ASSESSING DEMOGRAPHIC FACTORS IMMIGRATION FACTORS & COMMUNITY SUPPORT FOR DEPRESSION AMONG LOCAL IMMIGRANTS

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DEDICATION

To the immigrant community, especially undocumented immigrants, who have been marginalized, violated, and robbed of their voice time and time again. This dissertation is for you.

To the queer Black female scholars who came before me and endured hell in academia so that I did not have to. This dissertation is because of you. I hope I make you proud.

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ABSTRACT

There are an estimated 40,072 immigrants living in Wichita, Kansas making up 10% of the local population (American, 2017). It is imperative to support the mental well-being of immigrants who contribute markedly to the success and culture of the city. Previous research supports the Immigrant Paradox, which shows that immigrants tend to have better mental health than the U.S.-born population, but this health advantage diminishes over time (Schribner & Dwyer, 1989). While Sedgwick County has a recorded 17.9% lifetime prevalence of depression in its population, there is a need for data specific to local immigrants' mental health and ways the Wichita community can support the mental wellness of this community (Sedgwick County Health Department, 2012). The purpose of this research is to examine depression symptomology related to demographic and immigration factors and explore existing concerns and community-level changes needed to support the mental health of immigrants living in the Wichita, Kansas area.

In collaboration with local immigrant-serving partners, survey data was collected from immigrants living in the Wichita area (N = 140) to assess demographic and immigration factors related to depression. Focus groups were also conducted with Hispanic and Latina immigrant women (N = 10) to explore community impact on immigrants' mental health and needed local changes for improvement. The results of this research indicated that a younger age of immigration, being unmarried, and 'other' immigration statuses were related to increased depression outcomes. Prejudice was the strongest community concern impacting mental health and the strongest solutions were supporting undocumented immigrants and non-immigrants being knowledgeable about prominent issues in the immigrant community. Upon the availability of the information in this research, local leaders in the Wichita community are called to take actionable steps towards changes that improve the mental health of immigrants living in Kansas' largest city. Further suggestions for change are detailed.

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Introduction

The National Alliance on Mental Illness (NAMI) describes depression as a serious mental health condition that negatively impacts the lives of the individuals experiencing it, especially when left untreated without proper mental health care supports (National Alliance on Mental Illness, 2017). While it is known that immigrants may experience financial, language, and cultural barriers that can inhibit access to mental health care, in general immigrants tend to have better mental health outcomes than the U.S. born population. However, immigrants lose this healthy advantage overtime as they remain in the United States (Marks, Ejesi & Coll, 2014).

The purpose of this dissertation is to examine depression symptomology related to demographic and immigration factors and explore existing concerns and community-level changes needed to support the mental health of immigrants living in Wichita, Kansas. This research serves as a step in gathering important data to guide local community initiatives to address depression for immigrants living in Kansas' largest city. The substantial number of immigrants living in Wichita means that the success of the city has become increasingly contingent upon having a healthy immigrant community. Most research that has been done on the mental health of immigrants is conducted in cities with vastly different demographics from an urban Midwest city such as Wichita (Monserud & Markides, 2018; Takeuchi, 2007; Thibeault, Stein & Nelson-Gray, 2018). The few research studies that have been conducted on immigrants in Wichita have been unrelated to mental health and conducted to address needs of specific populations such as refugees and Tanzanians (Branstetter, 2017; Dosi, Rushubirwa, & Myers; 2007). While gaining understanding on the needs of specific demographics of immigrants is important in finding distinct cultural differences, such research limits applicability for the Wichita organizations that serve the immigrant community at large rather than by country of origin or immigrant status. This makes it important for local organizations to have access to data that allows them to address all immigrants' mental health at a local level. An

important way to support the prosperity of Wichita is to conduct local research that will be used to support the health and well-being of immigrants that live there.

Literature Review

Definition of Immigrant

For the purposes of this study "immigrant" is defined as any individual who was born outside of the United States and currently resides within the United States under any status other than a documented temporary resident status. There are three main categories of immigrants: naturalized citizens, lawful permanent residents, and undocumented immigrants.

U.S. Citizenship and Immigration Services (USCIS) defines a lawful permanent resident as "any person not a citizen of the United States who is residing in the U.S. under legally recognized and lawfully recorded permanent residence as an immigrant" (U.S. Citizenship and Immigration Services, n.d., p. 1). There are two ways that individuals can gain lawful permanent residence in the United States. They can be a "new arrival" applying for lawful permanent residence from outside of the U.S. or they can be a "change of status" immigrant, having been on temporary residency status and applying for permanent residency from inside the United States (Witsman, 2017). Immigrants who are lawful permanent residents are also known as green card holders. This includes refugees, individuals who have been granted asylum, those who are sponsored through a family member, or those who are sponsored through a place of employment. Most lawful permanent residents in the U.S. gain "new arrival" status through a family member who is a lawful permanent resident (Witsman, 2017).

Other lawful statuses include statuses such as Conditional Permanent residents and those under the status of Deferred Action for Childhood Arrival. Conditional permanent residents are immigrants who receive lawful permanent residency for a temporary term of two years for the purposes of their spouse petitioning for their extended permanent residency (U.S.

Citizenship and Immigration Services, 2019). Deferred Action for Childhood Arrival (DACA) recipients are individuals who were born outside of the U.S., arrived in the United States before their 16th birthday, have remained in the United States since 2007, and meet other DACA eligibility requirements. Before DACA was enacted in 2012 DACA recipients were considered to be undocumented immigrants (U.S. Citizenship and Immigration Services, 2018).

Naturalized citizens are immigrants who have obtained U.S. citizenship through military service, permanent residency status for five years, or permanent residency status for three years if married to a U.S. citizen (U.S. Citizenship and Immigration Services, 2018). Undocumented immigrants are foreign-born individuals residing in the United States without having had a legal means of entry or who entered through authorized documents that have expired (Homeland Security, 2019). Undocumented immigrants are prohibited from working in the United States, receiving government benefits, applying for lawful permanent residency, and are at greater risk of deportation than other immigrants.

Non-immigrants include individuals who are in the United States with authorization under a temporary basis. This includes student visa holders also known as an F-1 visa, those under temporary protected status also known as TPS, business visa holders also known as B1 visa, or tourist visa holders also known as B2 visa. Temporary Protected Status is a status that the Department of Homeland Security can designate to individuals who live outside of the U.S., but whose home country experiences unsafe conditions such as civil war, or natural disaster during the time that they are visiting the U.S. These individuals receive legal temporary residence with the intention that they return to their country of origin once determined safe by the Department of Homeland Security. TPS is not a pathway to citizenship. TPS holders and other non-immigrant visa holders are not considered immigrants as the purpose of these statuses are to reside only temporarily in the United States, and immigrants are defined as individuals who come to a country with the intent to live indefinitely. Individuals under these

non-immigrant statuses would need to meet the necessary requirements and go through the process of applying for lawful permanent residence (green card) in order to be considered immigrants (American Immigration Council, 2018).

Immigrant Prevalence

Over fourty-four million immigrants live in the United States. This means immigrants are 13% of the U.S. population and that the United States is home to 1/5 of the world's immigrants. This number has been continuously increasing as roughly one million immigrants migrate to the United States each year (Lopez, Bailik, Radford, 2017; Zong, Batalova, Hallock, 2018). While the states with the most immigrants are coastal and border states such as California with 10.7 million, Texas with 4.9 million, New York with 4.5 million and Florida with 4.4 million immigrants, Kansas recorded 205,720 immigrants in 2015, and has one of the highest percentages of immigrants in the Midwest states at 7% (Zong, Batalova, Hallock, 2018; Immigrants, 2017). Between 1990 and 2000, Kansas experienced a 114.4% growth in the immigrant population particularly Mexican, Vietnamese, and Indian immigrants (Waters & Jiménez, 2005). While the number of immigrants settling in Kansas is increasing, the number of immigrants settling in Wichita has slightly decreased. In 2017, 40,072 individuals living in Wichita or just over 10% of the population was foreign-born (American, 2017). The past two decades have each brought about 11,000 immigrants to Wichita while 2010 – 2017 has only seen about 6,400 immigrant arrivals so far (American, 2017). The foreign-born population in Wichita has only increased by about 2% within the last 20 years (Kansas, 2003). However, even with Wichita's decrease in immigrant arrivals it remains the city with the most immigrants in Kansas and has a higher percentage of immigrants than both the State (7%) and Sedgwick county (8.5%) (Immigrants, 2017; Quickfacts, 2017; Quickfacts, 2017).

Local Demographic & Immigration Factors

In Wichita 50.5% of immigrants are men and 49.5% are women. The mean age is 40.6 with 42% between the ages of 25 and 44 years old. Only about 6% of immigrants are under 18. Regarding race, 49% are Hispanic or Latino, 33% are Asian, 10% are White non-Hispanic, 6.3% are Black, .6% are American Indian/Alaskan Native, and 11% are other. Of those 25 and older, 38% have a less than high school education, 24% are high school graduates, 17% completed some college, 12% completed a bachelor's degree, and 8% completed graduate school or a professional degree. Fifty percent of immigrants in Wichita who speak a language other than English report speaking English very well. Most (61%) are married, 24% have never been married, and 10% are divorced or separated. Most (64%) are employed. The majority of Wichita immigrants work in construction, manufacturing, education, healthcare, and social assistance services (60.6%). Most immigrants in Wichita make $15,000 to $49,999 per year (American Fact Finder, 2017).

Immigration Status

Immigration status in Kansas is diverse. Of the 205,720 immigrants living in Kansas, 35.7% are naturalized citizens and 35% are undocumented (American Immigration Council, 2017). In Kansas there were a reported 5,900 DACA recipients in 2014 (Zong, Ruiz Soto, Batalova, Gelatt, Capps, 2017; Wilson, 2018). In 2017, 43.8% of immigrants in Wichita were naturalized citizens and 56.2% were non-citizens including legal permanent residents, migrant workers, undocumented immigrants, and international students (American Fact Finder, 2017; American Fact Finder 2017). One source reports a rough estimate of 2,000 refugees in Wichita (Branstetter, 2017)

Place of Origin

In 2017, Wichita immigrants reported their place of origin as Latin America (51.3%), Asia (36.4%), Africa (6.3), Europe (4.5), North America (1.1), and Oceania (0.4%). The top countries of origin for immigrants in Wichita are Mexico (44%), Vietnam (15%), India (3%), The Philippines (2%), and China (1.8%) (Census, 2017; American Fact Finder, 2017; American Fact Finder, 2017). A disparity exists within naturalized citizenship as immigrants from Latin America who make up over half of immigrants in Wichita, only accounted for 36% percent of all naturalized citizens and immigrants from Asian countries were overrepresented as naturalized citizens at 50.7%. (Wichita, 2019). Wichita has a greater percentage of Mexican and Vietnamese immigrants in comparison to the state of Kansas which has 40.5% Mexican and 4.7% Vietnamese immigrants (American Immigration Council, 2015).

Reason for Immigration

Immigrants come to the United States for many different reasons. While a large portion of immigrants arrive in the United States to reunite with family, there are nuances in emigration purposes between immigrants from different countries of origin. While many Central American immigrants often emigrate from their home countries due to political turmoil, organized crime, and a poor economy, immigrants from India most often leave their home country for work opportunities in the United States (Cruz, 2015; Zong & Batalova, 2017). Immigrants from Mexico often come to the United States for economic opportunity and those from China make their way to the United States to escape concerns about environment and education, or to begin entrepreneurial ventures (Zong & Batalova, 2018; Zong & Batalova, 2017; Hurun, 2018). While historically Vietnamese immigrants have entered the United States through refugee status and U.S. government resettlement into immigrant towns, in recent years most Vietnamese legal

permanent residents have entered the United States for family reunification purposes (Zong, Batalova, 2018).

Mental Health & Immigrants

Depression impacts roughly 16 million people or about 7% of adults in the United States. Major mental health organizations such as the National Alliance on Mental Illness (NAMI) and the National Institute of Mental Health (NIMH) discuss depression as a serious disorder that can be mitigated through intervention (The National Institute for Mental Health, 2018; National Alliance on Mental Illness, 2017). However, the immigrant population has unique differences in patterns of depression that seem to call for tailored interventions. Research on the mental health of immigrants has once again expanded in recent years in response to the most recent wave of political focus on the immigrant community (Zapata, Carlos, Merten, Gallus, Grzywaczs, 2017; Garcini, et al., 2017; Ornelas, India & Krista Perriera. 2011; Salas-Wright, Vaughn, Goings, Miller, & Schwartz, 2018). In general, immigrants tend to have better overall health and mental health than the U.S. born population. A significant amount of literature supports what is known as the Immigrant Paradox, this is that immigrants in the United States are generally less likely to experience various negative health outcomes, including depression, than the U.S. born population despite often facing more social and economic challenges and barriers that tend to impact mental health in the U.S. (Alegria, Canino, Stinson, & Grant, 2006; Marks, Ejesi & Garcia Coll, 2014; Schribner & Dwyer, 1989; Alegria, Alvarez & DiMarzio, 2017; Breslau, Aguilar-Gaxiola, Borges, Kendler, Su, Kessler, 2007; Takeuchi, et al., 2007; Williams, et al., 2007; Szaflarski, Cubbins, Bauldry, Meganathan, Klepinger, & Somoza, 2016; Constant, 2017).

Depression Related to Demographic and Immigration Factors

Previous research has given light to the various ways that demographic factors are associated with experiences of depression for immigrants.

Race/Ethnicity/Country of Origin

Black and African immigrants seem to have an additional health advantage regarding depression. Compared to other racial groups, Major Depressive Disorder and mild depression are less prevalent in African immigrants than many other immigrant groups (Szaflarski, et al., 2016). While assimilation tends to generally increase immigrants' experiences of depression, research on Black immigrants supports the Alba & Nee (1997) Assimilation Theory, which challenges the Immigrant Paradox by hypothesizing that assimilation improves the health of immigrants. Black immigrants who spend longer in the U.S. and share a sense of belonging and racial membership with African-Americans may have a reduced risk of depression than immigrants who deny membership with Black Americans (Hunter, Case, Joseph, Mekawi, & Bokhari, 2017; Kibour, 2001). However, there is empirical support that one of African immigrant women's major health concerns is depression and Black immigrant new mothers have been found to be more likely to experience depression than native-born new mothers (Sellers, Ward, Pate, 2006; Kumar, 2016).

Hispanic and Latino immigrant groups including those such as Cubans may have a similar prevalence of depression to U.S. born individuals of the same descent as well as higher depression prevalence than other immigrant groups. However, there is some conflicting evidence such as the depression outcomes of Puerto Ricans being higher than other minority groups (Jackson, et al., 2011). One study on Brazilians, determined that 35% met the criteria for depression, more than the U.S. general population prevalence at %7 (Lazar-Neto, 2018; Brody, Pratt, Hughes, 2018; The National Alliance on Mental Illness, 2017). Brazilians are Latino but not Hispanic. It can be difficult to extrapolate meaning from broad ethnic categories like Hispanic/Latino that include diverse subgroups (Alegria, Canino, Stinson & Grant, 2006; Alegria, et al., 2008; Szaflarski, Cubbins, Bauldry, Meganathan, Klepinger, & Somoza, 2016). In comparison to other immigrant groups, there is a lower prevalence of depression in

Asian/Pacific Islander immigrants (Szaflarski, Cubbins, Bauldry, Meganathan, Klepinger, & Somoza, 2016; Wong & Miles, 2014). Although, there seem to be differences between the depression outcomes of different Asian immigrant groups such as Filipino and Vietnamese immigrants have shown lower depression outcomes than Chinese immigrants (Jackson, et al., 2011).

Similar to Black immigrants, there is some evidence that acculturation does not impact older Chinese immigrants as it may impact immigrants from other countries. Additionally, Chinese immigrants from Taiwan may be less likely to experience depression than Chinese immigrants from China or Vietnam (Casado & Leung, 2001). However, Asian immigrant new mothers may be more likely to experience depression than native-born new mothers (Kumar, 2016). Additionally, no differences were found in the likelihood of experiencing postpartum depression between immigrant Indian women and U.S. born White women which is a noteworthy finding in context of the Immigrant Paradox (Goyal, Murphy & Cohen, 2006). Although there is a lack of research related to white immigrants and depression, one study shows that white U.S. born individuals have significantly higher rates of Major Depression disorder than white immigrants (Szaflarski, 2016). Additionally, research on immigrants from the former Soviet Union shows that baseline depression scores measured during initial entrance to the United States predicted depression scores over time (Aroian & Norris, 2002).

Gender

Both in the U.S. general population and in immigrant communities, women tend to report experiences of depression at a greater rate than men (Smith, Matheson, Moineddin, 2007; Wong & Miles, 2014). However, a few immigrant groups do not show this gender difference in depression rates and different factors tend to impact men and women's experiences of depression differently. Caribbean women and men have a similar lifetime

prevalence of Major Depressive Disorder (Williams, Haile, Gonzalez, Neighbors, Baser, & Jackson, 2007). Immigrant men may experience more negative mental health outcomes from feeling inadequate at a new job, adjusting to the new country, and immigration-related factors, whereas women may experience more negative mental health outcomes from health problems, professional stressors, and lack of attachment to ethnic group (Ritsner, Ponizovsky, Nechamkin, Modai, 2001; Thibeault, Stein & Nelson-Gray, 2018). In an Asian sample, low English proficiency has been associated with experiences of depression for immigrant men, while this is not the case for women. In contrast, country of birth has been associated with immigrant Asian women's experiences of depression, while country of birth does not seem to impact men in the same way (Takeuchi, et al., 2007). However, for Indian women, gender roles seem to play a role in depression as egalitarianism in the household was associated with less depression (Mann, Roberts & Montgomery, 2017). In a Latino sample, social support for men showed to be more impactful in decreasing depression whereas familial stress had a greater impact on women's depression (Hiott, Grzywacz, Arcury, & Quandt, 2006). Older adult Latina immigrant women have been shown to experience fewer depressive symptoms than older adult Latino immigrant men. (Monserud & Markides, 2018).

