

## **Acknowledgements**

Thank you to everyone who has made my time at Brown so worthwhile.

My parents- Thank you for your unwavering support and undivided attention. As your only child, I aspire to make you proud and serve as your support system down the line. Nothing but love and appreciation for you both.

My grandparents- Thank you for sparking my passion for education and the importance of storytelling.

My friends- Thank you for always making me laugh. I hope I can return the favor.

My faculty mentors- Thank you to my advisor, Dr. Bulled, for inspiring my work with refugees and believing in my capabilities every step of the way. This project would not have been possible without your help. Additionally, thank you to my thesis reader, Dr. Risica, your enthusiasm for nutrition is contagious.

Fellow Collaborators- Thank you for your willingness to welcome me into your space and treat me as one of your own.

Table of Contents

Introduction	v
Background	vii
Methods	xiv
Results	xv
Quantitative Phase	xv
Qualitative Phase	xxii
Social Network Analyses Phase	xxvii
Discussion	xxix
Limitations	xxx
Recommendations	xxxii
References	xxxiii
Appendices	xli

Examining the dynamics of food insecurity, stress, and social networks in recent Afghan  
refugees in the U.S.

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B.A., Salve Regina University, 2020

M.B.A, Salve Regina University, 2021

Thesis

Submitted in partial fulfillment of the requirements for the Degree of Master of Public Health

in the School of Public Health at Brown University

## **Introduction:**

Now more than ever, humans are migrating at an unforeseen, rapid pace. According to the IOM World Migration Report 2022, “as of 2020, 89.4 million individuals were living in global displacement, 5.4 million more than in 2019” (IOM, 2022). Although a portion of individuals migrate out of choice, a growing number of individuals migrate out of necessity. To further shift this global burden into perspective, the UNHCR declares that “by the end of 2021, 89.3 million people were forcibly displaced worldwide because of persecution, conflict, violence, or human rights violations.” This includes 27.1 million refugees as well as 4.6 million asylum seekers (UNHCR, 2021). As war and economic hardship force a rising sum of individuals to flee their country of origin, this population is less likely to return (World Economic Forum, 2021).

Due to a host of ongoing influences, including social isolation and socioeconomic barriers, stressors relating to the asylum-seeking process are widely associated with sub-optimal mental health outcomes (Li, 2016). More specifically, “Middle Eastern migrants have been shown to have high rates of mental health and well-being problems because of a number of factors, such as limited host language proficiency, marginalized cultural identity, discrimination, lack of opportunity to utilize their skills and knowledge, trauma experienced prior to migration, and a highly stressful process of adjustment” (475, Hashemi, Marzban, 2020). In addition to the stress affiliated with the resettlement process, post-traumatic stress disorder (PTSD) tends to cluster among refugee families (Sack, Clarke, Seeley, 1995). Given that numerous refugees are abandoning home in search of security, it is imperative to note that humanitarian crises often follow with a breakdown of law and protection of individuals, increasing the risk of traumatic events (Crosby, 2013).

Contributing to mental health challenges, refugees often struggle to find employment, which provides social and economic stability that helps generate a sense of wellbeing. For refugees, a lack of formal education and language literacy are escalating risks for unemployment. Further, unemployment jeopardizes mental health and can result in material deprivation as well as increased feelings of embarrassment or social isolation (Besier, Hou, 2006).

Connected to employment concerns, studies conducted globally establish that recent immigrants experience a higher prevalence of household food insecurity as compared to non-immigrants (Chilton et al., 2009; Kasper et al., 2000; Kiehne & Mendoza, 2015; Quandt et al., 2006; Tarasuk, 2015; Vahabi et al., 2011; Winham & Armstrong Florian, 2015). Studies indicate that migration from low to high resource settings increases one’s likeliness of developing a malnutrition related disease. This is largely due to economic and cultural factors, such as dietary simplifications with overconsumption of high energy, low-cost, nutrient-poor products, and beverages (Dondi et al., 2020). In a group of refugees connected to resettlement centers in the southeast US, 77% were food insecure and almost 50% reported that they had difficulty navigating the food environment (e.g., encountering unfamiliar food choices) (Nunnery et al., 2015). As expected, lack of income was associated with food insecurity, but reported difficulty

navigating the food environment was also strongly correlated with food insecurity (Hadley et al., 2010). Food insecurity is recognized as closely connected with biosocial factors and consequences, including health and social networks (Dhokarh et al., 2011; Hadley & Crooks, 2012; Hadley & Patil, 2008; Himmelgreen et al., 2007; Weaver et al., 2014).

Although a proportion of the world's refugees are resettled in developed countries with abundant food supplies, this does not necessarily equate to a marked increase in overall wellbeing. Indeed, data suggests that the nutritional status and food insecurity status of refugees resettled in these countries can remain or become compromised (Hadley, 2010). In addition, language fluency, permanent housing, and employment status directly impact a refugee's likelihood of experiencing food insecurity (Piwowarczyk et al., 2008). Individuals who constantly live with concern about not getting enough food, having to skip meals, or being chronically hungry are less inclined to fulfill social expectations and are deprived of social resources that support optimal mental health and wellbeing (Elgar et al., 2021). Severe levels of uncertainty provoke a stress response that induces feelings of powerlessness that heighten anxiety and depression (Moradi, 2020).

Serving as a mediator, social connectedness empowers refugees to lean into the resettlement process while retaining a cultural identity (Vuningoma, Lorini, Chigona, 2021). Moreover, qualitative data suggests that community ties are paramount to sustaining refugees' well-being. When agency and governmental support concludes, individuals heavily rely upon the following social structures to help bridge the support gap: family, friends, and churches (Agbényiga et al., 2012). On top of providing economic stability, social connectedness permits refugees to successfully utilize nutrition assistance programs as well as capitalize on community-level food scenes (Vu et al., 2020).

Social support offers a stress-buffering effect that can boost mental and physical health (Gottvall M, Vaez M, Saboonchi F, 2019). Scholarship on migration recognizes the importance of social connections to access information, guidance, and material support during the processes of migration and resettlement (Akkaymak, 2016; Boyd, 1989; Chelpi-den Hamer & Mazzucato, 2010; Chimhowu & Hulme, 2006; Fay, 2012; Gold, 2005; Strang & Ager, 2010; Wissink & Mazzucato, 2018). Social connections may assist in mitigating the challenges of resettlement as relates to food insecurity.

Studies indicate that tapping into social networks within newfound communities enable refugees to cope with stressful, postmigration events and promote positive psychological functioning (Fernandez et al., 2015). Pre-existing literature reveals that critical events directly enhance or impede a refugee's availability of resources and communication infrastructures. Often, social networks evolve according to factors such as sex or length of stay in a specific 'host' country.' As expected, migrants develop more interethnic and local ties as their length of residency increases (Wissinick, Mazzucato, 2017). The assumption that migrants can "access dense networks within close-knit local communities simplifies the experiences of newly arrived migrants, underestimating difficulties they may face in accessing support" (Ryan et al., 2008). In

particular, the changeable nature of social networks highlights the inextricable link between social capital and successful integration among recent refugees.

This research investigates the experiences of stress and food insecurity of recent Afghan refugees and the potential mitigating impact of specific social network structures. Although Afghans had collaborated with the U.S. government over the past decade, many feared the violent repercussions that would result from the Taliban reclaiming power (Faiez, Akhgar and Krauss 2021). Despite Western initiatives to evacuate as many Afghans as possible within such a short time span, there are hundreds of U.S. passport and green card holders with immediate family members who are trapped in Afghanistan unable to flee (Spinner, 2021). Findings from this study can offer insights into migrant experiences of stress and food insecurity, how these experiences impact negative health outcomes, and how developing certain social networks structures and dynamics can mitigate the harms.

### **Background:**

Following the U.S. evacuation in August 2021, more than 2.7 million Afghan refugees were registered worldwide (Gwisworld, 2022). Since the Taliban has reclaimed control, many Afghans are haunted by the group's repressive past- deprivation of basic women's rights, frequent floggings, amputations, and mass executions (Shear, Stevens, 2022). Among other refugee groups, Afghans are reliant upon social media platforms to maintain contact with loved ones, especially those still residing in Afghanistan. After Afghanistan's digital transfer of power, the Taliban heavily relies on the Internet for propaganda purposes. However, its restrictive front has prompted a significant number of Afghans with ties to the former government or the U.S. to dissolve social media profiles, leave chat groups and delete old messages (Mozur, Rehman, 2021). Naturally, such intense levels of suppression amplify stress levels and heighten fears centered around security.

