Start-up Incubators for Refugees: Applying Psychological Methods to Increase Chances of Entrepreneurial Success

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Abstract: An increasing number of start-up incubators offer programmes designed specifically for refugees. They provide entrepreneurship training and access to a closely-knit community for start-up development. Beyond that, they also support refugees in overcoming typical challenges, including a lack of language skills and required qualifications, an uncertain residence status, discrimination and psychological distress on various levels. While these incubators have already contributed to refugees’ social and economic integration, the number of successful participants is still relatively low. The question remains about what can be done to multiply the potential so that more significant numbers of refugees can benefit. To support incubators in achieving more significant numbers, this work presents a framework of methods and tools based on health and organisational psychology literature. More specifically, this work focuses on methods and tools to be applied during two critical phases of the incubation cycle, namely the selection process and the actual programme. First, suitable candidates may be overlooked and/or less suitable candidates admitted during selection. This work proposes approaches to improve the accuracy of assessment methods so that more significant numbers of candidates with good chances of success are admitted. In addition, these methods can help identify those candidates who may appear unsuitable at first sight but could likely get ready with a preparatory course before joining the programme. Second, participants may have difficulty keeping up during the programme for various reasons (often related to the mentioned challenges) and therefore drop out early. This work proposes science-based approaches which help to adapt and improve existing programme elements and/or implement new elements to increase the chances of successful programme completion. Overall, this work seeks to contribute to the academic discussion on innovative approaches to upscale the work of incubators for refugees. Further research will involve co-developing practical approaches with incubators for refugees, cooperating on the implementation, and measuring impact. The goal of providing incubators with relevant practical insights is to deploy more significant numbers of refugees as entrepreneurs and contribute to broader social and economic impact.

Keywords: Start-up incubators for refugees, health and organisational psychology, candidate selection and guidance, psychological assessment.

1. Introduction

Many refugees encounter challenges that hinder their social and economic integration in host countries. Five challenges in particular are discussed in the literature: Qualification, language skills, residence status, discrimination and psychological distress (Dustmann et al, 2017; Brücker, Rother and Schupp, 2018; Spadarotto et al, 2014). Integration is an indispensable success factor from the perspective of both refugees and host countries, with a major impact on economic and social realities (Harima and Freudenberg, 2020; Harima, Freudenberg and Halberstadt, 2019; Meister and Mauer, 2018).

For those refugees who wish to become entrepreneurs, dedicated start-up incubators offer programmes that help them to overcome these challenges and assist them on their entrepreneurial path (Harima, 2022; Harima, Freudenberg and Halberstadt, 2019; Nijhoff, 2021; Shneikat and Alrawadieh, 2019). Typical measures of such incubator programmes include access to professional support (e.g., relevant training), resources (e.g., co-working spaces) and the local network (e.g., contacts from mentors and coaches) (Bajaba et al, 2021; Harima, Freudenberg and Halberstadt, 2019; Nijhoff, 2021; Chliova, Farny and Salmivaara, 2018; Harima, 2022). More specifically, they offer entrepreneurship and language training to develop skills such as business modelling, prototyping and communication (Bajaba et al, 2021; Harima, Freudenberg and Halberstadt, 2019; Nijhoff, 2021). Moreover, they provide coaching and mentoring to support refugees in addressing personal problems and in building local networks to gain access to resources (Chliova, Farny and Salmivaara, 2018; Harima, 2022; Harima, Freudenberg and Halberstadt, 2019; Nijhoff, 2021). These measures create social and economic impact as they support and empower refugees to become more competent and confident, interact more proactively, take more responsibility and invest more effort in shaping a better future for themselves and the people around them (Harima, Freudenberg and Halberstadt, 2019; Chliova, Farny and Salmivaara, 2018; Degler, Liebig and Senner, 2017; Meister and Mauer, 2018; Nijhoff, 2021; Shneikat and Alrawadieh, 2019). While incubator programmes for refugees represent a key driver for social and
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economic integration, the question remains how the potential for upscaling can be realised. This work focuses on psychological tools to address issues during two phases to improve programme participants chances of success. participants (Hell and Gatzka, 2018):