Immigration Status/Reason for Immigration

There is some variation in depression outcomes by immigrant status and reason for immigration. Immigrants who left their home country to pursue education, employment, and unite with family initially report better mental health outcomes than native-born individuals and overtime their health outcomes decline to that of the native-born population. Some undocumented immigrants and immigrants who migrate for safety and survival reasons such as asylees, and refugees, do not seem to benefit from the Immigrant Paradox as they tend to have poorer overall health and mental health outcomes than native-born individuals (Young & Pebley, 2017; Giuntella, Kone, Ruiz, & Vargas-Silva, 2018). Refugees from Iraq, where there has

been consistent war and safety concern, and Arab refugees have shown particularly high levels of depression as compared U.S. -born counterparts of the same ethnicity (Taylor, et al., 2014; Pampati, Alattar, Cordoba, Tariq, & Mendes de Leon, 2018). Those immigrating for reasons of political violence have higher depression scores than those who received visas for familial reasons (Wong & Miles, 2014). For Ethiopians, the closer one's immigration status was to naturalized citizen the lower their depression score (Kibour, 2001). Asian immigrants who reported that they felt strongly about their reasons to immigrate were less likely to report depression than those who reported no clear reason to immigrate (Gong, Xu, Fujishiro & Takeuchi, 2011).

Age/Age of Arrival/Years in the United States

Despite the Immigrant Paradox, of immigrants initially having better mental health outcomes, the general trend in research findings has provided evidence that over time immigrants' mental health tends to decline with the more time spent in the United States and regress to the general health outcomes of the U.S. population (Alegria, Alvarez, DiMarzio, 2017; Finch & Vega, 2003; Miranda, Siddique, Belin, & Kohn-Wood, 2005; Lee, Nezu & Nezu, 2018). However, recent studies have found mixed results when looking at specific groups regarding the impact of time spent in the U.S., age, and, age at immigration on mental health. As mentioned previously regarding Asian immigrants, Chinese and Korean immigrants do not seem to experience an increase in depression with greater number of years spent in the United States (Guo & Stendland, 2018).

Research has supported both a linear relationship with depression and age, years spent in the U.S., and age at immigration, but some research also shows that there may be cut off points related to depression. Wong & Miles (2014) find support that experiencing depression is linked to both an increase in years lived in the U.S. as well as an increase in age. For the studies

that support a cutoff point associated with depression the theory is that access to certain resources and experiences are associated with certain ages and ages at immigration. Migrating in adolescence has been associated with a greater likelihood of depression. In one study, Asian immigrants who migrated at 25 or older were less likely to experience depression than those who migrated at age six or younger (Gong, Xu, Fujishiro & Takeuchi, 2011). While those who immigrate in adolescence may have more opportunities to gain education in the new country, develop social supports, and develop language proficiency, they tend to also have weaker ethnic identity and experience more acculturation, which have both been associated with poor mental health outcomes (Fuligni, 2005). In contrast, those who immigrate as adults may not be impacted by acculturation effects as greatly, but also may not have as many opportunities to be exposed to the new country's language, gain education in the new country, and develop social support (Gerst, Al-Ghatrif, Beard, Samper-Ternent, & Markides, 2010; Fuligni, 2005). However, in opposition to the above studies, some research has not found connection between mental health and age at immigration (Gerst, Al-Ghatrif, Beard, Samper-Ternent, & Markides, 2010; Lam, Yip & Gee, 2012) A few studies have found that age does not greatly impact depression in Asian immigrants (Mui, 1996; Gellis, 2003; Shapiro et al., 1999; Pernice & Brook, 1996).

Education/Employment/Income

The variables that contribute to socio-economic status vary in how they relate to depression. Although historically, research has found no connection between education and depression particularly for Asian immigrants, new literature has emerged which supports a connection between higher education level and lower depression (Mui, 1996; Gellis, 2003; Shapiro et al., 1999; Pernice & Brook, 1996; Kibour, 2001; Miranda, Siddique, Belin, & Kohn-Wood, 2005). Employment has been associated with a reduction in depression for a variety of immigrant groups (Aroian & Norris, 2002; Williams, Haile, Gonzalez, Neighbors, Baser, & Jackson, 2007; Taylor et al., 2014). While financial hardship has been shown to increase

depression outcomes in Latinx immigrants, income level did not significantly impact depression for Asian American immigrants (Gerst, Al-Ghatrif, Beard, Samper-Ternent, & Markides, 2010; Monserud & Markides, 2018; Lazar-Neto, 2018.Lam, Yip & Gee, 2012).

English Language Proficiency

Research on English language proficiency and how it is associated with depression is fairly inconclusive as some studies do support that there is a relationship (Nicassio, Solomon, Guest & McCullough, 1986; Bennett, Culhane, McCollum, Mathew & Elo, 2007; Lazar-Neto, 2018) and other studies do not support an association between these two variables (Wong & Miles, 2014; Guo & Stensland, 2018; Diwan, 2008).

Marital Status/Family

Relations with family generally seem to reduce negative depression outcomes. Marriage seems to function as a protective factor against depression across diverse immigrant backgrounds (Gerst, Al-Ghatrif, Beard, Samper-Ternent, & Markides, 2010; Monserud & Markides, 2018; Miranda, Siddique, Belin, & Kohn-Wood, 2005; Taylor et al., 2014; Lazar-Neto, 2018). However, this does not seem to apply for Asian immigrants (Mui, 1996; Gellis, 2003; Shapiro et al., 1999; Pernice & Brook, 1996). Generally, research suggests that staying close with family in regard to both proximity and relationally helps protect immigrants from depression (Aroian & Norris, 2002; Gutierrez-Vazquez, Edith, M., Flippen, C., & Parrado, E., 2018). However, this same effect has not been seen in various Asian immigrant groups (Pernice & Brook, 1996; Guo & Stensland, 2018). For some Asian immigrant groups, greater family support and involvement seem to act as a risk factor for depression as there is a growing body of research finding that Vietnamese and Chinese immigrants who have a larger familial support network and greater family support have higher depression outcomes. One theory that has been proposed to explain this is that those who have more contact with their family may be

confronted with the reality of a linguistic and cultural divide between their children and grandchildren (Gellis, 2003; Guo, Steinberg, Dong, & Tiwari, 2018).

Acculturation

Stephenson (2000) defines acculturation as the "degree of immersion in dominant and ethnic societies" (p. 79). Acculturation is associated with depression for various groups (Lee, Nezu & Nezu, 2018; Oh, Koeske & Sales, 2002; Kim, 2011). Increased acculturation has been associated with depression for various groups such as Vietnamese, Puerto Rican, Korean, Pakistani and Chinese immigrants (Nguyen & Peterson, 1993; Ramos 2005; Shin, 1994; Chaudhry, Husain, Creed, 2012; Lam, Pacala & Smith, 1997). However, some of the research that investigates multiple variables conflicts with the observed relationship between depression and acculturation (Lee, et al., 2016). This suggests that there may be other variables moderating this relationship such as gender, acculturative stress, and years of education (Castillo, et al., 2015; Mui & Kang, 2006; Gallagher-Thompson, 1997).

Community Support and Depression

While demographic factors allow a better determination of risk for depression at the individual level, most demographics are immutable and only partially inform best-practice intervention and prevention strategies. This makes it important to explore community-level support in order to serve those targeted immigrant demographics who would benefit from depression intervention. A study on the impact of community-based self-help groups showed promising results in Turkish immigrant women who experienced depression as the groups served as a means of social support (Siller, Renner, Juen, 2017). Additional community-based depression interventions tailored to specific cultural groups have been shown to decrease depression in immigrant populations (Karasz, et al., 2015).

Social support in itself functions as an important protective factor against depression for various immigrant groups as lack of social support has been associated with a greater risk of depression, post-partum depression, and other negative mental health outcomes (Ganann, Sword, Thabane, Newbold & Black, 2016; Zapata, Carlos, Merten, Gallus, Grzywaczs, 2017). Community-related factors such as living in a neighborhood with others who speak the same language, reporting a greater sense of community support, greater social cohesion in one's neighborhood, and the availability of one's own cultural events in the community have been associated with less depression (Nguyen, Rawana, & Flora, 2011; (Pernice & Brook, 1996; Yeh, 2014; Guo, Steinberg, Dong, & Tiwari, 2019; Gellis, 2003; ;Guo & Stensland, 2018; Vega, Ang, Rodriguez, & Finch, 2011; Zapata, Carlos, Merten, Gallus, Grzywaczs, 2017; Jang, et al., 2015).

There are other community-level risk factors that are worthy of being noted. Immigrants may also experience poor mental health outcomes due to experiencing discrimination. Various studies have found greater depression and psychological distress to be associated with greater perceived racism and experiences of others categorizing someone in a racial, ethnic, or other group identity that they do not personally identify with (Yussuf, 2015; Pernice & Brook, 1996; Yip, Gee & Takeuchi, 2008; Rah, Huh, Finch, Cho, 2019). Research also shows that immigrants have had increased mistrust in health care services if their community expands immigration enforcement authority to police instead of limiting it to Immigration Customs Enforcement (ICE) (Rhodes, et al., 2015).

The Wichita Community: Immigration Then and Now

With a rich history of German, Mexican, Irish, and Lebanese residents settling in the city, Wichita, Kansas has a unique immigration history. Wichita had an influx of German immigrants who made up a majority of the city, however, in the late 1800's demographics began to change (Chung, 2018). In the late 1800's and early 1900's, local industries readily hired

Mexican immigrants to work on the railroads as cattle drivers, and to work in the meat industry. During around the same time many Lebanese immigrants began to make Wichita their home as they left former Syria due to economic and safety concerns (Chung, 2018). In 1965 when the Immigration and Nationality Act passed, the Mexican immigrant workers that were so vital to the Wichita economy were suddenly considered to be illegally residing in the United States (Boorn, Kammeraad & Strohminger, 2009). Three decades later, new federal policies were implemented that limited immigrants' freedoms. The Illegal Immigration Reform and Responsibility Act of 1996 was implemented to create repercussions for undocumented immigration. This policy allowed a speedy deportation process without legal counsel for undocumented immigrants who had anything from a misdemeanor to a felony on their record. This policy also implemented five to ten year restrictions on visa application eligibility for undocumented immigrants who were found in violation of the act. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 striped non-citizens of the benefits they received through government welfare programs such as Temporary Assistance for Needy Families (TANF) (Torres, Decarlo Santiago, Kaufta Waltz, & Richards, 2018). The 1986 Immigration Reform Act allowed a pathway to legal residency of many formerly undocumented immigrants particularly from Mexico (Waters & Jiménez, 2005).

Nation-wide and local immigration history has worked to shape Wichita's current immigration landscape. The current climate in Wichita for immigrants can evoke mixed feelings due to federal, state, and local changes. For undocumented immigrants, the last few years of illegal immigration rhetoric from former Secretary of State Kris Kobach has been a source of fear for many of Kansas' 75,000 undocumented immigrants and the 106,933 individuals living in mixed immigrant status families (Lowry, Ordonez & Wise, 2017; Immigrants, 2017). It is an important time to support the well-being of the immigrants that are so integral to Wichita as a whole. In many ways the Wichita community has already been striving towards serving the

growing immigrant population through efforts such as the Catholic Diocese expansion of Hispanic Ministries in 2016, various events and festivals aimed at celebrating refugees and immigrants as a whole, and immigrant-serving organizations such as The Immigrant Support Services Network and The Sunflower Community Action's focus on immigration (V Encuentro, n.d.).

Immigrants strengthen our economy and our communities (Gillula, 2015). Depression has a connection with many other poor health outcomes ranging from gum disease, physical health and can even impact pre-mature death that impede on the positive impact that immigrants make on the communities that they live in (Luo, Hybels & Wu, 2018). In 2012, in Sedgwick County 17.9% of adults had been diagnosed with depression at some point in their lifetime, this demonstrates the need to address depression in a local context (Sedgwick County Health Department, 2012). Wichita will be stronger when supporting the well-being of the immigrants that live here.

Theoretical Framework

Segmented Assimilation Theory

Expected outcomes of the quantitative portion of this research are guided by Segmented Assimilation Theory. Segmented Assimilation Theory is a sociological theory developed by Portes & Zhou (1993) who suggest that the social context in which immigrants live, plays a role in acculturation outcomes as well as other social and well-being outcomes. Immigrants can either experience downward assimilation into the urban class (a negative outcome), straight line assimilation into the U.S. middle class (a positive outcome), or selective acculturation through a bicultural orientation and solidarity with one's culture of origin resulting in upward class mobility (a highly positive outcome). Portes & Zhou (1993) suggest three main social contexts that matter in the assimilation of immigrants: 1) skin color, 2) location of residence, and 3)

mobility ladders. Therefore those who have white skin, live in a location in close proximity to the dominant society, and have mobility ladders available to them such as education, support from government programs, or an economically strong co-ethnic community would be less likely to experience downward mobility and as a result would have more positive outcomes than those who don't.

Segmented Assimilation theory was originally created to explain the assimilation patterns of second-generation immigrants as there was a noted difference between the assimilation of those who moved from their home country and their U.S. born children (Xie & Greenman, 2011). However, this study uses Segmented Assimilation Theory to guide mental health outcomes of first generation immigrants because there is a need to examine the differences in physical and mental health outcomes of immigrants from various social backgrounds as the nuances of the immigrant experience can be seen from the literature. Existing alternative theoretical frameworks, such as the Immigrant Paradox, exhibit a monolithic conclusion for immigrant health outcomes and have not been able to sufficiently explain the variation in the outcomes of different immigrant groups' mental health. Although as a whole, immigrants in the United States tend to initially have better mental health than U.S.-born individuals supporting the Immigrant Health Paradox, Segmented Assimilation theory may be a useful theoretical underpinning to help explain the differences between immigrant groups regarding mental health outcomes. This theory is being applied to the current study to determine if some of the factors that drive social and economic mobility outcomes in Segmented Assimilation Theory can also help explain health and particularly mental health outcomes of the current study. The application of Segmented Assimilation Theory to the mental health outcomes of the current study would suggest that those who identify as white, those with higher education levels, those who have a mid-level of acculturation, those who do not live in ethnic enclaves, and

have a strong co-ethnic community would have better outcomes as these are some mechanisms theorized to contribute to upward mobility.

Social Ecological Model

The qualitative portion of this research is guided by Stokol's (1996) Social Ecological Model (SEM). In this model there are five levels of community health promotion: the Individual level, the Interpersonal level, the Organizational level, the Community level, and the Policy level. These levels are detailed further in Table 1, which includes descriptions of each of the 5 levels. While there are other social scological models, Stokol's model provides social scientists with a perspective that emphasizes the importance of individual's well-being in relation to their environment. This perspective acknowledges that there are various physical, relational, social, cultural, and political factors that impact the well-being outcomes of individuals and all factors must be considered in efforts moving toward improved wellness.

Table 1
Stokol's Social Ecological Model: Levels of Influence

Level	Description
Individual Level	Individual characteristics that influence behavior, such as knowledge, attitudes, beliefs, and personality traits
Interpersonal Level	Interpersonal processes, and primary groups including family, friends, peers, that provide social identity, support and role definition
Organizational Level	Rules, regulation, policies, and informal structures, which my constrain or promote recommended behaviors
Community Level	Social networks and norms, or standards, which exist as formal or informal among individuals, groups, and organizations
Policy Level	Local, state, federal policies and laws that regulate or support healthy actions and practices for disease prevention, early detection, control, and management

The Gap in Literature

Much of the existing research on how demographics, immigration, and community impact depression outcomes for immigrants has been conducted using national samples or in states with large immigrant populations such as Los Angeles, Washington, D.C., and California (Lam, Yip & Gee, 2012; Takeuchi, 2007; Taylor, 2007; Young & Pebley, 2017). There is a need for research on immigrant health that is conducted in areas with low immigrant populations, especially in the Midwest. There is a lack of community-based research on the outcomes of immigrants, that can provide a local picture of health (Zapata et al., 2017). This is needed for Wichita, in order to provide support for immigrants. There have also been few studies that focus on immigrants as a whole rather than just focusing on immigrants from a specific race, immigration status, or country of origin. Communities that have diverse immigrant demographics and want to make local changes to benefit the health of immigrants living there need to be guided by research that is inclusive of all immigrants, not just a specific group. These are crucial gaps in the research that call for studies such as the current study.

Background and Content: Community Partnerships

The nature of this study, which had a target population that made up only about 10% of the general population in the area, required the research team to create partnerships with immigrant-serving community organizations. Partnership creation was an important part of the success of this work. One community partner/co-investigator in this study was identified through the lead researcher's advisor. The co-investigator served as a champion of the study by helping recruit participants in the Hispanic and Latino community, promoting the study's purpose, translating, interpreting, and helping to disseminate results.

Partnerships with community organizations were established primarily through referrals. In light of the study, before the lead researcher began the project, she joined a variety

of immigrant-serving organizations around the community (e.g. Immigration Advocacy Network). This helped mainly with recruiting participants to take the survey for the quantitative portion of the study. Through presentations, emails, phone calls, and meetings, the lead researcher was able to spark the interest of gatekeepers in various organizations who were interested in helping recruit participants from their organizations. These organizations included churches, English classes, cultural groups, and schools who all allowed the research team members to come talk to their members and administer the survey during their regularly scheduled meeting times. Most community organizations were willing to provide ad hoc interpreters when needed who were also trusted members of their group, and who helped interpret the lead researcher's message about the purpose of the survey.

Current Study

The purpose of this study is to examine depression symptomology related to demographic and immigration factors and explore existing concerns and community-level changes needed to support the mental health of immigrants living in Wichita, Kansas. The current study will address the below research questions.

Research Questions

The research questions are as follows: Research question 1) What demographic factors (e.g. race, education, ect) and immigration factors (e.g. age of arrival, acculturation, etc.) are associated with depression among immigrants living in the Wichita community? Research question 2) How do Hispanic and Latina immigrant women perceive that living in Wichita impacts the mental health of immigrants? Research question 3) What do Hispanic and Latina immigrant women believe are local community changes that should be made to better support the mental health of immigrants living in Wichita, Kansas?

