

Developing and Validating the Refugee Integration Scale in Nairobi, Kenya

DAVID BEVERSLUIS

Brigham and Women's Hospital and Massachusetts General Hospital, Boston, MA, USA

DAVID SCHOELLER-DIAZ

The Fletcher School, Tufts University, Boston, MA, USA

MARTIN ANDERSON

RefugePoint, Cambridge, MA, USA

NATALIE ANDERSON

RefugePoint, Cambridge, MA, USA

AMY SLAUGHTER

RefugePoint, Cambridge, MA, USA

RONAK B. PATEL

Stanford School of Medicine, Stanford, CA, USA
rbpatel@gmail.com

MS received April 2015; revised MS received January 2016

The humanitarian trend of protracted refugee situations and urban displacement are driving de facto integration of urban refugees in host countries. Facilitating this process through local programmes and policies is an important long-term solution for urban refugees that can no longer be ignored. Tools to measure refugee integration are required to conduct research and to guide programmes and policy. This study describes the development and validation of a 25-item Refugee Integration Scale (RIS) using standard scale development methodology among Somali and Banyamulenge refugees in Nairobi, Kenya. We report mixed-methodology methods to strengthen the scale's validity and reliability. These include a literature review and a qualitative focus group component among refugees in Nairobi to establish a theoretical construct for urban refugee integration. The scale was then piloted and refined through a quasi-randomized survey of 331 refugees in Nairobi. Reliability was established as Cronbach's alpha 0.861 indicating high internal consistency. The RIS is a continuing step towards better understanding and measuring urban refugee integration, and will help to guide policies and programmes for this vulnerable population.

Keywords: Protracted Refugee, local integration, urban, integration measure

Introduction

During the past several decades, there have been an increasing number of refugees living in urban settings. The UN High Commissioner for Refugees (UNHCR) estimates that over half of global refugees are urban, with many concentrated in large cities, such as Nairobi which hosts over 100,000 urban refugees (Campbell *et al.* 2011; UNHCR 2014). This growth in a population, which has traditionally lived in large non-urban camps, has challenged many of the established practices in refugee protection and service provision, forcing new policy and programmatic approaches to deal with their unique needs. The humanitarian and development community, including UN agencies, international and local non-governmental organizations (NGOs) and occasionally host governments, are rapidly adapting their approaches towards this often marginalized population and are beginning to recognize the role of *informal* refugee integration as a viable alternative for the long-term displaced (Jacobsen 2001; Obi and Crisp 2002; Fielden 2008; UNHCR 2009). This is becoming an increasingly appealing and realistic option compared to the traditional pathways for refugees which emphasize *durable solutions*, often at the expense of policies designed to promote integration (Assembly 1951). These traditional approaches have proven inadequate in recent decades as geopolitical realities such as protracted humanitarian emergencies prevent safe *repatriation* to countries of origin, overwhelming numbers limit the impact of *resettlement* to third countries and many host-country policies leave refugees without permanent legal status, precluding formal *local integration* (UNHCR 2014).

Chronically displaced refugees have chosen to move to cities in search of better lives and opportunities and are directly confronted by both the challenges of urban poverty and their marginalized status as refugees. When no self-supporting ethnic enclave exists, many seek and/or are forced to integrate with the host community in order to survive, living and working among local populations in an unsupported and fragmented de facto integration (distinct from formal *local integration* which includes access to legal permanent residency or citizenship). Both refugee communities and their civil society advocates have begun to counter this limited and disorganized approach to integration however, by working towards a model of *facilitated* integration through policies and local programming (UNHCR 2009). Key to this approach is a belief that successful integration, whether accompanied by eventual formal legal status or not, is an important component and correlate of social, economic and, more broadly, human development for urban refugees. Defining, understanding and measuring the de facto integration process is central to the agenda of improving the human development of this population and, although a clear definition does not yet exist, several researchers and organizations have begun to address it (Crisp 2004; Ager and Strang 2008). We have moved towards an understanding of the many domains and facets of the integration process through this work.

In this article, we extend this research line through the development and pilot testing of a new measurement tool called the Refugee Integration Scale (RIS), which is a 25-item Likert scale designed to assist in estimating the degree of integration among urban refugees. As integration approaches become more recognized, organizations and agencies will need access to measurement tools for integration that are both theoretically and evidence-based as well as contextually grounded; we are hopeful that the RIS will address this need. The RIS was developed using standard scale development methodology with mixed-methods data and attention to strengthening scale validity and reliability. The process of scale development is well described and we followed a standard approach with several important steps (DeVellis 2003). First, a theoretical framework for refugee integration was established through a literature review and through a qualitative assessment among the target population in Nairobi, Kenya. Second, we developed and administered a pilot scale to 331 urban refugee respondents, also in Nairobi. And finally, we formalized the RIS as a 25-point scale and present the results of the scale's application among the respondents in our pilot cohort.

Theoretical Background

Successful scale development requires attention to both reliability and validity. Internal reliability measures such as Cronbach's alpha are discussed further below and are a characteristic of the quantitative data generated during the pilot study. As we developed the theoretical framework, however, we were careful to address several important measures of validity. Specifically, content validity, which refers to the extent to which the scale theoretically measures all aspects of the construct or idea under study (here refugee integration); and construct validity, which refers to the degree to which the scale in fact measures the construct that it claims to be measuring. In other words, does a final value on the RIS actually represent a real truth about the degree to which the respondent is integrated? These concepts can be addressed primarily through a robust theoretical framework for the construct. To this end, we performed a literature review, with some important aspects summarized below, and from which we ultimately drew our framework borrowing primarily from prior work by Ager *et al.* as well as several other authors who have done work with urban refugees. To contextualize the background work, we also conducted a qualitative assessment among urban refugees in Nairobi to better understand their integration process and to ensure our scale addressed their specific circumstances.

Literature Review Summary

As noted above, there have traditionally been three legal avenues of response for the long-term management of refugees (besides indefinite encampment), defined in the 1951 Convention as durable solutions: repatriation,

resettlement and local integration (Assembly 1951). As refugee crises have ballooned and become intractable in many parts of the world, the former two have served inadequate, especially for urban refugees. There have been increasing calls for attention to integration approaches for urban refugees since the early 2000s in both peer-reviewed literature and organizational guidelines. Much of this literature has also attempted to define the integration process more clearly, from which this research drew on to frame and construct scale items.

Jacobsen *et al.* identified integration as ‘the forgotten solution’ in a 2001 summary article which summarized well the research to date on this issue and called for further recognition of assisted informal integration efforts (Jacobsen 2001). She notes that, in recent decades, there was a move away from formal local integration especially in developing countries and that many host governments have declined to offer registration and official refugee status to large numbers of refugees, thereby avoiding the responsibility to grant them protections, including access to local integration which is guaranteed under the 1951 Convention. She writes:

Local integration, with its connotation of permanence, has fallen out of political favor, and the term is now a loaded one arousing negative reactions in host governments and donor agencies alike (Jacobsen 2001).

Jacobsen calls for a revitalization of an integration approach (as we echo in this article) in a way that is more flexible and politically palatable, by also addressing the needs of the host community and by continuing to recognize repatriation as an ultimate goal.

With regard to building a framework for the integration process, Jacobsen explores a list of criteria for successful integration which includes among others: ‘access to education or vocational training, health facilities, and housing’ and being ‘socially networked into the host community.’ She also recognizes the temporal nature of integration, stating that ‘this is a process which takes place over time’. The process of integration and the components of integration are well synthesized in several subsequent papers also published by the UNHCR Policy Development and Evaluation Service through the UNHCR series *New Issues in Refugee Research*. In a 2004 article entitled ‘The Local Integration and Local Settlement of Refugees: A Conceptual and Historical Analysis’, Crisp *et al.* divide the integration process into three dimensions: economic, social and legal (Crisp 2004). These broad categories encompass the various aspects of urban refugee life and most importantly highlight that, for integration to be successful, it must go beyond traditional legal approaches and address economic and social dimensions as well. This argument is continued in a 2008 summary article on integration from the same UNHCR group by Fielden *et al.* called ‘Local Integration: An Under-Reported Solution to Protracted Refugee Situations’, in which the authors re-summarize the issue to date and again

argue for increased focus on a multi-dimensional definition of integration (Fielden 2008).

