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University Applicants from Refugee Backgrounds and the Intention to Drop Out from Pre-Study Programs: A Mixed-Methods Study

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Abstract
The mixed-methods project WeGe investigates key factors for refugees' integration into pre-study programs and conditions for successful transitions to higher education institutions (HEIs). In this article, we first examine the dropout intentions of international students and refugee students participating in formal pre-study programs at German HEIs to disclose both barriers and resources. We use insights from migration research to extend theoretical student dropout models and analyse novel data from a quantitative survey with international and refugee students in pre-study programs. Our findings show that refugee students intend to drop out from pre-study programs more often than other international students. This difference disappears when other characteristics are controlled for. Effect decomposition shows that financial problems and perceived exclusion are driving dropout intentions of refugee students, whereas German language use in everyday life and a strong connection to the prospective field of study function as a resource and reduce the dropout risk. Depending on the reference group, deficits or resources of refugee students become apparent. This result suggests that refugees should be addressed as a student group in their own right. As a second step, we analyse qualitative expert interviews to reconstruct the staff's perspectives on barriers and resources of refugee students to analyse how the driving factors of dropout intentions are represented in their knowledge. In particular, we show if and how this knowledge is used to address refugees and to develop inclusive educational concepts within pre-study programs.

Keywords
dropout intention; German higher education; international students; pre-study programs; refugee students

1. Introduction

Many newcomers from regions in conflict arrived in Germany in 2015 and 2016. Around one-third of them hold a secondary school degree, had previously studied or already hold an academic degree (Brücker et al., 2016). Migrants' integration and adequate labour market participation depends largely on further educational pathways in host countries (Hartog & Zorlu, 2009) since skilled asylum seekers face barriers in the translation of their human capital from one country to another (Nohl et al., 2014) and are faced with the expectation to quickly integrate (or rather become assimilated) into a new education system. Foreign educational experiences and degrees are often devalued and misrecognised, and higher education institutions (HEIs) have

subject-related and linguistic access barriers for foreign applicants. In response to rising demand, the German federal government initiated a large funding program named Integra, administered by the German Academic Exchange Service (DAAD) that supports measures to prepare refugees for meeting admission criteria and studying (Fourier et al., 2020). Since 2016, around 10,000 refugees have participated in respective courses every year. Yet, little is known about the educational success and specific situation of refugees in pre-study programs at German HEI.

Germany has been a popular destination for international students for many years (Kondakci et al., 2018). International study applicants from outside the EU usually enter Germany with a student visa. Foreign applicants have to undergo a recognition process of their higher education (HE) entrance qualification based on the formal regulations of the Standing Conference of the Ministers of Education and Cultural Affairs, resulting in two distinct modes of HE access (Schröder et al., 2019): A recognition known as the direct HE entrance qualifications allows applicants to enter HE by proof of sufficient language skills. Applicants who are denied the equivalent qualifications (indirect HE entrance qualification) have to prove both their language level and the so-called subject-specific ability to study by passing an 'assessment test' before they can (re-)apply for studies. HEIs provide respective courses at their language centres or at so-called *Studienkollegs*. Only the latter offer subject-specific courses to prepare for the assessment test. Courses vary in intensity and length and run usually up to one (language courses) or two (*Studienkollegs*) semesters. Refugee students—those who have applied for asylum in Germany—are treated as a subgroup of non-EU international students in terms of HE application and admission (Berg, 2018). While pre-study programs have limited course places and established entrance examinations, almost all HEIs have limited capacity in popular subjects and select applicants by grades.

Internationally, various studies have dealt with the challenges of refugees in accessing HE (Lambrechts, 2020; Molla, 2019; Morrice, 2013). However, there is still a lack of research that takes a comparative perspective on foreign student applicants with and without a refugee background. Even though both international and refugee students have to meet the same admission criteria and pass the same formal pre-study programs, it remains unclear if they are comparable. From an intersectional perspective (McCall, 2005; Museus & Griffin, 2011), not only might migration experiences differ, but axes of inequality might intersect with belonging to one of the two student groups and institutional contexts and individual characteristics might be of different importance. By adopting an intersectional informed comparative view, our study can also contribute to the critical reflection on the still prevalent deficit perspectives on prospective refugee students. Another main research gap is the experiences of front-line actors working with

refugee students (Ramsay & Baker, 2019) concerning how they perceive differences between student groups as well as if and how they try to take this into account in their daily work. We build on research conducted at HEIs in Germany to address both research gaps. First, we analyse novel survey data from international and refugee students in pre-study programs. We use the dependent variable *intention to drop out of pre-study programs*. Regression analysis and effect decomposition show driving factors and resources that influence dropout risk. Beyond that, we show how explanatory factors intersect across student groups. Second, we triangulate (Flick, 2011) the quantitative results with insights from expert interviews into the understandings of refugee students' challenges and suitable responses of HEIs. In particular, we ask whether and how the experts' knowledge of driving factors for dropout intentions can be used to address refugees and develop inclusive concepts within pre-study programs.