- Phase 1 – Selection process: Various approaches are used to select suitable participants. However, such processes may have shortcomings. On the one hand, candidates may be admitted who turn out to be less suitable than anticipated, are not sufficiently engaged and may even drop out early. On the other hand, suitable candidates may be overlooked who would benefit greatly from an incubator programme.
- Phase 2 - Successful programme completion: While these programmes generally offer relevant training and support, they may not address specific individual needs and therefore fail to support struggling participants. The mentioned challenges can hold them back and make it more difficult to keep up with programme tasks, thus making a dropout more likely.

The scope of this work focuses on the first two phases of the entrepreneurial process: ideation and incubation. Although the subsequent phase of implementing what graduates have learned and building their start-up is critical to overall success, it is typically not covered in incubator pro-grammes. Therefore, this research focuses on the following question: Which psychological tools can be applied by incubators to increase the probability of success during (a) the selection pro-cess so that more suitable participants gain access and (b) the programme itself so that more participants graduate successfully?

The paper is structured as follows: First, the conceptual research methodology is briefly outlined. Second, the relevant literature is summarised. Third, potential measures to increase the chances of success are discussed. Fourth, concluding remarks are made, including limitations and further research.

2. Methodology

This work is conceptual in nature, based on a review of the relevant literature, with the goal of supporting start-up incubators for refugees to improve their processes and approaches. First, the literature on typical challenges refugees encounter is examined, with a particular focus on psycho-logical distress. Second, methods and tools discussed in the health and organisational psychology literature are reviewed to propose approaches for incubators to address psychological stressors among programme participants. Based on the literature, a framework of psychological methods and tools is proposed to inform further research in the context of start-up incubators for refugees. With special emphasis on phases 1 (selection process) and 2 (successful programme completion) of the incubation cycle, proposed methods and tools can be directly implemented and tested in collaboration with incubators to measure impact and assess ways for continuous improvement.

3. Literature Review

Five key challenges are identified as reasons for the slow integration of refugees, which are briefly described below: Qualification, language skills, residence status, discrimination and psychological distress (Lyon, Sepulveda and Syrett, 2007; Dustmann et al, 2017; Brücker, Rother and Schupp, 2018; Spadarotto et al, 2014).

Qualification: In many cases, unsuccessful integration is due to the qualifications required in the labour market. While refugees may have obtained qualifications in their home countries, these may be regarded as inferior and not recognised in host countries (Bucken-Knapp, Fakih and Spehar, 2019; Spadarotto et al, 2014; Degler, Liebig and Senner, 2017; Gnesa, 2018). This makes them less attractive to employers and puts them at a major disadvantage (Ruedin et al, 2020; Bucken-Knapp, Fakih and Spehar, 2019; Spadarotto et al, 2014).

Language skills: Proficiency in the local language is particularly important in addition to technical qualifications, as a lack of language skills makes sustainable integration in the labour market more difficult (Bucken-Knapp, Fakih and Spehar, 2019; Gnesa, 2018). Language skills are also required for unskilled jobs. In addition to job search, other integration measures also become difficult if access to and participation in language programmes is not possible at an early stage (Degler, Liebig and Senner, 2017).

Residence status: Temporarily admitted persons are uncertain about how long they will be al-lowed to stay, which undermines their job search efforts and discourages employers (Ruedin et al, 2020; Efionayi-Mäder and Ruedin, 2014; Karlsdóttir et al, 2017). What adds to these challenges is that depending on the type of residence status, refugees may not be allowed to enter employment legally (Marbach, Hainmueller and Hangartner, 2018).

Discrimination: Many refugees have experienced discrimination in socio-economic situations and social interactions. Discrimination is a significant stressor for refugees and can lead to increased identification with
their group, which complicates the lack of access to local networks in the destination country (Martiny and Nikitin 2019). Even if they get a job through their network, they are usually less qualified, underpaid, and have worse working conditions (Ruedin et al., 2020; Söhn and Marquardsen, 2017). That discrimination also harms mental and physical health has been shown many times (Schunck et al., 2015). Discrimination and negative stereotyping can have a negative impact on academic/vocational performance. This can be explained through the “self-fulfilling prophecy” (Rosenthal, 1974) and has been confirmed several times in studies (among students with a migration background (Martiny et al., 2013).