### **The Global Burden of Food Insecurity**

As technology and modern-day advancements become more globalized, the way food is consumed, distributed, and produced has shifted dramatically. In accordance with the Food and Agriculture Organization's (FAO) standards, while many people may not be 'hungry' in the sense that they are suffering physical discomfort caused by a severe lack of dietary energy, they may still experience food insecurity. A person is deemed 'food insecure' when they lack regular access to enough safe and nutritious food for normal growth and development (FAO 2022). Looming fear of insufficient access can spark various cases of malnutrition and lead to serious consequences for health and well-being. It is estimated that between 720 and 811 million people in the world experienced food insecurity in 2020. Approximately 660 million people may still face food insecurity in 2030, especially due to lasting effects of the COVID-19 pandemic (United Nations).

Consequently, the global impact of food insecurity, maternal and child undernutrition and micronutrient deficiencies affect approximately half of the world's population. In fact, more than 50% of all under-5 deaths globally are attributed to undernutrition (Al-Geffari, Metab, 2012). In addition, the unpredictability of global climate change poses an even greater threat to social groups who are socioeconomically disadvantaged and vulnerable (Betts et al., 2013). In concert with limited self-sufficiency, minimal control over the global food system promotes inferior diets (Dixon et al., 2009). Ultimately, global food insecurity is a complex, vicious cycle that is fueled by a host of ongoing influences.

Nutrition disparities are highly prevalent in inequitable social conditions, especially within subpopulations of low- and middle-income countries (LMICs) (Perez-Escamilla, 2018). Countries with relatively low public social spending have larger numbers of food bank users. For example, the U.S. has 12% of its population using food banks and spends 19.7% of Gross Domestic Product (GDP) on social expenditure. Whereas Belgium has ~1.9% total population using food banks and spent 29.6% of GDP on social expenditure in 2011 (Pollard & Booth, 2019). Global studies indicate that initiatives that seek to improve national food security but fail to improve household incomes are less likely to achieve the desired effect (Allee et al., 2021).

Unlike LMICs, the issue of food insecurity in higher income countries is not rooted in a lack of food. Rather a reliance on charity-based food models which exacerbates societal inequalities (Riches, 2002). For instance, in 2020, 35.3% of U.S. households with incomes below the Federal poverty line were food insecure. Rates of food insecurity were substantially higher than the national average for single-parent households, and for Black and Hispanic households. Food insecurity was more common in both large cities and rural areas than in suburban areas (USDA). Black and Hispanic American communities disproportionately suffer from food insecurity. In fact, 19.1% of Black households and 15.6% of Hispanic households experienced food insecurity in 2019. White Americans fell below the national average, with 7.9% experiencing food insecurity (Silva, 2020).

To mitigate the burden of food insecurity, the Supplemental Nutrition Assistance Program (SNAP) (also referred to as 'food stamps') was designed to provide aid and nutrition assistance benefits for eligible Americans. Throughout the years, SNAP has evolved into a highly stigmatized program that is widely utilized by marginalized communities. In turn, the controversial, politically charged nature of this program promotes a feeling of hesitancy and shame among eligible participants. Qualitative research reveals that SNAP recipients' coping strategies toward the end of the month often include skipping meals and seeking critical food support from family and friends (SK et al., 2020).

Considering the disruptive nature of the Covid-19 pandemic, demand for SNAP continues to grow. According to an analysis from the *New York Times*, SNAP participation grew by 17% from February 2020 to May 2020, three times faster than in any previous three-month period (DeParle, 2021). In addition, researchers at Northwestern University found that food insecurity had more than tripled among households with children to 29.5% at the end of June

2020 (Schanzenbach, Pitt, 2020). Put simply, the Covid-19 pandemic amplified pre-existing disparities, especially among America's most vulnerable.

According to the U.S. Department of Agriculture (USDA), food insecurity is explicitly defined as: a household-level economic and social condition of limited or uncertain access to adequate food. However, food insecurity is not synonymous with hunger. In fact, hunger is an individual-level physiological condition that may result from food insecurity (USDA). Over the past year, "one in 25 (3.9 percent) of households in the U.S. experienced very low food security, a more severe form of food insecurity, where households report regularly skipping meals or reducing intake because they could not afford more food" (FRAC, 2020). In the U.S., before other factors are controlled for, lower income households and households headed by an African American or Hispanic person, a never-married person, a divorced or separated person, a renter, a younger person, or a less-educated person are all more likely to be food insecure than their respective counterparts. Also, households with children are more likely to experience food insecurity than those without (Gunderson, Ziliak, 2015).

Prior to dissecting the multidimensional nature of food insecurity, it is imperative to differentiate between food access and availability. Sufficient availability does not ensure access to adequate, nutritious food. Access refers to food choices available depending upon a person(s) income, prevailing prices, and formal or informal safety net arrangements through which they can access food. Ultimately, political disenfranchisement widely contributes to the disproportionate health disparities associated with food access (Barrett, 2010). Daily, individuals make food choices that are governed by the availability of places to purchase food, transportation to them, and access to well-paying jobs with good benefits (Rodriguez, Grahame, 2016). From an economic lens, food itself is a private good. However, food security is a public good. Therefore, nutritious foods and healthy diets are deemed 'private' goods that enrich the social and economic costs of malnutrition and diet-related illnesses (Rocha, 2006).

### **Influences that Drive Food Insecurity and Sub-Optimal Health Outcomes Among Refugees**

Evidence suggests that the link between food insecurity and malnutrition is associated with sub-optimal dietary quality in adults. For instance, food-insecure adults consume fewer fruit, vegetables, and dairy products compared to food-secure adults. Resulting in minimal consumption of vitamins A and B6, calcium, zinc, and magnesium (Christian et al., 2020). Dietary compromises promote adverse health outcomes such as obesity and chronic diseases (Sun Lee et al., 2012). Consequently, individuals experiencing food insecurity are also likely to undergo psychological distress due to lack of affordable, culturally appropriate food. Severe levels of uncertainty provoke a stress response that induces feelings of powerlessness that heighten anxiety and depression (Moradi, 2020). Moreover, individuals who constantly live with worries about not getting enough food, having to skip meals, or being chronically hungry are less inclined to fulfill social expectations and are deprived of social resources that support optimal mental health and wellbeing (Elgar et al., 2021).



Studies indicate that migration from low to high resource settings increases one's likeliness of developing a malnutrition related disease. This is largely due to economic and cultural factors, such as dietary simplifications with overconsumption of high energy, low-cost, nutrient-poor products, and beverages (Dondi et al., 2020). Although a proportion of the world's refugees are resettled in developed countries with abundant food supplies, this does not necessarily equate to a marked increase in overall wellbeing. Indeed, a variety of data suggest that the nutritional status and food insecurity status of refugees resettled in these countries can remain or become compromised (Hadley, 2010). As expected, children of migrant families are known to be at a higher risk of diet-related morbidities due to complex variables including food insecurity, cultural and religious beliefs, and sociodemographic factors like ethnicity, socioeconomic status, and education (Dondi et al., 2020).

Dietary acculturation, which is both the outcome and the process through which immigrants acquire and react to food-related habits is directly linked to the occurrence and severity of food insecurity. For example, recently resettled food shoppers may seek out items commonly consumed in their country of origin. However, the prices of which may not be compatible with their current monetary situation (Hadley et al., 2007). Alongside limited funds, the dangers associated with high intake of processed and energy-dense foods contributes to chronic disease risk for refugees migrating to high resource countries, particularly the U.S. In summary, most refugees experience food intake changes after U.S. resettlement. It is important to note that the amount and direction of changes vary based on refugee characteristics such as: age, region of origin, past food deprivation experience, current socioeconomic status, food insecurity status, and length of stay in the U.S. (Wang et al., 2016).