2. Literature and Theoretical Considerations

2.1. Refugees in Higher Education from a Migration Channel Approach

HE for refugees is a long-neglected but increasingly important topic (Dryden-Peterson, 2012). While the state of international research is constantly growing, the majority of international literature is based on qualitative (case) studies that focus on challenges or barriers for refugee students within different HE environments or evaluate support programs for refugees at certain HEIs (Berg et al., 2018; Ramsay & Baker, 2019). Usually, they lack a comparative perspective. Following the migration channel approach (Findlay, 1990; Sandoz, 2018), we argue that asylum and student migration represent "mobility pathways structured by different actors… that create specific opportunities and constraints for migrants" (Sandoz, 2018, p. 224). The legal status and respective opportunity structures further shape migrants' pathways to HE due to an 'assemblage' (Détourbe & Goastellec, 2018) of specific intersections of legal, institutional and social contexts, dependencies and connected resources in the host country. Therefore, we analyse whether the risk of dropping out of pre-study programs differs between refugee students (those who have applied for asylum) and other international students (those who entered Germany with a student visa) and adopt an intersectional perspective by looking at interactions between explanatory variables and the respective migration channels (Museus & Griffin, 2011; Unangst & Crea, 2020).

2.2. Beyond Student Attrition Studies: Migration and Adaptation

Studies on student attrition or retention have a long tradition within HE research (Tinto, 1975). A process-based

and multi-dimensional understanding of student success and dropping out of traditional and non-traditional student groups emerged (Bean, 1985; Bean & Metzner, 1985; Suhlmann et al., 2018; Tieben, 2019). In HE research, Tinto's approach of social and academic integration is still widely used to explain dropout risk and is therefore our starting point and basis for the theoretical considerations. The concepts of social and academic integration, as well as financing and sociodemographic characteristics like age and gender remain relevant factors in explaining dropout risks and social inequalities in student attrition (Ciocca Eller & DiPrete, 2018; Isleib et al., 2019). For social and academic integration, identification with HEIs, and a sense of belonging to a subject or student group are as important as individual skills and the acquisition of knowledge during studies (Bean, 1985; Blüthmann et al., 2008; Walker-Gibbs et al., 2019). Also, opportunity structures and cost-benefit considerations affect educational decisions, social and academic integration and thus student attrition (Isleib et al., 2019; Roska, & Velez, 2012).

Even though Tinto's theoretical approach can be criticised as an assimilation model (Muñoz & Maldonado, 2012), it could be "highly informative" (White & Ali-Khan, 2013) in analysing the completion of pre-study programs concerning international and refugee study applicants. Muñoz and Maldonado (2012, p. 294) criticised that Tinto would assert "that for college students to succeed, they have to detach from their home communities, utilise campus resources and networks to assist them during the transition process, and incorporate new behaviours and memberships to fully fit into 'the college institutional culture.' " Within given institutional structures, social and academic integration could plausibly be important issues for migrants and refugee students (Grüttner et al., 2020; Rienties et al., 2012). Financing of living expenses, educational fees and immigration-related debt are key challenges for refugee students (Joyce et al., 2010; Webb et al., 2019) but could also be relevant for other international students (Thomas, 2017). Financial problems represent obstacles to learning success and are likely to have an impact on the cost-benefit considerations in the transition to university (Lenette, 2016; Sontag, 2019), thus making employment or vocational training for refugee students far more attractive than the arduous route of pre-study programs (Baker & Irwin, 2019; Molla, 2019). Gender aspects and older age, respectively educational disruptions and family obligations, can put a strain on refugee students' learning (Cin & Doğan, 2020; Harris et al., 2015; Joyce et al., 2010).