Psychological distress: In addition to the challenges mentioned above, individuals may experience psychological distress. For instance, this may originate from experiences before and during their flight which may trigger behaviours that can lead to reservations on the part of employers (Degler, Liebig and Senner, 2017). Studies on unemployment and long-term unemployment show that a prolonged interruption of employment can significantly impact mental health (e.g., depression), which increases with the duration of unemployment (Elkeles, 1999). Prevalence rates of mental disorders among refugees vary widely depending on the study. Data show that around 30% of refugees and conflict-affected individuals suffer from post-traumatic stress disorder (PTSD), depressive disorders and other psychological problems (Schuler et al., 2020; Steel et al., 2009). These figures can be explained by the fact that many migrated people are/were exposed to various objective stress factors that trigger stress and can have a detrimental effect on physical and mental health (Porter and Haslam, 2005; Tribe, 2022).

By examining relevant stressors as illustrated in Figure 1, this work focuses on reducing psychological distress as an effective leverage point to increase the probability of success of refugees going through dedicated incubator programmes.

Figure 1: Examples of stressors with/without reference to migration and acculturation over time (adapted from Braig, Schmees and Eschenbeck, 2021, p. 249).

According to the transactional stress model (Lazarus and Folkman, 1984), subjectively perceived stress has a detrimental effect on mental and physical health when there is a lack of resources and when individual coping capabilities are unfavourable. However, migration-associated stress does not necessarily lead to mental health problems (Kizilhan and Klett, 2021). The development of a mental illness depends not only on the extent of the stress, the development of a mental illness also depends on the personal resources of the refugees, their resilience and coping capacities (Fazel et al., 2005).

Refugees may bring specific resources such as multilingualism or increased flexibility in thinking and acting, as they have learned to adapt their behavioural repertoire (Marley and Mauki, 2019). In terms of salutogenesis (Antonovsky, 1997), these resources help to cushion or reduce migration-specific stress. In this context, the "healthy migrant effect" is also mentioned, according to which particularly healthy people migrate due to self-selection processes (Razum et al., 2000). However, the high prevalence rates of mental disorders among refugees show the importance of identifying stressors and resources in the context of migration in order to recognise risk
groups of stressed persons at an early stage and to develop targeted interventions for particularly stressed persons.

There is consensus in the literature that the aforementioned challenges must be overcome in order to increase the success of integration programmes (Ruedin et al., 2020; Bucken-Knapp, Fakih and Spehar, 2019). This work addresses an aspect that is often neglected in standardised integration programmes: Refugees have specific needs and stressful experiences depending on their country of origin, educational background and experiences, which reduces or nullifies the likelihood of success of standardised state integration programmes (Ruedin et al., 2020; Degler, Liebig and Senner, 2017).

Consequently, the integration process needs to be effectively complemented by voluntary engagement of non-governmental and non-profit organisations at the local level. This is important because it enables personal encounters between refugees and locals that go far beyond professional or financial support (Nijhoff, 2021; Degler, Liebig and Senner, 2017). In the intercultural context, reference can be made to Allport’s (1954) contact hypothesis, which states that contact between members of different (ethical) groups reduces prejudice and hostility. Contact without cooperation for a common goal does not reduce prejudice, and in some cases even exacerbates it (Pettigrew and Tropp, 2006).

Face-to-face contact sharing a common goal can be ensured by forming a "community" in the sense of a professional learning community. These have been shown to lead to more sustained learning (meta-analysis by Stoll et al., 2006). Professional learning communities are groups of people who work together to critically examine the way they work in a reflective, collaborative, inclusive, learning and growth-oriented manner (Mitchell and Sackney, 2000).

