The email contained a link to the project's website with further information. We asked universities to send two reminders to increase the level of response, which most of them did.

Respondents received Amazon vouchers as incentives for completing the survey. Initially, the longer questionnaire for Chinese students was incentivised with £10 while the shorter UK home student questionnaire offered £5. In light of a much shorter than anticipated survey duration the amount for international students was reduced to £8 in all surveys fielded after May 2017. It is possible that this affected the response rate negatively, though this is hard to ascertain because the fieldwork timing within the academic year and other factors related to the universities also played a role.

Germany Survey

Sample Design and Selection of Students

The frame of Chinese students is based on data from the Deutsche Zentrum für Hochschul- und Wissenschaftsforschung (German Centre for Higher Education Research and Science Studies). In the winter semester of 2013 there were 258 higher education institutions in Germany hosting 20,349 Chinese students enrolled on a UG or PGT programme. From the total number of 258, twelve institutions that provide only online education and 148 institutions each hosting fewer than 30

Chinese students were excluded. The sampling frame therefore comprised 110 universities in Germany with 18,841 Chinese students.

The sample is stratified by university reputation, using the 2013 Quacquarelli Symonds (QS) World University Ranking. In the 2013 QS World Ranking, 42 German universities appeared in the top 500. These ranked universities hosted 59% of the Chinese students. The other 68 non-ranked ones, including Fachhochschulen (Universities of Applied Science), hosted the remaining 41%.

Within the group of QS ranked universities, universities are further divided into sub-strata by QS ranking. The second stratification criterion is the size of the Chinese student population at each university. Within each stratum, universities were sorted by the size of their Chinese student population to create two sub-strata: one with universities hosting larger numbers of Chinese students (a combined 50% of Chinese students in this sub-stratum), and one with universities hosting the other half of Chinese students (with universities hosting smaller numbers). This stratification resulted in 20 strata, some of which contained only one or two universities.

Universities from each stratum were randomly selected. If a university declined to participate another was selected as a replacement. Universities were much less willing to cooperate than anticipated, which was problematic for strata with few units. Therefore, in some cases universities had to be reassigned to an adjacent stratum.

In total 63 universities were contacted, of which 24 agreed to participate. In each university, all Chinese students and a sample of an equivalent number of German students were randomly selected. Some universities surveyed only Chinese students, on the grounds that drawing a random sample of German students involved too much work for them. The data for German home students are therefore not fully representative of the universities that host Chinese students in Germany. We sampled around 4,700 Chinese students and 2,800 home students. In the case of one university with a small number of respondents students could only be invited via their website so an estimate had to be used.

Fieldwork

Fieldwork took place between March 2017 and April 2018. In most universities the fieldwork period was around three months. The universities invited the sampled students by email (see appendix) to take part in the survey and sent a reminder email a few weeks later.

Students who participated received an Amazon voucher. Home students received €5 for taking part in the survey, Chinese students received €11 as their questionnaire was longer.

China Survey

Sample Design and Selection of Students

The target population was students enrolled on Bachelor-level undergraduate and postgraduate courses in universities or 4-year colleges in China (but not students in 4-year colleges enrolled on programmes below Bachelor level).

The sample frame consists of the eligible student population enrolled in the 1,293 universities and 4-year colleges that existed in mainland China in 2016. The sample was stratified by reputation as

represented by institution type and region. By reputation higher education institutions were divided into Project 985 university, Project 211 university, non-key university³, public 4-year colleges and privately-owned 4-year colleges. Region divided the frame into the more developed Eastern region and the less developed Central/Western region. This resulted in a total of 10 strata; in each of these two or three universities were sampled (key universities were oversampled to allow for subgroup analysis). 3,300 students in 22 higher education institutions (150 students in each) were sampled with probability proportionate to sample size (PPS).

Fieldwork

Contact persons (either a departmental dean or staff of the student office) in each university were paid a fee to compensate for their labour and expenses. They sampled the students from the universities' student registers. All the survey invitation emails (see appendix) were sent by the project team via Qualtrics. Additionally, the relevant responsible person at the sampled university notified the students about the authenticity of the survey and encouraged them to take part. Each student who completed the survey received a cash reward of 100 yuan.