Methods

Research Team

The research team for this study includes six diverse individuals. The lead researcher is a Black American non-immigrant female doctoral student raised in the Midwest. The secondary researcher and community partner is a Mexican-born undocumented Latina immigrant who was raised in the Midwest. The first undergraduate research assistant is a Caucasian/Latin American, raised in Paraguay. The second undergraduate research assistant is a Vietnamese-American second-generation immigrant raised in the Midwest. The third undergraduate research assistant is a Puerto Rican, non-immigrant, female, undergraduate psychology student raised in the Midwest. All three of the undergraduate researchers also spoke a second language (Vietnamese and Spanish) and helped answer questions and give explanations in their second language to participants who needed assistance.

Quantitative Methods

All quantitative data in this study was originally gathered by the research team and all procedures were approved by the Institutional Review Board before data were collected.

Participant Inclusion Criteria

Participants qualified to participate in the survey for this study if they met the following criteria: 1) if they reported that they were from a country outside of the U.S. 2) reported currently living in Wichita, Kansas or the surrounding areas, 3) were not classified under one of the "non-immigrant" statuses (e.g. student visa, tourist visa), and 4) reported being age 18 or above. The data of any participant found to not meet these qualifications were not included in analysis. Table 1 shows a description of the participants.

Participant Recruitment

Survey participants were recruited through social media, email, electronic flyers, snowball recruitment, and partnership with local gatekeepers and immigrant-serving organizations including churches, English classes, schools, and cultural activity groups in Wichita, Kansas.

Data Collection Tools

The survey instrument used was a 46-item survey including the Center for Epidemiological Studies Depression Scale (CES-D) to assess depression symptomology, the Psychological Acculturation Scale (PAS) to assess acculturation, immigration -related questions, and demographic questions. See Appendix A for the English version of the survey. Spanish and Swahili versions of the survey that were used in this study to collect data are available upon request.

Demographic & Immigration Questions. Survey questions consisted of nine demographic questions including city of residence, gender, race, age, marital status, education level, employment status, income, and employment industry. Response options for industry were derived from data regarding the most common types of employment for immigrants in Wichita (American, 2017). Participants were also asked seven immigration-related questions including age of immigration to the U.S., length of time living in the U.S., country of origin, reason for emigration, immigration status, refugee status, and English proficiency. Because the construct of race is conceptualized differently in different countries and regions of the world, the response options for race were created based on consultation with roughly 20 individuals from different countries who were living in the U.S. in order to identify race categories that would be identifiable by most participants.

Depression Scale. The Center for Epidemiological Studies Depression Scale (CES-D) is a 20-item questionnaire ($\alpha = .86$) initially modified and validated by Lenore Radloff (1977).

This scale assesses depression symptomology within the last week. This scale does not assess depression in itself as an individual must have persistent symptoms for at least one month to meet the criteria for depression, and this version of the CES-D specifically asks about symptoms only within the last week (Radloff, 1977). The CES-D has been validated in multicultural samples such as Malaysian adolescents (α = 0.85) and Malaysian adult prisoners (α = .75), Mexican young adults (α = .83), Spanish-speaking adults (α = .89), Lebanese adults (α = .84), Greek adolescents and adults (α = .95), Korean-Canadian immigrants (r = .65 with Symptom Checklist Depression subscale), Portuguese adults (α = .87), Brazilian general population (α = .84), Brazilian older adults (α = .86), and French adults (Ghazali et al., 2016; Mazlan & Ahmad, 2014; González-Forteza, et al., 2011; Vázquez, 2007; Kazarian & Taher, 2010; Fountoulakis, 2001; Noh, et al., 1998, Gonçalves & Fagulha, 2004; Lazar-Neto, 2018; Batistoni & Cupertino, 2007; Morin, et al., 2011). A sample item from the CES-D scale includes: "I felt everything I did was an effort/Spanish: Sentí que todo lo que hacía tomaba esfuerzo./Swahili: Nilihisi kuwa kila kitu nilichofanya ni juhudi." The CES-D uses a 4-point Likert scale in which participants can respond: "Rarely or none of the time (less than 1 day)", "Some or a little of the time (1 – 2 days)", "Occasionally or a moderate amount of time (3 – 4 days)" , "All of the time (5 – 7 days)". The CES-D is calculated by adding up the scores of each individual question. Scores ranging from 0 – 60 indicate no depression to mild depression symptomology. Scores ranging from 16 – 23 indicate moderate depression symptomology. Scores ranging from 24 – 60 indicate severe depression symptomology. Although this CESD scale only asks about symptomology within the last week rather within the last two weeks and therefore cannot be used to determine depression but rather depression symptomology, any scores that are 16 or above indicate risk for clinical depression.

Acculturation Scale. For this research study the Psychological Acculturation Scale (PAS) was used to assess acculturation (Tropp, Erkut, Coll, Alarcón & García, 1999). In its

validation study the PAS had a high internal consistency in both Spanish ($\alpha = .90$) as well as English ($\alpha = .83$). While before this study it had only been validated for use with individuals of Hispanic descent living in the U.S., it was chosen for its short length and was examined for internal validity with non-Hispanic groups in the current study. The PAS is a 10-item scale that was developed in response to the lack of instruments measuring acculturation through a phenomenological perspective. This scale was developed to assess acculturation as a psychological phenomenon including cultural attachment and a sense of belonging within communities. An example item from the PAS is "With which group of people do you know what is expected of a person in various situations?". Response options consist of a nine-point Likert scale for each question with number one labeled "Only with Hispanics/Latinos", number five labeled "Equally with Hispanics/Latinos", and number nine labeled "Only with Anglos (Americans)" to indicate that if they chose a number closer to one their response would reflect more belonging or attachment to Hispanic/Latino culture and a response closer to nine would reflect more belonging or attachment to Anglo (American) culture.

A drawback of using the PAS is that it was not originally developed for use with groups outside of Hispanic and Latino culture. Because the current study is assessing acculturation in a variety of cultures, it was necessary to adapt the scale by changing the labels of the scale to make it applicable to immigrants who were not Hispanic or Latino. Within the Likert scale, number one was re-labeled "Culture from my home country", five was re-labeled "Both cultures equally", and nine was re-labeled "culture from the United States". Responses closer to the number one reflect more belonging and attachment to the culture form their home country and responses closer to the number nine reflect more belonging and attachment to the individual's home country.

Procedure

The 46-item survey was administered both electronically through a link to Qualtrics and in paper format to participants. Survey items in Spanish, English, and Swahili were assessed by individuals who were native speakers of the languages and feedback was given on survey items regarding the clarity of items and understanding of the items in the scale. Consent forms were attached to the beginning of the survey. Electronic and paper surveys and consent forms were also available to participants in Spanish, English, and Swahili. Participants were able to choose which language they wanted to complete the survey in. Survey completion took between 15 to 45 minutes depending on the language proficiency and technology proficiency of participants. Survey participants were not compensated.

Administering the survey often included communing, sharing a meal, attending church services, and spending time with the group members in the immigrant-serving organizations. After every round of survey administration to a group in an organization, the lead researcher followed up with the group members by returning to give them a thank you card as well as homemade cookies. Gatekeepers were gifted with a thank you card and a bar of Shocklate from the Wichita State University bookstore. Giving the participants and gatekeepers in this study something back for their time, seemed to help create trust between the participants and the research team. Many participants as well as gatekeepers asked for the results of the study to be shared with them once completed. Some gatekeepers indicated that they wanted such information in order to know how to serve their members better in relation to mental health in the local immigrant community.

Quantitative Analysis

The data collected for the purpose of this study was initially input, organized, and cleaned using Microsoft Excel before it was input and analyzed using SPSS statistical analysis

software. The race and ethnicity question was in a “check all that apply” format. In the analysis of the variable “race” Pacific Islander and “Asian” were collapsed into an “Asian or Pacific Islander” category due to a low number of participants identifying as “Pacific Islander”. The data of participants who identified as multiracial by choosing more than one race or ethnicity was analyzed in groups with participants who identified the same way (e.g. White Hispanic/Latino/Chicano). If there was an individual who identified their race/ethnicity in a way that there was no group for, the data was put into the “other” race category.

A response category for “immigration reason” was created in retrospect due to many participants indicating in the write-in responses that they came to the United States for a significant other (e.g. “marriage”, “I came to meet my husband”, “porque me enamore de mi esposo y queriamos vivir juntos y casarnos” English Translation: because I fell in love with my husband and we wanted to live together). The response category that was created is “Marriage or Partnership”. The "other" category that is a response to the “immigration reason” question consisted of various responses such as "Vine a trabajar. Y darle mejor vida protección a mis hijos" in English "I came to work and give better life protection to my kids", "to start a new life", and "political problems". The data of participants who identified more than one reason for coming to live in the United States was analyzed with each of the response categories marked. For the question "Which of the following best describes your type of employment/work?" response categories were collapsed to include only the categories that had over 7% of participants due to low sample sizes in lower percentage categories.

Qualitative Methods

All qualitative data in this study was originally gathered by the researcher team and all procedures were approved by the Institutional Review Board before data collection.

Participant Inclusion Criteria

Individuals qualified to participate in this study's focus groups if they held immigrant or undocumented status, currently lived in Wichita, Kansas or the surrounding cities, were 18 or older, identified as a women, and were of Hispanic and/or Latino race or ethnicity. Data from any participant that did not meet these qualifications was omitted from analysis.

Participant Recruitment

Focus group participants were recruited through social media, connecting with gatekeepers within the immigrant community in Wichita, Kansas, word of mouth, snowball recruitment, and the opportunity for those who participated in the survey to sign up for the focus group participation if they met respective requirements. To incentivize participation, each individual was offered a thank you card with one $10 gift card inside to a local grocery store and were provided dinner during the time of the focus group. This was not only a recruitment strategy, but also an important part of what Rappaport (1981) mentions on empowering marginalized groups that Community Psychologists work with in research and giving back to participants as a way to thank them and emphasize their value and contribution to the research at hand (Rappaport, 1981).

Data Collection Tools

Three in-person semi-structured focus groups, referred to as group interviews, were conducted with two to six participants each. Focus groups were chosen as the method of data collection to allow for the three strengths that Hughes & Dumont (1993) discuss in their paper recommending focus groups as a tool for "culturally anchored research": Strength 1) focus groups allow the within-group homogeneity that increases discussion of shared experiences between participants and the elaboration of stories. Strength 2) focus groups allow researchers to become familiar with the specific language that a cultural group uses to describe their social world and strength 3) focus groups allow researchers to explore the gamut of diverse experiences between group members and the nuances between similar experiences. To answer

research question number two, questions focused on perceptions of how the local community impacts the mental health of immigrants. Questions in this study were influenced by the research questions used in Hebert-Beirne et al (2018) and Sohtorik & McWilliams, (2011). These are two qualitative studies that focus on health and mental health needs of an immigrant population in a community context. Questions from these studies were reviewed in order to help brainstorm precise and quality questions and language to use within the focus groups.

Focus group questions were designed to discuss experiences at each of the five levels of Stokol's (1996) Social Ecological Model (SEM) noted in Figure 1: the Individual level, the Interpersonal level, the Organizational level, the Community level, and the Policy level. An example of using the SEM model for a focus group question at the Organizational level was, "What types of mental health services in Wichita do you know of that you could access if you needed them?". To answer research question number three, questions were designed to explore local improvements and solutions to support immigrants' mental health. The focus group introduction script and questions can be seen in Appendix B.

Procedure

Two focus groups were held in a closed room at a local church that served a largely Hispanic congregation. This was chosen to create comfort and familiarity for the participants. One focus group was held in a closed room in the student center at Wichita State University. The duration ranged from approximately one to two and-a-half hours. Focus group participants were gathered in close quarters in the closed rooms, generally with the furniture arranged in a circle facing each other. Participants were invited to enjoy food and talk with each other before the start of the focus group in order to create a more relaxed environment. At the beginning of each focus group, a member of the research team read an IRB-approved introduction of the research to the participants, this introduction included notice of confidentiality. Unless all participants in

the focus group indicated that they were comfortable speaking in English, the introduction was also interpreted in Spanish by a native Spanish-speaking member of the research team. Participants were provided a copy of the consent form in their choice of English or Spanish and asked to take time to read it or request that it be read to them before moving forward. Participants were not asked to sign the consent form as the research team was aware that Hispanic, Latino, and immigrant populations have historically been subjected to unethical deception in research, and the research team wanted to avoid perceptions of participants signing something that could possibly be harmful to them (Gutiérrez & Fuentes, 2009; Lopez, 1987; Vasquez-Calzada, 1988). Additionally, it was considered that some participants could be undocumented and exempting this group from signing a form was expected to reduce the possibility of fear and mistrust.

After participants read the consent form, they were asked to complete a short form that asked them to provide their country of origin, age, and choose a pseudonym. Unless everyone in the focus group indicated that they would be comfortable speaking in English, focus group questions were asked aloud in both English and in Spanish by a research team member who was a native Spanish speaker, and participants were then notified that they could speak in Spanish or English to respond to interview questions. Participants were asked if it they would be okay with the focus group being recorded, and upon the start of recording focus group, participants were asked to give verbal consent regarding their voluntary participation. Focus groups lasted from one to two hours.

Qualitative Analysis

Before analysis, specific data were excluded. In focus group number two there was an individual who over the course of the conversation was found to not meet participation criteria for the study. This participant's dialogue was marked out of the transcript to be omitted from

final analysis. Focus group facilitators' remarks were also extracted from the transcript unless deemed significant, as recommended by Saldaña (2013). Saldaña (2013) suggests that interviewer dialogue can be included if it holds more purpose than inquiring about or gathering information. Researchers deemed facilitator remarks significant if the facilitator was either translating for a participant, or if a participant emphasized, agreed with, or reiterated the dialogue immediately following. The description of each step of the thematic analysis in this study, which was guided by Braun & Clark (2008), is detailed in Table 2.

Table 2

Steps of Thematic Analysis

Step	Description of the Process
Step 1: Familiarizing Yourself with the Data	1. The three focus group recordings were transcribed and re-read by research team members in order to become familiar with the data. 2. Irrelevant remarks were extracted from the transcripts. 3. Two research team members independently highlighted chunks of "codable" text in each transcript. 4. After independently highlighting "codable text", the two research team members for each transcript would then come together to compare their highlighted text and come to an agreement on the final "codable" text. - If one researcher could not convince the other that a chunk of text that they had highlighted was "codable" then it was not deemed as "codable".
Step 2: Generating Initial Codes	1. Each "codable" text was given a code name, also known as being 'coded', independently by each researcher. - Codes were not established a priori. Each researcher independently created preliminary codes for each "codable" text by considering the underlying meaning of each text. 2. The two research team members working with each transcript came together to compare codes. - If different meanings were derived, then researchers discussed the creation of a new code until agreement was reached. - Coding was a recursive back and forth process. As researchers progressed through the transcript, they referenced previous codes

Table 2 (Continued)

	to assess their application to text that was currently being considered for a code name. Already established codes could also be changed if both researchers were in agreement. 3. Codes were examined for irrelevancy, and if determined irrelevant were excluded.

	A thematic map was created by inputting codes into Mindmeister software, an online data mapping application.
Step 3: Searching for Themes	1. Codes were organized into two separate Mindmeister maps based on which research question they answered. - If a code referred to impact on mental health it was separated into a Mindmeister for research question two. - If they referred to improvements, solution, or changes to improve mental health, they were separated into a Mindmeister for research question three. 2. Codes were further categorized under the SEM level that they most related to. 3. Further, underneath the SEM level, preliminary themes (the broadest level of categorization), subthemes (a more specific phenomenon within a theme but still broad enough to encompass codes), and codes (the most specific level of categorization) were developed. organized into groups based on similar overarching phenomena. - A code became a theme or subtheme if it seemed to encompass a group of codes within the same SEM level or if it could not be grouped with other similar codes. - If there was a group of similar codes, but no code that described the overall group, a preliminary theme name was created to label the phenomenon within the grouped codes. - Priority for becoming a theme or subtheme was not given to codes with the most instances of mention. There was equal opportunity for codes with few or one mention to become themes or subthemes. 4. Theming was a continuous process of moving between the preliminarily developed themes, the codes, and the raw data in the transcript.
Step 4; Reviewing Themes	The preliminary Mindmeister map was reviewed, and changes were made if there were similar preliminary these, subthemes, or codes that were similar and could be merged together or separate.
Step 5: Defining and Naming Themes	Once a final thematic map was created themes, subthemes and codes were established, they were entered and organized in to Excel and each theme was given a description.

Some coding practices were established through previous research and some were established based on the nature of the data. In total, four research team members interacted with the data through identifying "codable" text and eventually codes. Each of the three undergraduate research team members analyzed one transcript, and the lead graduate research team member completed the coding process with all three transcripts to ensure that similar phenomena in different transcripts were coded the same. The team was able to meet for coding

using the virtual communication platform, Zoom due to Covid-19. Codable text was deemed any text that researchers perceived to answer research question number two or research questions number three or any text deemed important. Research team members took a liberal approach to identifying important or "codable" text. If a researcher felt that a certain portion of text may be important but was not completely sure, they were instructed to highlight the text as it could always be discussed and removed later if it ended up not contributing to the research findings by helping to answer the research question. Even though excluding irrelevant codes was not a part of the suggested steps by Braun & Clark (2008), it was done because of the liberal method used to identify "codable" text. Although some of text agreed upon as "codable" was interesting, it simply did not help answer the research question. Five texts initially identified as "codable" text were excluded.

An inductive and latent approach to coding as described in Saldaña (2013) and Braun & Clark (2008) was taken in this qualitative analysis. Researchers followed a few rules while coding: 1) codes should consist of two to seven words, 2) code names should aim toward answering the focus group question or research question rather than being coded as the focus group question itself. For example, if the focus group question was "what barriers to care exist?" the researcher would try to avoid coding any responses as "barriers to care", but rather give more detail such as "financial barriers". The researchers aimed to generate a .80 Cohen's Kappa value and did not have disagreement resulting in a Kappa score of 1 (McHugh, 2012). The reason that the primary researcher developed themes alone as opposed to with the rest of the group of researchers is because this allowed themes to be developed in a timely manner as meeting in-person to create themes became a health risk in light of the spread of COVID-19.