From a conceptual perspective, the contrast between the U.S. food scene and the rest of the world is overwhelmingly stark. Migrants frequently report issues centered around: language barriers, transportation issues, and an inability to do comparative shopping. Also, the literacy-demanding social service system of the U.S. can inhibit one's ability to obtain the necessary social services to stay healthy (Nunnery, Dharod, 2017). As previously mentioned, limited English proficiency enhances the obstacles associated with enrolling in governmental and charitable food assistance programs. Studies have found that higher levels of self-efficacy were associated with lower levels of food insecurity. Conversely, higher levels of heritage language proficiency were related to lower levels of food insecurity (Kamimura et al., 2016)

Furthermore, social isolation may hinder individuals from obtaining information about food assistance programs, receiving aid for services navigation, and sharing or borrowing food from family, friends, and neighbors (Vu et al., 2020). Unfortunately, eligible immigrants "utilize formal social service programs at lower rates than their U.S.-born counterparts for many reasons, including complex application, eligibility, documentation, and recertification requirements, transportation barriers and work schedules, stigma, fear of discrimination and deportation, and previously discussed linguistic and cultural barriers" (Vu et al., 2020). Unforgiving social programs and limited English proficiency perpetuates a cycle of poverty. Key determinants of health such as income and education greatly determine the success of a refugee's resettlement

process. In a study that examined the relationship between socioeconomic status and food insecurity levels among refugees in the U.S., income and having more than one year of education was associated with lower food insecurity ( $p < .05$ ), while “difficulty in the food environment” was associated with high food insecurity ( $p < .01$ ) (Hadley et al., 2010).

## **Refugee and Migrant Food Insecurity in Massachusetts and Rhode Island**

Since this research will focus on Afghan refugees resettling within the state of Massachusetts and Rhode Island specifically, it is imperative to understand the region’s current position on the topic. Recently, a survey of immigrant communities conducted in 16 languages in Massachusetts in July 2020 found that 59% of the households reported that they do not have enough food to eat. Among households with at least one undocumented family member, that jumps to 78% (International Rescue Committee, 2022).

Although some refugees are eligible for public relief benefits, they do not always feel safe accessing them. According to a study by the Urban Institute, “1 in 7 adults in eligible immigrant families – 13.6% – reported that they did not enroll in programs like Medicaid, the Children's Health Insurance Program (CHIP), SNAP and housing subsidies last year because of worries that it would affect their legalization efforts” (Haley, et al., 2020). This is a recurrent trend among refugees resettling within the U.S. Given the fear and intensity associated with forced migration, refugees are unwilling to jeopardize immigration status for benefits that may weaken their socio-status. Stigmatization perpetuates this hesitancy and amplifies the struggles associated with the resettlement process.

Prior to settlement, many Afghan refugees have experienced significant life-threatening traumas that have evoked depression and anxiety disorders, including high rates of PTSD. Further, since a large portion of Afghan refugees identify as Muslim, this increases their risk of becoming targets of discrimination. In conjunction with financial difficulties and cultural barriers upon settlement, the stigma surrounding mental health issues further minimizes likelihood of achieving economic success (Alemi et al. 2014). Due to the growing influence of American nationalism, the concept of maintaining an ‘identity’ can feel rather daunting and even polarizing. During and after resettlement, traditional meals allow refugees to preserve and maintain their cultural identity.

Compared to the traditional American diet, most Afghans consume foods permitted by Halal law. Given the recent influx of Afghan refugees and limited financial means, food bank staples (boxed mashed potatoes or pasta) invoked feelings of unfamiliarity or loneliness (DeJesus, 2021). To prevent homesickness and display solidarity, multiple U.S. based NGOs have launched initiatives that are designed to deliver culturally relevant foods to Afghan refugees (Thurston, 2022). Prioritizing culturally relevant food options shows Afghans that they do not have to sacrifice their identity to advance within the U.S. However, as other refugee groups take precedence and require further support, it is not likely that these NGOs will continue to

accommodate such tastes. Curtailing culturally relevant options on such short notice can directly impact mental health outcomes, particularly stress.

### **Afghan Refugees and Stress**

Pre-existing literature establishes that “socioeconomic, social, and interpersonal factors, as well as factors relating to the asylum process and immigration policy affect the psychological functioning of refugees” (Li, Liddell, Nickerson, 2016). Naturally, perpetual stress responses increase one’s likelihood of releasing hormones which compromise immune system functioning as well as physical illness. Following the immediate fight or flight response, other physiological reactions include longer lasting stages such as the Alarm phase, Resistance phase, and Exhaustion phase (Selye, 1974). As expected, each phase plays a paramount role when it comes to maintaining optimal mental and physical health. Further, “refugees who seek shelter from experiences of war or political persecution, often come under a great number of life-threatening stressors for themselves and their families” (Yakushko, Watson, & Thompson, 2008). Moreover, the uncertainty that accompanies dangers affiliated with the immigration process can contribute substantially to increased stress levels (Saldana, 1992). Compared to other mental illnesses such as depression, stress is present at debatably every component of the immigration process. In conjunction with forced displacement, poor socioeconomic conditions and lack of social integration exacerbate pre-existing mental health disparities, particularly stress.

To quantify the impact of stress among Afghan refugees, approximately 41% experience stress, meanwhile 46.5% suffer from PTSD (Kurt, et al., 2022). Considering Afghanistan’s volatile sociopolitical climate, many Afghans have experienced potentially traumatic events such as witnessing atrocities, prolonged deprivation as well as the loss of loved ones either in their home country or en route to destination countries. Ultimately, all situations negatively impact mental health and may undermine an individual’s adaptive abilities (Alemi, Stempel, 2018). In addition to these inequities, Afghan refugees are susceptible to discrimination even after integrating in newfound territory. After the tragic events of September 11, 2001, Muslim immigrants have been targets of discrimination in Western countries and feel forced to suppress their cultural identity to obtain stable employment or housing. Despite its ‘collectivist’ front, Afghanistan is a multiethnic society that has long standing ethnic divisions (Rezaei, Adibi, Banham, 2021). Although these divisions gradually dissolve upon resettlement, it can directly impact resettlement outcomes, especially among refugees who belong to a religious minority.

### **Afghan Refugees and Social Networks**

More recently, the concept of social networking has become increasingly popular among cultural anthropologists as one method of understanding behavioral patterns on larger scales (Mitchell, 1974). Functionalities of social networking such as contact with loved ones, allow

anthropologists to recognize both social support and mobilization developments (Utz, Breuer, 2017). Ultimately, “characteristics of networks such as socio-economic status, education level, resources, or power of the constituent network members influence the formation of weak ties and the form of social capital gained” (Mishra, 2020). Social relationships, which are contingent on access to social networks, promote engagement in social activities and broaden entry to various social support groups. As such, these social factors positively impact health outcomes and contribute to strong cognitive function (Kelly et al., 2017). In fact, prior studies have indicated that social-emotional support is paramount to reducing and regulating stress levels (Goodwin et al., 2001).

Posttraumatic-stress-disorder (PTSD) is one of the most common mental health conditions among Afghan refugees resettled in developed countries (Ahmad, Othman, Lou, 2020). To effectively combat such disparities and produce favorable resettlement outcomes, perceived social support is key. According to the WHO, the impact of stressors can be buffered by protective factors such as access to employment services, social support, proficiency in the language of the host country, and family reunification (WHO, 2021). As such, social connectivity bridges the gap between high levels of stress and self-sufficiency. Studies indicate that “intact family bonds are an essential element for refugees, especially those who originate from communities with strong social bonds and ‘collectivist’ values, so that feelings of safety and positive mood ensue with abilities to fight mental health worries” (Ahmad, Othman, Lou, 2020).

As seen among Syrian refugees in Canada, having family nearby is a critical source of social support. On the other hand, individuals who lacked close contact with relatives were likely to experience higher levels of stress and isolation. This is largely since a considerable proportion of refugees “have great concern for family members who remained in Syria or in a precarious situation in the surrounding countries” (Hanley et al., 2018). Constructing social capital directly affects social cohesion and economic stability. For instance, Bloemraad (2006), who compared the political integration of Vietnamese refugees in the U.S. to Portuguese immigrants in Canada, uncovered drastic differences in naturalization and political participation between the two groups. This distinctiveness is because the Canadian government “promoted citizenship and funded community groups and language instruction to facilitate political engagement and integration by contrast, in the United States, the government did not encourage refugees to become citizens; the relationship between the government and its citizens is more distant and results in less political engagement by refugees” (672, Bloemraad 2006). Social support from both loved ones as well as newfound governments enhance refugee integration and improve general well-being. Maintaining a coherent narrative or reconstructing a social network is especially dangerous for refugees who are emotionally deprived. The ability to trust is radically undermined when integrating and forging a social identity advances poor mental health conditions (Strang, Quinn, 2019).