Beyond this general approach, the analysis of student success needs to take other relevant dimensions, as well as coping mechanisms, into account (Grüttner, 2019; Lenette, 2016): Overcoming language barriers to access HEIs or pursuing studies is as crucial for refugee students (Hirano, 2014; Kanno & Varghese, 2010) as it is for international students. Both groups are eventually burdened with experiences of social exclusion like

concerns about precarious residence status, xenophobia, racism and stigmatisation (Chacko, 2020; Morrice, 2013; Villegas & Aberman, 2019), which may hinder integration and educational careers. Experience of forced migration as well as student migration can be assumed to be associated with acculturation stress and risk of reduced mental well-being (Akhtar & Kröner-Herwig, 2015).

Despite several similar experiences and perspectives, the situation of refugees who intend to study differs from that of non-EU international students (Stevenson & Willott, 2009). These differences are related to the lasting impact of the migration channel (Sandoz, 2018). Refugee students are involved in a complex interplay of various dependencies, resulting from intersections of legal frameworks and private and public actors (Berg, 2018; Détourbe & Goastellec, 2018; Sontag, 2019) and face institutional assumptions of applicants and students which often disregard their specific situation (Baker & Irwin, 2019; Berg, 2020). Therefore, barriers that are, in principle, also relevant for international students, can be amplified for refugee students and contribute to particular disadvantages (Lambrechts, 2020). Moreover, the opportunity structures of refugee students tend to guide their engagement towards vocational training or employment. Therefore, we assume that (1) refugee students report a higher dropout risk from pre-study programs compared to other international students and (2) there is a need for HEIs to address the specific situation of refugees (Earnest et al., 2010; Lenette, 2016).

3. Data and Methods

3.1. Quantitative Data and Methods

3.1.1. Quantitative Data and Measurements

Our quantitative analysis is based on a survey with refugee students and international students in pre-study programs. The data was collected in the 2018–2019 winter semester at 18 HEIs in Germany. Our research team conducted a study preparation survey and used self-administered paper and pencil questionnaires. As HEIs sometimes offer language courses (direct HE entrance qualification) and subject-specific courses (indirect HE entrance qualification), a total of 74 courses nested in 21 organisational units can be distinguished. The HEIs were selected across different federal states in the east, west, north and south of Germany to cover regional and administrative variety.

Data from a total of 1,019 participants were collected. We asked whether an asylum application was made in Germany and its current status (e.g., still on-going or recognised refugee/asylum seeker). People without an asylum application could choose from a list of other legal statuses (e.g., visa to study, residence permit). 998 participants provided usable information on their residence status: 332 prospective students who applied for asylum in Germany and 666 international students who came to

Germany by other means—usually a visa to study or prepare for a degree.

To measure our dependent variable, *intention to drop out*, we asked whether serious consideration had already been given to cancelling the preparatory course, following a 5-point Likert-scale from 1 ("does not apply at all") to 5 ("fully applies"). The variable was dichotomised (0/1) by recoding values of 3 "partly/partly" or higher to 1.

To measure language integration, we used a scale for subjective language competencies including self-evaluations in reading, speaking, listening and writing (for more information on used scales see Table 1 in Supplementary File 1). We asked whether participants more often use German or another language in four different everyday dimensions (reading newspapers and books, watching videos, and watching TV) to take informal learning opportunities as well as acculturation modes oriented towards the host society or ethnic groups into account (Berry, 1997; Miyamoto et al., 2018).

We used two short scales to collect concerns about social exclusion: A short scale regarding worries about insecure residence status and potential expulsion and a short scale on worries about xenophobia in the host society. We use social exclusion as an overarching concept that includes racialised or ethnicized discrimination, xenophobia and precarious legal status, especially concerning migrants and refugees (Krzyzanowski & Wodak, 2009; MacDonald, 2017; Richmond, 2002).

To measure mental adaptation, we used the WHO 5 short scale for psychological well-being and created an index that can take values between one and one hundred (Topp et al., 2015). A cut-off at ≤ 28 is used to identify problematic mental well-being. Beyond that, we measured the ability to cope with adaptation processes by the brief resilient coping scale (Sinclair & Wallston, 2004).

HE social integration is measured on the one hand via the feeling of belonging (Janke & Dickhäuser, 2018) to the preparatory course and on the other hand by a single item on existing social connections with people who have university study experience in Germany. We measured the performance component of academic integration through the competence experience (Janke & Dickhäuser, 2018) in the preparatory course and the identification component by a single item on student self-identification (Janke et al., 2017). In addition, we focus on the fit between subject interest and subject choice. We collected the idealistic subject aspiration ("If you had all options: Which subject would you choose?") and the realistic subject aspiration ("If you think about your current situation: Which subject will you probably study?") and coded answers according to the UNESCO ISCED 2013 classification (two-digit code; UNESCO, 2015). For the present analysis, dummies are used indicating whether there is a convergence between idealistic and realistic subject aspiration and if no encodable information for the desired subject or prospective subject was given. We also use a dummy variable indicating whether studies have already been started abroad.