The most precise definition of the various components or ‘domains’ of local integration was published by Ager *et al.* in a 2008 article entitled ‘Understanding Integration: A Conceptual Framework’ (Ager and Strang 2008). This article describes the conclusions of a UK-based qualitative study designed to arrive at a normative and operational definition of integration given a history of wide variation in the use of this term. The background for their analysis draws heavily on prior literature exploring integration of resettled refugees in Europe as well as qualitative interviews with resettled refugees in the UK. They define 10 domains of integration (bold), grouped into four categories:

- Markers and Means: Employment, Housing, Education, Health;
- Social Connection: **Social Bridges** (relationship with host community), **Social Bonds** (relationship to fellow refugees), **Social Links** (relationship with host government);
- Facilitators: Language and Cultural Knowledge, Safety and Stability;
- Foundation: Rights and Citizenship.

Another important branch of the recent literature on refugee integration that explores important components of successful integration are an assortment of papers summarizing successful examples of informal integration in various countries. In the Fielden article noted above, the author’s primary goal, for example, is to take ‘an inventory of local integration case studies’ and through this highlight that *de facto* integration is already naturally occurring in many developing countries of first asylum and that it deserves more focused support as a viable solution (Fielden 2008). A similar summary article by Banki *et al.* explores refugee integration in Nepal, Pakistan and Kenya, and goes a step further by attempting a comparison of the ‘level of refugee integration’ between these countries based on several subjective indicators, such as ‘restriction of movement’, ‘participation in the local economy’ and ‘moving in the direction of self-sufficiency’. Similarly, in a 2006 article, ‘Urban Refugees in Nairobi: Problems of Protection, Mechanisms of Survival and Possibilities for Integration’, Campbell *et al.* lend support to ‘the idea of local integration as a viable, durable solution to their situation of protracted exile’ (Campbell 2006). There are many additional papers highlighting successful examples of refugee integration in developing countries, including, for example, in Gambia, Gabon and Uganda; all of these papers highlight important lessons regarding the constitution of a successful integration process (Dryden-Peterson and Hovil 2003; Stone and De Vriese 2004; Hopkins 2011).

Resettled refugees have been integrating successfully in the EU and North America for many years, which has resulted in a body of literature attempting to explore their degree of integration. Several examples include Dickerson’s *et al.* (2011) ‘Performance Measurement for Refugee Integration Programs’ in

the USA, and Bijl and Verweij's (2012) 'Measuring and Monitoring Immigrant Integration in Europe' and Entzinger *et al.*'s 'Benchmarking in Immigrant Integration' in Europe (Biezeveld 2003). There are numerous reports and documents from various European government agencies reporting on integration programmes. Most of these, however, do not explore deeply the individual's integration process, but rather report on programmes as a whole. One interesting attempt to develop indicators for integration is from a UNHCR project called the Refugee Integration Evaluation Tool, which uses over 200 unique policy-level indicators to evaluate nationwide integration policy and was recently deployed for several countries in Eastern Europe (Sunjic and Dobbs 2010).

And, lastly, in arriving at a framework within which to build our RIS, we explored the significant literature on cultural adaptation and social integration. We accessed this literature mostly in order to gain understanding of the prior effort undertaken to quantify community trust and social inclusion through scale methodology. Two helpful examples include the 'Social Inclusion Index' from Huxley *et al.* (2006) and the 'Sense of Community Index' from Chavis *et al.* (2008). Additionally, literature from applied psychology such as a 2002 book entitled *Psychological Sense of Community* by Fisher *et al.* (2002) gave insight into some of the many social variables that underlie integration in the broader human context (Gracia and Herrero 2004).

Qualitative Assessment

Qualitative methods

The qualitative assessment was conducted in Nairobi over a three-week period to improve construct and content validity, and contextualize the eventual creation of scale items for these refugee populations. Fifteen focus group discussions (FGDs) with four to six participants each and 17 individual in-depth interviews were held with a representative sampling of refugees, local Kenyans, and local NGO and civil society leaders.

Respondents were recruited through local NGO contacts and were broadly representative of host and local communities, gender, age groups and length of time in Nairobi. Refugees were from Somalia, Ethiopia and the Great Lakes Region. Somali refugees were predominantly Muslim, while Ethiopian refugees were primarily ethnically Oromo (a politically persecuted ethnic group in Ethiopia) and Christian. Great Lakes Region refugees, mostly Congolese, were ethnically Bantu and Evangelical Christian or Catholic, with fewer refugees from Rwanda or Burundi. Finally, local Kenyan participants were either ethnically Bantu Kenyans or Kenyan-Somalis, the latter being ethnically Somali but native-born Kenyan citizens. Each FGD was homogeneous by ethnicity and gender in an attempt to encourage open discussions and minimize discomfort.

A member of the study team, DSD, facilitated all FGDs and interviews after obtaining verbal consent from respondents. An open-ended, adaptive topic guide was used to focus the discussion towards perceptions of integration while still allowing for organic responses from subjects. Sessions were continued until responses were felt to be representative and identified themes saturated, and typically lasted approximately two hours. Between interviews, an iterative process was utilized to further refine questions and topics for subsequent interviews in order to achieve saturation of themes. Interviews were conducted with appropriate language translation when needed (Somali, Amharic, Swahili, and several local GL dialects) provided by local NGO contacts. The translators were directed to provide verbatim translation by the facilitator prior to the sessions to avoid simplification and omission bias. Sessions were conducted in private locations convenient to respondents.

Detailed notes were kept during each interview that were later compiled into typed transcripts. These transcripts were analysed by multiple members of the research team using a simplified grounded theory approach, which allowed for the emergence of specific themes. NVivo 10 (QSR International, 2012) was utilized to analyse the transcripts and further refine themes. This study was approved by the Partner's Healthcare Institutional Review Board, protocol number 2013P002090 and locally by a RefugePoint internal review process.

Qualitative study results

There were many diverse themes identified by our stakeholders; these are presented below in six general categories. The structure of these identified themes and situational examples as reported here had significant input into the development of the individual Likert-items in the scale but were not copied directly into the framework for the RIS.

(1) *Challenges of Urban Poverty*—despite the clear marginalization perceived by our refugee respondents and their status as refugees, many of their primary concerns revolved around common issues of urban poverty and health rather than the theoretical issues of durable solutions or integration. Understandably, the challenges inherent to modern life for over a billion of the urban poor around the world, such as access to safe water, sanitation, sufficient food, health care and affordable housing, were also an active part of the daily survival of our respondents. For the very poor, the basic and direct necessity of survival usually holds primacy over concerns such as legal documentation and official refugee status which can seem indirectly related. Our respondents recognized that access to basic services and overcoming the challenges of urban poverty were central aspects of their integration. During a focus group with Somali refugees, one woman, while speaking about the poor performance of her small business, lamented ‘when I get sick, there’s no money’. Another refugee worried about the burden of having to care for a sick child and the drain that this was on her household income.

The typical safety nets available to the urban poor (already severely limited in Nairobi's slums) such as government-provided health clinics, welfare and cash-transfer programmes or urban sanitation projects are less accessible to urban refugees. Several respondents complained that they had difficulty gaining access to a local health clinic due to their unofficial status as refugees. Likewise, respondents reported that as non-Kenyans they were restricted from government-offered seminars about basic health and hygiene.