For refugees that lack pre-existing networks within their new home country, the resettlement process can be challenging to navigate. In the U.S., resettling is bureaucratic and

selective. Critics of high levels of refugee acceptance, including former President Trump, leverage political strategy by exploiting vulnerable populations. Despite stigmatization and political rumors, an exhaustive report published by the office of the chief economist at the State Department found “robust causal evidence that there is no adverse long-term impact of refugees on the U.S. labor market” (Mayda, 2017). Although disproving such false, yet damaging claims serve as a milestone for refugees, it will not halt racist behavior. Failing to disentangle the inextricable relationship between refugee status and socioeconomic rank reinforces stigmatization and perpetuates bigotry. Ultimately, this research aspires to provide participants with a voice that will allow supporting organizations to tailor their mission to further accommodate a wider array of refugees.

### **Methods:**

This study was conducted in Providence, RI and Worcester, MA. As a mixed methods study, it incorporated interrelated research phases including a qualitative phase (semi-structured interviews), a quantitative phase (quantitative survey), and a social network analysis phase. Although each phase is independent of one another, results helped determine if correlations existed between indicators of food insecurity and stress. It is important to note that although participants were allowed to complete all three elements of the study, information they provided for each phase was not linked.

Following the U.S. evacuation in August 2021, Worcester and Providence received a high influx of Afghan refugees. Collaborating with key supporters of the refugee community enabled the research team to develop a further understanding of Afghan culture. In Providence, connections were established with the Refugee Dream Center. In Worcester, connections were established with the Worcester Islamic Center, UMass Family Health Center, and Welcoming Alliance for Refugee Ministry.

### **Study Design**

For the semi-structured, qualitative interviews, an interview guide was developed to gain perspective among Afghan refugees on experiences of food acquisition, food quality, and shared food-related experiences. The intention was to look for a broad scope of issues influencing food access and food related wellbeing. Interviews lasted approximately 45 to 60 minutes, were audio recorded, and transcribed verbatim. After the interview, each participant received 25 USD for their time. Once no new ideas were presented, the code book was finalized, and all interviews were re-coded. Qualitative interviews were coded based upon themes found in all interviews. Coding was inductive and assessed for different ideas presented by each participant.

To further examine the link between food insecurity and stress, the quantitative survey phase was based upon the Household Food Insecurity Access Scale (HFIAS)(9-items) (Coates et al., 2007) and the Global Measure of Perceived Stress (14-items) (Cohen, S., Kamarck, T., &

Mermelstein, R., 1983), with additional demographic details collected. The survey was created via Qualtrics for participants to take online anonymously or for administration with the assistance of a researcher. Additionally, evaluating the effect of demographic indicators (gender, age, access to transportation, English proficiency, time since leaving Afghanistan, current living accommodation, as well as current means of transportation) helped provide context related to either food insecurity or stress. Survey completion took approximately 15 to 20 minutes and each participant received 15 USD for their time.

Considering the intersection between social connectedness and refugee experiences, the social network analysis phase examined whether the dynamics of personal social networks influenced experiences of food insecurity and stress. All individuals offering a social network also provided data on stress and food insecurity by completing the scales included in the survey phase of the study. The collection of personal network data took place in four modules: (1) questions asked of the respondents about themselves, (2) a name generator/elicitation module, (3) questions asked of the respondent about each alter in #2, and (4) a module asking respondents about the relationship between each unique pair of alters (i.e., whether each pair knows one another and whether they would meet independently of the respondent). Social network completion took approximately 1 to 2 hours, and each participant received 40 USD for their time. EgoNET software was used to collect personal networks for this study. A qualitative assessment of the networks explored content and structure and relationship to experiences of stress and food insecurity.

## **Sampling and Recruitment**

Partnering with the Warm Welcome, Refugee Dreams Center as well as the Worcester Islamic Center enhanced participant recruitment. Study flyers were created to be posted in these organizations as well as at hotels in Worcester where Afghan refugees were being housed. The flyers were printed in English and described: the purpose of the study, research team contact information, inclusion criteria, expectations of participation, and (for the survey) a QR code. Recruitment continued until no new themes emerged. All participants had to fit the following inclusion criteria: 1) 18 years or older; 2) Afghan; 3) currently identifies as an Afghan seeking asylum status in the U.S 4) able to provide informed consent; and 5) speaks English or Pashto. A total of 12 interviews, 7 social network analyses, and 9 surveys were conducted.

## **Results:**

### **Quantitative Phase**

#### *Survey Sample Description*

A significant number of survey respondents were young adults who have been living in the U.S. for approximately one year. Also, three of nine survey participants perceived themselves

as fluent in spoken and written English. **Table 1** showcases survey participants' demographics and key information including gender, age, current living accommodation, English proficiency, access to transportation, time since leaving Afghanistan (months), as well as current means of transportation.

*Table 1. Survey Participant's Demographics*

	<b>N=9</b>
<b>Gender</b>	<b>11</b>
Man	4
Woman	5
Not listed	1
Preferred not to answer	1
<b>Age</b>	<b>11</b>
23	3
24	1
25	1
26	1
31	1
35	1
Not listed	3
<b>Accommodation</b>	<b>10</b>
Hotel	3
Apartment	6
Guests in a family home	1

<b>English Proficiency</b>	<b>9</b>
Fluent Spoken and Written	3
Fluent Spoken	0
Competent Spoken	2
Limited	3
None	1
<b>Time Since Left Afghanistan (months)</b>	<b>8</b>
10	3
12	2
14	2
108	1
<b>Transportation</b>	<b>9</b>
Bus/Public Transportation	5
Walking/Bike	0
Private Car	1
Taxi/Lyft/Uber	3

Figure 2. Food Insecurity Perceptions

1. In the past month, did you worry that your household would not have enough food?

Answer	%	Count
No	66.67%	6
Yes	33.33%	3
Total	100%	9

If yes, how often did this happen?	Answer	%	Count
1	Rarely (once or twice in the past month)	60.00%	3



2	Sometimes (three to ten times in the past month)	0.00%	0
3	Often (more than ten times in the past month)	20.00%	1
4	Don't know	20.00%	1
	Total	100%	5

**2. In the past month, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?**

Answer	%	Count
No	80.00%	8
Yes	20.00%	2
Total	100%	10

If yes, how often did this happen?	Answer	%	Count
1	Rarely (once or twice in the past month)	50.00%	1
2	Sometimes (three to ten times in the past month)	50.00%	1
3	Often (more than ten times in the past month)	0.00%	0
4	Don't know	0.00%	0
	Total	100%	2

**3. In the past month, did you or any household member have to eat a limited variety of foods due to a lack of resources?**

Answer	%	Count
No	70.00%	7
Yes	30.00%	3
Total	100%	10

If yes, how often did this happen?	Answer	%	Count
1	Rarely (once or twice in the past month)	33.33%	1

2	Sometimes (three to ten times in the past month)	33.33%	1
3	Often (more than ten times in the past month)	0.00%	0
4	Don't know	33.33%	1
	Total	100%	3

**4. In the past month, did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?**

Answer	%	Count
No	88.89%	8
Yes	11.11%	1
Total	100%	9

If yes, how often does this happen?	Answer	%	Count
1	Rarely (once or twice in the past month)	100.00%	2
2	Sometimes (three to ten times in the past month)	0.00%	0
3	Often (more than ten times in the past month)	0.00%	0
4	Don't know	0.00%	0
	Total	100%	2

**5. In the past month, did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?**

Answer	%	Count
No	90.00%	9
Yes	10.00%	1
Total	100%	10

If yes, how often does this happen?	Answer	%	Count
1	Rarely (once or twice in the past month)	0.00%	0

2	Sometimes (three to ten times in the past month)	0.00%	0
3	Often (more than ten times in the past month)	100.00%	1
4	Don't know	0.00%	0
	Total	100%	1

6. In the past month, did you or any other household member have to eat fewer meals in a day because there was not enough food?

Answer	%	Count
No	70.00%	7
Yes	30.00%	3
Total	100%	10

If yes, how often does this happen?	Answer	%	Count
1	Rarely (once or twice in the past month)	66.67%	2
2	Sometimes (three to ten times in the past month)	0.00%	0
3	Often (more than ten times in the past month)	33.33%	1
4	Don't know	0.00%	0
	Total	100%	3

7. In the past month, was there ever no food to eat of any kind in your household because of lack of resources to get food (such as transportation or money)?