We consider sociodemographic characteristics like age (in years) and gender (0 = male/1 = female) and social origin into account—the latter through a questioning of the highest educational qualification of mother and father. A high social origin is defined as having at least one parent with a university degree (reference category is "no parent with a university degree"). We have also taken the financial situation into account. Immigration-related debt is measured by a single item: "Did you or your family have to go into debt to be able to come to Germany?" The item is linked to a question on problems regarding the financing of living expenses with a 5-point Likert-scale from "no problems at all" (1) to "very strong problems" (5).

Due to the survey mode, we know the composition of the group of surveyed participants of each course and the type of course (0 = language course/1 = subject-specific course). We use this information to correct for selection into different courses. Missing information on variables is addressed by the multiple imputation (20 imputed data sets) of all variables with 1 percent or more missing values. Thus, we reach a total of 954 valid cases for our analysing sample (without multiple imputation, the sample would shrink to 760 cases).

3.1.2. Quantitative Methods of Analysis

We use logistic regression models and calculate marginal effects (Average Marginal Effects [AME]) and present four hierarchical models including control variables for the type of pre-study course and the composition of the course participants: Model 1 (M1) 'baseline' only shows the effect of the dummy variable for refugee students and three models in which groups of further variables are subsequently added (M2 to M4). We report robust standard errors that should be interpreted carefully due to our non-random sample.

We use a Fairlie (2005) decomposition of the effect of belonging on the group of refugee students. Decomposition techniques are widely used to quantify the separate contributions of group differences in measurable characteristics such as age, education and experiences to racial or gender gaps in outcomes. We model decompositions using both groups of students (refugee students and international students) as a reference group. This leads to two separate models of decomposition: The ones asking what if refugee students had the same distribution of characteristics as other international students regarding the effects of the corresponding variables among refugees, and the second asking what if refugee students had the same distribution of characteristics like other international students regarding the effects of the corresponding variables among other international students. The results show the role different groups of variables play as mechanisms that increase or decrease dropout risks. In addition, the modelling indicates whether these mechanisms intersect with the belonging to one of the two student groups under study.

3.2. Qualitative Data and Methods

As transitions to HE not only depend on individual but also institutional factors, we shift our attention to the organisational context. Our qualitative analysis is based on 14 expert interviews (Gläser & Laudel, 2010) conducted in late 2019. We reached out to our contact partners of the pre-study programs where we collected our quantitative data and asked them to support us in contacting experts matching our sampling criteria. We focussed on experts with comprehensive professional experience in teaching or managing pre-study programs for international study applicants with and without a refugee background, in order to map different positions in the organisational hierarchy. Further sampling criteria were to cover organisational variance in offered course types. We were able to realise seven interviews with experts working in language courses of HEIs (direct HE access mode) and seven with experts working in *Studienkollegs* (indirect HE access mode).

We used a pre-structured interview guideline (Gläser & Laudel, 2010) which aims to generate ex-post narrations with a focus on professional experience in managing and teaching within the context of study preparation. Among further issues, the first part of the interview guideline addresses the experts' experience with the course participants at the level of day-to-day interactions. The second part of the interview guideline was focused on their experiences with the increasing proportion of refugees in the courses as well as on organisational changes concerning the teaching of refugees. Interviews were fully transcribed according to standard scientific transcription (Fuß & Karbach, 2019).

We used qualitative content analysis as described by Mayring (2004) to summarise and structure the content of the interview material. This approach combines structuring through predefined codes with openness to unexpected findings in the material. The qualitative data analysis software MAXQDA® supported our coding process. As a first step, one of the authors coded the expert interviews based on a categorical scheme using the key questions presented in Supplementary File 1, Table 2: (1) How are the driving factors of dropout intentions—financial problems, experiences of social exclusion, German language use in everyday life and connection to the field of study represented in the knowledge of the experts? (2) How do the experts view refugees concerning these factors? (3) How do they evaluate their opportunities to contribute to developing inclusive concepts in pre-study programs? As a second step, memos were written and discussed to condense the most relevant information concerning our analytical questions.