The fieldwork ran from October 2017 to October 2018, with a break in August for the summer holiday. For each university the fieldwork period was around two months. However, the survey links remained active for at least three months, so occasionally there were later responses as well.

Japan Survey

Unlike for the other survey countries we did not have an academic partner in Japan that could facilitate contact with universities to access students. The surveys were therefore conducted by the Japanese market research company Nikkei Research.

Sampling and Fieldwork

The target populations in Japan were Chinese and Japanese undergraduate and postgraduate taught students. All students of Chinese/Japanese nationality enrolled in undergraduate and postgraduate degree courses in universities listed with the Japanese Department of Education (MEXT) in April 2018 were eligible.⁴ These included 780 higher education institutions: national universities⁵ (including Institutes of Technology), public universities⁶ and private universities. Technical colleges were not included.

Initially, both face-to-face interviews on university campuses and online surveys were considered as data collection methods. The former would have had the advantage of being able to select a stratified random sample of universities (and a quota sample of students within selected universities). This would have helped ensure a representative final sample and largely mirrored the sampling of universities in the other three countries. However, in Japan it is not possible for

³ Key universities are part of the government initiatives Project 211 or Project 985. These universities, which make up only 5% of all higher education institutions, are considered important for national development and are managed by the central Chinese government (as opposed to provincial government).

⁴http://www.mext.go.jp/b_menu/link/1294885.htm

⁵National universities (国立大学, *kunitachidaigaku*) are the most prestigious universities in Japan.

⁶ Public universities (公立大学, *kouritsu daigaku*) are universities funded by prefectures and municipalities.

commercial research agencies to recruit students on campus. Therefore, students had to be contacted online, which did not permit stratification of the sample.

For the sample of Japanese students, Nikkei Research used their existing online access panel. From their online panel they contacted 12,468 members that were known to be university students. A quota sample was implemented to ensure it was representative in terms of gender and region.

The sample of Chinese students at Japanese universities was recruited specifically for the survey via Nikkei’s partner agency, using a range of methods including snowballing. The sample is therefore clustered at some universities. For both Chinese and Japanese students, eligibility of respondents was determined by several screening questions. Respondents not specifying their university (either explicitly refusing to or not being able to find their university listed in the drop-down selection) were screened out.

The fieldwork was conducted in the first three weeks of September 2018.

Response Rate at Student Level and Achieved Sample Size

Response rates at the student-level differed substantially across countries, sample groups and universities. Table 2 displays the achieved sample sizes for the two groups.

Achieved Sample Size

The dataset contains all responses, including partial responses and cases for which survey weights could not be calculated.

Table 2 Achieved sample sizes and response rates

	UK		Germany		China	Japan		
Group	Chinese students	Home students	Chinese students	Home students	Home students	Chinese students	Home students	Total
Full response	1,317	1,569	704	388	3205	490	382	8,055
Partial response	169	97	105	35	131	1	31	569
Total	1,486	1,666	809	423	3,336	491	413	8,624
Response rate	13%	16%	17%	15%	82%	Not calculable	3.3%	
Total cases with survey weight	1,431	1,655	754	414	3,293	491	413	8,415

Note: Full response corresponds to those who have completed the main questionnaire (they progressed until at least question J8).

Survey Weights

The dataset includes a survey weight variable, *cweight*. Survey weights need to be applied in analysis in order to make the results representative of a given student population.

For the UK, Germany and China, the survey weight is an analysis weight that combines sample design weight and non-response weight. The sample design weight adjusts for coverage error, i.e. differences between the administrative data sources used to construct the sample frame and the actual population (e.g. due to changes in the Chinese student population between 2013/14 (sampling frame) and 2017/18 (reference population)). The non-response adjustment accounts for differential survey non-response. It calibrates the data to the characteristics of the reference population using the following information: stratum, level of study (undergraduate /postgraduate), gender, age and subject area⁷(the latter two are not used in non-response adjustment in China).