A fundamental difference between camp-based refugees and urban refugees exists with regard to service provision. A core function of camps is to provide basic life-sustaining services such as food, health care, water and sanitation. This is possible due to the planned and purpose-built nature of formalized camp infrastructure and the non-urban programmatic orientation of most humanitarian actors. Likewise, long-term provision of these services is often required due to a lack of local economy or jobs. In urban settings, however, this traditional aid infrastructure does not exist and refugees are most often left on their own to provide for themselves and their families. Service provision must then identify and reach out to these urban refugees who may want to remain invisible. Interestingly, several respondents from both the refugee groups and the local Kenyan groups noted the misperceptions regarding this difference. Locals incorrectly perceive that all urban refugees are provided with the full array of services in the urban setting that exist in the camp, which can exacerbate resentment and ill will towards urban refugee populations while harming trust and hampering the integration process. Conversely, while lack of official urban refugee services may leave the refugees more vulnerable, it also inherently decreases dependence and incentivizes towards some level of integration with the local host population. Urban refugee populations live amongst their Kenyan neighbours and support themselves through local livelihoods out of necessity—a necessity that in turn increases integration between communities.

(2) *Documentation and Legal Status*—a second major theme identified during background interviews was the difficulty of obtaining legal recognition as refugees and the challenges this introduced into daily life. Most respondents correlated their degree of integration to their level of legal protections and formal documents. Access to these documents provides legitimacy and some protection against daily discrimination from officials. Among the several types of documentation, the most commonly sought was the UNHCR Mandate Refugee Certificate (MCR). Having this document formally acknowledges refugee status and is required to be considered for resettlement or receive UNHCR's support during any eventually planned repatriation. It also proxies for previously lost documents including birth certificates or prior national ID, and can therefore assist in practical aspects that require an ID, such as opening a bank account. Respondents also indicated that documents are protective as a tool to challenge discrimination from police, whereas lack of formal refugee status exposes refugees to extortion and arbitrary arrest. One refugee described being pestered almost daily by local police due to not

having proper documentation. Finally, several respondents felt strongly that, aside from these tangible benefits, having a mandate, with its implied acknowledgement of their plight, significantly improved their hopefulness and sense of integration into the local community. Despite these benefits, our refugee respondents also consistently complained that official documents were notoriously difficult to obtain. They noted a cumbersome process with multiple visits to government and UNHCR offices over months to years and a perception that this bureaucracy was intentionally impeding their ability to successfully settle into their local communities. While some noted recent positive changes, the majority of respondents in our sample felt there was continued room for improvement. Furthermore, this system remains in flux, driven in part by recent political events such as several Al Shabab attacks in Kenya, with the government slowly taking over more responsibility for registering refugees and granting Refugee Certificates, a document expected to eventually replace UNHCR's MRC.

(3) *Culture and Community Trust*—respondents' perceptions of their degree of integration were often framed in terms of community trust and the cultural differences within the local community. The refugees' degree of otherness from local Kenyans had important implications for their ability to integrate. First, integration does not imply assimilation, and maintaining some cultural identity was reported by respondents as important for healthy integration. Many respondents expressed strong commitment to their fellow ethnic and national refugees, finding hope and reaffirming their identity in these groups. For example, refugees from Somalia expressed this attitude and often found identity in their religion; several respondents indicated that the Somali mosque in Eastleigh is a focal point for community identity. Similarly, both Ethiopian and GL refugee communities strongly identified with their countrymen, living in the same neighbourhoods, attending the same churches, celebrating the same festivals and working closely together. This form of affinity to migrants from the same ethnic background, while seemingly counter to integration, likely enhances it in the same way as other immigrant communities assist with transition and assimilation in new place while supporting identity, which is critical for human security (Leaning and Arie 2000).

Integration, by definition, entails close interaction between host communities and refugees. Several refugees described close relationships with Kenyans and felt satisfied with their level of integration. A majority, however, expressed a sense of isolation from the host community and few positive interactions outside their respective ethnic groups. Respondents described xenophobia and stereotypes originating from both sides. Somali respondents described many examples of overt racism and are often referred to as terrorists. Some local Kenyan's also subtly betrayed their community's negative attitudes towards refugees and acknowledged openly that they could 'do better' in welcoming refugees. Additionally, a divide exists between Somali refugees and the Somali-Kenyan population. Recent Somali refugees reported feeling especially unwelcomed by their ethnic brethren and disappointed that

the long-established Somali-Kenyan community does not more explicitly facilitate their settlement in Kenya. In some cases, respondents complained of exploitation by their same ethnic group. Interestingly, respondents from the GL Region confirmed discrimination as well, but generally to a lesser degree than by Somali and Ethiopian refugees; local Kenyans felt that GL refugees had an easier time integrating than others due to their similar ethnic background. Finally, respondents from all groups felt that local language ability was important for integration. Those who had quickly acquired English or Kiswahili were significantly more satisfied with their ability to integrate and regularly consumed local media.

These cultural tensions and our respondents' sense of integration were often described in terms of trust between communities. Unfortunately, most expressed low levels of trust both within their own community and with the host community. A Somali woman commented that it is difficult to leave valuables unattended at home due to fear of theft from neighbours or even co-residents. Another refugee woman spoke of the difficulty of trusting others to care for her children while she works outside of her home. Many refugees reported not trusting local Kenyans in financial or business partnerships, fearing that their money will be stolen. Finally, there is a general lack of trust in authorities and police due to significant discrimination (further on this below).

(4) *Livelihoods and Education*—central to respondents' perception of their ability to integrate was their ability to make a living for their families and to advance their education and training. Most respondents reported being officially unemployed, instead relying on informal income and family businesses, such as selling tea or fruit at local stands, to generate income. Refugees reported poor access to financial services, for example, obtaining credit to expand their small home businesses. They also felt that, as refugees, they were more vulnerable to extortion and distorted local economies, such as being made to pay higher rents than locals. Several refugee respondents relayed stories of attempted business partnerships with local Kenyans that resulted in theft of their investments. Without options for legal recourse, refugees' trust in locals and authorities is severely damaged. Despite these challenges, there are many determined refugees contributing to the economic life of their neighbourhoods. One respondent, an Ethiopian doctor who had successfully collaborated with a local Kenyan lab technician to start a pharmacy, was able to prevent much of the discrimination that he would otherwise have suffered by allowing the Kenyan to manage the legal aspects of the business. Both felt strongly that their mutually non-exploitative business partnership resulted in greater financial trust between their respective communities. Finally, refugees felt that their status placed overbearing bureaucratic burdens on their ability to start businesses and find full-time work, such as the need for expensive business permits to own their own businesses. No respondents had obtained this permit; instead they suffered increased discrimination and resorted to paying bribes to police in order to operate. Local Kenyan respondents also

expressed that, despite it being a good idea, the system of work permits for refugees in particular was non-functional: 'it's not working, and it's not good.'

Most respondents were enthusiastic about advancing their education as a way to improve their integration, but they generally felt that this was difficult due to several constraints. First, it is difficult to transfer previously earned credentials and degrees to Kenya. One respondent had trained as a therapist in Congo but was unable to practise in Kenya due to difficulties with licensing. Another reported an arduous process of attempting to transfer her nursing diploma from Ethiopia to a Nairobi university and years spent trying to become credentialed in Kenya without success. Similarly, many refugees with less formal education expressed a strong desire to improve their skills through livelihood training programmes, but found their options limited. Those taking advantage of several local NGO programmes, though, felt hopeful about these opportunities. Finally, despite the government's policy of free universal primary education, including for refugee children, various considerations inhibit refugee attendance. Respondents were anxious to see their children well educated, but cited distance and unavailability of schools in low-income areas, lack of access to formal documents, restrictive school admission policies and limited resources to cover school-related expenses like uniforms and supplies as reasons why many of their children were not in school full time.