Results

Quantitative Results

The following section reports on the results of the quantitative analysis which was designed to answer research question 1) What demographic factors and immigration factors are associated with depression among immigrants living in Wichita? What follows is a description of the sample.

Participant Sample

A total of 204 participants who were immigrants living in the greater Wichita, Kansas area participated in the survey for the current research. However, may cases were excluded. Thirty-seven cases were excluded due to lack of sufficient data for analysis (e.g. incomplete CES-D Scale). Cases were excluded if the survey indicated that the participant did not meet the inclusion criteria of the study. For example, six participants indicated that they were from Puerto Rico or a U.S. state, 11 participants indicated non-immigrant visas such as a temporary work visa (e.g. H1-B) or a student visa (F-1), and two participants indicated that they did not live in Wichita or the surrounding cities. Three individuals were excluded for having five or more cases missing from the PAS scale, as the scale was only 10 questions and researchers felt that missing half of the data for that scale makes scores unreliable. Last, five individuals were excluded because they had four or more missing responses to questions in the CES-D scale, as four or more missing responses invalidates the score (Radloff, 1977). This resulted in the exclusion of 64 cases from analysis. There were 140 cases in the sample after these exclusions were made. Cases that had limited missing demographic questions were excluded from analysis on a test-by-test basis in order to refrain from working with a small sample size throughout the whole dataset. Additionally, the missing data from the cases that had PAS questions with less than five missing responses and CESD questions with less than four missing responses was replaced with sample mean values for each question. Variable means for 10 response values in the CESD were imputed, and variable means for six response values in the PAS were imputed.

Descriptive Statistics

Depression Symptom Score

All percents reported are valid percents. A reliability analysis was run with the CES-D (α = .91) with the final sample of participants. Due to strong Cronbach's alphas, no scale items were omitted. The mean CESD score for the sample was 14.39 (SD = 10.5) and ranged from 0 to 50 on a scale of 0 to 60.

Depression Symptom Severity Level

There are three levels of depression symptom severity which have cut off points established by previous literature (Best Practices, 2015). The severity levels are the none/mild depression symptom severity level with scores ranging from 0 – 15, the moderate depression symptom severity level with scores between 16 and 23, and the severe depression symptom severity level with scores between 24 and 60. Within the sample, 86 participants were at the none/mild depression symptom severity level, 44 participants were at the moderate depression symptom severity level, and 10 participants were at the severe depression symptom severity level. In summary, the majority of participants were at the none/mild depression symptom level and about 1/3 had a score that put them in the moderate or severe depression symptom level. Further details about participant depression symptom severity levels can be seen in figure one.

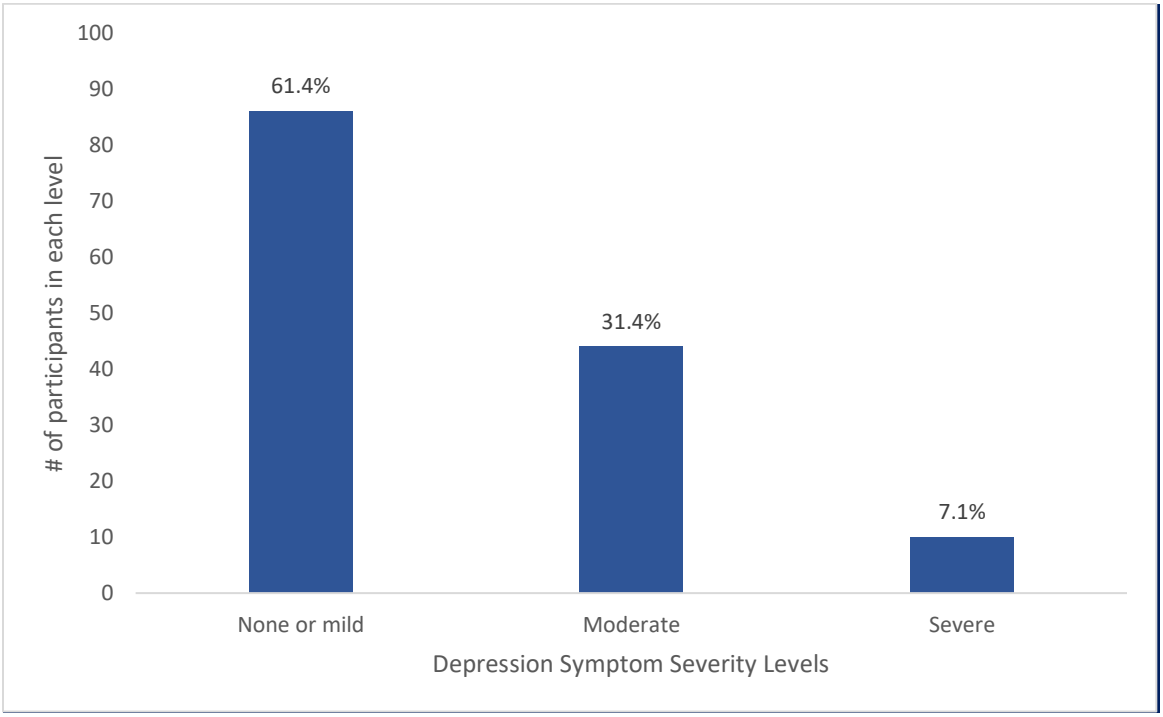

Figure 1

Participant Depression Symptom Severity Level Frequencies

Demographic Factors

The largest groups in the sample were female, Hispanic/Latino/Chicano, married, had U.S. equivalency of a high school diploma, worked full time, did not indicate income range, and were not in the labor force. They also were on average about 40 years old. Further detail related to demographic characteristics of the sample in this study are displayed in Table 3.

Table 3

Demographic Characteristics of Survey Participants

Characteristic	Percent/Mean	n/Range(SD)
Gender		
Female	72.1	101
Male	25.7	36

Race/Ethnicity		
Hispanic or Latino or Chicano only	54.7	76
Asian only	20.9	29
White/Caucasian only	6.5	9

Table 3 (Continued)

Black only	8.6	12
Middle Eastern only	3.6	5
Native American or First Nation only	0	0
Pacific Islander only	0	0
Hispanic or Latino or Chicano; White/Caucasian	3.6	5
Other race (e.g. human, Mexicana)	2.2	3
Age	39.7	18 – 72 (13)
Marital Status		
Married	71.4	100
Never Married	16.4	23
Living with a Partner	2.1	3
Divorced	3.6	5
Separated	2.9	4
Widowed	2.1	3
Education Level		
< U.S. high school equivalency	20.3	28
U.S. High school diploma equivalency	23.2	32
Some college	14.5	20
Associate's degree	7.2	10
Bachelor's degree	19.6	27
Master's degree	9.4	13
Professional or Doctoral degree	5.8	8
Employment Status		
Full Time	47.1	66
Part Time	20	28
Not in Labor Force (e.g. home maker, retired)	16.4	23
Unemployed	14.3	20
Income Range		
≤ $19,999	9.2	12
$20,000 – 29,999	14.5	19
$30,000 - $39,000	11.5	15
$40,000 – $49,999	9.2	12
$50,000 – $59,999	7.6	10
$60,000 – $69,999	7.6	10
$70,000 – $79,999	3.1	4
$80,000 – $89,999	3.8	5
$90,000 – $99,999	1.5	2
≥ $100,000	9.9	13
Did not indicate income range	22.1	29
Industry		
Manufacturing	11.1	14
Healthcare	11.9	15
Construction	8.7	11
Education	8.7	11

Other industry (e.g. food service, janitorial, social assistance)	31.7	40
Not in Labor Force	27.8	35

Immigration Factors

A reliability analysis was run with the PAS ($\alpha = .84$) with the final sample of participants, no items were omitted. The largest groups in the sample were legal permanent residents, non-refugees, reported speaking English very well, from Mexico, and immigrated to the U.S. to be with family or friends. They also had on average lived in the U.S. for about 15 years, arrived on average around 24 years old, and they had a fairly low mean of 3.82 for their acculturation score. Mean depression symptomology scores for each group by immigration factor are displayed in Table 4.

Table 4

Immigration-Related Characteristics of Survey Participants

Characteristic	Percent/Mean	N/Range(SD)
Immigration Status		
Naturalized Citizen	33.6	45
Legal Permanent Resident (LPR)	38.8	52
Other lawful immigration status (e.g. DACA, Conditional Permanent Resident)	6.7	9
Undocumented	10.4	14
Other (e.g. work visa, dual citizen, pending)	2.2	3
Unknown/Refused to respond	8.2	11
Refugee Status		
Came to U.S. as refugee	10.3	13
Did not come to U.S. as a refugee	89.7	113
English Proficiency		
Very Well	32.1	45
Moderately Well	15	21
Average	25.7	36
Not Very Well	19.3	27
Does not Speak English	4.3	6
Survey Language		
English	56.4	79
Spanish	42.1	59
Swahili	1.4	2
Place of Origin		

Mexico	50	67
Vietnam	15.7	21
Africa	8.2	11
Asia (excluding Vietnam)	11.21	15
South America	6.7	9
Other places (e.g. Europe, N. America)	8.2	11
Immigration Reason		
Table 4 (continued)		
Work	11.4	16
Family/Friends	33.6	47
Initially Education	10	14
Safety or Asylum	9.3	13
Brought by an Adult	16.4	23
Marriage/Partnership	10.7	15
Other reason	6.4	9
Length of residence	15.4	0 – 55 (11.4)
Age of Arrival	24.3	0 – 61 (13.)
Acculturation Score	3.82	1 – 6.6 (1.4)

Bivariate Analysis Results

The following results answer research question number one: What demographic factors (e.g. race, education, ect) and immigration factors (e.g. age of arrival, acculturation, etc.) are associated with depression among immigrants living in the Wichita community?

Depression Symptom Scores and Demographic Factors

A Pearson's *r* correlation coefficient showed a non-significant relationship between depression symptom score and age with an effect size showing a weak negative impact ($r = -.14$, $p = .101$, $n = 135$). Due to a violation of the assumption of normality, a Mann-Whitney U Test was conducted to show a non-significant difference between the depression symptom scores of men and women with a weak negative effect size ($U = 1722$, $p = .64$, $r = -.04$). One-way between subjects ANOVAs were conducted and showed that there was no significant difference between the depression symptom scores of those in different income ranges $F(10,120) = .463$, $p = .91$, $\eta^2 = .037$, nor education levels $F(6,131)=1.20$, $p = .31$, $\eta^2 = .052$, and that both variables had a weak effect size. Due to the violation of the assumption of normality with the variables marital

status, industry, employment status, and ethnicity/race a Kruskal Wallis H test was run to assess the relationship between these variables and depression symptom scores instead of a one-way between-subjects ANOVA. There was no significant difference between depression symptom score and marital statuses $\chi^2(5, n = 138) = 9.052$, $p = .107$, $\epsilon^2 = .07$, industries $\chi^2(5, n = 126) = 1.183$, $p = .947$, $\epsilon^2 = .01$, employment statuses $\chi^2(3, n = 137) = 5.839$, $p = .120$, $\epsilon^2 = .04$, nor ethnic/racial groups $\chi^2(6, n = 139) = 7.84$, $p = .25$. $\epsilon^2 = .06$, and all had weak effect sizes. Further details are displayed in Table 5. Overall, in this section there were no significant differences between any demographic factors and depression symptomology scores. Because these analyses were conducted using many bivariate tests, a type 1 error of interpreting significance where there is none is more likely to have occurred than if a single multivariate test had been conducted.

Table 5

Outcomes of Depression Symptom Scores by Demographic Factors

Demographic Factor	Mean/ Correlation	SD	Post Hoc Test
Gender			
Female[1]	14.8	10.9	
Male[2]	13.1	9.6	
Race/Ethnicity			
Hispanic or Latino or Chicano only[3]	14.7	9.1	
Asian only[4]	10.7	8.7	
White/Caucasian only[5]	14.4	14.4	
Black only[6]	16.8	13.7	
Middle Eastern only[7]	23.2	16.4	
Hispanic or Latino or Chicano; White/Caucasian[10]	17.8	17	
Other race	9	2	
Age	-.14	-	
Marital Status[11]			
Married[12]	13.6	10.7	
Never Married[13]	17.9	9.2	
Living with a Partner[14]	22.7	17.7	
Divorced[15]	7.6	4.4	
Separated[16]	16	3.6	
Widowed[17]	15.9	15.5	
Education Level			
< U.S. high school equivalency[18]	13.1	10	

U.S. High school diploma equivalency[19]	13.7	8.2
Some college[20]	18.3	11.4
Associate's degree[21]	19.6	11.4
Bachelor's degree[22]	12.9	13.3
Master's degree[23]	12.1	9.1
Professional or Doctoral degree[24]	12.4	7.7
Employment Status		
Full Time[25]	13.6	9.3
Part Time[26]	11.8	9.2

Table 5 (continued)

Not in Labor Force[27]	14.7	12.9
Unemployed[28]	18.9	12.5
Income Range		
≤ $19,999[29]	16.7	7.5
$20,000 – 29,999[30]	16	12.4
$30,000 - $39,000[31]	17.7	11.4
$40,000 – $49,999[32]	13.6	10.1
$50,000 – $59,999[33]	12.8	12.6
$60,000 – $69,999[34]	14.7	12.4
$70,000 – $79,999[35]	15.6	12.0
$80,000 – $89,999[36]	11.6	3.8
$90,000 – $99,999[37]	12.5	2.1
≥ $100,000[38]	10.9	10.4
Did not indicate income range[39]	13.4	10.7
Industry		
Manufacturing[40]	13	6.7
Healthcare[41]	13.7	9.9
Construction[42]	14.3	9.0
Education[43]	12.1	7.4
Other industry[44]	14.1	10.6
Not in Labor Force[45]	17.4	13.7

Note. * = p < .05, ** = p < .01, *** = p < .001

Depression Symptom Scores and Immigration Factors

Pearson's *r* correlation coefficients were computed to assess the relationship between depression symptom scores and acculturation score, age of arrival in the U.S., and years in the U.S. There was a non-significant negative relationship between acculturation score and depression symptom score with a weak effect size (r =-.06, p = .453, n = 140), and a non-significant positive relationship between length of residence and depression with a weak effect size (r = .03, p =.70, n = 130). There was a significant negative relationship between age of arrival in the U.S. and depression symptom score with a small effect size (r = -.21, p < .05, n =

135). Due to a violation of the assumption of normality, a Mann-Whitney U Test was conducted to show a non-significant difference between depression symptom scores of refugees and non-refugees and had a a small effect size (U = 636, p = .43, r = -.07). Due to the violation of the assumption of normality, Kruskal Wallace H non-parametric tests were used to determine no significant differences between the depression symptom scores of those in different groups related to reasons for immigration and had a small effect size $\chi^2(6, n = 137) = 8.371$, p = .212, ϵ^2 = .06, places of origin with a small effect size $\chi^2(5, n = 134) = 3.726$, p = .589, ϵ^2 = .03, and immigration statuses with a small effect size $\chi^2(5, n = 134) = 7.101$, p = .213, ϵ^2 = .05. A one-way between subjects ANOVA revealed that there was no significant difference and a small effect size between the depression symptom score of those at different English proficiency levels $F(4,130) = .816$, p = .59, η^2 = .024. Table 6 provides further details. Taken together, in this section, age of arrival in the U.S. had a significant relationship with depression symptomology scores, and all other immigration factors did not. Because these analyses were conducted using many bivariate tests, a type 1 error of interpreting significance where there is none is more likely to have occurred than if a single multivariate test had been conducted.

Table 6

Outcomes of Depression Symptom Scores by Immigration Factors

Immigration Factor	Mean/ Correlation	SD	Post Hoc Test
Immigration Status			
Naturalized Citizen[1]	13.6	11.2	
Legal Permanent Resident[2]	14.6	10.4	
Undocumented[3]	13.3	6.4	
Other lawful immigration status[4]	22.2	12	
Other[5]	25.3	21.1	
Unknown/Refused to respond[6]	10.5	7.0	
Refugee Status			
Came to U.S. as refugee[7]	11	11.1	
Did not come to U.S. as a refugee[8]	14.7	10.8	
English Proficiency			
Very Well[9]	16.6	13.1	
Moderately Well[10]	12.1	8.4	

Average[11]	13.8	7.9	
Not Very Well[12]	13.5	10.5	
Does not Speak English[13]	14.6	13.3	
Place of Origin			
Mexico[14]	14.9	9.7	
Vietnam[15]	10.2	7.1	
Africa[16]	16.1	14	
Asia (excluding Vietnam)[17]	15.8	14	
South America[18]	15.9	11.6	
Other places[19]	15	12.9	
Immigration Reason			
Table 6 (continued)	11.4	8.4	
Work[20]			
Family/Friends[21]	13.9	10.2	
Initially Education[22]	14.9	12.7	
Safety or Asylum[23]	13.5	6.2	
Brought by an Adult[24]	20.1	12.51	
Marriage/Partnership[25]	15	11.6	
Other reason[26]	10	6.9	
Length of residence	.03	-	
Age of Arrival	-.21	-	*
Acculturation Score	-.06	-	

Note. * = p < .05, ** = p < .01, *** = p < .001

Depression Symptom Severity Levels and Demographic Factors

Chi Squared tests for independence revealed that there were no significant associations and a small effect size between depression symptom severity levels and education level X^2 (12, n = 130) = 12.20, p = .53, Cramer's V = .20, gender X^2 (2, n = 137) = 1.93, p = .38, φ = .12, industry X^2 (10, n = 126) = 8.802, p = .55, Crammer's V = .19, nor employment status X^2 (6, n = 137) = 10.52, p = .10, Crammer's V = .104. Due to a violation of the assumption of normality, a Kruskal-Wallis H test was conducted to reveal that there was no significant difference and a small effect size between depression symptom severity levels based on age χ^2(2, n = 135) = 3.947, p = .139, ϵ^2 = .03. A Fisher's Exact Test provided statistical correction for the variables which had less than five cases in each category revealing that there was no significant difference and a small effect size between depression symptom severity levels and income range categories X^2 (22, n = 140) = 16.8, p = .52, Cramer's V = .25, and that there was a significant difference, but a small effect size

between depression symptom severity levels and marital status X^2 (10, n = 138) = 22.05, p < .01, Crammer's V = .28. Adjusted residuals served as a post hoc test, revealing that those who reported never being married were more likely to be in the moderate depression symptom severity level (Adjusted R =2.9), and less likely to be in the none/mild depression symptom severity level (Adjusted R = -2.4). Table 7 provides more details. Overall, in this section, marital status had a significant relationship with depression symptomology level, and all other demographic factors did not. Because these analyses were conducted using many bivariate tests, a type 1 error of interpreting significance where there is none is more likely to have occurred than if a single multivariate test had been conducted.