The survey weight combines the two elements, sample design and non-response adjustment. Sample design weights alone could not be deposited as they could allow identification of participating universities in some countries.

Note that UK and German home student groups are calibrated to the characteristics of the Chinese student population in the UK and Germany as they are meant to serve as comparison group only. The survey data on UK and German home students, with or without using survey weights, is not appropriate for describing the UK or German home student population as a whole in their respective countries.

For Japan, there was no full sampling frame available. The survey weight calibrates the survey responses of the two populations, Chinese students and Japanese home students to population margins of known key characteristics and was done separately for the two groups. The characteristics are: type of university (national/public/private, and for each type whether it is in the QS ranking); gender (using information for all international students for Chinese students); undergraduate/ postgraduate study level, and for each level whether the subject is Science or Humanities, Arts and Social Science (using information for all international students for Chinese students).

Data Processing

Quality Issues

The data were checked for quality issues, using range checks and cross tabulations to ensure responses are plausible. External information such as sample information provided by participating universities was also used.

In the UK survey, in a small number of cases, the sample information provided suggest that the sampling criteria were not followed entirely and the sample included some ineligible students (e.g. postgraduate research students). When we noticed this in August 2017, we added an additional

⁷ Subject area groups university subjects into five areas: Business and economics; science, engineering, computer science and maths; humanities, social science (excl. economics) and education; arts and architecture; other (which, significantly, includes medicine and law).

response category 'postgraduate research student' to the questionnaire so that these students would be screened out. For most universities concerned, ineligible respondents could be identified with the sample information and have been removed from the data.

In the Japan survey of Japanese students, some panel members tried different answers in the screening section in order to be able to access the main survey. These cases were removed. If a participant had successfully passed the screening questions a first time, but did the survey a second time, only the first was kept.

Variable Labels

The variable labels describe the question content and (in the case of multiple choice questions) also the response option. For questions that appeared with slightly different wording in the questionnaire for different groups, e.g. for international Chinese students, we use placeholders. For example, *arriv* is labelled 'year of arrival in COUNTRY OF STUDY' instead of 'year of arrival in the UK', etc.

Suffixes

Variables that contain the information from equivalent but not identical questions from different questionnaires use the same name and have an added suffix that indicates the group covered by a given variable. The reason why the information in the variable is not identical and therefore not combined in one variable might not always be apparent from the variable label. Variables of the same name with different suffixes should not be combined into one variable without first consulting the questionnaires to check the full question text and response options that each group received.

The suffix is separated from the variable name with an underscore and consists of one or two parts, depending on the survey question it relates to: a small letter indicating the group, followed by capital letters indicating the country/countries covered.

The group suffix 'c' is for Chinese international students, the suffix 'h' for home students (British students in the UK, German students in Germany and Chinese students in China). Variables without group suffixes apply to all groups surveyed in the country/countries indicated by the country suffix.

The country suffix, using capital letters, indicates to which country or countries the variable applies: UK for the UK, DE for Germany, CN for China and JP for Japan. Variables that do not have a country suffix apply to all four countries.

For example for Chinese international students the variable based on question C1 in the questionnaire, 'who influenced their decision to study abroad', is called *infdecwho1_cUKDEJP*. This indicates that Chinese students in the UK, Germany and Japan received this question. For Chinese home students question C1 is different, because it asks 'who influenced their decision to study in their current location'. It is therefore a separate variable, *infdecwho1_CN*, with CN indicating that all respondents in China received the question.

Adaptive Appearance Questions

For some questions, if the respondent did not provide any response, the question would be shown a second time (either in the same format, or in a simplified version). The variables relating to the second appearance have the same name as that relating to the initial question, with an 'x' at the end

of the name (but before any suffix). For example, *foccp* is Father's occupation, *foccp₂* is the second appearance of this. The variable label indicates this by starting with '2nd'.

Coding of Open Answers

Many closed questions had a response option 'other, please specify' with a text box provided to write in text. All text entries have been coded up. Responses that corresponded directly to one of the offered closed response options were recoded to that response. Responses that did not fit into existing response options were recoded to newly created categories. When respondents selected 'other, please specify' but did not specify, or the response was not codeable, the case remains as 'other, please specify'. The full text responses are not released.