(5) *Personal and Community Security*—expansion of community trust requires security from harassment and violence; unfortunately, many respondents identified significant levels of discrimination as an impediment to their successful integration. The most common source of harassment, repeated by all groups, was the Kenyan police. While hardly a problem unique to urban refugees, refugee respondents felt especially targeted and susceptible given their special status as refugees and expressed that paying recurrent bribes was a significant economic drain on their already scarce household incomes. One respondent reported being arrested approximately 15 times for selling fruit on the street without a business permit. Daily acts of intimidation also represent the only consistent interaction refugees have with local authorities, thereby damaging prospects of trust and development of civic engagement. This lack of legal protection exacerbates vulnerabilities leading to discrimination such as unfair rents, exploitative business partnerships or, more seriously, gender-based violence. Several female refugees told stories of rape and sexual intimidation originating from both their own ethnic group and the host community. Discriminated by the very persons and process meant to protect against such harassment, exploitation and crime leaves these urban refugees especially vulnerable.

Refugees often live in the shadows of violence they fled in their home countries, disrupting their ability to settle in their new homes. Religiously moderate Somali refugees are plagued by the religious extremism of Somali-based terrorist group *al-Shabaab* in the detrimental stereotypes of Islam

rampant in Kenya. Increasing religious terrorism originating from Somalia in East Africa also negatively reinforces the local fear of this community. Similarly, many ethnically Oromo Ethiopians perceive projected state violence and intimidation from the Amhara-dominated Ethiopian government in the form of local Ethiopian agents within their Nairobi communities. Respondents report dealing with this perceived threat on a daily basis, highlighting the misperceptions and personal trauma that can severely hinder their efforts at establishing themselves peacefully in their new homes.

(6) *Hope and Control*—the final important themes from the qualitative assessment relate to refugees' hope for the future and their perceptions of control over reaching their goals. Respondents revealed many goals for their future and were generally optimistic despite their many significant trials as refugees. They hope for better lives for themselves and their families and for better jobs and education. There was also a pervasive desire to someday return to their home countries. At the same time, however, this hope was tempered by realism that they were not in a position to actualize many of these desires. Respondents reported a lack of financial and political means to improve their lives and typically have limited recourse against the daily discrimination they face. This tension, between hope for a better future and lack of control over moving towards that future, is at the core of the integration process.

Refugees reported mixed access to the societal systems and tools available to achieve increased control in their lives, whether political, social or economic. There was no direct involvement in the Kenyan political system and refugees reported an inability to affect the political process in any meaningful way. Most respondents were not actively involved with local civil society organizations although there are several local community-based organizations working directly with refugees. These groups provide access to improved financial services, language training, livelihoods training and even sports clubs—all designed to facilitate development and integration of refugees. Furthermore, they advocate for their constituents to the government when able and provide at least some political representation to an otherwise poorly represented group.

Scale Development and Pilot Study

After contextualizing and applying the theoretical background through the above methods, we developed a pilot scale and implemented it in Nairobi among urban refugee respondents. Data analysis then allowed for statistical winnowing of the scale items to form the final RIS. Throughout, we attempt to maximize reliability and validity through several measures described below and summarized in Table 1.

There are several important assumptions underpinning the scale development. First, as noted above, we used the previously developed 10 domains of integration by Ager *et al.* as the framework for the scale items; the pilot scale

Table 1

Summary of Validity and Reliability Measures Undertaken for the Refugee Integration Scale

Validity measures

-
- | | |
|--------------------|---|
| Content validity | <ul style="list-style-type: none"> • Refugee integration model • Qualitative assessment with 15 focus group discussions • Expert review of item pool |
| Construct validity | <ul style="list-style-type: none"> • Brief sense of community scale (convergent validity, <i>sub-type of construct validity</i>) |
| Criterion validity | <ul style="list-style-type: none"> • Unable to perform as no current ‘<i>gold standard</i>’ currently exists |

Reliability measures

- | | |
|--|---|
| Language and cultural relevance of scale | <ul style="list-style-type: none"> • Brislin’s back-translation method • Pre-testing with four focus group discussions |
| Internal consistency | <ul style="list-style-type: none"> • Cronbach’s Alpha • Test–retest reliability—unable to perform due to anonymous administration |
-

and the final scale include items from each of these domains. We felt that this structure provides adequate framing for the broad variety of themes uncovered in the literature review and qualitative study. Second, integration is a process moving along a continuum from ‘poorly integrated’ (complete isolation and perhaps more easily identifiable) to ‘well integrated’ (more challenging to define and beginning to overlap at the extreme with assimilation). Through attempting to quantify integration on a scale ranging from 0 to 100, we do not intend to imply that there are absolute end points to either—that a person who scores 100 has achieved some clearly defined status of ‘fully integrated’, an end point at which the process of integration stops. Similarly, a score of zero does not imply the lowest possible level of integration. Rather, we assign a number to an individual’s level of integration, acknowledging that the absolute numerical value is arbitrary and has limited inherent meaning, but can allow comparisons between individuals and groups over time and place. Third, we have chosen to target this scale at an *individual’s* level of integration. We do not target the household or general community for responses, although an aggregate measure of individual responses may be useful in analysis.

Scale Development and Pilot Study Methods

Pilot-scale development

Utilizing the above theoretical background, we generated a preliminary item pool of approximately 120 Likert statements expressing positive and negative

attitudes towards the integration process. Items were generated through a collective brainstorming process by all co-authors and several additional refugee experts, and primarily reflected the themes which emerged in the qualitative assessment and were categorized into one of the 10 domains of integration. Obviously, repetitive items were eliminated and further winnowing by several refugee experts and a psychologist familiar with psychometric scales resulted in 60 items evenly distributed among the various domains of integration.

The pilot items and five-point Likert responses (Strongly Agree, Generally Agree, Neither Agree nor Disagree, Generally Disagree, Strongly Disagree), as well as additional survey sections including demographics, validation measures (BSCS) and informed consent were translated into Somali and Kinyamulenge, the target languages for the pilot study. Of note, we refer to these languages as proxies for ethnicity (Kinyamulenge spoken by Banyamulenge refugees from the Great Lakes Region and Somali spoken by refugees from Somalia). This was done using a modified Brislin's back-translation method in order to achieve content equivalence and strengthen internal reliability. The English version, which was developed with Brislin's cross-cultural criteria in mind (simple language for ease of cross-cultural understand, etc.), was forward-translated in committee by two bilingual translators and investigator DB for each target language. A third bilingual translator then back-translated each version into English and any identified translation errors were resolved by group consensus among all three translators (Cha *et al.* 2007).

Finally, in order to arrive at the 40-item pilot scale, each of the 60 translated items was reviewed with Somali and Banyamulenge men and women in four separate FGDs in Nairobi. Feedback from these sessions was used to modify several items and further narrow the items according to cultural and local relevance.

Pilot testing

We pilot tested the 40-item draft RIS in two urban refugee populations (Somali and Eastern Congolese Banyamulenge) in their respective languages (Somali and Kinyamulenge) in several Nairobi neighbourhoods (Eastleigh, Kayole, Kasarani) known to have a high proportion of refugee inhabitants. Eight bilingual research assistants (four for each language) were trained as interviewers and administered the surveys to respondents over a two-week period. Respondents were selected using a quasi-representative sampling methodology; interviewers approached every third household in a given block or community and interviewed no more than one adult family member per refugee household. If no refugees were present or they were unwilling to participate, the interviewer skipped to the next third household. The interviews were conducted in private by a single research assistant and lasted approximately 30 minutes each. A total of 331 respondents were

interviewed, including 155 Somali and 176 Banyamulenge. All respondents agreed to participate after being read an oral informed consent script prior to beginning the survey instrument. In order to avoid bias through therapeutic misconception, no affiliation with our local NGO partner (RefugePoint, known locally to many refugees) was claimed during interviews.