Answer	%	Count
No	80.00%	8
Yes	20.00%	2
Total	100%	10

If yes, how often does this happen?	Answer	%	Count
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1	Rarely (once or twice in the past month)	100.00%	1
2	Sometimes (three to ten times in the past month)	0.00%	0
3	Often (more than ten times in the past month)	0.00%	0
4	Don't know	0.00%	0
	Total	100%	1

**8. In the past month, did you or any household member go to sleep at night hungry because there was not enough food?**

#	Answer	%	Count
1	No	100.00%	9
2	Yes	0.00%	0
	Total	100%	9

**9. Did you or any household member go a whole day and night without eating anything because there was not enough food?**

#	Answer	%	Count
1	No	100.00%	9
2	Yes	0.00%	0
	Total	100%	9

Most survey participants are not currently experiencing food insecurity (66.67%). However, a subset (33.33%) expressed concern about having enough food. Additionally, no survey participants are going to sleep at night hungry because there was not enough food. Nor are any survey participants going a whole day and night without eating anything because there was not enough food. Conversely, 30% of survey participants ate a limited variety of foods due to a lack of resources. Comparably, 33.33% worried that their household would not have enough food within the past month.

*Table 3. Survey Participant's Stress Levels in the Past Month*

In the last month, how often have you...	Never/Rarely (0-2 times)	Sometimes (3-10 times)	Often (over 10 times)	Total
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Been upset because of something that happened unexpectedly?	3 (33.33%)	4 (44.44%)	2 (22.22%)	9
Felt that you were unable to control the important things in your life?	3 (33.33%)	4 (44.44%)	2 (22.22%)	9
Felt nervous and stressed?	1 (11.11%)	5 (55.56%)	3 (33.33%)	9
Felt confident about your ability to handle your personal problems?	3 (33.33%)	3 (33.33%)	3 (33.33%)	9
Felt that things were going your way?	4 (50.00%)	3 (37.50%)	1 (12.50%)	8
Found that you could not cope with all the things that you had to do?	6 (66.67%)	2 (22.22%)	1 (11.11%)	9
Been able to control irritations in your life?	3 (33.33%)	4 (44.44%)	2 (22.22%)	9
Felt that you were on top of things?	4 (44.44%)	2 (22.22%)	3 (33.33%)	9
Been angered because of things that happened that were outside of your control?	2 (22.22%)	4 (44.44%)	3 (33.33%)	9
Felt difficulties were piling up so high that you could not overcome them?	4 (44.44%)	4 (44.44%)	1 (11.11%)	9

As seen in **Table 3**, 55.56% of participants felt nervous or stressed in the past month. When asked, ‘In the last month, how often have you been angered because of things that happened that were outside of your control?’ 44.44% of survey respondents answered sometimes whereas 33.33% answered often. Additionally, when posed the question: “In the last month, how often have you found that you could not cope with all the things that you had to do?” (66.67% ‘never/rarely,’ 22.22% ‘sometimes,’ and 11.11% ‘often’).

### Qualitative Phase

Throughout the interview process, the following themes emerged: (1) security; (2) concern for loved ones residing in Afghanistan; (3) restrictive government-funding as barriers to achieving self-sufficiency; (4) language and cultural divide. Ultimately, these themes directly impacted stress levels and affected participant’s ability to maintain optimal well-being.

## **Restrictive government-funding as barriers to achieving self-sufficiency-**

Participants acknowledge that government-sponsored initiatives including SNAP are paramount to combating food insecurity, especially among refugees. However, nutritional assistance initiatives do not expense everyday products including laundry detergent, dish soap, and items of that nature. In the same vein, many participants find that social workers and government-sponsored agencies fail to explicitly outline housing assistance guidelines and expectations. In short, most participants find a lack of guidance related to navigating these programs stunts growth and inhibits self-sustainability. In describing the frustrations centered around these barriers, this participant reports:

***“Actually, there are a lot of problems. If my daughter was not supporting my rent of the house, we would need additional assistance. We also have a lot of other expenses. For example, we need clothes. Also, we need detergents. So these are things that we can not afford through food assistance. This is why we need cash assistance from the government. We need continued help from the government.”***

*-Elderly female, currently resides in a third-floor apartment but does not leave much because she struggles to use the stairs*

Government initiatives serve as the backbone of survival for a significant number of participants. On average, most participants were receiving approximately 800 to 900 USD in rental subsidies each month. However, depending on the size of each family unit, rent subsidies waived. Throughout the interview process, participants often expressed fear of being ‘cut off.’. Meaning that upon gaining full-time employment, the federal government would lessen supplemental funds that have become quintessential to economic survival. Further, many participants fear eviction or extreme budgeting. Although almost all participants are eager to work and earn a living wage, government support alleviates the economic burden prompted throughout this transitional period.

The following participants depict this dilemma:

***“Since we were receiving food stamps, we do not have experience buying food without it. Now that we are getting cut off, this determines how much we spend on food. (Short pause) So, my husband tells me how much money we have, and how much we can spend on food and rent.”***

*-Female, early 30's, mother*

***“So, if we have some support from the government. We can cover the remainder. But it will be impossible to support ourselves without any government assistance. I witnessed a family that could not afford one month of rent, and the landlord evicted them. I do not want to see that day for my family. So, I am scared that I will have to pay for everything on my own. Especially since I do not have a job.”***

*-Female, mid 30's, mother*

### **Security-**

Given Afghanistan's current state, participants were particularly motivated to flee in search of security. Although participants acknowledge the inevitable frustrations that follow the integration process, many find stress levels in the U.S. relatively low when compared to life in Afghanistan. This is largely because a significant portion of participants feel 'safe' and 'free' under U.S. authority. In comparison to Taliban law, interview participants believe that the U.S. government offers promise and opportunity to advance in debatably every aspect of life. More specifically, participants with children (especially those with daughters) feel overwhelmingly grateful that a proper education is not only a privilege, but rather a right. When describing the immigration process, one participant explained:

***“The main reason was safety. My husband worked for the U.S. government, so we did not feel safe...Also, another reason we came is to secure our kids' future. Sometimes, there was no food and there were no opportunities for them to learn.”***

*-Female, early 30's, mother*

Although the following interviewee was unable to flee Afghanistan with loved ones, the shield of the U.S. government offers a sense of relief:

***“I am happy being here (U.S.) because at least I am safe. I worked for the U.S. government for 17 years. I provided them with support...But the Taliban came to my house twice. They took my vehicles and searched my house. So, my family is currently hiding themselves.”***

*-Male, former U.S. government employee*

### **Nostalgia for loved ones residing in Afghanistan-**

Since not all participants were able to evacuate with loved ones, many are battling feelings of loneliness and despair. In addition, some participants are yet to confront unresolved trauma that occurred while living in Afghanistan. Compounding factors such as these greatly

impact stress levels and enhance feelings of uncertainty. Most participants felt that concern for loved ones still residing in Afghanistan is their top stressor. In fact, such heightened levels of fear and anxiety directly impact a considerable portion of participants from tackling everyday issues with confidence. Now that the Taliban has presumed control, family members of Afghan refugees will likely fall victim to some form of punishment, including kidnapping. In fact, a handful of participants shared experiences recounting family members that have gone missing due to their search for refuge or affiliation with the U.S. government. As expected, some participants have expressed that freedom coincides with intense levels of guilt. After reflecting on ways in which the U.S. government can further support loved ones still residing in Afghanistan, this participant touches on the complex nature of nostalgia:

***“There should be more projects about helping family members who are still in Afghanistan. We now have the U.S. government. But our family is still in Afghanistan, living in high risk areas...No? Although we helped the U.S. government, we have family members back in Afghanistan that are worried about being killed and living in danger. For example, my husband was working for the U.S. government in Afghanistan. But now, his parents (still living in Afghanistan), have to burn everything that belongs to him, so the Taliban do not know that they are related.”***

*-Female, early 30's, mother*

When asked about maintaining contact with loved ones in Afghanistan, the next two participants further underscore the inverse relationship between nostalgia and guiltiness instilled upon U.S. arrival:

***“We do not have any other option but to be patient- we must wait. Back home in Afghanistan, the government is cruel. They (the Taliban) sabotage everything. They do not allow girls to attend school. I want the government to bring my family here. I would be so thankful.”***

*-Elderly female, currently resides in a third-floor apartment but does not leave much because she struggles to use the stairs*

***“But, the rest of my family is in Afghanistan- of course, I miss them. But, they do not feel safe and are in danger because of the Taliban. (Short pause) And, you know, the Taliabn does not allow girls to attend school. The main reason that the world and U.S. government does not recognize them is because of this.”***

*-Male, former U.S. government employee, advocate for Afghan refugees with disabilities*

