Is Migration a Stressor for the Most Talented? Non-specific psychological distress among Chinese students in Tertiary Eduction in China, Germany and the UK

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Introduction

The so-called Healthy Immigrant Paradox suggests that migrants generally benefit from better health outcomes than comparable natives (Teruya y Bazargan-Hejazi 2013). Despite of this general pattern, its is still debated whether it also applies to mental health..

The relation between migration and mental health is a complex one since there are many ways migration can impact mental outcomes. On the one hand, it is known that migration is a very selective process and that emigrants are not a representative sample of the population in the country of origin. It is thus believed that there could be a selection of migrants in terms of characteristics that can also impact their mental outcomes. Since Odergaard's seminal research (1932) showing that migrants could be selected in their predisposition to certain mental conditions including psychosis, selection has been a common explanation. In this case, mental health problems are not a consequence of migration but underlie the very decision to migrate. Besides, migration is a stressing life event, which can of course impact negatively on mental health. This second kind of argument makes causal claims between migration and mental wellbeing. Researchers do not always agree in whether migration is harmful for mental health (He and Wong 2013; Breslau 2011; Maggi et al. 2010; Adhikari, Jampaklay, and Chamratrithirong 2011; Banal et al. 2010) or not (Mood, Jonsson, and Låftman 2016; Stillman, Gibson, y McKenzie 2012).

The growing literature studying the association between migration and mental outcomes suffer from a number of limitations.

On the one hand, it is difficult to disentangle the effect of selection from a causal influence of migration on health. Successful studies have looked at natural experiments (Stillman, Gibson, and McKenzie 2012) which are difficult to find and generalize for obvious ethical reasons. Alternatively, high quality data combining samples of migrants in destination and non emigrants in origin is required. Unfortunately, this alternative is not often available, despite of the ongoing shift in migration studies from developing comparison between migrants and natives in destination to an origin-destination perspective which expands the comparisons to natives in origin (Garip 2016).

Another common limitation of this literature is that it generally looks at deprived migrant populations. Indeed, unskilled economic migrants are the most vulnerable population and they could be more exposed to stressors associated to migration. However, it is definitively important to expand the focus to skilled and advantaged populations who, by definition, are selected, so as to evaluate the potential harming effect of migration.

Our contribution

Our paper represents an important contribution along these two lines. Specifically, we study differentials in non-specific mental distress (Kessler et al. 2003; Kessler et al. 2010) among Chinese students in tertiary education in China, Germany and the UK. Chinese international students represent one of the most important flows of skilled migrants internationally to the point that China is, already, the main sending country of students abroad (UNESCO, 2018).

This innovative design/study is possible thanks to a collaborative international research project[1] involving British, Chinese and German universities to produced what, to the best of our knowledge, is the only high quality, large scale representative survey of a stock of international students in two destinations. Our survey has control groups of natives in all three countries, which makes it easier to isolate the effect of migration from the context of reception (comparisons between Chinese international students and natives in Europe) and selection (comparison between Chinese in China and Europe).

Data

The Bright Futures survey (2017) is a multi-country survey of students enrolled in tertiary education in China, Germany and the UK. The survey was conducted in 2017 using a two-stage sampling logic first stratifying universities by ranking and, for the European samples, the number of Chinese students enrolled in undergraduate and postgraduate taught education. For China, the sample also covers different provinces in the North, South and East of the country. Table 1 describes sample sizes for each for the analytic groups in this paper.

Table 1. Bright Future sample sizes and analytic subsamples

Country	Sub-sample	Freq.	Percent
UK	Chinese UK	1,523	20.98
	British	1,730	23.84
Germany	Chinese Germany	789	10.87
	Germans	376	5.18
China	Chinese China	2,840	39.13
	Total	7,258	100.00

Results

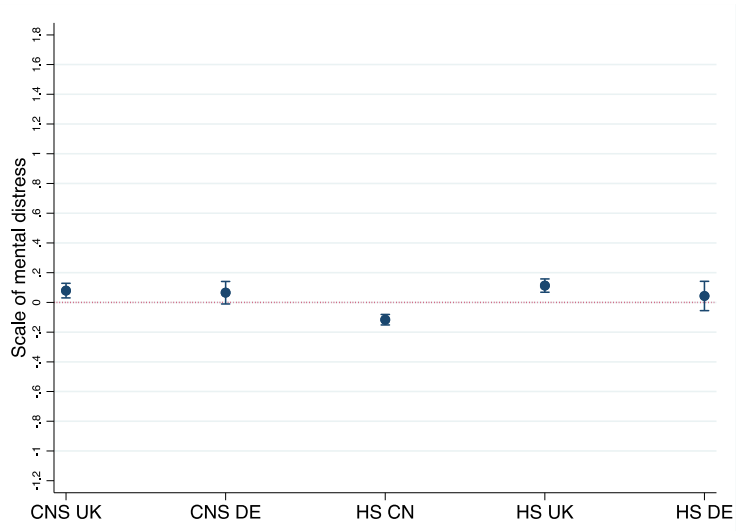
From our survey, we can evaluate mental distress among international students. To measure mental distress, our survey uses the Kessler (K6) scale, which is widely used in epidemiological surveys to measure non-specific psychological distress.2 The items used to build this scale are a mix of behavioural, emotional