Types of Missing Values

The dataset differentiates between a number of missing value types for item non-response and other missing values (see Table 3).

Most questions did not offer a 'don't know' or 'refuse' option. Therefore, one cannot know why a respondent did not respond to a question that they did see. This type of item non-response is coded as skipped (-99) (except for Germany data, where skipped items are recorded as system missing).

For the few questions where explicit 'don't know' or 'refuse' options were offered codes -97 and -98 are used.

Table 3 Types of missing values

Code	Type	Note
<i>Item nonresponse</i>		
-96	Not applicable Variables <i>foccp</i> , <i>moccp</i>	For questions that had an explicit 'not applicable' option (see questionnaires)
-97	Don't know	For questions that had an explicit 'don't know' option (see questionnaires)
-98	Refused	For questions that had an explicit refusal option (see questionnaires)
-99	Skipped	The respondent has seen this question but did not answer (not applicable to Germany data)
<i>Other missingness</i>		
.	Filtered/system missing	Question did not apply to respondent or respondent stopped prior to question; or (in Germany data only) respondent skipped question

Questionnaire Reference Table

The questionnaire reference table helps the user to link the questionnaire content to the relevant variables in the dataset. The table also contains meta variables and derived variables that are not directly based on a question, e.g. *cntry* (survey country).

The reference table is provided as an Excel file. The running number in the first column indicates the default ordering of the table, which is the same as the order of the variables in the dataset and codebook: first meta variables, then all other variables in alphabetical order. If using the reference

table side by side with one of the questionnaires it might be useful to sort the table by question number for the relevant questionnaire.

The second column lists the variable name. The variable name is listed without item numbers or suffixes at the end, i.e. for a survey question that consists of several items (and therefore several variables in the dataset) there is only one row in the reference table.

The third column contains the variable label or amended description of the variable content.

Columns four to nine indicate in which questionnaires a given question was included (and what question number it was in each questionnaire) and hence what universe the variable covers. Question numbers can differ across questionnaires even if the question is identical.

Codebook

The codebook lists all variables in the dataset, in the same order as in the dataset. At the start there are some key variables to identify survey groups, the remaining variables are in alphabetical order. (As there are several questionnaires combined it was not practical to order variables by questionnaire structure.)

The codebook shows the labels assigned to the values for each variable. A note indicates if, compared to the question in the questionnaire(s), response categories have been collapsed in order to reduce statistical disclosure risk. Derived variables are also explained.

Key variables

Variable *group*

The labels firstly indicate the origin of the student relative to their study location: (CNS for Chinese student abroad, HS for students studying in their home country), followed by the study country.

Table 4 Respondent groups, variable group

Value	Label	Description
1	CNS UK	Chinese students in the UK
2	CNS DE	Chinese students in Germany
3	HS CN	Home students in China
4	HS UK	Home students in the UK
5	HS DE	Home students in Germany
8	CNS JP	Chinese students in Japan
9	HS JP	Home students in Japan

Variable *centry* (survey country)

The variable *centry* indicates in which country the respondent studies: the UK, Germany (DE), China or Japan.

Variable *samgroup*

The variable *samgroup* indicates the sample group for the surveys in the UK, Germany and China. The strata were collapsed into fewer groups to reduce the risk of disclosure for participating universities. Due to the sample design in Japan there are no sample groups defined.

Table 5 Sample groups, variable sampgroup

Value	Label
11	UK: top pseudo-quintile
12	UK: 2nd pseudo-quintile
13	UK: 3rd pseudo-quintile
14	UK: 4th pseudo-quintile
15	UK: 5th pseudo-quintile
21	DE: QS-ranked universities
22	DE: technical universities
23	DE: non-ranked universities
24	DE: universities of applied sciences
31	CN: project 985 universities
32	CN: project 211 universities
33	CN: other universities
34	CN: 4-year colleges
35	CN: Private 4-yr colleges

References

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Janet A. Harkness et al., eds. (2010) *Survey Methods in Multinational, Multiregional, and Multicultural Contexts*. Hoboken N.J.: Wiley.