4. Discussion of framework

While start-up incubators for refugees address the abovementioned challenges, the true potential often is not realised (Bucken-Knapp, Fakih and Spehar, 2019; Spadarotto et al., 2014; Degler, Liebig and Senner, 2017; Meister and Mauer, 2018; Kloosterman, 2010; Harima, Freudenberg and Halberstadt, 2019; Nijhoff, 2021). A disciplined application of psychological tools is proposed to ensure that more suitable participants gain access to such programmes (phase 1) and complete them successfully (phase 2).

4.1 Phase 1 – Selection process

This work is based on the latest scientific findings in differential psychology, personality psychology, culturally sensitive aptitude diagnostics, health psychology and psychology for working with refugees.

Improvement potential: To assess candidates, start-up incubators for refugees often apply typical selection tools like individual interviews and case studies as well as group exercises. This is meant to assess motivation as well as well as communication and entrepreneurial skills. While this appears to be a viable approach, around 50% of candidates are admitted to incubator programmes on average and of those only about 70% graduate successfully (SINGA, 2020). Culturally sensitive aptitude diagnostic procedures adapted to the situation of refugees are needed, which increase the probability of programme completion as well as the number of successful business start-ups (Zacher, 2019). Based on the literature, an in-depth consideration of criteria on personality traits and personal suitability as entrepreneurs is required for a more precise estimation of entrepreneurial success (DeGeest, Seibert and O’Boyle, 2018; Brandstätter, 2011).

Measures for improvement: In principle, the methods listed in Table 1 can be considered for clarifying the suitability of entrepreneurs. The validity (informative value), acceptance by the target group, and cultural fairness of the procedures must be weighed (Leenen, Stumpf and Höft, 2021).

Table 1: Recommended assessment methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Validity</th>
<th>Acceptance by target group</th>
<th>Cultural fairness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structured Interviews (Schuler, Höft and Hell, 2014, p.162)</td>
<td>.51</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>Work sample tests (Schuler, Höft and Hell, 2014, p.162)</td>
<td>.48</td>
<td>medium</td>
<td>low</td>
</tr>
<tr>
<td>Personality tests specifically adapted to entrepreneurship diagnostics (Hell and Gatzka, 2018)</td>
<td>.47</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>General mental ability tests (DeGeest, Seibert and Boyle, 2018)</td>
<td>.36</td>
<td>medium</td>
<td>low</td>
</tr>
<tr>
<td>Assessment center (Schuler, Höft and Hell, 2014, p.162)</td>
<td>.28</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>Value tests (Kristof-Brown, Zimmerman and Johnson, 2005)</td>
<td>.20</td>
<td>high</td>
<td>low</td>
</tr>
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</table>
Often generic assessment methods which are not specifically designed for the situation of refugees are used (e.g., personality tests, general mental ability tests). Therefore, this work aims to use proven procedures with high cultural fairness and to complement them with new elements. Based on the literature, three successive elements are particularly useful for assessing entrepreneurial potential:

- Entrepreneurial personality tests should be used specifically for assessing entrepreneurial potential. Such tests operationalise different success-relevant characteristics in the context of different phases of start-ups (Hell and Gatzka, 2018). For personality traits, differences across cultures are regularly reported (Schmitt et al, 2007), but these are very small compared to differences in expertise and ability tests (Lynn, Fuerst and Kirkegaard, 2018).

- As a new element, the handling of migration-specific stress and health/well-being will also be surveyed in the future. For this, existing tests, such as "Healthy and efficient at work" (Berset, Krause and Weibel, 2018), could be completely revised for the group of refugees. Such a newly developed test aims to assess migration-specific stresses and resources as well as the state of health. Based on the results, refugees can be supported in staying focused on their psychological health despite all the challenges of independence.

- Structured interview: After successfully completing the tests, an interview follows with all candidates who are not excluded from discussing the results of the tests and collect motivation. Interviews have excellent validity and good acceptance and can be designed to be culturally fair. The previous interviews are partially standardised, so that each case can still be dealt with individually.

With these three elements, participants with a high potential for successful programme completion can be selected according to the decision matrix illustrated in Figure 2.