4. Results

4.1. Quantitative Analysis

In the following section, we first present our quantitative findings based on regression analysis as well as effect decomposition.

4.1.1. Regression Analysis

We first show the AME of the migration channel asylum based on hierarchical logistic regression models (Figure 1). Controlling only for characteristics of attended courses in our baseline model M1, refugee students show a nine-percentage-point increased probability for reporting dropout intentions. Including variables on migration- and adaptation-specific factors in M2, we
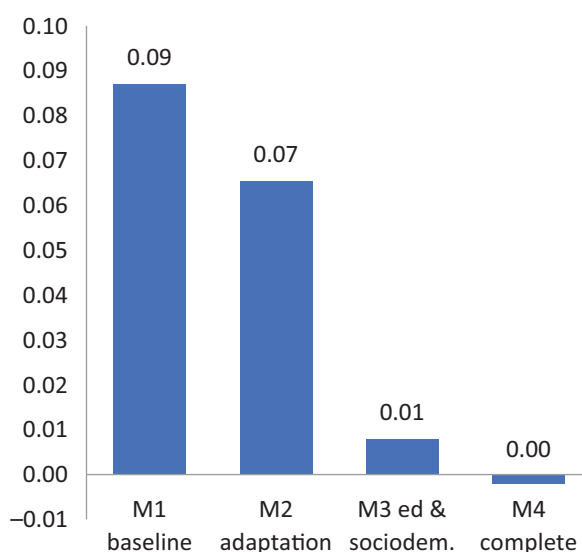
Figure 1. Dropout intentions of refugee students vs. international students (percentage-point difference based on hierarchical regression models). Source: Own calculation based on the study preparation survey (WeGe). Notes: AMEs are reported. Only the effect in M1 and M2 is statistically significant; N = 954 for all models (M1–M4) with multiple imputed data; for more information on the specified models see Table 1 in Supplementary File 2.

observe a small reduction of this effect (seven percentage points). If we add information on educational factors (HE social and academic integration) and sociodemographics (age, gender, and social origin) instead, the effect drops to one percentage point (M3). The probability of reporting dropout intentions is almost similar for both student groups if we control for all model variables in our complete model (M4).

4.1.2. Decomposition

The decomposition of effects leads to a deeper understanding of the mechanisms explaining the changes in the migration channel effect between M1 and M4. First, we look at a decomposition model that uses refugee students as a reference group (Figure 2, left). Here we observe a mixture of strengths and deficits. The model shows that language integration as a resource is of crucial importance. If the language integration of refugee students was on the same level as that of international students, the migration channel effect on dropout risk would increase about 35 percent. This is driven by German language use in everyday life reflecting informal learning opportunities as well as integration processes (for further details see Supplementary File 2, Table 2, left column). Also, aspects of perceived exclusion, e.g., worries about expulsion, are of some impor-

tance. If refugee students perceived exclusion on the same level as international students, the group difference regarding dropout intentions would decrease about 9 percent.