Final scale development

Following pilot testing, manual data entry was performed using Excel (Microsoft, 2013) and statistical analysis was conducted with SPSS Version 21.0 (IBM Corporation, 2012). Sixteen pilot-scale items were negatively worded and therefore required a reverse scoring transformation (0→4, 1→3, etc.). In order to maximize the available data set, missing values for the pilot scale (2.4 per cent) were addressed using multiple imputation methodology with final values used for statistical testing imputed as the mean of five subsequent multiple imputations (Rubin 2009). Test characteristics, including Cronbach's alpha, were calculated for the pilot RIS and each language-specific scale and a Discriminatory Power Score (DPS) and item-scale correlation was calculated for each item (Cronbach 1951; DeVellis 2003; Sullivan 2003). Finally, component factor analysis was attempted but did not result in a useful grouping of items; therefore, we do not report this here and it was not utilized in final item selection.

Final item selection for the 25-item RIS was determined through a consensus process among co-authors with multiple test characteristic inputs. Fifteen items were dropped in order to arrive at a 25-item scale which is an appropriate length to facilitate ease of administration and which allows for ease of scoring (4 points each × 25 items = 100-point total scale). Items were dropped if the scale alpha improved after deletion and if the DPS was less than 1, indicating a low item-variance, or discriminatory power (i.e. an item was dropped if there was not a broad range of responses from the respondents and it therefore does not discriminate well between individuals). Finally, at least one item was included per domain to retain content validity; this requirement did not result in the retention of any items with poor test characteristics that would otherwise have been eliminated. The final scale is included in Table 2 and translated versions are included in Appendix I.

We establish convergent validity (a sub-type of construct validity) through co-administration of an adapted Brief Sense of Community Scale, which is an established psychometric scale that measures psychological sense of community among respondents. Convergent validity allows us to state that, if the RIS is well correlated with another established scale that measures a similar concept, then the first scale is also likely to be measuring that concept as well. We adapted and translated this eight-point Likert scale and administered it to all respondents as a component of the survey instrument as described above. This is included in Appendix II.

Table 2

Pilot Study—Basic Demographics			
	Somali	Kinyamulenge	Overall
Total respondents	155	176	331
Median age, <i>years</i> (SD)	35.0 (13.4)	29.0 (10.6)	31.0 (12.2)
<i>Gender, n (%)</i>			
Male	83 (53.6)	97 (55.1)	180 (54.4)
Female	72 (46.4)	79 (44.9)	151 (45.6)

Finally, the analysis of the pilot study cohort data was conducted using independent sample *t*-tests for the continuous variables (ex. age) and chi-squared analysis for the categorical variables (ex. official Kenyan refugee status). Multiple linear regressions and correlations were conducted as below. Prior to conducting multiple linear regression, standard assumptions were checked on and were satisfied (no outliers, non-colinearity, independent errors, random normally distributed errors, homoscedasticity, linearity and non-zero variances).

Pilot Study Results

Reliability measures

The final RIS is presented in Table 3. Somali and Kinyamulenge versions are included in Appendix I. Cronbach’s alpha coefficient, the standard test characteristic of internal reliability, ranges from 0 to 1, with values approaching 1 representing greater internal reliability. Cronbach’s alpha for the combined-language RIS was 0.861. This is in the range indicating *good* internal reliability typically accepted for new scale development (Kline 2013). Alpha values for each language-specific scale were similar and are presented in Table 4, with the Somali scale performing slightly better (0.904 versus 0.803) but both in the good to excellent range.

Convergent validity

Partial correlations (reported for each language group) were performed between the RIS and the adapted BSCS in order to test convergent validity. Among Somali respondents, there was a strong positive, partial correlation between BSCS score and RIS score, controlling for gender, age and years living in Nairobi ($r = 0.847, p = 0.000$). Results of the zero order calculation also yielded a strong positive correlation, indicating that controlling for the above demographics had very little effect on the strength of the relationship between the two variables ($r = 0.859, p = 0.000$). Among Kinyamulenge respondents, there was also a strong positive, partial correlation between BSCS score and RIS score, controlling for gender, age and years living in

Table 3

Refugee Integration Scale		
	RIS-English	Domain of integration
RIS 1	I have begun to think of myself as a Kenyan	Language and cultural knowledge
RIS 2	I am comfortable speaking with Kenyans in Kiswahili to get things done in my daily life	Language and cultural knowledge
RIS 3	I often watch TV or listen to radio in Kiswahili	Language and cultural knowledge
RIS 4	I feel at home in Nairobi	Safety and stability
RIS 5	The local police treat me the same as my Kenyan neighbours	Safety and stability
RIS 6*	My Kenyan neighbours mistreat me because I am a refugee	Safety and stability
RIS 7*	Within the past month, the police have stopped me because I am a refugee	Safety and stability
RIS 8*	I am isolated from my fellow refugees	Social bonds
RIS 9	My Kenyan neighbours are concerned about me	Social bridges
RIS 10	I often attend community meetings, sports or other similar events, with a mix of Kenyans and refugees	Social bridges
RIS 11	My Kenyan neighbours and I help each other out if needed	Social bridges
RIS 12	The Kenyan government is working to improve the lives of refugees in my neighbourhood	Social links
RIS 13*	The Kenyan government discriminates against me because I am a refugee	Social links
RIS 14	The local government administrators in my area, such as the local chief, care about refugee issues	Social links
RIS 15	I have just as many opportunities to find formal work as my Kenyan neighbours	Employment
RIS 16	I work with Kenyans every day	Employment
RIS 17	Other people pay me fairly for the work that I do compared to my Kenyan neighbours	Employment
RIS 18	I have access to a Kenyan bank account	Employment
RIS 19	The quality of my house is similar to those of my Kenyan neighbours	Housing
RIS 20*	My landlord treats me differently than my Kenyan neighbours because I am a refugee	Housing
RIS 21	I am permitted to access similar education and training for myself compared to my Kenyan neighbours	Education
RIS 22	I am permitted to access health care services for me and my family just as easily as our Kenyan neighbours	Health

(continued)

Table 3

Continued		
	RIS-English	Domain of integration
RIS 23	If it is possible, I would like to be a Kenyan citizen	Rights and citizenship
RIS 24	I am treated the same as Kenyans by the law	Rights and citizenship
RIS 25	I have an official identification card that is recognized by local Kenyan businesses and authorities	Rights and citizenship

indicates negatively worded item requiring reverse scoring.

Table 4

Cronbach's Alpha Summary		
RIS—Combined	RIS—Somali	RIS—Kinyamulenge
0.861	0.904	0.803

Nairobi ($r = 0.720, p = 0.000$). Results of the zero order calculation yielded a strong positive correlation, indicating that controlling for the above demographics also had very little effect on the strength of the relationship between the two variables ($r = 0.709, p = 0.000$). These results support convergent validity and thereby construct validity, indicating that the RIS is in fact measuring (at least) the sense of community-oriented domains of refugee integration. These results are displayed in Figure 1.

Pilot cohort analysis

Although not the primary purpose of this study, a brief analysis of our pilot study cohort data using the finalized RIS as a dependent variable reveals some interesting findings and can be a useful illustration of the potential use of this scale in future research. A representative sample is not required in a scale development pilot study to assess Cronbach's alpha or DPSs, but is necessary to make useful non-biased conclusions (ex. level of integration) about a given population. We feel statistically comfortable undertaking this analysis on our data set due to the quasi-representative sampling approach utilized during the data-collection phase, while acknowledging potential bias in this population as representativeness was not the intended goal of sampling.