Table 7

Outcomes of Depression Symptom Severity Levels by Demographic Factors

Demographic Factor	Depression symptom severity level		
	None/Mild N(SD)	Moderate N(SD)	Severe N(SD)
Gender			
Female	60(59.4)	32(31.7)	9(8.9)
Male	25(69.4)	10(27.8)	1(2.8)
Race/Ethnicity			
Hispanic or Latino or Chicano only	41(53.9)	31(40.8)	4(5.3)
Asian only	23(79.3)	5(17.2)	1(3.4)
White/Caucasian only	7(77.8)	0(0)	2(22.2)
Black only	7(58.3)	4(33.3)	1(8.3)
Middle Eastern only	2(40)	2(40)	1(20)
Hispanic or Latino or Chicano; White/Caucasian	3(60)	1(20)	1(20)
Other race	3(100)	0(0)	0(0)
Age	26.1(12.8)	22.3(13)	17.8(14.6)
Marital Status			
Married	66(66)	27(27)	7(7)
Never Married	9(39.1)*	13(56.3)**	1(4.3)
Living with a Partner	2(66.7)	0(0)	1(33.3)
Divorced	5(100)	0(0)	0(0)
Separated	1(25)	3(75)	0(0)
Widowed	2(66.7)	0(0)	1(33.3)
Education Level			
< U.S. high school equivalency	19(67.9)	7(25)	2(7.1)
U.S. High school diploma equivalency	21(65.5)	10(31.2)	1(3.1)
Some college	9(45)	9(45)	2(10)
Associate's degree	4(40)	4(40)	2(20)
Bachelor's degree	19(70.4)	5(18.5)	3(11.1)

Master's degree	9(69.2)	4(30.8)	0(0)
Professional or Doctoral degree	5(62.5)	3(37.5)	0(0)
Employment Status			
Full Time			
Part Time	44(66.7)	19(28.8)	3(4.5)
Not in Labor Force	15(65.2)	4(17.4)	4(17.4)
Unemployed	8(40)	10(50)	2(10)
Income Range			
≤ $19,999	5(41.7)	7(58.3)	0(0)
$20,000 – 29,999	9(47.4)	8(42.1)	2(10.5)
$30,000 - $39,000	7(46.7)	6(40)	2(13.3)
$40,000 – $49,999	9(75)	2(16.7)	1(8.3)
$50,000 – $59,999	6(60)	3(30)	1(10)
Table 7 (continued)			
$60,000 – $69,999	7(70)	2(20)	1(10)
$70,000 – $79,999	2(50)	2(50)	
$80,000 – $89,999	5(100)	0(0)	0(0)
$90,000 – $99,999	2(100)	0(0)	0(0)
≥ $100,000	9(69.2)	4(30.8)	0(0)
Did not indicate income range	20(69)	7(24.1)	2(6.9)
Industry			
Manufacturing	10(71.4)	4(28.6)	0(0)
Healthcare	10(66.7)	4(26.7)	1(6.7)
Construction	7(63.6)	4(36.4)	0(0)
Education	6(54.5)	5(45.5)	0(0)
Other industry	26(65)	11(27.5)	3(7.5)
Not in Labor Force	18(51.4)	11(31.4)	6(17.1)

Note. * = p < .05, ** = p < .01, *** = p < .001

Depression Symptom Severity Levels and Immigration Factors

Chi Squared tests of independence revealed non-significant relationships and a small effect size between depression symptom severity levels and English proficiency X^2 (10, n = 131) = 11.57, p = .26, Crammer's V = .19., refugee status X^2 (2, n = 126) = 3.195, p = .20, φ = .16, place of origin X^2 (10, n = 134) = 11.734, p = .30, Crammer's V = .21, reason for immigration X^2 (14, n = 140) = 11.814, p = .62, Crammer's V = .21, and ethnicity/race X^2 (12, n = 139) = 18.19, p = .11, Crammer's V = .256. A Fisher's Exact Test providing statistical correction for a Chi squared test, revealed that there was a significant difference between depression symptom severity level for immigration statuses X^2 (12, n = 140) = 18.90, p < .05, Crammer's V = .32. Those who reported "other lawful immigrant" statuses were less likely than expected to be in the none/mild

depression symptom severity level (Adjusted R = -2.5), and those in the "other" immigrant status category were more likely than expected to be in the severe depression symptom severity level (Adjusted R = 4.0). Table 8 provides further detail related to immigration factors. Overall, the results showed that "other lawful immigration status" had an association with none/mild depression symptom severity and "other" immigration statuses were associated with the severe depression symptom severity, no other immigration factors had a relationship with depression symptom severity. Because these analyses were conducted using many bivariate tests, a type 1 error of interpreting significance where there is none is more likely to have occurred than if a single multivariate test had been conducted.

Table 8

Outcomes of Depression Symptom Severity Levels by Immigration Factors

Immigration Factor	Depression Symptom Severity Level		
	None/Mild N(%)	Moderate N(%)	Severe N(%)
Immigration Status			
Naturalized Citizen	31(68.9)	10(22.2)	4(8.9)
Legal Permanent Resident	32(61.5)	18(34.6)	2(3.8)
Undocumented	8(57.1)	6(42.9)	0(0)
Other lawful immigration status	2(22.2)*	5(55.6)	2(22.2)
Other	1(33.3)	0(0)	2(66.7)*
Unknown/Refused to respond	8(72.7)	3(27.3)	0(0)
Refugee Status			
Came to U.S. as refugee	11(84.6)	2(15.4)	0(0)
Did not come to U.S. as a refugee	68(60.2)	36(31.9)	9(8)
English Proficiency			
Very Well	24(53.3)	15(33.3)	6(13.3)
Moderately Well	17(81)	3(14.3)	1(4.8)
Average	20(55.6)	15(41.7)	1(2.8)
Not Very Well	18(66.7)	8(29.6)	1(3.7)
Does not Speak English	3(50)	2(33.3)	1(16.7)
Place of Origin			
Mexico	35(52.2)	28(41.8)	4(6)
Vietnam	16(76.2)	5(23.8)	0(0)
Africa	7(63.6)	3(27.3)	1(9.1)
Asia (excluding Vietnam)	10(66.7)	3(20)	2(13.3)
South America	6(66.7)	2(22.2)	1(11.1)
Other places	8(72.7)	1(9.1)	2(18.2)
Immigration Reason			
Work	10(62.5)	5(31.2)	1(6.2)

Family/Friends	28(59.6)	17(36.2)	2(4.3)
Initially Education	9(64.3)	4(28.6)	1(7.1)
Safety or Asylum	10(76.9)	3(23.1)	0(0)
Brought by an Adult	10(43.5)	9(39.1)	4(17.4)
Marriage/Partnership	9(60)	4(26.7)	2(13.3)
Other reason	7(77.8)	2(22.2)	0(0)

Note. * = p < .05, ** = p < .01, *** = p < .001

A One-way between subjects ANOVA revealed no significant difference and a moderate effect size between depression symptom levels and the acculturation scores $F(2,137) = 1.37$, $p = .26$, $\eta^2 = .51$. Due to a violation of the assumption of normality, Kruskal-Wallis H tests were utilized to reveal no significant differences and a small effect size between depression symptom levels based on age of arrival in the U.S. $\chi^2(2, n = 135) = 2.849$, $p = .241$, $\epsilon^2 = .02$, no significant difference and a small effect size in relation to length of residence in the U.S. $\chi^2(2, n = 137) = 3.422$, $p = .181$, $\epsilon^2 = .03$. In this section, overall immigration status had a significant relationship with depression symptom severity levels, and all other immigration factors did not. Table 9 provides further detail related to immigration factors. Overall, none of the continuous immigration-related variables had a relationship with depression severity levels. Because these analyses were conducted using many bivariate tests, a type 1 error of interpreting significance where there is none is more likely to have occurred than if a single multivariate test had been conducted.

Table 9

ANOVA Comparisons of Depression Symptom Severity Level by Immigration Factors

Immigration Factor	Depression Symptom Severity Level		
	None/Mild Mean (SD)	Moderate Mean (SD)	Severe Mean (SD)
Length of residence	15.5(11.2)	13.6(10.8)	22(13.5)
Age of Arrival	26.1(12.8)	22.3(13)	17.8(14.7)
Acculturation Score	4(1.3)	3.7(1.5)	3.4(1.6)

Taken together the quantitative portion of this study determined that there was a weak negative relationship between age of arrival and depression score, unmarried participants were more likely than expected to be in the moderate depression severity symptom level, those with

"other" lawful immigration statuses were more likely than expected to be in the no/mild depression symptom severity level, and those in the "other" immigration status were more likely than expected to be in the severe depression symptom severity level.

Qualitative Results

The following section reports on the results of the qualitative analysis which was designed to answer research question two: How do Hispanic and Latina immigrant women perceive living in Wichita to impact the mental health of immigrants? and research question number three: What do Hispanic and Latina immigrant women believe are local community changes that should be made to better support the mental health of immigrants living in Wichita, Kansas? What follows is a description of the sample for the qualitative section.

Descriptive Results

A total of three focus groups were conducted over a span of four months with participants who were Hispanic or Latina, immigrant, women, age 18 or older, and living in the Wichita, Kansas area (N = 10). Most participants were Mexican (n = 9), the average age of participants was 37.4 and the average amount of years in the U.S. was 22.1. To protect the identity of participants, pseudonyms were used as a measure of confidentiality. See more information about individual focus group participants in table 10.

Table 10

Demographic Characteristics of Focus Group Participants

Pseudonym	Country of Origin	Years in U.S.	Age
Diana Rogers	Mexico	26	51
Tony Valdez	Mexico	45	59
Ana O.	Mexico	13	31
Petita	Peru	18	60
Mohana Lopez	Mexico	15	35

Roxanne Poepoe	Mexico	24	25
Ana T.	Mexico	30	38
Fiakis	Mexico	13	34
Samantha Martinez	Mexico	17	19
Daisy Delgado	Mexico	20	22

Themes

The qualitative themes were separated by research question and organized into categories based on the Socio-Ecological Model's five levels that were used to guide the focus group questions.

Research Question #2: Local Impact on Mental Health. The following results report themes from the data generated in response to research question two: How do Hispanic and Latina immigrant women perceive that living in Wichita impacts the mental health of immigrants? There were 18 themes and 69 subthemes identified under this research question.

Individual Level Themes. The following five themes were determined at the individual level: Financial Hardship, Difficult Choice to Immigrate, Negative Mental Health Outcome, and Coping Mechanisms. Table 11 provides a succinct picture of the local impact on immigrant mental health and an example quote within this social ecological level.

Table 11
Local Impact within a Socio-Ecological Context: The Individual Level

Theme (mentions)	Subtheme (mentions)	Code (mentions)	Example Quote
Financial Hardship (5)	--	--	"I get a part-time job serving tables, so I was making little money to pay the rent and be able to survive" – Mohana Lopez (coded: 'financial hardship')
Difficult Choice to Immigrate (4)	--	--	"I didn't want to move [to the U.S.], at that point I really didn't feel like moving" – Petita

			(coded 'Difficult Choice to Immigrate')
Negative Mental Health Outcomes (20)	--	--	"I feel like you have to be motivated on steroids to deal with everything" – Samantha Martinez (coded: 'Negative Mental Health Outcomes')
Coping Mechanisms	Non-Help Seeking Behavior (7) Help-Seeking Behavior (5) Religion (3) Substance Use (2) Resilience (7)	--	"My family is very spiritual. My parents are Christian, and so my mom would always pray, and I prayed too and I think that helped me a lot" – Daisy Delgado (code: 'Religion as a Coping Mechanism'

Within the theme "Financial Hardship", participants described examples that eluded to not having enough money or having to make an extra effort to provide necessities. They discussed the need to find or maintain multiple jobs and work long hours to make ends meet, making little money to provide for their family, and having large expenses come up in their lives. The theme "Difficult Choice to Immigrate" captured participants describing a lack of desire or difficulty in making the decision to come to the U.S. The theme "Negative Mental Health Outcomes" included participants description of experiencing negative emotions and had 20 mentions

The theme "Coping Mechanisms" encompassed ways that participants discussed coping with negative emotions. There are five subthemes under this theme: Help-Seeking Behavior, Non-help Seeking Behavior, Religion as a Coping Mechanism, Substance Use as a Coping Mechanism, and Resilience. The subtheme "Non-Help-Seeking Behavior" includes experiences in which participants mentioned themselves or others not pursuing mental health resources when they felt they needed it or expressed disinterest or lack of utilization of mental health resources. The subtheme "Help-Seeking-Behavior" refers to instances where participants sought help for mental health needs from a professional or identified that they needed mental health help from a professional. The subtheme "Religion" pertains to participants discussing how

religion or religious practices improve mental health or serve as a helpful solution for themselves or other immigrants when struggling with mental health. The subtheme "Substance Use" includes participants discussing the use of alcohol and drugs often and while experiencing negative feelings. The subtheme "Resilience" encompasses discussion about a desire to push through difficulties, difficulties not making a significant impact on their lives, or individuals overcoming difficulties to reach a successful outcome. Overall in this section, Negative Mental Health Outcomes with 20 mentions was the most discussed topic at the individual level related to impact on mental health.

Interpersonal Level Themes. The following themes were determined at the interpersonal level: Violence, Intracultural Conflict, Social Support, Violence, Lack of Connection, Negative Impact on Family & Kids, and Intracultural Conflict. Table 12 provides a succinct picture of the local impact on immigrant mental health and an example quote within this social ecological level.

Table 12
Local Impact within a Socio-Ecological Context: The Interpersonal Level

Theme (mentions)	Subtheme (mentions)	Code (mentions)	Example Quote
Violence (1)	--	--	"So coming from a domestic violence environment, turns out that here in this place it was worse to me. So I end up being beat-up. I was pregnant and I end up being [in] the hospital, I mean it was worse". – Mohana Lopez (code: Violence)
Social Support (0)	Familial Support (3) Friends Support (4) Supportive Educators (2) Service Provider (1)		"I remember growing up and like just sitting with my family and we would talk about like stuff going on. To me that was a positive coping mechanism it's kind of like therapy but with your family members" – Daisy Delgado

			(code: Family Support)
Intracultural Conflict (0)	Pressure to Succeed (2) Class Divide (4) Gender Norms (3) Stigma (11)	--	"There sometimes isn't solidarity... I meet people who I think I can relate to, but they're more uhm... yeah they have more solidarity with their income class... they're rich before they're Mexican, or they're rich before they're whatever else, you know. I found myself relating more to people who are low income sometimes more than people who are Mexican or other immigrants that aren't necessarily Mexican." – Daisy Delgado (code: Class Divide)

Table 12 (continued)

Lack of Connection (0)	Lack of Belonging (9) Isolation (2) No Right to Grievance (5) Unwelcoming Environment (1) Separation from Family (11) Prejudice (28)	--	"'Who do you think you are? You're the lucky one! You're here. You're one of the lucky ones! What are you doing being sad? At least you're not in your country where it was apparently so bad, you know that you had to come here.' You know, something like that. You feel like that judgement is always gonna be there cause they're gonna be like, 'You don't have a right to be sad' or 'You don't have a right to be upset' but you do, it just feels like you would be invalidated". – Roxanne Poepoe (code: No Right to Grievance)
Negative Impact on Family (3)	Negative Mental Health Impact on Kids (2) Academic Decline (1) Disengaged Parents (3) Bullying (1)	Help Seeking for Kids (2)	"She had been a very good student, been in the honor roll all the time, and then here everything crashed" - Petita (code: Academic Decline)

	Abuse (1) Lack of Youth-Friendly Environments (4) Kids Losing Culture (4)

Within the theme "Violence", one participant discussed her experiences in an environment of domestic violence both before and after she immigrated. The theme "Social Support" has four subthemes: Familial Support, Friends Support, Supportive Educators, and Service Providers. The subtheme "Familial Support" includes times that focus group participants talked about family support as an important value or talked about experiences of family support. The subtheme "Friends Support" includes participants' perceptions of friends as a possible support system for immigrants, or experiences where support from friends has led to positive outcomes. Within the "Supportive Educators" subtheme, a participant discussed an educator who was helpful to her in reaching academic goals. Within the subtheme "Service Providers", one discussed the relationship that she has with their lawyer that feels genuinely caring and extends beyond just business.

The theme "Intracultural Conflict" encompasses discussions from participants about difficulties they faced that were framed in a context within the Latino or Hispanic culture. This theme has four subthemes: Pressure to Succeed, Class Divide, Gender Norms, and Stigma. The subtheme "Pressure to Succeed" describes there being pressure to be successful through education and career as someone who is the child of immigrants who made great sacrifices for their children. The subtheme "Class Divide" describes discussion where participants expressed that regardless of immigrant or racial identities there can be a disconnect between individuals from different socioeconomic statuses. The subtheme "Gender Norms" includes discussion about how struggles with mental health are experienced differently different for men, and how this experience intersects gender and ethnicity though gender norms such as machismo which can make men want to seem strong and not talk about any struggles they are facing. The

subtheme “Stigma” refers to times when participants mentioned a negative association related to mental illness or seeking mental health services framed within a cultural context.