**Figure 2: Decision matrix for programme admission**

In addition to those who are accepted, those individuals can be identified who have the personal characteristics of entrepreneurs but do not make it into the programme, e.g., due to psychological stress. These individual challenges are addressed in a pre-programme with trained coaches/mentors to include these individuals in the following programme cycle. The pre-programme includes stress management training (Kaluza, 2018), coaching and mentoring (Sullivan, 2000), and group therapy elements. Experts working with refugees emphasise the importance of collective resources and the importance of group processes (Kizilhan, 2010). This does not require therapeutic training but a good knowledge of group processes (Kizilhan and Klett, 2021).

### 4.2 Phase 2 – Successful programme completion

Existing integration programmes for refugees focus on qualifications (entrepreneurial competencies and skills) and language skills. Because building formally recognised qualifications is difficult and time-consuming, such programmes hold a key advantage for rapid economic integration through preparation for entrepreneurship. Close to 90% of participants agree that such programmes had helped them build important professional skills.
This has helped many participants to find a job in the first year following programme completion (SINGA, 2020). In addition to language courses, such programmes also provide a safe space where participants can practice the local language with their peers, trainers, coaches and mentors. Although the professional goals of such programmes are largely achieved, there may also be reasons that lead to programme termination.

Improvement potential: While such programmes often have personalised elements such as coaching and mentoring, up to 30% programme dropouts indicate a potential for improvement (SINGA, 2020). A plausible explanation may be that such programmes often do not sufficiently address the challenges of psychological stress and discrimination (sources). Correlations of psychological stress and programme dropouts need to be better understood in order to define and implement effective countermeasures.

Measures for improvement: In addition to the selection process and the mentioned pre-programme, further action should be taken to improve mental health during the programme. It is important that in addition to evaluating the programme elements based on the evaluation model of Kirkpatrick (1959) or the framework model for training effectiveness (Tannenbaum et al, 1991), changes in behaviour are also surveyed. Regular feedback cycles are essential. A stress barometer could measure how individual well-being is developing during the programme. Problems identified can be addressed with the coaches/mentors and candidates with high stress levels are given access to further stress management training as in the pre-programme. Further improvements should include training programmes for coaches/mentors to improve their awareness of psychological stress related to migration. A method toolbox to help reduce such stress could be developed, which can be used by the coaches/mentors. Starting points for successful coaching and mentoring can be derived from the literature (Sullivan, 2000). Insights into the optimal design of professional learning communities, including common events, shared values, vision and collaboration are expected to add value to incubator programmes for refugees (Mitchell and Sackney, 2000).

5. Conclusion

Based on the literature on health and organisational psychology, this work proposes approaches to help start-up incubators for refugees to address challenges related to psychological distress. The overall goal of this work is to improve the chances of entrepreneurial success among programme participants and empower them to create social and economic impact for themselves as well as the wider ecosystem. Special emphasis is placed on two critical phases of the incubation cycle: the selection process and the actual programme to graduation. A conceptual framework of psychological methods and tools is presented that shall have academic and practical relevance. First, this paper aims to contribute to the academic discussion on how to better exploit the potential of refugee incubators so that more suitable refugees can benefit. Second, this work is designed with practical considerations of start-up incubators for refugees in mind. Discussed methods and tools can be directly implemented and tested in practice.

In terms of limitations, this paper primarily focuses on psychological methods and tools that are relevant from candidate selection to graduation. While the phase upon graduation, when refugees implement and build on what they have learned, is also important, it goes beyond the scope of this paper. This phase is generally separate from the core curriculum of refugee incubator programmes. However, it represents a promising avenue for further research on suitable psychological methods and tools. Because programme graduates may feel lost and intimidated without the structure and daily support of the incubator programme, a phase-out programme can be a viable option. For instance, this could be continued coaching and mentoring, stress management training and graduate meetups with peers. Another direction for further research relates to the above-mentioned practical relevance of this work. In cooperation with start-up incubators for refugees, proposed psychological methods and tools can easily be applied and the impact on entrepreneurial success rates can subsequently be measured. These insights can then be the basis for fine-tuning and further improvements of applied methods and tools.

References