The state of mental adjustment is not of general importance because difficulties with mental health compensate with resilient coping, which is to some extent stronger in refugee students than in international students. This means refugee students can benefit from their resilience. HE social integration explains 5 percent of the group difference in dropout intentions, whereas academic integration is obviously of more importance: It determines 15 percent of the group difference, with an emphasis on study experiences abroad, from which refugee students much more often benefit from compared to international students. Not only do refugee students have study experiences from abroad more often, these study experiences also have a more pronounced influence. If refugees did not have this educational resource, their intention to drop out would be even stronger compared to international applicants. Going into detail, we see the following: If refugee students were to report convergence of idealistic and realistic study subject aspirations as often as international students, their dropout risk would decrease (see also Supplementary File 2, Table 2, left column). Sociodemographics account for only 2 percent of the group difference in dropout
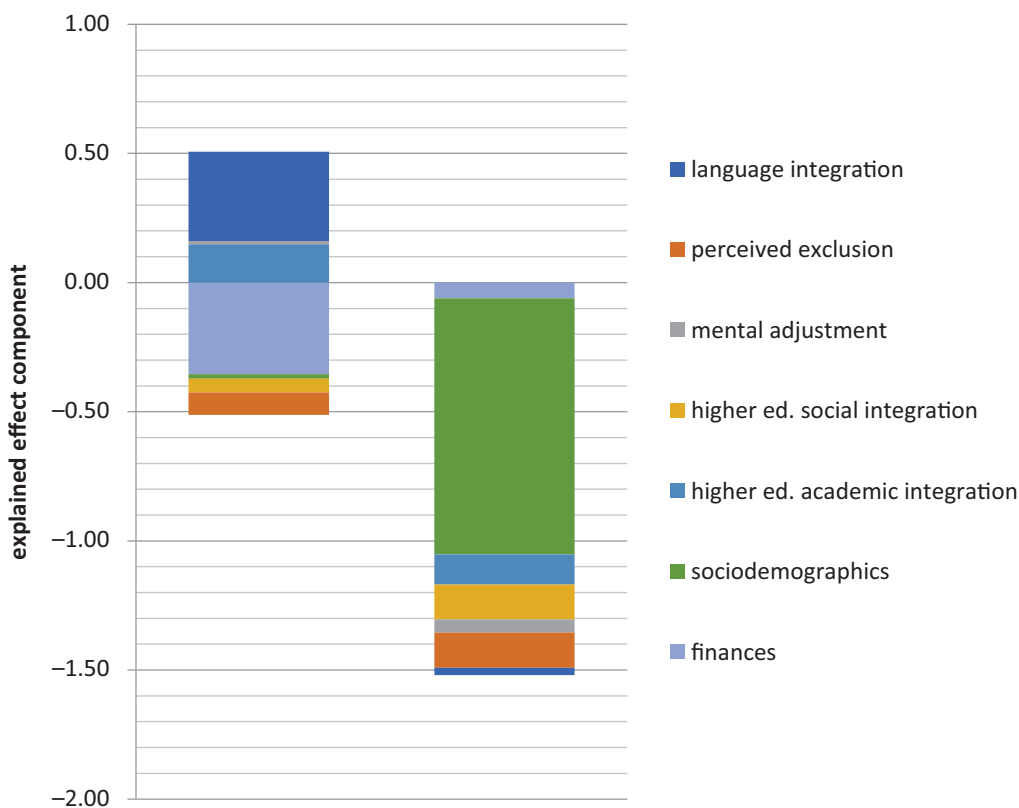

Figure 2. Decomposition of the migration channel effect conditional on the reference group (Fairlie decomposition). Source: Own calculation based on the study preparation survey (WeGe). Notes: Ratios of the effect of the migration channel explained by groups of variables (percent) using complete model M4 with all covariates; N = 954 with multiple imputed data; for more information on the specified models see Table 2 in the Supplementary File 2.

intentions. If as many refugee students as international students were female (23 percent vs. 45 percent), the group difference would increase largely (see effect component in Supplementary File 2, Table 2, left column). If refugee students were as young as international students, the group difference would decrease. The two characteristics mentioned largely outweigh each other. Social origin plays hardly any role. Another 35 percent of the group difference is explained by students' financial situation. Yet, the most significant factor is immigration-related debt, which is more often reported by refugee students than by international students.

A different picture emerges when we take international students as a reference group (Figure 2, right). In this case, we see exclusively deficits. Language integration, e.g., German language use in everyday life and finances are of less or almost no importance. Perceived exclusion (14 percent) and mental adjustment (five percent) seem to be of more importance, which is partially due to no effect of resilient coping for international students (Supplementary File 2, Table 2, right column). This means that international students are less likely to develop resilience in the face of these adversities compared to refugee students. Both HE social and academic integration seem to be barriers for refugee students and explains 14 percent and 12 percent of the group difference respectively, indicating that dropout risks of refugee students would decrease if they were integrated into HE as well as international students are. To generalise from the experience of international students to refugee students would therefore overlook the resources in the field of academic integration. The role of gender seems to be different when looking at international students as a reference group. Due to reduced dropout risk for female international students as well as a very important role of age, it seems that refugee students' dropout intentions would decrease about 99 percent if gender, age, and social origin distributions of both student groups were similar (see effect component in Supplementary File 2, table 2, right column). Therefore, it would be misguided to generalise from the experience of international students to refugee students concerning age and gender.

4.2. Qualitative Results

In the following, we present the results of the qualitative analysis oriented to the core issues we used to guide and structure the coding of our expert interviews.