The basic demographic information is summarized in Table 3, broken down by language group and gender. There were a total of 331 respondents

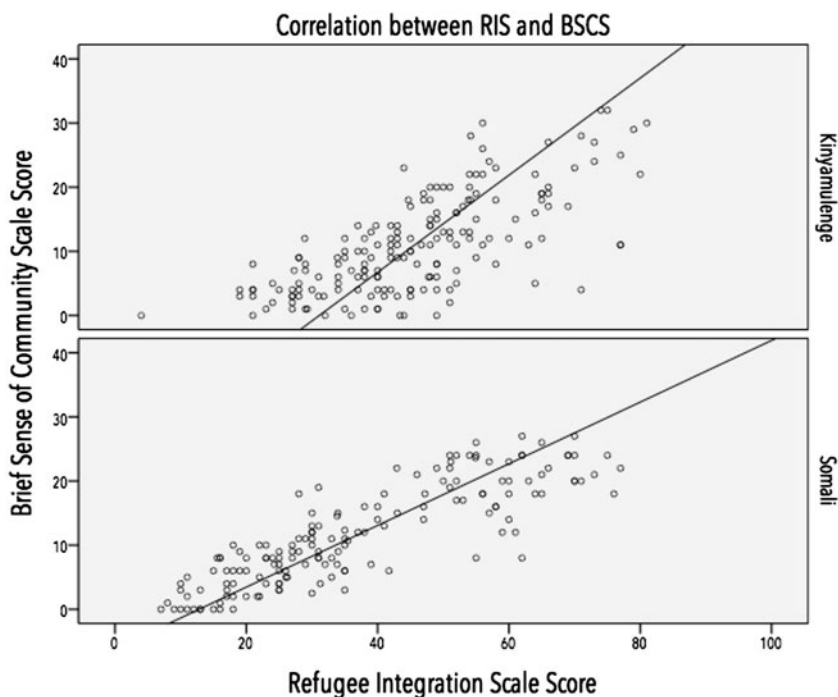


Figure 1

Convergent Validity: Partial Correlations between RIS Score and BSCS Score

representing the two language groups with slightly more male than female respondents and slightly more Kinyamulenge than Somali respondents, as shown in the table.

There are several statistically significant differences between groups in the table that are interesting to highlight. Most importantly, the Kinyamulenge speakers had a statistically significant higher mean score (45.7 ± 14.4 SD) than the Somalis (37.1 ± 18.5 SD). This finding is not surprising given the political and cultural context in Nairobi in which Somalis are subject to higher levels of stigmatization and cultural isolation than ethnically and religiously similar Bantu Great Lakes Region Kinyamulenge speakers. Further gender-based analysis reveals that much of this difference between language groups results from a very low mean score for Somali women (31.0 ± 15.1 SD) compared to Somali men (mean 42.3 ± 19.7 SD). This difference is not noted between genders in the Kinyamulenge-speaking population where women score slightly higher (although not statistically significant). This clear difference in level of integration between the language groups is consistent with prevailing gender norms among Somalis (mostly Muslims) and it is not surprising that Somali women are the least well integrated.

There are several additional statistically significant differences noted between the language groups that highlight further questions. Specifically, the

Kinyamulenge were less likely to have GoK Refugee Status, were younger and had been living in Nairobi for a shorter period of time. This difference is not influenced by differences in gender as above. These variables could be argued to have a theoretical relationship to integration (i.e. increased time in Nairobi leading to increased integration) but the relationship is not clear-cut from this limited data. Despite decreased time as a refugee and lack of access to official government refugee status, the Kinyamulenge scored higher on the RIS. It is likely that these specific items have a positive effect on integration but that there are more powerful unaddressed factors, such as government policy or cultural similarities, that have caused Kinyamulenge speakers to integrate more quickly than Somali refugees (especially women).

Finally, we perform a standard multiple linear regression with simultaneous variable entry to assess the independent contribution of Language, Age, Gender, Marriage Status, Years in Nairobi, GoK Refugee Status and UNHCR Refugee Status to the total RIS score in order to further explore the relationships above and the seeming inconsistencies. This seven-variable model explained only a low amount of the overall variance (20 per cent) in the value of the RIS score with all seven variables being statistically significant ($F(7,323) = 11.53$, $p < 0.05$, $R^2 = 0.20$). This value, although low, is consistent with accepted standards in multiple regression models for complex psychometric constructs.

The standardized β coefficients for this regression are shown in Table 4. All except UNHCR Refugee Status are statistically significant. Age has a negative coefficient, indicating that, as refugees increase in age, they may have decreased integration, although the coefficient is relatively small. All of these require further study to understand exactly how they impact the integration process. One might posit that UNHCR Refugee Status has no impact at all if it does not influence the domains of integration identified in the study. Age may show a negative relationship, albeit small, because younger refugees may be more adaptable to a new context and have greater ability access to various livelihood opportunities and social groups than older refugees. The remaining independent variables report positive coefficients, with Language, GoK Refugee Status and Years in Nairobi all greater than 0.2 and therefore having the most effect in the model. Although not clear from this limited data set, this may indicate that these factors do in fact have a positive influence on a refugee's level of integration. Language group seems the most understandable given the importance of communication in the entire process of integration but, further, language group here is a proxy for cultural origin. We might expect that Kinyamulenge speakers with similar Bantu ethnicity and culture to Kenyans are able to more quickly adapt. The GoK Refugee Status seems to confer some modicum of protection according to the qualitative work above and this may be how it positively influences integration. The length of time in Nairobi is also understandable given the process of building social networks and securing them happens over time.

Discussion

The RIS presented here was developed and validated in order to provide a tool that can provide a deeper understanding of urban refugee integration. Refugee integration has been a poorly understood and often neglected option for refugees in comparison to the more often utilized durable solutions of resettlement and repatriation. The de facto integration of urban refugees among local host communities, however, is occurring with greater prevalence due to the protracted nature of situations which are only expected to increase. In this context, there is an urgent need to better track and monitor refugee integration through a robust, yet practical, tool. We anticipate that the new RIS will provide an opportunity for both humanitarian agencies, development actors, municipal governments and academics to better document and quantify refugee integration and in turn provide improved programming and policies. A tool such as the RIS can also serve to measure the impact of programmes and policies aimed at facilitating integration as a means towards improved stability and welfare.

We have developed this tool according to standard scale development methodology paying close attention to reliability and validity measures as summarized in Table 1. We presented the significant theoretical background work that we undertook in order to appropriately develop this tool, including both a literature review and a qualitative focus group study among our target population. The results of this analysis highlight the important domains of integration and strengthen the content and construct validity of the scale. Second, the RIS has strong internal reliability measures including a good Cronbach's alpha coefficient. Third, by reporting correlation with the Brief Sense of Community Scale, we have shown a degree of construct validity. Finally, a brief statistical analysis of the pilot study cohort using the final RIS score as a variable, although limited, indicates that, within this cohort, the data seems to confirm several potential pathways to improved integration, such as cultural similarity or time in the community, thereby further strengthening the scale's validity.

Despite this, there clearly remains uncertainty regarding the validity of the RIS; are we in fact measuring integration with this scale and the assigned score? As there is no available gold standard or criterion able to measure integration, a definitive answer will remain elusive. Also, due to limitations of our study population and research question, there were several areas of validity and reliability that we were unable to address. Specifically, we did not assess test-retest reliability given the anonymous nature of our refugee respondents. Finally, we do not report here the dropped pilot items or statistics associated with item winnowing such as DPS or item-scale correlations.

Further research and experience with the RIS in multiple contexts will be required to expand the applicability of the RIS. Refugee integration is a universal process but a particular indicator may be more highly context-specific than a scale such as this will allow. We believe, however, that the domains and items used for the scale are based on issues that all refugees face while integrating into local host communities and therefore this type of scale will be

applicable in other regions and ethnic groups. The RIS, however, has not been tested outside of the Nairobi context and external validation will be required in order to confirm that the constructs included are universally applicable.

Finally, we do not intend to minimize the complexity of a multi-domain construct such as refugee integration through reduction to a 25-item scale. As noted above, this is a broad construct with multiple domains. In order to balance the goal of usability with scientific rigor, we decided on a scale that can be implemented in 15–20 minutes and therefore be incorporated into larger surveys. Context-specific analysis and qualitative work including focus groups and key-informant interviews must continue to complement the use of the RIS as part of a larger toolkit wherever it is implemented to understand the local complexities of the integration process. A simplified process of contextualizing this scale for unique environments can also be undertaken to refine the RIS for a specific population and location if deemed appropriate.