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Project website <http://brightfutures-project.com/>

Appendix

Survey invite email template for Chinese students in the UK

The email included the Chinese text, followed by the English translation.

Subject line: 参与有关中国留学生的付费调查 - Participate in survey on Chinese student mobility

亲爱的firstname,

我们想邀请您参加“[光明的前途](#)”项目调查。这是一项首次大规模在全英范围内开展的针对中国留学生的学术调查。通过科学抽样，您被挑选为[University name]中国留学生样本的一部分。

我们想要描绘一幅图景，全面展示中国在英留学生的动力和经历，并且将这些方面与中国国内学生作比较。

我们将非常感谢您能够填答问卷，回答下列有关问题：

是什么原因决定您在英国留学？

您的期望是什么？

您对在英国学习有何评价？

您关于未来的计划是什么？

调查将用中文进行，耗时20分钟。为表示感谢，“光明的前途”项目组为您准备了**高达11英镑的英国亚马逊购物券**。您的所有回答将被完全保密，不会被任何第三方共享。研究不会泄露任何个人信息。

请点击链接，参与调查：

[survey link]

这项研究由英国埃塞克斯大学及中国清华大学的社会科学家团队联合开展，受中国国家自然科学基金和英国经济与社会研究理事会资助。

这项调查得到了[University name]的全力支持。您的支持对于我们完成这个项目也有非常重要的价值。

[University name]

及“光明的前途”项目组

观看视频，获取更多信息：[“光明的前途”网站](#)

如果您有任何问题，或在填答中需要帮助，请随时联系我们：邮箱

brightfuture_project@outlook.com或电话01206 873340。

Dear [firstname],

We invite you to participate in the [Bright Futures survey](#), the first large-scale, UK-wide academic survey on Chinese international students. Through scientific sampling, you have been selected as part of a sample of Chinese students at [University name].

We want to build a picture about motivations and experiences of Chinese students in the UK, and how this compares to Chinese students who study at home.

Therefore, we would be really grateful if you could fill in our survey to tell us:

What made you decide to study in the UK?

What were your expectations?

How you are finding studying in the UK?
What are your plans for the future?

The survey is in Chinese and takes about 20 minutes to complete. As a token of our gratitude, the Bright Futures team has prepared **up to £8 as Amazon UK voucher** for you. All your answers will remain completely confidential and will not be shared with any third parties. **No personal information will be identifiable.**

Please follow this link to the survey:
[survey link]

This research is undertaken by a team of social scientists led in the UK by the University of Essex, and in China by Tsinghua University, and is supported by the National Natural Science Foundation of China and the Economic and Social Research Council.

This survey has the full support of [University name], and your support by completing the survey will be invaluable to this project.

Yours sincerely,
[University name] and the Bright Futures Project Team

Watch our video on our website to find out more: [Bright Futures](#).
If you have any questions or require help in completing the survey please do not hesitate to contact us via email: brightfuture_project@outlook.com or phone: 01206 873340.

Survey invite email template for Chinese students in Germany

The email included the Chinese text, followed by the English translation.

Subject line of the email: “光明的前途”: 中国留学生有偿问卷调查，诚邀您参与！ / Participate in paid survey on Chinese international students

Body of the email:

亲爱的同学，

我谨代表“光明的前途”项目组研究成员，真诚地邀请您参加“光明的前途”项目调查 [Bright Futures](#)。“光明的前途”是德国第一个旨在了解中国留学生的大规模学术调查项目。通过科学的抽样，您的意见对于我们的研究至关重要。通过了解您的看法，我们力图全面展示像您一样的学生如何选择教育，在就学过程中的种种经历，包括留学和今后的职业发展等。您的所有回答将被完全保密，且仅供学术研究之用；您的答案不会被任何第三方共享。研究不会泄露任何个人信息。

本项调查将用中文进行，耗时约20-25分钟。为表示感谢，“光明的前途”项目组为您准备了高达14欧元的亚马逊购物券。调查完成后，将会显示如何领取这项奖励的提示。

请点击链接，参与调查：
[Bright Futures](#)

或者将以下链接复制粘贴到您常用的浏览器里：
https://survey.eu.qualtrics.com/jfe/form/SV_8zR49gupFdDwoYt

您的参与对于我们有非常重要的价值！

及“光明的前途”项目组

如果您有任何问题，或在填答中需要帮助，请随时联系我们：邮箱bright_futures@uni-bielefeld.de想要获取更多信息，请访问项目网站: www.brightfutures-project.com.