4.2.1. Knowledge of Driving Factors

The experts identify financial problems due to living expenses and educational fees as well as migration-related financial burden as prevalent obstacles to learning success. However, in the case of international students without refugee status, they tend to assume that problems in terms of finances have to be clari-

fied as far as possible before the students arrive in Germany. Refugees, on the other hand, are confronted with an administrative jungle after their arrival and during their pre-study programs (Table 3, Supplementary File 1, quote 1). Furthermore, the experts are deeply concerned about their students' experiences of social exclusion and highlight racism and stigmatisation as crucial barriers for social and academic integration in pre-study programs. In addition, feelings of exclusion are closely intertwined with individual and institutional capabilities to overcome language barriers. The experts emphasise the significance of developing social bonds between the students, within the course context and beyond, and they interpret facilitating social integration processes as a professional obligation (Table 3, Supplementary File 1, quote 2). From the perspective of the experts, social inclusion processes additionally function as a resource for German language learning and vice versa (Table 3, Supplementary File 1, quote 3). Last but not least, the expert interviews reveal the significance of a strong connection to the desired field of study for social and academic integration. Having similar goals and interests strengthens not only social ties but motivation as well. Since in pre-study programs the learners have to achieve high performance levels in terms of language skills and subject-specific competencies, this factor is viewed as a crucial resource for developing coping strategies (Table 3, Supplementary File 1, quote 4). However, some experts frame the students' successful study preparation as a justified selection by performance and tend to neglect individual living conditions assuming high performance standards to be inevitable for quality language learning (Table 3, Supplementary File 1, quote 5).

4.2.2. Refugees as a Target Group

The experts' understanding of refugees as a target group is anchored in their long-term experiences in study preparation for international applicants with and without refugee status and the way they compare the groups reveals similarities and differences. Their knowledge of the factors that jeopardise success or increase the intention to drop out is built up accordingly. This can be exemplified by examining their knowledge of students' financial conditions: Whereas international students without refugee status often rely on low-paid part-time jobs and their employment permit depends on visa regulations, refugees' financial problems are exacerbated by their complex integration into other areas of asylum law and social policy. From the perspective of unemployment and welfare agencies, getting a job is prioritised over funding for study preparation, so it often takes lengthy negotiations for refugees to get support during pre-study programs. Also, their financial situation is more heavily burdened by family obligations, since childcare responsibilities are prevalent and their financial leeway is further restricted by migration-related debt or financial support of other family members. Moreover, from the

perspective of the experts, uncertain residence permits, social exclusion and traumatisation are particular issues. These problems are specifically linked to living conditions that are likely to induce mental burden and jeopardise refugees' successful study preparation (Table 3, Supplementary File 1, quote 6).

The experts describe a range of support measures that are already established within the pre-study programs for which they are responsible. Particularly within the framework of the federal funding scheme, they use the opportunity to raise additional funds to re-design course concepts and developed new targeted support measures for refugees. Those complementary offers include, for example, study competence courses (techniques of scientific work and writing, time and stress management, etc.), offers to assist students in acquiring intercultural skills, excursions and visits to exhibitions, social and cultural events as well as study and social counselling or thematic information events (e.g., student financing and scholarship schemes or psychological counselling centres). These accompanying measures are on the one hand designed to address refugees concerning language and subject-specific competencies that are required to pass the final exam. On the other hand, the local knowledge is used to offer support by reaching out to other relevant areas and organisations and thus aims at taking the additional prerequisites for successful learning, the needs and resources of the learners—driving factors for dropout intentions—into account.

4.3. Opportunities to Develop Inclusive Concepts

Based on the interviews, we can ascertain that teachers as well as coordination staff are committed to a significant engagement for individual support of refugees struggling with the required performance level in terms of German language and subject-specific competencies. However, the teachers perceive their scopes for action to be restricted for example by organisational conditions (Table 3, Supplementary File 1, quote 7).

Generally, the experts express concern that there are too few opportunities to adequately address the specific needs of learners with a refugee background. Since, as a rule, only the actual teaching time is paid in HEI language courses, individual support is mostly provided based on the voluntary engagement of staff members. What is more, in the opinion of all experts, the opportunities for teachers' further education and training are still inadequate. This is inextricably linked with the political and economic conditions of pre-study programs resulting in the prevalent precarious employment of teachers as well as poor wages (Table 3, Supplementary File 1, quote 8). Therefore, the teachers often give several courses and this situation leads to a lack of time and limited motivation to engage in further education and training.

The experts especially criticise that a professional discourse on how to design inclusive concepts and responsive supports for refugees in pre-study programs has only

just begun and anticipate their engagement to be unsustainable. Local developments are crucially dependent on funding and financing by state and federal state temporary programs. Although the motivation for improving refugees' access to HE chances is omnipresent in the expert interviews, impulses for designing and implementing new support offers are also counteracted by given legal and political regulations. In the case of refugees participating in pre-study programs, there are still labour market and asylum policy restrictions going far beyond the experts' options for action (Table 3, Supplementary File 1, quote 9).