The RIS is an important next step in developing a more robust measure and understanding of urban refugee integration among local host communities. The RIS, as a measure of refugee integration, can allow future investigations into the relationship with broader measures of human development and address the working theory that improved refugee integration leads to better welfare. Specific questions about the relationship between refugee integration and health outcomes or economic contributions to host communities can be better studied with such a tool. Furthermore, an increased understanding of refugee integration through tools such as the RIS can help civil society, governments and refugees themselves to develop and implement better ways to encourage and use integration mechanisms as a means of building better lives for urban refugees.

- AGER, A. AND STRANG, A.** (2008) 'Understanding Integration: A Conceptual Framework'. *Journal of Refugee Studies* 21(2):166–191.
- ASSEMBLY, U. G.** (1951) 'Convention relating to the Status of Refugees'. United Nations, Treaty Series 189, 137.
- BIEZEVELD, R.** (2003) *Benchmarking in Immigrant Integration*, April, Rotterdam: European Research Centre on Migration and Ethnic Relations (ERCOMER). pp. 1–53.
- BIJL, R. AND VERWEIJ, A.** (2012) 'Measuring and monitoring immigrant integration in Europe: facts and views'. In Bijl, R. & Verweij, A. (eds) *Measuring and Monitoring Immigrant Integration in Europe: Integration Policies and Monitoring Efforts in 17 Countries*. *The Hague: The Netherlands Institute for Social Research*, pp. 11–42.
- CAMPBELL, E. H.** (2006) 'Urban Refugees in Nairobi: Problems of Protection, Mechanisms of Survival, and Possibilities for Integration'. *Journal of Refugee Studies* 19(3): 396–413.
- CAMPBELL, E. H., CRISP, J. AND KIRAGU, E.** (2011) *Navigating Nairobi*. UNHCR Policy Development and Evaluation Service, January, <http://www.unhcr.org/4d5511209.pdf> (accessed 3 September 2012).
- CHA, E.-S., KIM, K. H. AND ERLÉN, J. A.** (2007) 'Translation of Scales in Cross-Cultural Research: Issues and Techniques'. *Journal of Advanced Nursing* 58(4): 386–395.
- CHAVIS, D. M., LEE, K. S. AND ACOSTA, J. D.** (2008) *The Sense of Community (SCI) Revised: the Reliability and Validity of the SCI-2. ... Community Psychology Conference*. Lisboa, Portugal: 2nd International Community Psychology Conference.

- CRISP, J.** (2004) 'The Local Integration and Local Settlement of Refugees: A Conceptual and Historical Analysis'. *New Issues in Refugee Research*, April, <http://www.unhcr.org/407d3b762.html> (accessed 1 September 2012).
- CRONBACH, L. J.** (1951) 'Coefficient Alpha and the Internal Structure of Tests'. *Psychometrika* 16(3): 297–334.
- DEVELLIS, R. F.** (2003) *Scale Development*, 2nd Edition. Thousand Oaks, CA: SAGE.
- DICKERSON, A., LEARY, K., MERRITT, B., AND ZAIDI, D.** (2011). *Performance measurement for refugee integration programs*. Berkeley Goldman School for Public Policy. Berkeley: University of California.
- DRYDEN-PETERSON, S. AND HOVIL, L.** (2003) *Local Integration as a Durable Solution: Refugees, Host Populations and Education in Uganda* Geneva: United Nations High Commissioner for Refugees (UNHCR).
- FIELDEN, A.** (2008) 'Local Integration: An Under-Reported Solution to Protracted Refugee Situations'. *New Issues in Refugee Research*, June, <http://www.unhcr.org/486cc99f2.pdf> (accessed 1 September 2012).
- FISHER, A. T., SONN, C. C. AND BISHOP, B. J.** (2002) *Psychological Sense of Community*. New York, NY: Springer Science & Business Media.
- GRACIA, E. AND HERRERO, J.** (2004) 'Determinants of Social Integration in the Community: An Exploratory Analysis of Personal, Interpersonal and Situational Variables'. *Journal of Community and Applied Social Psychology* 14(1):1–15.
- HOPKINS, G.** (2011) *Casamance Refugees in The Gambia: Self-Settlement and the Challenges of Integration*. Geneva: UNHCR, Policy Development and Evaluation Service.
- HUXLEY, P., EVANS, S., MUNROE, M., WEBBER, M. AND BURCHARDT, T.** (2006) *Development of a 'Social Inclusion Index' to Capture Subjective and Objective Domains (Phase I): Final Report to the NCCRM*. Birmingham, UK: National Co-ordinating Centre for Research and Methodology.
- JACOBSEN, K.** (2001) 'The Forgotten Solution: Local Integration for Refugees in Developing Countries'. *New Issues in Refugee Research*, July, <http://www.unhcr.org/3b7d24059.pdf> (accessed September 1 2012).
- KLINE, P.** (2013) *Handbook of Psychological Testing*. London: Routledge.
- LEANING, J. AND ARIE, S.** (2000) *Human Security: A Framework for Assessment in Conflict and Transition*. Washington: United States Agency for International Development/Complex Emergency Response and Transition Initiative.
- OBI, N. AND CRISP, J.** (2002) *UNHCR policy on refugees in urban areas: Report of UNHCR/NGO Workshop*. Geneva: United Nations High Commissioner for Refugees Evaluation and Policy Analysis Unit.
- RUBIN, D. B.** (2009) *Multiple Imputation for Nonresponse in Surveys*. New York: John Wiley & Sons.
- STONE, D. AND DE VRIESE, M.** (2004) *Refugee Livelihoods: Livelihood Strategies Options for Congolese Refugees in Gabon. ... and Options for Congolese Refugees in Gabon*. Geneva: United Nations High Commissioner for Refugees (UNHCR).
- SULLIVAN, T. J.** (2003) *Methods of Social Research*, February, pp, 1–16, http://books.google.com/books?id=vQGUQAAACAAJ&dq=Methods+of+social+research+Sullivan&hl=&cd=1&source=gbs_api.
- SUNJIC M., AND DOBBS L.** (2010) 'Central Europe gets a new tool to measure refugee integration', UNHCR News. United Nations High Commissioner for Refugees. <http://www.unhcr.org/news/latest/2010/2/4b797b3e9/central-europe-gets-new-tool-measure-refugee-integration.html> (accessed October 30 2013).
- UNHCR** (2009) UNHCR Policy on Refugee Protection and Solutions in Urban Areas, Geneva: United Nations High Commissioner for Refugees, <http://www.unhcr.org/en-us/protection/hc-dialogue%20/4ab356ab6/unhcr-policy-refugee-protection-solutions-urban-areas.html> (accessed October 30 2013).
- UNHCR** (2013) 'War's Human Cost'. *UNHCR Global Trends*. Geneva: United nations High commissioner for refugees (UNHCR).