Dear student,

On behalf of an international group of social scientists, we are **inviting you to participate in the [Bright Futures](#) survey** the first large-scale, Germany-wide academic survey on Chinese international students.

Your views are indispensable in generating a comprehensive picture of how students like you make educational choices and experience different aspects of higher education, including international mobility and prospective employment. All your answers will remain completely confidential and will be used only for research purposes; they will not be shared by any third parties. **No personal information will be identifiable.**

The survey is in Chinese and takes approximately 20 to 25 minutes to complete. As a token of our gratitude, the Bright Futures team has prepared **up to €14 as an Amazon voucher** for you. The instructions on how to claim the reward will be presented upon completion of the survey.

Please follow this link to the survey:

[Bright Futures](#)

Or copy and paste the URL below into your internet browser:

https://survey.eu.qualtrics.com/jfe/form/SV_8zR49gupFdDwoYt

Your support in completing the survey will be very valuable to this project.

Yours sincerely,
Bright Futures Project Team

If you have any questions or require help in completing the survey please do not hesitate to contact us via email: bright_futures@uni-bielefeld.de. For further information visit the project website: www.brightfutures-project.com.

Survey invite email template for home students in China

亲爱的**大学的同学，您好！

这里是清华大学社科学院社会学系“光明的前途”调查项目课题组。我们经**大学相关部门同意，获得了您的邮箱。感谢您能参与本次问卷调查。

“光明的前途”是受国家自然科学基金资助、由清华大学社会学系李强教授、刘精明教授负责的、在全国范围内大规模开展的针对在校生教育选择的研究项目。通过科学抽样，我们选取了全国22所高校共3300名大学生作为样本，您也是其中不可或缺的一员。

请您点击下方链接填答学生问卷，完成问卷大概会需要您30分钟的时间。您可以随时中断填写，系统会自动保存您的进度，重新点击链接即可继续填答。本问卷调查为有偿调查，在您完成学生问卷及填写完成之后发放的家长问卷（家长问卷预计花费5分钟）后，我们会向您支付100元作为感谢。我们会在所有学生问卷填答完成之后发放家长问卷，由于各位同学填答时间不同，家长问卷发放时间会在5-7天之后，请您谅解。

您的意见对于我们的研究至关重要。我们将描绘一幅图景，全面展示像您一样的大学生怎样做出教育选择、怎样度过大学生活、对自己的未来又有怎样的期待。

我们向您保证，您的所有回答将被完全保密，且仅供学术研究之用；您的回答不会被任何第三方共享。研究不会泄露任何个人信息。

最后，祝您在新的一年里一切顺利，学业有成！

点击此链接转到调查：

[\\${!://SurveyLink?d=Take the Survey}](#)

复制以下 URL 并粘贴到您的互联网浏览器中：

[\\${!://SurveyURL}](#)

如您有任何疑问，可发送邮件至： [email address]，我们会及时答复，谢谢！

热切期待您的答复！

清华大学“光明的前途”项目组

项目网站<http://www.brightfutures-project.com/cn>

English translation:

Dear students of ** university/college,

This is the “Bright Futures” research team of Department of Sociology of Tsinghua University. We obtained your email address with the consent of the relevant department of your school. Thank you so much for participating in this survey.

The “Bright Futures” project is a research project focusing on decision-making of education among higher education students nationally, which is funded by the National Natural Science Foundation of China and led by Professor Qiang Li and Professor Jingming Liu from Department of Sociology of Tsinghua University. We selected 3300 college students from 22 universities across the country as samples through scientific sampling process, and you are one indispensable member among them.