5. Discussion and Conclusion

Based on quantitative panel data from refugee and international students in pre-study courses and qualitative interview data with practitioners at German HEIs, we have looked into the specific situation of refugee students and factors influencing their dropout risk. Our study exclusively undertook a quantitative comparison between the situation of international and refugee students. We extended classical theoretical dropout models by demonstrating the intrinsic importance of additional migration-related variables. Alongside financing problems, social and academic integration, language integration, psychological adaptation and structural aspects of social exclusion such as concerns about the threat of deportation, can also explain the intention to drop out. Further, the triangulation of students' and experts' perspectives provides insights into the needs and potentials of refugee students, as well as professionals' awareness about and means to address their situation. After the panel data allows us a comparative analysis of the situation of refugee students and international students, the qualitative expert interviews provide insights into how practitioners assess the situation, needs and potentials of refugee students and to what extend refugee students are understood as a distinct target group regarding the development of inclusive concepts.

Our quantitative findings indicate some structural differences between refugee students and international students in pre-study programmes. Refugee students more often intend to drop out of pre-study programs due to financing problems, experiences of social exclusion and inequalities by age and gender. However, in contrast to the prevalent deficit perspective, students can develop agency and strategies to deal with those challenges. Resilient coping, everyday German language use and academic integration (e.g., existing study experience from abroad) reduce the dropout risk for refugee students and thus serve as resources. Our data reveal group-specific differences in the importance of explanatory variables such as resilient coping, finances, language integration or gender. These results point to group characteristics that should be taken into account by HEIs.

The interview analysis indicates that the development of offers for refugee students was often based on

experiences with international students. However, our findings imply that an inference based on a comparison of refugee students with international students to some extent would fail. This result points to the importance of an intersectional perspective that takes into account internal differences of social groups and their connection with structural conditions. Nevertheless, HEI staffs' understandings of prerequisites for study preparation and driving factors for dropout intentions partly reflect perceptions of similarities and differences between course participants with and without a refugee background. Yet, although practitioners recognise refugees as a new target group and highlight the amplification of barriers resulting from intersections of legal frameworks and various private and public actors as a particular issue for refugee students (Détourbe & Goastellec, 2018; Unangst & Crea, 2020), they see limited opportunities to develop inclusive concepts and refer to institutional expectations towards international applicants. As Baker and Irwin (2019) have pointed out, unfitting institutional presumptions about students' needs, resources and proper ways to address them, can complicate and even inhibit educational transitions. Refugee students and their reality of life often do not fit stereotypical ideas of HE applicants and students (Berg, 2020). In line with this, our interview analysis implies that it would benefit refugee students to be offered support that comprehensively takes their situation into account.

Further research should concentrate on refugee students' pathways within degree programs and more comparative approaches between countries and HE systems as well as formative and summative evaluations of different pre-study programs and support structures. Further studies may also try to distinguish between different countries or regions of origin, as well as between different linguistic backgrounds. There is still a lack of suitable data that helps all responsible actors to formulate evidence-based policy measures. Longitudinal data would be very welcome to study processes of inclusion and exclusion on the transition to and through the degree programme. In-depth analyses should be carried out to better understand the influence of educational institutions and staff in compensating or enforcing educational and social inequalities.

Studies of the situation of refugee students have often constituted them as a student group of their own by pointing out their specific needs (Lambrechts, 2020). Our results indicate that a deficit perspective on refugees is inappropriate since they bring a specific range of needs and resources (Harvey & Mallman, 2019; Ramsay & Baker, 2019; Shapiro, 2018), whereby resources tend to be overlooked compared to other international students. Considering not only refugees' needs and resources concerning successful study preparation, but also suitable conditions for implementing inclusive concepts and responsive support at the HEI level, a sustainable discourse between the relevant actors is urgently needed. Refugees' successful educational path-

ways rely on cooperative organisational learning encompassing institutions throughout the entire assemblage of policy areas (Berg et al., 2021). This holds particularly true when it comes to finances. Based on our quantitative and qualitative insights, we recommend creating sustainable financial conditions for building communities of practice between front-line actors in pre-study programs and for teachers' training strategies. Last but not least, re-designing and developing responsive supports needs to be organised by giving a voice to the experiences not only of HEI staff but refugee students as well.

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Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the authors (unedited).

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