[1] "Bright Futures": A Comparative Study of Internal and International Mobility of Chinese Higher Education The project has been funded jointly (under the call Euro- China 'UPC') by the Economic and Social Research Council (ESRC UK, ES/L015633/1), Deutsche Forschungsgemeinschaft (DFG Germany, FA284/6-1), and the National Natural Science Foundation of China (NSFC China, 71461137004).

[2] To measure mental wellbeing, we used Kessler scale (K6 screening scale of nonspecific psychological distress)—a standard scale widely used in survey research among epidemiologists and psychologists. The K6 asks respondents to rate how often they felt, over the last 30 days: (a) nervous, (b) hopeless, (c) restless or fidgety, (d) so sad that nothing could cheer you up, (e) that everything was an effort and (f)

and psychological symptoms that are important to wellbeing and mental health outcomes. About one sixth of Chinese international students in our survey reported experiencing some form of psychological distress during the 30 days prior to the survey. This proportion is quite similar to that among our home student control groups in the UK and Germany, which means that Chinese students adjust to the standards of the majority population attending tertiary education in their respective European destinations. Among Chinese students in China the proportion experiencing distress was marginally lower (6% lower). For the UK and Germany, this finding holds even after we control for the level of study (undergraduate and masters), the month of interview (which takes into account the timing of exams and essay writing) and academic performance. So, just as for home students, Chinese international students get stressed during times of exams and essay writing, and these effects are more pronounced among students whose performance is not as strong.

Figure 1 Average levels of mental distress among Bright Futures respondents in China, the UK and Germany



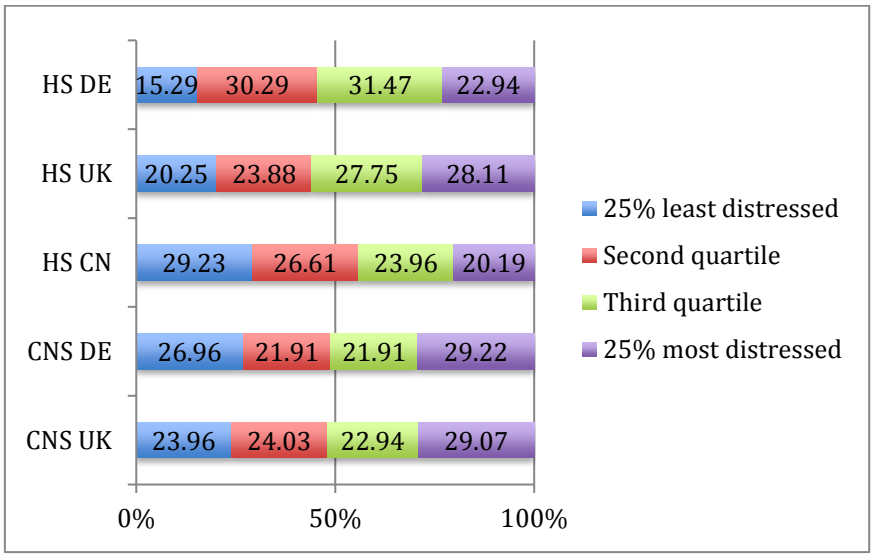
Legend: Red dotted line represents the population average. 90% of respondents are placed between -1.2 and 1.8. Median score is -.2; 25th percentile is -.7 and 75th percentile is .55. CNS: Chinese students, HS: home students.

Looking at population averages is a common practice in epidemiological survey research, and we can also view the distribution of students by categories of distress (as indicated by quartiles, ranging from the 25% who are least distressed to the 25% who are most distressed).

This graphical approach provides the same conclusions as the previous plot in more detail. Chinese students in China are the least distressed. Only 20 percent of them report being among the most distressed. In the UK, 29 percent of Chinese students and 29 percent of home students are in this position.

worthless. We transformed these items into a scale of mental wellbeing versus mental distress to explore population averages that could help us to estimate the size of group differentials.

Figure 2 Quintiles of mental distress among Bright Futures respondents in China, the UK and Germany



Source: Bright Futures 2018

Further results

After documenting differentials, our paper looks at the effect of confounders including selection. It also explores gender differences and uses many of the available variables used in the questionnaire to capture lifestyles in order to explain the adjustment of international students in two different destination settings.

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