Please click the link below to complete the student questionnaire and it will take you 30 minutes. If you need to leave during the process of answering, you can close the website page directly and the former answers would be saved. You can continue answering by clicking the link in the email again later. It is a paid survey so that after you complete the student and parent questionnaires (about 5 minutes), you will receive 100 yuan as rewards. We will send the parent questionnaire after you complete the student questionnaire. Please understand that since the time used by students is different in the school, the parent questionnaire will be sent out after 5 to 7 days.

Your answer is critical to our research. We will paint a picture of how college students like you make their educational choices, live their college life and expect their future.

We assure that all your answers will be kept confidential and will be used only for academic researches. Your answers will not be shared by any third party and your personal information will not be revealed.

Wish you all the best in the new year and succeed in your studies!

If you have any problems during the course of answering the questionnaire, please feel free to contact us. Email: [email address]

Click the link to complete the survey

[\\${!://SurveyLink?d=Take the Survey}](#)

Copy and paste the following URL into your internet browser

[\\${!://SurveyURL}](#)

“Bright Futures” research team of Tsinghua University

Website:<http://www.brightfutures-project.com/cn>

Survey invite email template for home students in the UK

Email subject line: Participate in survey on experiences in higher education

Dear [first name],

We are **inviting you to participate in the [Bright Futures](#) survey**, which is part of an academic research project on experiences in higher education. Through scientific sampling, you have been selected as part of a sample of students at [Universityname].

Your views are indispensable in generating a comprehensive picture of how students like you make educational choices and experience different aspects of higher education including student mobility and prospective employment. All your answers will remain completely confidential and will be used only for research purposes; they will not be shared by any third parties. **No personal information will be identifiable.**

The survey takes approximately 15 minutes to complete. As a token of our gratitude, the Bright Futures team has prepared **up to £8 as an Amazon voucher** for you. The instructions on how to claim the reward will be presented upon completion of the survey.

Please follow this link to the survey:

[survey link]

This survey has the full support of [Universityname] and your support in completing the survey will be very valuable to this project.

Yours sincerely,
[Universityname] and the Bright Futures Project Team

If you have any questions or require help in completing the survey please do not hesitate to contact us via email: brightfuture_project@outlook.com or phone: 01206 873340. For further information visit the project website: www.brightfutures-project.com.

Survey invite email template for home students in Germany

Subject line: **Teilnahme an bezahlter Forschungs Umfrage**

Liebe/r Studierende/r,

Wir **laden** Sie herzlich zur **Teilnahme an unserer Umfrage von [Bright Futures](#)** ein, die Teil eines akademischen Forschungsprojektes ist.

Ihre Ansichten sind unentbehrlich bei der Erstellung eines umfassenden Bildes, wie Studierende wie Sie Ihre Bildungsentscheidungen treffen und verschiedene Aspekte der Hochschulbildung (wie Mobilität und potenzielle Beschäftigung) erleben. Ihre Antworten werden vertraulich behandelt und nur für Forschungszwecke verwendet; sie werden nicht mit Dritten geteilt. **Personenbezogene Informationen werden nicht identifizierbar sein.**

Die Umfrage wird ca. 20 Minuten in Anspruch nehmen. Als Zeichen unserer Dankbarkeit haben wir für Sie einen **Amazon Gutschein im Wert von bis zu 8€** vorbereitet. Wie Sie diese Belohnung erhalten, erfahren Sie nach Abschluss der Umfrage.

Folgen Sie bitte dem Link zur Umfrage:

[Bright Futures Umfrage](#)

Oder kopieren Sie den URL-Link in Ihren Browser:

https://survey.eu.qualtrics.com/jfe/form/SV_6tam8IRGGASXij

Vielen Dank für Ihre Teilnahme!
Das Bright Futures Projekt Team

Falls Sie Fragen haben oder Hilfe beim Abschluss der Umfrage benötigen, schreiben Sie uns bitte unter bright_futures@uni-bielefeld.de. Für mehr Informationen besuchen Sie bitte unsere Webseite: www.brightfutures-project.com.