The theme “Lack of Connection” has six subthemes: Prejudice, No Right to Grievance Lack of Belonging, Isolation, Unwelcoming Environment, and Separation from Family. The subtheme “Lack of Belonging” describes participants’ discussion of feeling like they themselves or others perceive them as not fitting in, being left out or discarded, and a desire to fit in or be with like others. The subtheme “Isolation” describes participants discussing staying intentionally isolated in order to avoid possible consequences of interacting with those who were not immigrants such as law enforcement. The subtheme “Unwelcoming Environment” describes one participants experience of feeling like the people in Wichita were not happy to see her and her family living there because they were an immigrant family. The subtheme “Separation from Family” describes participants discussion of how immigrating to the U.S. means they have to deal with the difficulty of not getting to be with family members even in difficult times such as death of a loved one. The subtheme “No Right to Grievance” describes messages from self or others about immigrants not voicing concerns or issues that they face in order to show gratitude for the resources and opportunities that they do have available to them and out of fear that opportunities, resources, and services will be taken away if they do express concerns. This includes both concerns related to their emotional health as well as concerns related to services or resources they are receiving. In Table 11 Roxanne Poepoe gives an example of what she believes someone might say in response to her expressing her struggles as a DACA recipient.

The subtheme “Prejudice” encompasses conversation about participants experiences with perceived discrimination or anticipation of prejudice based on participants’ race, immigration status, or English proficiency. The subtheme “Prejudice” has four codes: Inequality, Hostile Environment, Racial Profiling, and Negative Reaction to Spanish. The code “Inequality” describes an instance in which a participant discussed her parents telling her that she is going to

have to work harder than other people because she has a disadvantage by being undocumented. The subtheme “Hostile Environment” describes environments that participants had to be in often such as church, school, around in-laws and most commonly at work in which conversation was held about immigrants in a negative light or they became the target of the negative remarks. Within the subtheme “Racial Profiling”, one participant shared her experience when a cop pulled her over and asked for her documents after the cop told her that he pulled her over because someone that they were looking for looked like her. She also mentioned that she believes she has been pulled over because cops may put her tags in the system and see her last name, and recognize it as a Hispanic last name. The subtheme “Negative Reaction to Spanish” includes instances where participants discussed social or physical punishment for speaking Spanish in a predominantly English-speaking space such as a department store or at school.

The theme “Negative Impact on Family” captures stories of the family, but mostly children of immigrants experiencing negative outcomes either after immigration or after events or lifestyle changes that participants connected to immigration. This theme also has seven subthemes: Negative Mental Health Impact on Kids, Academic Decline, Disengaged Parents, Bullying, Abuse, Lack of Youth-Friendly Environments, and Kids Losing Culture. The subtheme “Negative Mental Health Impact on Kids” discusses experiences of depression or anxiety in participants’ children. This subtheme contains one code called “Help-Seeking for Kids”. This code captures participants discussion of taking their children to see therapists. The subtheme “Academic Decline” includes one participant discussing her daughter, who was an excellent student before immigrating, receiving low grades after immigrating. The subtheme “Disengaged Parents” is about parents not being able to be as engaged with their children as they would like to or not noticing a significant change in their children. For example, parents not being able to send time with children due to working and not noticing when issues arise with their children. The subtheme “Bullying” came from one participant who discussed her daughter being bullied

at school. The subtheme "Abuse" resulted from one participant who talked about how her children experiences sexual abuse when they were younger, and working long hours impacted her ability to be with her children and be aware of what was going on. The subtheme "Lack of Youth-Friendly Environments" includes discussion about there being a need for a place where youth can spend their time. The subtheme "Kids Losing Culture" includes participants talking about their kids not feeling like they fit in with the culture from the participants' home country and perceptions that the kids are losing their native culture. Stigma and Prejudice were two topics most discussed at the interpersonal level related to impact on mental health.

Organizational Level Themes. The following themes were determined to be at the Organizational level: Difficulties with Mental Health Services, Educational Discrepancies, Lack of Cultural Responsiveness. Table 13 provides a succinct picture of the local impact on immigrant mental health and an example quote within this social ecological level.

Table 13
Local Impact within a Socio-Ecological Context: The Organizational Level

Theme (mentions)	Subtheme (mentions)	Code (mentions)	Example Quote
Educational Discrepancies (1)	--	--	"From professionals [in my home country] we had to look for other kinds of jobs here… You cannot perform your career because the credits are not equivalent, you're not going to be granted the equivalency. You have to go back to college to study, well I was told that I needed to study three more years to get the same degree I had in my country". – Petita (code: Educational Discrepancies)
Difficulties with Mental Health Services (0)	Difficulties Finding Mental Health Help (7) Financial Barriers to Help (7) Lack of Culturally Aligned Resources (4) Lack of Awareness about Mental Health (3)	--	"Immigrants tend to be low income. It's very rare if you find rich immigrants, at least in my experience. So you don't allocate money for that kind of things. It's more like emergencies, like I have to go to the E.R. You wouldn't want to allocate money for [mental health services]".

	Negative Experience with Professionals (1) Positive Experience with Professionals (2) Language Barriers in Mental Health Services (12)		– Daisy Delgado (code: Financial Barriers to Help)
Lack of Cultural Responsiveness (1)	Lack of Trust (4) No Guidance for Immigrants (7) Lack of Resources in Spanish (1) Lack of Empathy (6) Professionals Unaware of Immigrant-Related Issues (8)	--	"Mohana added that she believes there is a lot of resources there but they are not equipped to help us they're more like towards Americans". – Facilitator 2/interpreted from Spanish to English for Mohana Lopez (code: Lack of Cultural Responsiveness)

The theme "Educational Discrepancies" encompasses conversation from one participant who described that when immigrating, often many credentials do not have the same equivalency in the U.S. Even those who are professionals in their country may have to go back to school in order to work in the U.S. in the same job field that they were already qualified to work at in their home country. The theme "Difficulties with Mental Health Services" has seven subthemes: Difficulties Finding Mental Health Help, Financial Barriers to Help, Lack of Culturally Aligned Resources, Lack of Awareness about Mental Health, Negative Experience with Professionals, Positive Experience with Professionals, and Language Barriers in Mental Health Services. The subtheme "Difficulties Finding Mental Health Help" describes conversation related to participants expressing that it is difficult to find mental health services in general, but also that it is difficult to find mental health services that meet their specific needs such as those related to lack of insurance. Within the next subtheme "Financial Barriers to Help", participants talked about needing to have money or insurance to be able to afford mental health services. They discussed how mental health services are costly in general and immigrants who are already a disadvantaged group may especially not have the finances to be able to prioritize mental health services.

The subtheme “Lack of Culturally Aligned Resources” describes participants’ discussion about not being able to find mental health professionals who had a similar cultural background as them or have culturally similar mental health practices as them. The subtheme “Lack of Awareness about Mental Health” discusses how some individuals in the immigrant community and particularly the Latino community may not be aware of the meaning of mental health and what mental health is because it is not something that is discussed often. Within the subtheme “Negative Experience with Professionals” one participant discussed her experiences of microaggressions with non-immigrant and non-Hispanic or Latino mental health professionals and how that made her feel like she did not want to continue services with them. However, the next subtheme “Positive Experience with Professionals” describes participants’ discussion of experiences with mental health professionals that were helpful to them or would make them want to recommend their therapist to others. The subtheme “Language Barriers in Mental Health Services” captures participants’ concerns about how difficult it is to find mental health professionals who speak Spanish, or how they have only found very few who speak Spanish.

The theme “Lack of Cultural Responsiveness” includes one participant’s discussion about how she feels that the mental health resources available in the community are more geared towards non-immigrants. The theme “Lack of Cultural Responsiveness” has five subthemes under it: Lack of Trust, No Guidance for Immigrants, Lack of Resources in Spanish, Lack of Empathy, and Professionals Unaware of Immigrant-Related Issues. The subtheme “Lack of Trust” encompasses conversation about perceptions and experiences that contribute to a lack of trust of service providers who are outside of one’s own cultural group, specifically ethnic group. The subtheme “No Guidance for Immigrants” describes participants’ discussion of experiences where there was confusion in navigating services, programs, and cultural norms or blatantly stating that there is a lack of help and guidance related to how to navigate services and the new culture. The subtheme “Lack of Resources in Spanish” refers to one participant’s comment that

community events do not tend to advertise in Spanish. The subtheme "Lack of Empathy" describes the idea that people who are not immigrants and who treat immigrants poorly may sometimes do so because they cannot relate to the struggles that come with being an immigrant. The last subtheme "Professionals Unaware of Immigrant-Related Issues" focuses on professionals who assume that participants are able to go through life the same way that those born in the U.S. are able to and so are unaware of specific issues they face and because of this are unable to be helpful with these issues and provide tailored resources. Participants expressed that they had common experiences with professionals being unaware of issues such as knowing about what it means to be undocumented and competently working with DACA-related paperwork. These were discussed as common experiences within the immigrant community and specifically the Hispanic immigrant community. At the Organizational level and its impact on mental health, Professionals Unaware of Immigrant-Related Issues, No Guidance for Immigrants, Financial Barriers to Help, Difficulties Finding Mental Health Help were the four most discussed topics in this section.

Community Level Themes. The following themes were determined to be at the community level of the Socio-Ecological Model: Unmet Expectations, Immigration-Related Activism, Diverse Environment, Changes in Public Resources, and Improved Quality of Life. Table 14 provides a succinct picture of the local impact on immigrant mental health and an example quote within this social ecological level.

Table 14
Local Impact within a Socio-Ecological Context: The Community Level

Theme (mentions)	Subtheme (mentions)	Code (mentions)	Example Quote
Unmet Expectations (1)	--	--	"The day I come I thought it's gonna be better, I'm gonna come and I'm gonna go to school, I'm gonna learn, I'm gonna go back home, I'm gonna do better things. Things never change. I still have suffering the same." – Mohana Lopez

			(code: Unmet Expectations)
Immigration-Related Activism (3)	Empowerment (2)	--	"I even went to Washington D.C. to uhm to the united I went with United We Dream and Sunflower Community Action here. They they like worked together and I marched with them. I'm trying to think of what it was called. So the—we were marching for a clean Dream Act. That was the thing so that was very positive" – Daisy Delgado (code: Immigrant-Related Activism)
Diverse Environment (5)	Cultural Isolation (2) Positive Representation (3)	--	"Some things I like about Wichita is it's like there's so many cultures here. You're always gonna find your culture somewhere" – Samantha Martinez (code: Diverse Environment)
Changes in Public Resources (0)	Increased Number of Local Events (1) Loss of Important Public Resources (5)	--	"Twenty years ago, Wichita was a really nice place. You could get bus, English classes, and baby room, and things like that. They were dying over time, and they were dying because the people that was getting in those programs, they were not getting to the people. It was really nice to have people helping you as an immigrant. – Diana Rodgers (code: Loss of Important Public Resources)
Improved Quality of Life (11)	--	--	"I like Wichita for my kids" – Ana T. (code: Positive Environment to Raise Kids)

The theme "Unmet Expectations" describes one participants experience of expecting that coming to the U.S. would improve her life and circumstances, however she still had the same difficulties that she had in her home country after she immigrated to the U.S. The theme "Immigrant-Related Activism" encompasses discussion about opportunities with organizations in the Wichita community that engage in activism related to immigration rights. This theme has one subtheme called "Empowerment" which includes discussion about how getting involved in immigrant-related activism allows individuals to be more powerful in a group and also realize that it is possible for them to create change.

The theme "Diverse Environment" includes conversation about there being cultural diversity in Wichita and this being a positive aspect of living in Wichita allowing individuals to

interact with those in their own culture as well as others outside of their culture. This theme has two subthemes: Cultural Isolation and Positive Representation. The subtheme "Cultural Isolation" discuss diversity as a culture shock if one is coming from a town with a homogeneous population such as those coming to Wichita from an ethnic enclave or a country where most people look like them. The subtheme "Representation" includes discussion about how in Wichita participants were able to see immigrants represented positively such as in the murals on the North side of town and within immigrant-owned businesses.

The theme "Changes in Public Resources" encompasses both positively and negatively perceived changes in public resources often utilized by participants as well as others in the immigrant community. This theme has two subthemes: Increased Number of Local Events and Loss of Important Public Resources. The subtheme "Increase Number of Events" refers to one participant's comment that there are more public events now in Wichita than there used to be. The subtheme "Loss of Important Public Resources" refers to how various public resource that serve immigrants have been diminishing over time in Wichita. One specific resource that was seen within many texts within the "Loss of Important Public Resources" subtheme is the loss of ability to get a driver's license for undocumented immigrants. Participants often specifically mentioned that driver's license access was once available and is no longer available. However, there is also a different code that touches on the topic of the driver's licenses, so this will be discussed further in the policy level results.

The last theme, "Improved Quality of Life" incudes discussion about how moving to the United States, and more specifically Wichita improved participants' lives due to economic advantages, familiarity, and the safety it provided as opposed to other countries and even other larger U.S. cities. The theme "Improved Quality of Life" has four subthemes: Wichita is Home, Higher Education, Financial Benefits, and Positive Environment to Rise Children. At the

community-level related and its impact on mental health, Improved Quality of Life with 11 mentions, was the most discussed topic mentioned in this section.

Policy Level Themes. The following themes were determined at the policy level: Undocumented Immigration, Negative Political Climate. Table 15 provides a succinct picture of the local impact on immigrant mental health and an example quote within this social ecological level.

Table 15
Local Impact within a Socio-Ecological Context: The Policy Level

Theme (mentions)	Subtheme (mentions)	Code (Mentions)	Example Quote
Undocumented Immigration (0)	Status Impacts Motivation (7) Lack of Choice in Migration (4) Worry (7) Same Struggle (1) Undocumented Status Taboo (8) Limited Opportunities (7)	Unknown Limitations (5) Employment Restrictions (2) Driver's License Restrictions (2)	"I grew up always scared to talk to anybody about [being undocumented] because I was like I don't want my parents to be taken away. You know I don't want something to happen because of something I said is wrong. I didn't feel like I could talk about it because I was like who the heck am I going to talk to this about? I don't want to put my family in danger." (code: Undocumented Status Taboo) – Roxanne Poepoe
Negative Political Climate (4)	--	--	"With the new administration and seeing we're in a Republican state, it's really kind of scary." – Roxanne Poepoe (code: Negative Political Climate)

The theme "Undocumented Immigration" encompasses shared experiences and phenomena within the undocumented community that were discussed in the focus groups. This

theme has six subthemes: Status Impacts Motivation, Lack of Choice in Migration, Worry, The Same Struggle, Undocumented Status Taboo, and Limited Opportunities. The subtheme "Status Impacts Motivation" discusses either participants own experiences or seeing other undocumented individuals, especially youth, who do not try to reach certain achievements because of the restrictions that make various aspects of life difficult for someone who has an undocumented status. Within the subtheme "Lack of Choice in Migration" participants discuss that they were brought to the U.S. by their parents when they were children and did not have a choice in whether or not they immigrated. The subtheme "Worry" includes participants discussion about a fear or concern, for the well-being of undocumented persons especially for themselves or family members in a future orientation. Worrying that something will happen to them in the future such as an incident that will lead to deportation or result from deportation.

The subtheme "Same Struggle" describes conversation from one participant who explained that she does not feel like she is in a worse position in society because she is has an undocumented immigration status as opposed to a different immigration status. The subtheme "Undocumented Status Taboo" captures discussion from participants about how for those who are undocumented, it is both feared to talk about being undocumented and taught not to talk to others about having an undocumented status. Because of the silence around status, there is the lack of ability to form community with other undocumented immigrants until someone speaks out about their own status, which was discussed as generally well received by other undocumented immigrants. The last subtheme "Limited Opportunities" captures discussion from participants who express how having an undocumented immigration status has kept them from being able to have opportunities that others have who do not have undocumented immigration status.

The subtheme "Limited Opportunities" has three codes within it: Driver's License Restrictions, Employment Restrictions, and Unknown Limitations. The code "Unknown

Limitations" encompasses experiences of undocumented participants growing up not knowing how their undocumented immigration status would impact their lives and sometimes not realizing that it would even impact their lives at all or what it meant. The code "Employment Restrictions" describes participants who experienced being turned away from a job because of their DACA status. Within the code "Driver's License Restrictions" participants explain that a driver's license is needed for many things and there are consequences for not having one. In the theme "Negative Political Climate" participants discussed the national and local political climate as being scary or threatening. Within this theme they did not discuss specific policies that directly impacted them as immigrants, but rather just discussed more generally how the political climate has impacted them negatively. Overall in this section, Taboo, Worry, Limited Opportunities, and Status Impacts Motivation were the four most discussed topics at the individual level related to impact on mental health.

Research Question #3: Local Change to Support Mental Health. The following results report themes from the data generated in response to research question number three: What do Hispanic and Latina immigrant women believe are local community changes that should be made to better support the mental health of immigrants living in Wichita, Kansas?

Individual Level Themes. The following theme was determined at the individual level of the Socio-Ecological Model: Immigrant-Led Change. Table 16 provides a succinct picture of participants' suggestions of the local changes to improve immigrant mental health and an example quote within this social ecological level.

Table 16
Local Changes within a Socio-Ecological Context: The Individual Level

Theme (mentions)	Subtheme (mentions)	Code (Mentions)	Example Quote
Immigrant-led Change (3)	--	--	"There's a lot of responsibility that has to be taken by people like me who are immigrants

			and are in a position of privilege." -Daisy Delgado (code: Immigrant-led Change)

The theme "Immigrant-Led Change" encompasses conversation which suggests that immigrants should participate in making change in their own communities. The only topic that was discussed in this section related to improve mental health was Immigrant-led Change.

Interpersonal Level Themes. The following themes were determined at the interpersonal level of the Socio-Ecological Model: Allyship, Support for Undocumented Immigrants, Empathy from Non-Immigrants, Know the Prominent Community Issues. Table 17 provides a succinct picture of participants' suggestions of the local changes to improve immigrant mental health and an example quote within this social ecological level.