**Language and cultural divide-**



Unfamiliarity with English and Western culture poses a serious hurdle among a considerable number of participants. From grocery shopping to managing documentation, participants new to the English language yearn to learn and become fluent. Comparable to barriers pertaining to restrictive government funding, enrolling in English learning (EL) classes follow suit. Unfortunately, EL classes are not usually funded by the U.S. government. To tackle daily issues, a large sum of participants finds themselves heavily reliant on English speaking Afghans. In summary, while government-sponsored initiatives collapse, participants are expected to earn a living wage, while simultaneously learning English. The next two participants detail daily accounts when English fluency is so critical:

***“So, I want to learn how to drive and speak English. I want to be more independent because when my husband goes to work, I want to be able to make appointments for my children. I want to be able to go to the store without my husband.”***

*-Female, early 30's, mother*

***“I do not take it personally. Even if I work, I still can not afford classes, because the fee is so high. (Short pause) Actually, the government should be helping us learn English. Because without learning English, we can not go ahead and take care of ourselves.”***

*-Female, recently married, former teacher*

From the perspective of an English speaking, Afghan refugee:

***“I have requested for someone to show and explain to them (Afghan women) the culture. Because, you know, a lot of people make mistakes. Like, even taking out the garbage. They do not know how to pay the electricity bill. They do not know about applying for a road test or driving license. Or applying for jobs. Especially when it comes to job salaries and paying taxes. You know? In this case, we need more training.”***

*-Male, former U.S. government employee, advocate for Afghan refugees with disabilities*

## **Social Network Analyses Phase**

The collected social network analyses offer meaningful insight related to resources and information sharing. While unintended, all social networks were collected from female Afghan refugees currently residing in either Providence or Worcester area. All 7 social networks are concentrated and tight knit. As part of a monthly NGO organized women's social time, the first 5

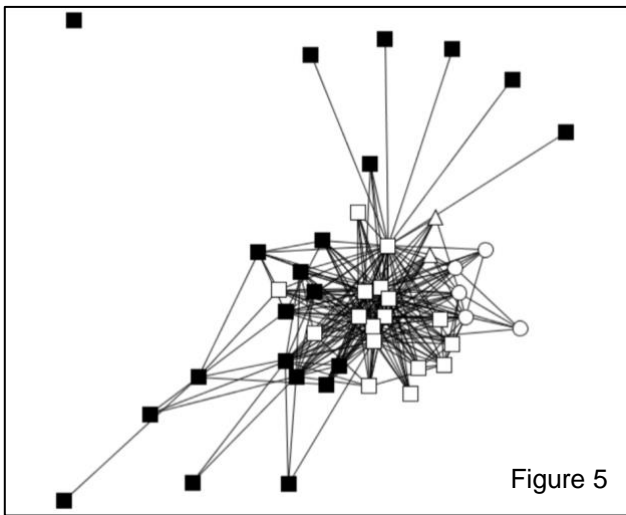
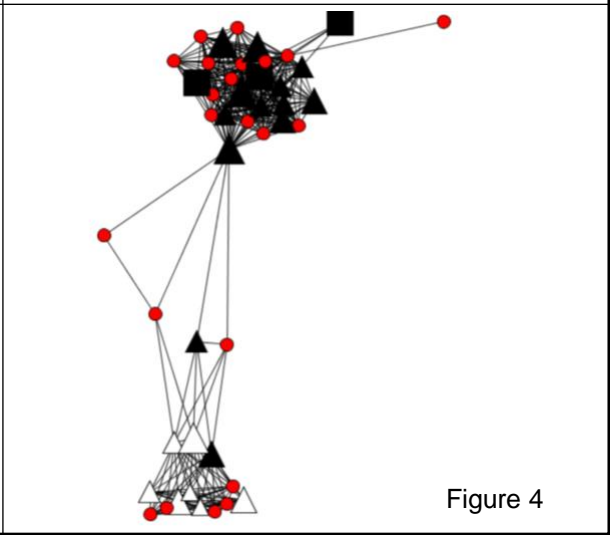
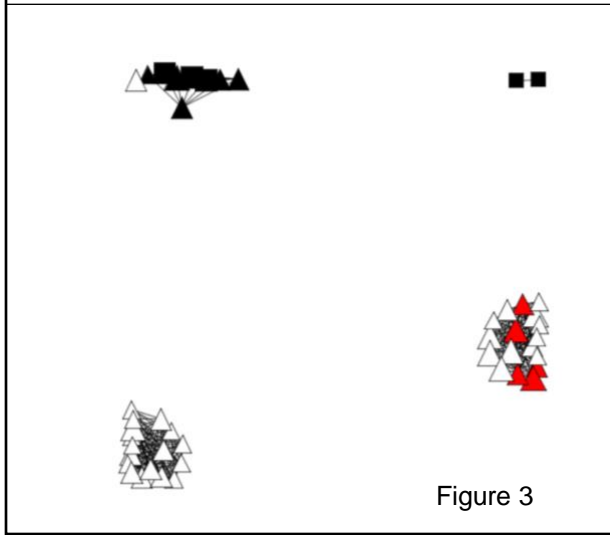
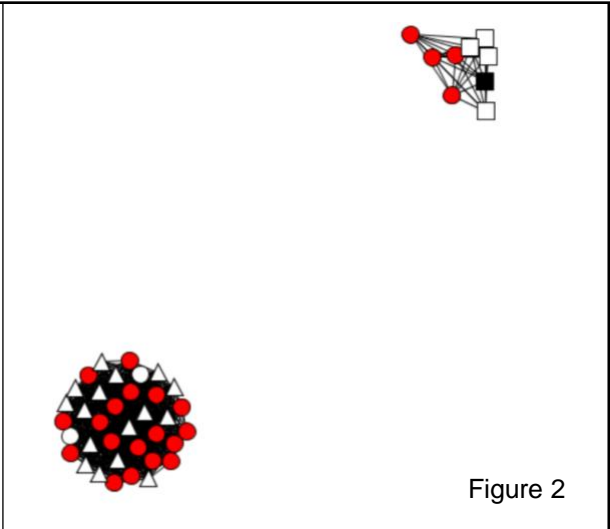
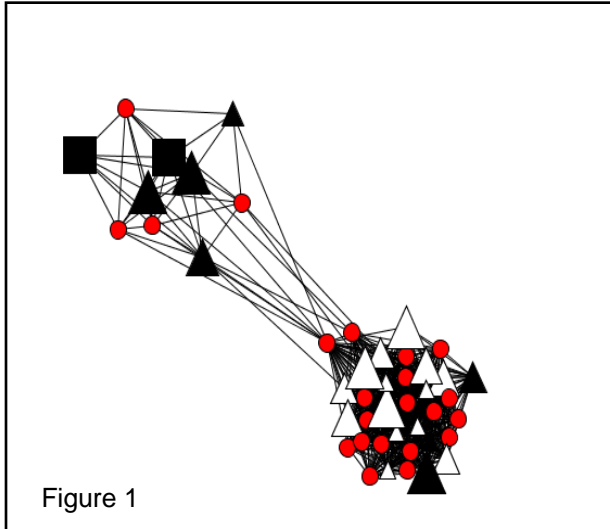
network analyses were conducted. This type of comfortable, intimate setting allowed participants to feel at ease and provide insight among fellow support figures.

As seen in Figures 1-4, minimal connections have been established within the U.S. Many newfound connections were with recent, Afghan migrants. Additionally, the connections forged with U.S. locals were few and limited to individuals in resettlement agencies or charities. Since all social network participants prioritized daily communication with loved ones still residing in Afghanistan, all experienced limited opportunities to become familiar with neighbors, community members, fellow parents at their children's school, or colleagues at new jobs. Frequent communication with separated loved one's advanced stress levels and prevented participants from truly leaning into the resettlement process.