Appendix I

Refugee Integration Scale—English, Somali and Kinyamulenge Translations

	RIS—English	RIS—Somali	RIS—Kinyamulenge
RIS 1	I have begun to think of myself as a Kenyan	Waxan bilabay inankufikiro inan ahay Kenyan	Natangiye kwiyumva nkumu nya Kenya
RIS 2	I am comfortable speaking with Kenyans in Kiswahili to get things done in my daily life	Aniga waxan darema daganan marka dadka Kenyanka kulaha-dlayo luqada Kiswahiliga malin kasta oo nolasheyda katir san	Niakibazo ngira mukuganira igiswahili mubuzima bwanyye bwa burigihe na banyakenya
RIS 3	I often watch TV or listen to radio in Kiswahili	Aniga marmar waxan dawada tiffiga iyo waxan dhagestaa radiyaha sawaxiliga	Kenshi ndeba televiziyo cyangwa nkumva radiyo mu giswahili
RIS 4	I feel at home in Nairobi	Aniga waxan dharema Nairobi iney-tahay gurigeyga	Numva ndi iwacu muri Nairobi
RIS 5	The local police treat me the same as my Kenyan neighbours	Aniga sifcan ayay ila dhaqman boo-liska sida dadka Kenyanka ah oo il dhaw	Abaturanyi banije b'abanyakenya banyitaho
RIS 6*	My Kenyan neighbours mistreat me because I am a refugee	Aniga waan amina askarta iney llad-haqman sida dhadka Kenyatiga aah oo kale	Abapolisi bashinzwe akarere ntuyemo bamfashe kimwe nk'abaturanyi banije b'abanya Kenya
RIS 7*	Within the past month, I have been stopped by the police because I am a refugee	Dadka Kenyatiga aah wexe lladhaq-man six un wayo waxan ahay qaxooti	Abaturanyi banije b'abanyakenya barantoteza kubera ko ndi impunzi
RIS 8*	I am isolated from my fellow refugees	Aniga marmar waxan kalaqeb gala kulamada qomiyadaha aah, dadka qoxotiga ah	Nitabira kenshi inama z'amashyirahamwe hamwe n'izindi impunzi
RIS 9	My Kenyan neighbours are concerned about me	Saxib day da dhow wa Kenyaan	Mfite inshuti z'inkoramutima z'abanyakenya

RIS 10	I often attend community meetings, sports or other similar events, with a mix of Kenyans and refugees	Aniga marmar waxan kaqebgala dhacdooyinka sida kulanka qoomiyada ciyarahaa iyo dhacdooyinka lamid aah kuwaso isugud-haxjiro dadka Kenyanka aah iyo dadka qoxotiga	Kenshi nitabira inama, imikino cyangwa se ibindi birori hamwe n'abanyakenya ndetse n'impunzi
RIS 11	My Kenyan neighbours and I help each other out if needed	Aniga iyo dadka Kenaytiga wan isawina marka lobahado	Niye n'abaturanyi banjye b'abanya Kenya turafashanya iyo bikenewe
RIS 12	The Kenyan government is working to improve the lives of refugees in my neighbourhood	Dowlada Kenya waxe ushaqenesa iney badasho nolosha dadka qox-otiga ee qoomiyadayda	Leta ya Kenya irimo gukora ibishoboka byose kugira ngo ubuzima bw'impunzi burusheho kuba bwiza mu karere ntuyemo
RIS 13*	The Kenyan government discriminates against me because I am a refugee	Aniga sikaduwan dadka Kenyanka ayey dowlada Kenya lladaqanta wayo waxan ahay qoxoti	Leta ya Kenya iramvanguura/inshyira kur-uhande/ inyigizayo kuberu ko ndi impunzi
RIS 14	The local government administrators in my area, such as the local chief, care about refugee issues	Dadka xafada kataliyo sida jifka o kale waykataxadaran nolasha qaxootiga	Ubuyobozi bw'akarere ntuyemo nka chifu, bwita ku bibazo by impunzi
RIS 15	I have just as many opportunities to find formal work as my Kenyan neighbours	Waxaan haystaa naasiib baadan aankuradiyo shaqo sida dadka Kenyanka aah oo kaleeto	Mfite amahirwe angana n'aya baturanyi banjye b'abanyakenya mu guhabwa akazi
RIS 16	I work with Kenyans every day	Waxaan lashaqeyaa Kenyanka maalinkasta	Nkorana n'abanyakenya buri mumsi
RIS 17	Other people pay me fairly for the work that I do compared to my Kenyan neighbours	Dadk kale waxey isiiyan xaqeyga sida kenyan ka kale	Abo nkorera bandiha kimwe n'abanyakenya

RIS 18	I have access to a Kenyan bank account	Waxaan isticmala bangi accounti Kenya ahi	Nshobora gufungura konte muri banke ya Kenya
RIS 19	The quality of my house is similar to those of my Kenyan neighbours	Muqalka gurigeega wuxuu lamid yahay guryaha Kenyanka oo kale	Inzu ntuyemo imeze nkiz' abaturanyi banjye b'abanyakenya
RIS 20*	My landlord treats me differently than my Kenyan neighbours because I am a refugee	Ninka guriga iskaleh wuxu ila dhaqma sikaduwan Kenyanka kale maxayelay waxaan ahay qaxooti	Nyiri amazu andhisha menshi kurusha abanyakenya babaturanyi kubera ko ndi impunzi
RIS 21	I am permitted to access similar education and training for myself compared to my Kenyan neighbours	Aniga waan isticmatikarnaa sida waxbarasho iyo tobabar lamid ah dadka Kenya oo kaleeto	Nemerewe kwiga no gukurikirana amahugurwa nk'abaturanyi b'abanyakenya
RIS 22	I am permitted to access health care services for me and my family just as easily as our Kenyan neighbours	Aniga waxaan awooda inaan isticmalo xaruumaha cafimadka aniga iyo familikayga sifudiud sida Kenyan oo kaleeto	Nemerewe kwizuza no gu habwa serivisi z'ubuzima hamwe n'umuryango wanjye ku buryo bworoshye kimwe n'abaturanyi bacu b'abanya Kenya
RIS 23	If it is possible, I would like to be a Kenyan citizen	Haday surtugal tahay waxaan jee laan lahaa inaan noqdo Kenyan	Nifuza kuba umwene gihugu wa Kenya niba bishoboka
RIS 24	I am treated the same as Kenyans by the law	Cadalada waxay ila dhaqanta sida dadka Kenyanka ah	Nijye mflashwe nk'abandi banyakenya imbere y'amategeko
RIS 25	I have an official identification card that is recognized by local Kenyan businesses and authorities	Waxaan heystaa warqad ganaesi oo la aqoonsan yahay	Mfite icyangombwa cyemewe na leta ya kenya mu buyobozi no mubucuruzi

*indicates negatively worded item requiring reverse scoring.

*Appendix II***Adapted Brief Sense of Community Scale—English, Somali and Kinyamulenge Translations**

	BSCS—English adapted	BSCS—Somali	BSCS—Kinyamulenge
BSCS 1 Needs fulfillment	I can get what I need from my Kenyan neighbours	Waxaan rabo waanka helaa Kenyaanka deriskayga ah	Nshobora kubona ibyo nifuza mubaturanyi b'abanyakenya
BSCS 2 Needs fulfillment	My Kenyan neighbours help me fulfill my needs	Daaka Kenyanka aa ee dariska wexey iga caawiyaan waxaan ubahanahay	Abaturanyi baniye b'abanya-kenya bamfasha kubona ibyo nifuza
BSCS 3 membership	I feel like a member of the Kenyan community	Waxaan dareema inan kamid ahay bulshada Keeyanka	Numva ndi umwe mu banyakenya
BSCS 4 membership	I belong among my Kenyan neighbours	Waxaan katirsanahay Keeyanka dariskeeyga	Nibara nk'umwe mubaturanyi baniye b'abanyakenya
BSCS 5 influence	I have a say about what goes on in the my neighbourhood	Waxaan wax kadhihi kara waxa kasocda dariskeeyga	Mfite ijambo mubaturanyi baniye
BSCS 6 influence	People in my neighbourhood are good at influencing one another	Dadka dariskeeyga wexey kuficanyihiin sojiisashada mida midk kale	Abaturangi baniye baterana umwete
BSCS 7 emotional connections	I feel connected to my Kenyan neighbours	Waxaan dareema inan kuxariirsanahay keeyanka dariskeeyga	Mfite ubwisanzure mu baturanyi bange b'abanyakenya
BSCS 8 emotional connections	I have a good bond with Kenyans living in my neighbourhood	Waxaan xariir waragsan laleyahay dadka Kenyanka ah	Mbanye neza n'abanyakenya duturanye