Table 17
Local changes within a Socio-Ecological Context: The Interpersonal Level

Theme (mentions)	Subtheme (mentions)	Code (Mentions)	Example Quote
Allyship (2)	Listen to Immigrant Voices (1)	--	"Speaking up for immigrants is really important because like I mentioned before there's a lot of immigrants who don't have the privilege of speaking up for themselves, because you know there's more risk involved. So having people who aren't gonna be effected or speaking up if they realize that and then get informed on like what things effect immigrants that's already a huge a huge help." - Daisy Delgado (code: Allyship)

Table 17 (continued)

Support for Undocumented Immigrants (8)	--	--	"You know how there's that HIPPA thing or whatever, like we won't disclose this information no matter what? There should be something like that for immigration status too. I don't know if there is, but it needs to be clearly stated like you won't jeopardize- you know, we're not

			gonna call INS on you. You can talk about [immigration status] here." - Roxanne Poepoe (code: Support for Undocumented Immigrants)
Empathy from Non-Immigrants (2)	--	--	"Some sort of exercises that kids could kind of get some kind of empathy exercises" – Roxanne Poepoe (code: Empathy from Non-Immigrants)
Know the Prominent Community Issues (9)	--	--	"I've known kids that their parents are deported and how do you cope with that when you're so young? I mean there are schools in Wichita which are primarily Latino so if you know what issues that usually effect that population you can look for, you know signs or I guess just be more aware of what to expect." – Daisy Delgado (code: Know the Prominent Community Issues)

The theme "Allyship" discusses the desire for a stronger bond and partnership from those who are not immigrants. There was one subtheme under "Allyship": Listen to Immigrant Voices. The subtheme "Listen to Immigrant Voices" captures one participant's idea that change should be guided by what those from the immigrant community want rather than what allies might think that they want. The theme "Support for Undocumented Immigrants" encompasses either ideas for or personal experiences in which a change supports the well-being of undocumented immigrants. Some discussed a change in policies and practices that would help support undocumented immigrants, and some discussed how opening up about their own undocumented status provided support for other undocumented immigrants and how it is important in the future for people to have that support. The theme "Empathy from Non-Immigrants" discusses how an important change would be to either increase empathy in for immigrants through practices or teaching children to be kind to immigrants. The theme "Know the Prominent Community Issues" provides solutions suggesting that professionals such as teachers and community employees who work with immigrant populations both get to know the

community they are working with and educate themselves on what they might need to know regarding working with this community. Overall in this section, Support for Undocumented Immigrants and Know the Prominent Community Issues were the two most discussed topics at the interpersonal level related to local changes to improve mental health.

Organizational Level Themes. The following themes were determined at the Organizational level: Cultural Teaching to Kids, Mental Health Education, Accessible Services. Table 18 provides a succinct picture of participants' suggestions of the local changes to improve immigrant mental health and an example quote within this social ecological level.

Table 18
Local changes within a Socio-Ecological Context: The Organizational Level

Theme (mentions)	Subtheme (mentions)	Code (Mentions)	Example Quote
Cultural Teaching to Kids (3)	--	--	"It would be super great if there was a Mexican-American studies" – Roxanne Poepoe (code: Cultural Teaching to Kids)
Mental Health Education (4)	--	--	"...bringing more awareness like teaching people exactly what it is and what mental health is" – Ana T. (code: Mental Health Education)
Accessible Services (0)	Accessible Location (1) Affordability (1) Expand to Elementary Schools (1) Language Access (4)	Spanish-Speaking Mental Health Professionals (3) Free English Classes (2)	"Something that I thought was cool like at the court offices, I've gone up to the 5th floor I think because I needed paperwork, and they have a sign before you even speak to anyone like if you speak any of these languages that need a translator you just had to point to the language you spoke and they would just call someone that could just translate on the phone right there... They had like lists like rows of different languages that like I didn't even know what they were... That's more inclusive... So it would be cool that instead of having one sign in English, one sign in Spanish, just have it in English and then... Just have that phrase "if you need help..." in all the different languages." - Samantha Martinez

Table 18 (continued)

(code: Language Access)

The theme “Cultural Teaching to Kids” suggests that a change be made to have a place where specifically immigrant and Latino kids can formally learn about their cultural history. The theme “Mental Health Education” suggests to have resources created and more awareness of existing resources that would teach about what mental health is, what mental health resources are available locally, and enhancing the already existing resources in the community such as “De Familia a Familia de NAMI”. This is a Spanish class provided by the local chapter of the National Alliance on Mental Illness about the basics of mental health and mental illness.

The theme “Accessible Services” encompasses participants discussion about how mental health services must be more accessible to the immigrant community in order for immigrants to utilize them. There are four subthemes under this theme: Accessible Location, Language Access, Affordability, and Expand to Elementary Schools. The subtheme “Accessible Location” summarizes discussion from one participant who said that because of the difficulties that immigrants might face with going to classes such as English classes and classes about mental health, classes should try to be integrated in peoples communities and homes. The subtheme “Affordability” captures discussion from one participant who specifically suggested that mental health services should be more affordable. The subtheme “Expand to Elementary Schools” suggests the solution of expanding mental health services, such as ComCare which is currently in schools, down to the elementary level. The subtheme “Language Access” includes suggestions about various ideas on how to provide language access to immigrants from encouraging bilingualism at all levels in school, to providing medical interpreters in hospitals. The subtheme “Language Access” has two codes: Spanish-Speaking Mental Health Professionals and Free English Classes. The code “Spanish-Speaking Mental Health Professionals” was captured a robust discussion specifically about having more Spanish-speaking mental health professionals

in the greater Wichita area. There are two texts within the code Free English classes. This was a solution offered in order to mitigate any financial barriers. Overall in this section, Language Access and Mental Health Education were the two most discussed topics at the organizational level related to local changes to improve mental health.

Community Level Themes. The following themes were determined at the community level of the Socio-Ecological Model: Social Equality, Representation. Table 19 provides a succinct picture of participants' suggestions of the local changes to improve immigrant mental health and an example quote within this social ecological level.

Table 19
Local changes within a Socio-Ecological Context: The Community Level

Theme (mentions)	Subtheme (mentions)	Code (Mentions)	Example Quote
Representation (3)	--	--	"Push our Latino people to move forward and represent us in government and everywhere else" – Tony Valdez (code: Representation)
Social Equality (4)	--	--	"...y sería un poco más equitativo todo, seria todo mas igual" English translation: ...and it would be a bit more equitable in everything, everything would be more equal" – Fiakis (code: social equality)

The theme "Representation" suggests that immigrants and Latinos be represented in interactions with kids such as children's stories as well as in government. The theme "Social Equality" is fairly vague in simply mentioning that social equality would help improve mental health for immigrants. At the community level to improve mental health Representation and Social Equality were the two topics discussed.

Policy Level Themes. The following themes were determined at the policy level of the Socio-Ecological Model: Law/Policy Change. Table 20 provides a succinct picture of

participants' suggestions of the local changes to improve immigrant mental health and an example quote within this social ecological level.

Table 20
Local changes within a Socio-Ecological Context: The Policy Level

Theme (mentions)	Subtheme (mentions)	Code (Mentions)	Example Quote
Law/Policy Change (2)	Immigrant-Inclusive Policies (1) Access to Driver's Licenses (3)	--	"Para empezar, ¿yo creo que serian leyes no? Creo que serían la base de todo porque hmm... si no cambian las leyes realmente no podíamos ni trabajar... y seguir manejando sin licencia y seguir trabajando sin seguro". Translated from Spanish to English: To start I think there should be laws, right? I believe that they would be the base of everything because hmm... if you don't change the laws we really couldn't even work... and keep driving without a license and keep working without health insurance. - Fiakis (code: Law/policy change)

The theme "Law/Policy Change" describes the need for policy change in order to improve immigrant mental health in Wichita. The theme "Law/Policy Change" has two subthemes: Immigrant-Inclusive Policies and Access to Driver's Licenses. The subtheme "Immigrant-Inclusive Policies" simply suggests for policy makers to consider the impact that policies will have on immigrants in the process of policy creation. The subtheme "Access to Driver's Licenses" suggestions that a change should be made in Kansas to allow undocumented immigrants to obtain driver's licenses and that allowing this would help improve mental health. Overall, in this section Access to Driver's License for undocumented immigrants was most discussed topics at the policy level related to local changes to improve mental health.

Taken together, the qualitative outcomes of this study determined that resilience and non-help seeking behavior at the individual level, prejudice at the interpersonal level, status

impacting motivation, worry about undocumented issues, and professionals unaware of immigrant-related issues at the organizational level, diverse environment and loss of important public resources at the community level, and limited opportunities for undocumented immigrants at the policy level all make up the most prominent issues that impact mental health for immigrants living in the Wichita area. Together these themes answer how Hispanic and Latina immigrant women perceive that living in Wichita impacts the mental health of immigrants? Additionally, the qualitative themes related to community change including immigrant-led change at the individual level, support for undocumented immigrants and know the prominent community issues at the interpersonal level, language access and mental health education at the organizational level, representation and social equality and the community level, and access to driver's licenses for undocumented immigrants at the policy level were the most commonly discussed ways to improve the mental health of immigrants living in the Wichita community. These themes answer what Hispanic and Latina immigrant women believe are local community changes that should be made to better support the mental health of immigrants living in Wichita, Kansas.

Discussion

Summary of Major Findings and Connections to the Literature

Summary of Quantitative Findings

The goal of this study was to assess depression symptoms among immigrants living in Wichita, KS in relation to demographic and immigration factors, and determine community-based support for mental health. The percentage of participants in the sample for this study who met the criteria for severe depression symptomology (7.1%) was similar to the percentage of the general population in the United States that experienced at least one major depressive episode within the last year (7%) (The National Alliance on Mental Illness, 2017). While the metrics for

measuring a point-in-time prevalence of depression symptomology in a sample and assessing lifetime diagnosis, and the percentage of people who have had a depressive episode in a year are quite different, it would still be expected that the percentage of immigrants experiencing severe depression symptomology in this study's sample would be lower than the general population based on extensive literature supporting The Immigrant Paradox (Schribner & Dwyer, 1989). However, many studies that support the Immigrant Paradox have been conducted in coastal states that have a higher immigrant population (Alegria, Canino, Stinson, & Grant, 2006; Marks, Ejesi & Garcia Coll, 2014; Schribner & Dwyer, 1989; Alegria, Alvarez & DiMarzio, 2017; Breslau, Aguilar-Gaxiola, Borges, Kendler, Su, Kessler, 2007; Takeuchi, et al., 2007; Williams, et al., 2007; Szaflarski, Cubbins, Bauldry, Meganathan, Klepinger, & Somoza, 2016; Constant, 2017). Perhaps, in the Midwest or more specifically in the Wichita Metro area there is a higher than expected prevalence of depression. However, the difference in metrics do not allow a clear conclusion to be made.

Although only 7% of participants in the sample met criteria for severe depression symptom severity, 38.5% or more than one-third of participants met criteria for moderate depression symptom severity. This is meaningful, because in a clinical setting if the CES-D asks about feelings over the last two weeks, meeting criteria for moderate depression would put the client at risk for clinical depression (American Psychological Association, 2011). Although, most participants are still in the no/mild depression category, the large percentage of those in the other two categories is concerning as we know research supports the link between depression and a variety of other negative life outcomes such as reduced memory recall, lower life time income, higher likelihood of obesity, etc. (Choo, et al., 2019; Kizibash, 2002). Even before looking at the connection to demographic factors, it can be seen that there is an alarming high percentage of depression symptoms at the moderate and severe level in this sample of immigrant participants.

Most of the demographic factors and immigration factors that were assessed did not have a meaningful relationship to depression symptom outcomes. For some demographic factors and immigration factors this was surprising as previous literature has established a meaningful connection. For example, it was expected that there would be a significant difference between depression outcomes based on gender as women tend to consistently report higher depression than men in research within the general population as well as immigrant population (Smith, Matheson, Moineddin, 2007; Wong & Miles, 2014). It was surprising to find no significant difference related to gender, although women in the sample did have a higher mean depression symptoms score than men. Previous literature has also established a relationship between acculturation and depression for immigrants as well (Nguyen & Peterson, 1993; Ramos 2005; Shin, 1994; Chaudhry, Husain, Creed, 2012; Lam, Pacala & Smith, 1997). Perhaps because there was a low acculturation score in the sample, this impacted the outcome's significance. Alternatively, for acculturation, gender, and other demographics that were not significant the Mid-west sample in this study brings to light new findings about depression in immigrants that may not been documented in pervious literature because the outcomes are specific to the geographic location.

While a majority of demographic factors did not have a relationship with depression symptomology, a younger age of arrival was associated with greater depression symptomology, those who had never been married had a greater expectancy to be at the moderate depression symptom severity level, "other lawful immigrants" like DACA recipients and Conditional Permanent Residents were less likely than expected to be in the none/mild depression symptom severity level, and those who were under "other" immigration statuses had a greater expectancy of severe depression symptom severity level. It is worth noting that this study only shows a weak connection between immigrating at a younger age and increased depression. However, this finding related to age of immigration does align with previous literature on Asian immigrants

that links immigration in adolescence with poorer mental health outcomes than immigration in adulthood (Gong, Xu, Fujishiro & Takeuchi, 2011). Most of the research that supports a link between younger immigration with depression is rooted in acculturation as a catalyst for depression (Fuligni, 2005). In this study acculturation and depression did not have a meaningful relationship, so there is a need to explore other factors related to immigration at a young age. It was not surprising to find that those who weren't married were more likely than expected to be at the moderate depression severity level. Previous literature supports that marriage seems to serve as a protective factor against depression across a span of diverse immigrant groups, with a unique nuance for Asian immigrant groups for whom marriage has not been shown to exhibit this same protective quality (Gerst, Al-Ghatrif, Beard, Samper-Ternent, & Markides, 2010; Monserud & Markides, 2018; Miranda, Siddique, Belin, & Kohn-Wood, 2005; Taylor et al., 2014; Lazar-Neto, 2018).

There is little literature on the mental health of Conditional Permanent Residents and other immigration statuses that made up the "other lawful immigration statuses" category. However, there is quite a bit of literature on one of the groups in this category, DACA recipients. There is some conflicting literature on DACA status' relationship with mental health outcomes (Alif, et al., 2020; Zamudio, 2017; Siemons, Raymond-Flesch, Auerswald, & Brindis, 2017; Patler & Laster Pirtle, 2018). The current study provides some evidence to support Alif et al. (2020) study on psychological distress, which found DACA recipients to have poorer mental health outcomes. However, because DACA recipient status was not examined independently in relation to depression symptoms, it is difficult to say how much of an influence the other immigration statuses in this group had on this outcome. Additionally, there was a small sample size in the 'other lawful statuses' group. The "other" immigration category that had a relationship with severe depression symptoms was a small group and appeared to predominantly be made up of individuals without a stable immigration status. This instability in

status may have contributed to increased depression in the same way that it has for undocumented immigrants in previous research (Young & Pebley, 2017; Nova, 2014).

Summary of Qualitative Findings

The qualitative portion of this study showed the many difficulties that immigrants living in the Wichita community face, the positive ways that the Wichita community supports immigrants' mental health, and ways to better support immigrant mental health locally. Overall, this research provides empirical support for a need for local change at all of the social ecological levels. When looking at specific themes, subthemes, and codes, in this study the one with the most mentions related to impact on mental health was 'Prejudice'. 'Prejudice' was the strongest theme in the study as it had almost double the amount of mentions (17) that the next most frequently mentioned themes had (8). The outcome of this research that 'Prejudice' is the strongest theme, aligns with previous literature as there is a solid body of research the connects discrimination with negative mental health outcomes, especially for Latinos (Falcon & Tucker, 2000; Pascoe & Smart Richman, 2009; Torres & Ong, 2010; Torres, 2009; Yussuf, 2015; Pernice & Brook, 1996; Yip, Gee & Takeuchi, 2008; Rah, Huh, Finch, Cho, 2019).

'Social Support' was a theme that surfaced under the interpersonal social ecological level in this study and this theme aligns with the literature in terms of community support impacting mental health positively (Siller, Renner, Juen, 2017; Ganann, Sword, Thabane, Newbold & Black, 2016; Zapata, Carlos, Merten, Gallus, Grzywaczs, 2017). Other themes that had a higher number of mentions include: Worry (in relation to undocumented immigrants), Status Impacts Motivation, Limited Opportunities, Difficulties finding Mental Health Help, Financial Barriers, No Guidance, Professionals Unaware of Immigrant Issues, Stigma, Non- Help Seeking Behavior, and Resilience. Most of these are at the Organizational social ecological level. Recommendations for change are discussed more in depth in the 'Future Directions' section.

Major Findings and Connection to Segmented Assimilation Theory

Most findings from this study did not support Segmented Assimilation Theory. Application of Segmented Assimilation Theory to the mental health outcomes of the current study would suggest that those who identify as white, those with higher education levels, those who have a mid-level of acculturation, those who do not live in ethnic enclaves, and have a strong co-ethnic community would have better outcomes as these are some mechanisms theorized to contribute to upward mobility and ultimately well-being. Though, only some of these variables could be examined through this study, results showed that race in terms of white ethnic groups, education level, and acculturation outcomes did not impact depression outcomes. The sample in this study had a higher than anticipated depression outcome compared to the general population, and Segmented Assimilation Theory would suggest that when immigrants live in neighborhoods with non-immigrants instead of ethnic enclaves this leads to upward mobility and better outcomes. Wichita does have ethnic enclaves such as "the North side" which is a part of the city with a concentration of Mexican-Americans and Mexican immigrants. Some themes that emerged in the qualitative portion of this research such as "diverse environment" do not support Segmented Assimilation Theory's logic that mixed neighborhoods can be a ladder towards greater wel-being. The theme "diverse environment" included discussion regarding the North side of Wichita as being a place that positively impacted mental health because Mexican immigrants could find community there when the diversity within Wichita felt isolating. Additionally, literature has supported an association between the mental well-being of immigrants and living in communities with like-others (Nguyen, Rawana, & Flora, 2011; (Pernice & Brook, 1996; Yeh, 2014; Guo, Steinberg, Dong, & Tiwari, 2019; Gellis, 2003; ;Guo & Stensland, 2018; Vega, Ang, Rodriguez, & Finch, 2011; Zapata, Carlos, Merten, Gallus, Grzywaczs, 2017; Jang, et al., 2015). Overall, this study did not support the theoretical framework of Segmented Assimilation theory.