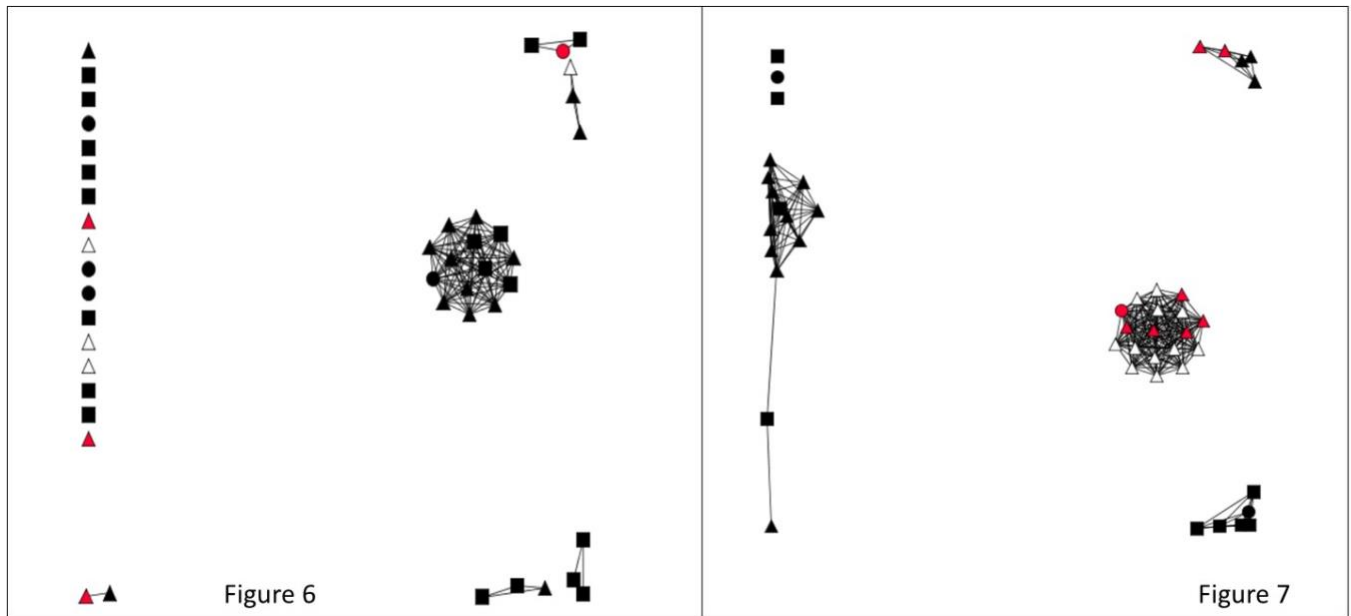
Figures 1-4 are the social networks of very recent female Afghan refugees residing in the Worcester, MA area for an average of 12 months. Among these first four participants, most contacts are not living in the U.S. (a significant amount is currently residing in Afghanistan). Regularly conversing with family members that are living in fear of the Taliban's restrictive ruling lessens the desire to create connections among U.S. locals. Since there is an obvious lack of positive social stimulation, all admitted to experiencing high levels of stress and fear about the future. This also directly impacts each participant's likelihood of becoming fluent in English and being able to financially contribute to their family's income. Frequent, daily interactions are often time consuming and reflect the language and social barriers exhibited within both the semi-structured interviews and surveys.

By contrast, Figure 5 presents the network of an Afghan migrant present in the city of Worcester since 2013. Her network is more expansive and consists of connections dispersed throughout the globe, including within the U.S. Compared to the other women, participant 5 is married but does not have any children. In turn, this level of freedom provides her with the time and energy to work while simultaneously attending university. While she routinely communicates with family members in Afghanistan, new connections have allowed this participant to attain a secure career as well as attend university. She also served as a source of support for incoming Afghan refugees.

As seen in Figures 6 and 7, both social networks show two distinct clusters, the largest cluster represents family and the second largest demonstrates a friend group that has been established since childhood. Beyond these clusters are individuals within the network that are not connected to others, usually U.S. based friends or classmates. Particularly in Figure 6, it is apparent that she communicates with individuals who are not even remotely correlated with one another. Compared to other participants, she has been granted various educational opportunities throughout the world. Hence the diversity of social connections. Both individuals-reside within the Providence area, are unmarried, and attending Brown University.



Country of Residence	Nationality	Node size
White - Afghanistan	▲ Afghan	Frequency of contact
Black - America	■ American	
Red - Unknown	● Unknown	



## **Discussion:**

This research explores the relationship between food insecurity, stress, and social networks among recent Afghan refugees. Studies indicate that due to the Covid-19 pandemic, currency depreciation against the U.S. dollar impacted refugees from purchasing necessities (259, Zuntz, 2022). While prior research found that refugees experienced stress when navigating newfound food scenes (Hadley et al., 2010), this study found that more pressing variables including English literacy as well as lack of agency support take precedence. Upon arrival, many participants experienced some levels of food insecurity due to limited funds and inability to preserve groceries. However, various charity-based models such as local NGOs and religious organizations allowed participants to maintain cultural traditions as well as consume a diet that did not induce feelings of stress. Additionally, participants noted that SNAP subsidized food costs alleviated the burden of food insecurity. Analogous to another study examining food insecurity among recent refugees resettling in the U.S., this research also concluded that availability of food, particularly traditional food, was not considered a problem. The main concern related to food insecurity was centered around optimizing SNAP and other government related benefits (Wilson, Rodriguez, 2019). For instance, participants perpetually struggled to afford everyday household products including laundry detergent and dish soap. This is largely because government benefits strictly expense food related items.

Ultimately, the following issues were presented as barriers to maintaining healthy stress levels: security; concern for loved ones residing in Afghanistan; restrictive government-funding as barriers to achieving self-sufficiency; language and cultural divide. Most participants expressed resentment toward the U.S. government and its inability to provide recent refugees with free EL classes. For instance, one participant unintentionally purchased cat food thinking it

was a can of tuna fish. Mistakes of this nature are rooted in weak language development and can be costly for refugees already struggling to make ends meet. Lack of general support inhibits recent Afghan refugees from integrating and eventually flourishing within newfound communities. Because of the difficulty associated with immigration related paperwork, participants report that cases were often ‘pawned off’ on a continual basis. In turn, participants lacked a reliable source of contact and were unable to fully take advantage of government-sponsored relief related to employment and housing.

Hurdles such as these spark a trickle-down effect and exacerbate underlying inequalities. Once government cash and rent assistance collapse, participants will lack the means to afford such expenses. Consistent to a study exploring refugee integration, minimal language infrastructure at the community level directly impairs economic integration and asset building. Thus, increasing reliance on family care services and cash/subsidized assistance (Nam et al., 2021).

In conjunction with the stressors native to the immigration process, findings reveal that concern for loved ones still residing in Afghanistan severely amplifies stress levels. Findings echoes previous research illuminating how family separation is a heavy source of distress among refugees (Miller et al., 2018). Living as a refugee in a society that has, in part, contributed to forced displacement increases likelihood of experiencing the following traumas: discrimination, harassment, microaggressions, and racial trauma, as well as structural features related to housing, healthcare, education, and employment (Grasser, 2022). Importantly, prioritizing community building even among fellow Afghan refugees has the power to mitigate stress levels and help bolster independence.

Along the lines of a study that focused on social participation among resettled refugees in Boston, most participants reported establishing very few relationships since resettlement. Cultivating meaningful relationships and enhancing social cohesion is imperative to combating feelings of isolation and helplessness (Versey et al., 2022). For social workers and fellow resettlement workers, embedding social cohesion into the integration process is paramount to promoting refugee emotional well-being and reducing stress levels (Traeger et al., 2022). Further, leveraging community building tactics to advance social network outcomes helps fight persistent adversity as well as high levels of stress on a sustainable front. Importantly, resettlement agencies can study and utilize social network analyses to accommodate ongoing initiatives to accurately subsidize incoming needs.

### **Limitations:**

The findings of this study are specific to two cities located in the Northeast region of the US (Providence, RI and Worcester, MA). This may not be generalizable for all recent Afghan refugees or refugees. Regarding the Afghan population, the concept of research is rather unknown and even daunting. Upon initial introductions, many potential participants often assumed the research team was a government or social worker. After clarifying intent and

purpose, individuals would agree to meet out of politeness. However, when attempting to schedule a set time, interest weakened and resulted in loss to follow up. Suspicion of researchers is deeply rooted in fear of exploitation as well as reservations related to oversharing. From a cultural perspective, Afghans are independent and do not regularly mingle with individuals outside of their primary social circle. Such apprehensions limited analysis on the social network analyses to qualitative only as well as weakening statistical assessments to measure the relationships between social network characteristics and stress and food insecurity levels.

Further, Afghan men were under-represented in thesis research samples, which may obscure findings related to the immigration process. Lack of male representation is due to gender dynamics present within the Afghan culture. As a female researcher, entering female domains (household visits with groups of women) was deemed acceptable and non-threatening. However, if applied to Afghan men, this would be considered taboo. Small sample sizes also wither the generalizability of the results, particularly regarding survey results. Future research focusing on refugees fleeing war torn, hostile environments is imperative to better understand additional dynamics impacting stress levels and to inform integration policy and practice. When discussing the topic of stress, the notion of post-traumatic stress disorder emerged organically throughout the interview process. This is an area of exploration that demands further attention moving forward.

### **Recommendations:**

This research provides important insight related to barriers that evoke stress among recent Afghan refugees. This work allows agencies to reprioritize initiatives to sustainability fit refugees' needs on a cultural, more equitable front. Although the immigration process is not linear and may differ among various refugee groups, all refugees should be offered with equal circumstances to learn English and gain employment in a timely, productive manner. To effectively reduce stress amongst recent Afghan refugees, we must consider the role that refugee agencies should play in terms of social connection. Considering the lack of social infrastructure found within Worcester as well as Providence, agencies should prioritize tapping into predetermined networks in neighboring communities to bolster refugee independence. Ultimately, strong support systems will enable recent refugees to integrate in a smoother, more supportive manner. Understanding the outcomes affiliated with this inverse relationship can better inform interventions and public health strategies tailored to the needs of incoming refugees.

#### ***Increase Access to English Classes***

Findings illustrate how English literacy levels determine a participant's ability to enroll in social programs as well as acquire suitable housing. More specifically, participants that did not immigrate with an English-speaking counterpart particularly struggled to tackle everyday issues

such as grocery shopping. Although a considerable portion of participants fled Afghanistan with the intention of working in the U.S., seeking consistent employment with minimal exposure to English is dramatically challenging. Lack of programs specific to Afghan culture inhibits self-sufficiency and demobilizes a significant portion of refugees. While it is known that the ability to speak English is an integral component of immigrant assimilation, recent cohorts are learning at incremental rates (Landgrave, 2019).

Despite government encouragement, EL classes are usually shaped to fit languages commonly spoken at home. According to the U.S. Department of Education, English Learners are heavily concentrated in districts and schools with their EL peers (Department of Education, 2022). Since English learners are not equally distributed across the nation, but rather clustered in a relatively small percentage of districts, opportunities for advancement are limited. To shift this burden into perspective, in Fall 2019, Spanish was the home language of 3.9 million EL public-school students in fall 2019, representing 75.7 percent of all EL students (NCES, 2022). Meanwhile in 2019, about 50 percent of Afghans ages 5 and over reported limited English proficiency, compared to 46 percent of all immigrants. As to the languages other than English spoken at home, immigrants from Afghanistan were most likely to speak Persian (Farsi) (42 percent), Pashto (25 percent), and Dari (20 percent) (Batolva, 2021). Previous research has shown that refugees capitalize on shared information as well as resources and tactics to make the best of their position (Williams, 2006). This research adds to the literature, turning attention to the need for free EL classes and increased funding for agencies designed to champion Afghan refugees.

### ***Enhancing Access to U.S. Integration Classes-***

Although key government-sponsored benefits such as SNAP are popular among Afghan refugees, navigating its pitfalls is not necessarily intuitive. In fact, a wide array of participants express frustration toward local resettlement agencies and their unwillingness to educate refugees on how to fully optimize associated benefits (i.e., how to create a bank account or establish a debit card pin). Naturally, this perpetuates a cycle of reliance on those who are familiar with operating the 'system.' Plus, it reinforces the notion that government-sponsored agencies do not provide Afghan refugees with the tools necessary to forge meaningful social connections.

Drawing parallels to a Cornell University study measuring the link between U.S. employment retention and refugee well-being, this study also found that the federal government approaches refugee resettlement with an abrupt, self-sufficient lens. However, this strategy fails to offer sufficient resources to guarantee long-term sustainability (Ali, 2022). Overall, this study finds that equipped agencies jeopardize the immigration process due to a lack of follow up. Failing to maintain contact with newly arrived refugees critically minimizes agency and stunts career development. Further, funding programs that bolster refugee independence dismiss the importance of social connection.

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**Appendices:**

***Quantitative Measures-***

Demographics: \*no questions are required

How do you identify yourself?

Man

Woman

Not listed

Prefer not to answer

How old are you, in years? \_\_\_ years

How long has it been since you left Afghanistan, in months? \_\_\_\_ months

How long has it been since you arrived in the United States, in months? \_\_\_\_\_months

Where are you currently staying?

Hotel

Apartment

Guest in a household

What is your current access to transportation (list all that apply)?

Bus/Public Transit

Bike/Walking

Private Car

Taxi/Lyft/Uber

What is your level of English proficiency?

Fluent spoken and written

Fluent spoken

Competent spoken

Limited

None

“Household Food Insecurity Access Scale (HFIAS) Measurement Tool”

1.	In the past month, did you worry that your household would not have enough food?	0 = No (skip to Q2) 1=Yes 9=Don't know
		1 = Rarely (once or twice in the past month)



1.a	How often did this happen?	2 = Sometimes (three to ten times in the past month) 3 = Often (more than ten times in the past month) 9 = Don't know
2.	In the past month, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?	0 = No (skip to Q3) 1=Yes 9 = Don't know
		1 = Rarely (once or twice in the past month)
2.a	How often did this happen?	2 = Sometimes (three to ten times in the past month) 3 = Often (more than ten times in the past month) 9 = Don't know
3.	In the past month, did you or any household member have to eat a limited variety of foods due to a lack of resources?	0 = No (skip to Q4) 1 = Yes 9 = Don't know
		1 = Rarely (once or twice in the past month)
3.a	How often did this happen?	2 = Sometimes (three to ten times in the past month) 3 = Often (more than ten times in the past month) 9 = Don't know
4.	In the past month, did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?	0 = No (skip to Q5) 1 = Yes 9 = Don't know
		1 = Rarely (once or twice in the past month)

4.a	How often did this happen?	2 = Sometimes (three to ten times in the past month) 3 = Often (more than ten times in the past month) 9 = Don't know
5.	In the past month, did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	0 = No (skip to Q6) 1 = Yes 9 = Don't know
5.a	How often did this happen?	1 = Rarely (once or twice in the past month) 2 = Sometimes (three to ten times in the past month) 3 = Often (more than ten times in the past month) 9 = Don't know
6.	In the past month, did you or any other household member have to eat fewer meals in a day because there was not enough food?	0 = No (skip to Q7) 1 = Yes 9 = Don't know
6.a	How often did this happen?	1 = Rarely (once or twice in the past month) 2 = Sometimes (three to ten times in the past month) 3 = Often (more than ten times in the past month) 9 = Don't know
7.	In the past month, was there ever no food to eat of any kind in your household because of lack of resources to get food?	0 = No (skip to Q8) 1 = Yes 9 = Don't know
7.a	How often did this happen?	1 = Rarely (once or twice in the past month) 2 = Sometimes (three to ten times in the past month) 3 = Often (more than ten times in the past month) 9 = Don't know

8.	In the past month, did you or any household member go to sleep at night hungry because there was not enough food?	0 = No (skip to Q9) 1 = Yes 9 = Don't know
8.a	How often did this happen?	1 = Rarely (once or twice in the past month) 2 = Sometimes (three to ten times in the past month) 3 = Often (more than ten times in the past month) 9 = Don't know
9.	In the past month, did you or any household member go a whole day and night without eating anything because there was not enough food?	0 = No (questionnaire is finished) 1 = Yes 9 = Don't know
		1 = Rarely (once or twice in the past month)
9.a	How often did this happen?	2 = Sometimes (three to ten times in the past month) 3 = Often (more than ten times in the past month) 9 = Don't know

"Perceived Stress Scale - New Hampshire." Perceived Stress Scale,"

For each question choose from the following alternatives:

Never/Rarely (0-2 times)

Sometimes (3-10 times)

Often (over 10 times)

Don't know

\_\_\_\_\_ 1. In the last month, how often have you been upset because of something that happened unexpectedly?

\_\_\_\_\_ 2. In the last month, how often have you felt that you were unable to control the

important things in your life?

\_\_\_\_\_ 3. In the last month, how often have you felt nervous and stressed?

\_\_\_\_\_ 4. In the last month, how often have you felt confident about your ability to handle  
your personal problems?

\_\_\_\_\_ 5. In the last month, how often have you felt that things were going your way?

\_\_\_\_\_ 6. In the last month, how often have you found that you could not cope with  
all the things that you had to do?

\_\_\_\_\_ 7. In the last month, how often have you been able to control irritations in  
your life?

\_\_\_\_\_ 8. In the last month, how often have you felt that you were on top of things?

\_\_\_\_\_ 9. In the last month, how often have you been angered because of things that  
happened that were outside of your control?

\_\_\_\_\_ 10. In the last month, how often have you felt difficulties were piling up so high that  
you could not overcome them?

<https://das.nh.gov/wellness/Docs/Percieved%20Stress%20Scale.pdf>