Limitations

The findings in this study should be interpreted in light of several limitations. This study is an exploratory study. This study has a particularly limited sample size, as the sample in analyses for the current study had ≤ 140, this may have impacted significance outcomes. The sample was not randomized, and may not be representative of the Wichita immigrant population as a whole. Additionally, although 10 is a robust sample size for establishing meaningful themes in qualitative data, there was a lack of saturation for some themes as new experiences in each focus group were often expressed. The results of the focus groups may also be limited to Mexican women as 90% of the qualitative sample was Mexican women. There were concerns related to social desirability response bias as some participants with low English proficiency who received help from someone who had a higher English proficiency, may have responded to questions in a socially desirable way because of the stigma related to depression. The organizations that data was collected from tended to work with immigrants who were still working to increase their English proficiency and socialized among predominantly immigrant groups.

Future Directions

Future Research

Future research should continue to examine the prevalence of depression in immigrants living in the Midwest and Wichita specifically to see if the outcomes support The Immigrant Paradox or if prevalence rates in Midwest population samples are similar to the prevalence of the general population as they were in this study. A larger sample and randomized sample should be recruited in Wichita in order to better generalize the results to truly see if Wichita is facing a mental health crisis or serving as a mental health haven with the immigrants that have made Wichita their home. The inclusion of more focus groups multiple immigrant across groups in the future would allow saturation to be reached. Additionally, future researchers

should also include a survey question that asks about participants' current use of anti-depressants or therapy. This would help rule out individuals whose depression symptom score would have potentially been mediated through such tools used to manage depression.

Community Changes

The qualitative portion of this research shows that there is a clear need to improve the environment in the greater Wichita area to support the mental health of the immigrants that live there by making changes at each level of the social ecological model. Social Ecological changes should be made in the greater Wichita community that stem from evidence-based practices. In 2011, Welcoming America and The Spring Institute created The Receiving Communities Toolkit: A Guide for Engaging Mainstream America in Immigrant Integration (Downs-Karkos,2011). Additionally, the group Grantmakers Concerned with Immigrants and Refugees (GCIR) created a toolkit for grant makers called Investing in Our Communities: Strategies for Immigrant Integration (Petson, Wang, McGarvey, 2007). The recommendations in these toolkits should become common practice in the greater Wichita area at the Policy level (e.g. advocate for undocumented immigrants to have the right to obtain a driver's license), Community level (e.g. establishing a community plan to welcome new immigrants), Organizational level (e.g. eliminate language barriers), Interpersonal level (e.g. equal treatment and opportunity), and Individual level (e.g. non-immigrants can donate to immigrant-related causes).

Additionally, local leaders who serve the immigrant-community in Wichita should consider the suggestions discussed by participants to improve mental health for immigrants in the Wichita area. The Wichita government, community, and individuals should support equity programs for individuals who speak a minoritized language, Spanish and Vietnamese in particular, who want to go into the mental health field as therapists, clinical psychologists, and counselors in particular. Benefits such as student loan repayment should be established in order

to retain and attract to the city the valuable skill of speaking a minoritized language and working in the mental health field. To increase the accessibility of mental health services, there should also be the implementation of a mental health service providers that both accept Medicaid and operate on a sliding scale on the North side and the East side where many Mexican and Vietnamese immigrants live. These services should be advertised in a variety of languages especially Spanish and Vietnamese, and have multiple providers who are Mexican, Vietnamese, and immigrants, or at the very least Latino and Asian.

Allyship to the immigrant community must visibly increase in the Wichita community. This includes the creation of public of signs (i.e. street signs, billboards) in Spanish and Vietnamese, the celebration of various international cultural events and the attendance of government and community leaders from diverse backgrounds, the donation of funds to causes that support local immigrants. Leaders of public service organizations should establish required training information related to relevant interactions that may occur when employees work with individuals who are immigrants (e.g. employers working with tax identification numbers, government offices working with green cards, school counselors understanding the implications of student's undocumented status, etc.). Local political groups should actively engage in allyship by working to elect immigrants in government. Kansas House representatives should support HB2003, the limited Kansas driver's license bill presented in 2019 allowing all Kansas residents, despite immigration status, to obtain a driver's license. Individuals should engage in allyship by actively learning about the lives and experiences of immigrants and intentionally seeking the representation of immigrants. For example, individuals can seek out children's books with positive immigrant protagonists and recruit from immigrant-serving organizations for leadership positions to increase the likelihood that someone from the immigrant community will fill the role.

Individuals and community organizations should raise and donate funds to support the increase of education and education programs about what mental health and mental illness are, especially programs in a minoritized language, such as De Familia a Familia de NAMI. This education needs to include discussion about the impact of using substances as a coping mechanism for mental health. Education may not need to be formal. Literature on substance abuse curriculum suggest that there are developmentally appropriate forms of education that should be considered for youth and may even be received in an impactful way through subliminal forms such as through media and social media (Onrust, Otten, Lammers & Smit, 2016). Social support for both immigrants from similar backgrounds, such as undocumented immigrants in particular, second generation immigrants (children of immigrants), and the 1.5 generation may be beneficial, but should be created and led by immigrants. Local universities and K – 12 schools should include elective options for broader curriculum that teaches the history and culture of minority groups, especially Mexican and Vietnamese groups. Environments like Horace Mann Duel Magnet are a great place to begin such curriculum efforts.

The purpose of this research is to examine depression symptomology related to demographic and immigration factors and explore existing concerns and community-level changes needed to support the mental health of immigrants living in Wichita, Kansas. The outcomes of this research showed that marital status, age of immigration, and immigration status have a relationship with depression, and prejudice was the strongest community factor impacting depression. It is important that this information as well as the suggested community changes, be utilized by a variety of local sectors in order to improve the mental health of immigrants living in Wichita.

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APPENDICES

APPENDICES

Appendix A

Survey Questions

The questions below ask about your comfort and familiarity with culture in the U.S. and culture in your home country. Responses closer to 1 reflect more similarity with culture in your home country. Responses closer to 9 reflect more similarity with culture in the U.S. Circle the response that reflects which culture best describes how you feel in regard to the question. If both cultures fit equally, mark "5".

1. With which group(s) of people do you feel you share most of your beliefs and values?

1	2	3	4	5	6	7	8	9
People from my home country				Both groups equally				People from the United States

2. With which group(s) of people do you feel you have the most in common?

1	2	3	4	5	6	7	8	9
People from my				Both groups equally				People from the

home country								United States

3. With which group(s) of people do you feel the most comfortable?

1	2	3	4	5	6	7	8	9
People from my home country				Both groups equally				People from the United States

4. In your opinion, which group(s) of people best understands your ideas (your way of thinking)?

1	2	3	4	5	6	7	8	9
People from my home country				Both groups equally				People from the United States

5. Which culture(s) do you feel proud to be a part of?

1	2	3	4	5	6	7	8	9
Culture from my home country				Both cultures equally				Culture from the United States

6. In which culture(s) do you know how things are done and feel that you can do them easily?

1	2	3	4	5	6	7	8	9
Culture from my home country				Both cultures equally				Culture from the United States

7. In which culture(s) do you feel confident that you know how to act?

1	2	3	4	5	6	7	8	9
Culture from my home country				Both cultures equally				Culture from the United States

8. In your opinion, which group(s) of people do you understand best?

1	2	3	4	5	6	7	8	9
People from my home country				Both groups equally				People from the United States

9. In which culture(s) do you know what is expected of a person in various situations?

1	2	3	4	5	6	7	8	9
Culture from my home country				Both cultures equally				Culture from the United States

10. Which culture(s) do you know the most about the history, traditions, customs, and so forth?

1	2	3	4	5	6	7	8	9
Culture from my home country				Both cultures equally				Culture from the United States

Below is a list of some ways you may have felt or behaved. Please indicate how often you have felt this way during the past week by checking the appropriate space. Please only provide one answer to each question.

1. During the past week I was bothered by things that usually don't bother me.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

2. During the past week I did not feel like eating; my appetite was poor

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

3. During the past week I felt that I could not shake off the blues even with help from my family or friends.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

4. During the past week I felt I was just as good as other people.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

5. During the past week I had trouble keeping my mind on what I was doing.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

6. During the past week I felt depressed.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

7. During the past week I felt that everything I did was an effort.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

8. During the past week I felt hopeful about the future.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

9. During the past week I thought my life had been a failure.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

10. During the past week I felt fearful.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

11. During the past week my sleep was restless.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

12. During the past week I was happy.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

13. During the past week I talked less than usual.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

14. During the past week I felt lonely.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

15. During the past week People were unfriendly.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

16. During the past week I enjoyed life.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

17. During the past week I had crying spells.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

18. During the past week I felt sad.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

19. During the past week I felt that people disliked me.

Rarely	Some	Occasionally	Most

or none of the time (less than 1 day)	or a little of the time (1-2 days)	or a moderate amount of time (3-4 days)	or all of the time (5-7 days)

20. During the past week I could not get going.

Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)

Demographics

1. Do you currently live in Wichita or the surrounding areas?
   - ☐Yes
   - ☐No

2. What is your gender identity?
   - ☐ Male
   - ☐ Female
   - ☐ Other:_____

3. How would you identify your race/ethnicity (check all that apply)?
   - ☐ White/Caucasian
   - ☐ Black
   - ☐ Hispanic or Latino or Chicano
   - ☐ Asian
   - ☐Pacific Islander
   - ☐ Middle Eastern
   - ☐Native American or First Nation
   - ☐ Other (please specify): _____

4. How old are you? _____

5. How old were you when you arrived in the United States to live? _____

6. How many years have you lived in the United States? _____

7. What is your marital status?
   - ☐ Married
   - ☐ Never married
   - ☐ Living with a partner
   - ☐ Divorced
   - ☐ Separated
   - ☐ Widowed (not married, spouse passed away)

8. What is the highest level of education you have completed? (Please use the chart below to answer using U.S. grade levels)
   - ☐No school

☐1st grade
☐2nd grade
☐3rd grade
☐4th grade
☐5th grade
☐6th grade
☐7th grade
☐8th grade
☐9th grade
☐10th grade
☐11th grade
☐12th grade
☐ Some college
☐ Associate's Degree
☐Bachelor's degree
☐Master's degree
☐Professional degree or Doctoral degree

Age	United States	United Kingdom		Vietnam	
4 - 5	Pre-Kindergarten	Reception	Early Years Foundation Stage		
5 - 6	Kindergarten	Year 1	Key Stage 1		
6 -7	1st Grade	Year 2		Grade 1	Primary School tiểu học
7 - 8	2nd Grade	Year 3	Key Stage 2	Grade 2	
8 - 9	3rd Grade	Year 4		Grade 3	
9 - 10	4th Grade	Year 5		Grade 4	
10 - 11	5th Grade	Year 6		Grade 5	
11 - 12	6th Grade	Year 7	Key Stage 3	Grade 6	Lower Secondary *Trung học cơ sở*
12 - 13	7th Grade	Year 8		Grade 7	
13 - 14	8th Grade	Year 9		Grade 8	
14 - 15	9th Grade	Year 10	Key Stage 4 (GCS E)	Grade 9	
15 - 16	10th Grade	Year 11		Grade 10	Upper Secondary School *trung học phổ thông*
16 - 17	11th Grade	Year 12/ Lower 6th	A Levels	Grade 11	
17 - 18	12th Grade	Year 13/ Upper 6th		Grade 12	

9. What country are you from? Note: this may be the country you were born in or identify with culturally.

_____

10. What is your employment status?
    - ☐ Employed Full-Time (40 or more hours/week)
    - ☐ Employed Part-Time (less than 40 hours/week)
    - ☐ Not in Labor Force (retired, homemaker, disabled, not looking for a job, etc.)
    - ☐ Unemployed (looking for a job)

11. What reason did you come to live in the United States?
    - ☐ I came to the U.S. for work
    - ☐ I came to the U.S. to be with my family/friends
    - ☐ I came to the U.S. to pursue education
    - ☐ I came to the U.S. to seek safety or seek asylum
    - ☐ I came to the U.S. because my family or another adult brought me when I was a child
    - ☐ Other (please specify): _____

12. What is your household's estimated yearly income?
    - ☐ $9,999 or less
    - ☐ $10,000 - $19,999
    - ☐ $20,000 to $29,999
    - ☐ $30,000 to $39,999
    - ☐ $40,000 to $49,999
    - ☐ $50,000 to $59,999
    - ☐ $60,000 to $69,999

☐ $70,000 to $79,999
☐ $80,000 to $89,999
☐ $90,000 to 99,000
☐$100,000 or more
☐Unknown or Prefer not to answer

13. What is your current immigration status? Reminder: your responses are anonymous
☐ Naturalized Citizen
☐Lawful Permanent Resident (green card holder)
☐ Other lawful immigration status (for example DACA, Conditional Permanent Resident, etc)
☐ Undocumented/VISA has expired/No current visa
☐Non-immigrant visa (for example F-1, B-1, etc.)
☐ Other: _____
☐ Unknown or Do not want to respond

14 Did you come to the United States as a refugee?
☐Yes, I came to the U.S. as a refugee
☐No, I did not come to the U.S. as a refugee

15. Which of the following best describes your type of employment/work?:
☐ Construction
☐ Manufacturing
☐ Education
☐ Healthcare
☐ Social Assistance Services
☐ I do not work
☐ Other (please specify): _____

16. How well do you speak English?
☐ Very Well
☐ Moderately Well
☐ Average
☐ Not Very Well
☐ I do not speak English

Appendix B

Focus Group Script and Questions

Hello, my name is Alissa Bey/Claudia Amaro and I am a student at Wichita State/an immigration Community Advocate. I appreciate your willingness to participate in this research. This research is about community mental health support for immigrants living in Wichita, Kansas and the surrounding communities. You were selected for participation in this study because you are 18 years old or older and you are a part of the immigrant community in Wichita, Kansas or the surrounding areas.

Before we begin, I would like to share a few procedures for our conversation. First, I will finish reading this overview of what to expect in this focus group. We will then give you a consent form to review. I will then answer any questions that you have about this focus group. Then the focus group will be conducted. We will ask you questions about support for mental health in the Wichita

community. The focus group will be audio recorded in order to gather accurate information based on the discussion that we have here today. Once the focus group ends we will have a short debriefing session where we can answer any questions that you have.

Although we will be on a first name basis here today, no names or identifying comments will be used when I write about or discuss this research with others. We will use aliases or fake names in order to keep the identities of each individual confidential. For example, someone with the name of Rosa Garcia may choose the alias "Sunny" in order to keep her identity confidential. You can choose what fake name you would like for us to use. You can be assured of complete confidentiality. This interview will last approximately 60 minutes.

If the subjects discussed in this focus group cause feelings of discomfort, please contact Healthcore Clinic's Behavioral Health Services. They are located at 2707 E 21st St, phone number (316)-961-0249 open from 7am to 8pm Monday through Thursday, 7am to 6pm Friday, and 8am – 5pm Saturday.

Now that we have read the introduction to you, we will give you the consent form to read. If you need the consent form read to you, please notify us of this.

SEM Level	Question
Individual	Let's first start just by talking about what brought you to Wichita, Kansas from your country and how your experience has been since you have lived in Wichita. While living in Wichita, have you had more positive experiences related to being an immigrant or more negative experiences related to being an immigrant? Is there anything that you have experienced in Wichita that has caused positive emotions such as being happy and healthy? If they cannot think of anything: For example, some people may enjoy that Wichita has certain events, or food If you don't mind sharing, is there anything that you have experienced in Wichita that has caused negative emotions such as sadness, anxiety, or fear? You do not have to share anything that you do not want to share. If they cannot think of anything: For example, some people may say that the people in Wichita are not friendly. Do those experiences currently impact you in your daily life? Do you think your experiences as an immigrant have impacted your mental health more positively or more negatively? If so, how? Do you believe that you are able to make a change in the community to improve the mental health of immigrants?
Interpersonal	From what you've heard, what things impact happiness and joy for others who are immigrants living in Wichita? From what you've heard, what things are a common concern or cause negative feelings and emotions for others who are immigrants living in Wichita?

	Do you think that overall, immigrants in Wichita more often have good mental health such as experiencing happy emotions or do you think Wichita immigrants more often experience emotions like sadness, depression, anxiety? How do you think the mental health of immigrants living in Wichita is impacted differently than someone who is not an immigrant living in Wichita? If someone who is an immigrant in the Wichita community realizes that they are struggling with their mental health (e.g. experiencing sadness or anxiety) what might they do to help themselves feel better? For example, go to the doctor, pray, talk to family or friends If they need it reworded: What sources of support for mental health have you noticed that immigrants living in Wichita seek out? What are some common occurrences or common practices in Wichita that may cause immigrants living here to experience negative mental health? If they need it reworded: In other words, what are some things in Wichita that may make immigrants feel sadness, anxiety, or fear? If they need it reworded: In other words, what are some things in Wichita that may make immigrants feel happy, joyful, or content? How can individuals who are not immigrants change to improve the mental health of immigrants in Wichita?
Organizational	What would keep someone who is an immigrant living in Wichita from using mental health services like health clinics and psychologists? Are there specific services in Wichita that you feel are helpful to immigrants who live here? What types of mental health services in Wichita do you know of that you could access if you needed them? How can Wichita hospitals/clinics change to improve the mental health of immigrants? How can schools change to improve the mental health of immigrants in Wichita? How can workplaces change to improve the mental health of immigrants in Wichita? There are many organizations that serve immigrants in Wichita including resettlement agencies for refugees, bilingual health clinics, and even policy makers who work for the city and change our laws.

	If you could tell them one thing that you think would help improve the mental health of immigrants living in Wichita, what would it be?
Community	What are some resources, characteristics, or common occurrences in Wichita that may cause immigrants living here to experience positive mental health? What are some things that you like about Wichita? What is something that could encourage immigrants living in Wichita to utilize psychological services? What are some things that you do not like about Wichita? What needs to change in the Wichita community in order to better support the mental health of immigrants?
Policy	What are some policies in Wichita that may cause immigrants living here to experience negative mental health? If they need it reworded: In other words, what are some policies in Wichita that may make immigrants feel sadness, anxiety, or fear? What are some policies in Wichita may cause immigrants living here to experience positive mental health? If they need it reworded: In other words, what are some policies in Wichita that help may make life easier? How can laws and policies change to improve the mental health of immigrants in Wichita?