THE INFLUENCE OF SOCIAL ISOLATION AND OTHER RISK FACTORS ON OLDER AFRICAN IMMIGRANTS' EMOTIONAL WELL-BEING

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DEDICATION

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THE INFLUENCE OF SOCIAL ISOLATION AND OTHER RISK FACTORS ON OLDER AFRICAN IMMIGRANTS' EMOTIONAL WELL-BEING

Social isolation has been documented as a significant challenge for older adults, including those who are immigrants. The conventional wisdom blames social isolation among older immigrant adults on language barriers, living arrangements, and age at migration, however, this does not allow for analytical clarity on how social isolation interacts with other important risk factors to influence emotional well-being among older African immigrants. This study offers an important contribution to the existing knowledge by examining how social isolation and other risk factors interact to impact emotional well-being among older African immigrants. It uses life course theory, acculturation theory, resilience theory, and cumulative risk theory to identify the relevant stressors or risk factors such as living arrangements, financial satisfaction, acculturation predictors, transportation, and grandchild care. A mixed-methods approach integrating quantitative and qualitative research methods was used in the study. For the collection of quantitative data, 163 participants aged 60 and over completed an online or mailed survey. Hierarchical regression was used to analyze the quantitative data. Findings showed that ethnic social relations and living arrangements had a unique contribution to the social isolation of the participants. Also, social isolation, ethnic social relations, and financial satisfaction significantly influenced the emotional well-being of study participants. For the study's qualitative data, the researcher conducted in-depth interviews with 11 participants, age 63-79, by telephone. Five major themes were generated from the data using a thematic analysis approach, which included (a) minimal social engagement

outside of the home, (b) barriers to social engagement, (c) satisfaction with finances, (d) fewer socialization consequences, and (e) coping strategies. The overall finding showed that the participants lacked social engagement outside of the home, which negatively affected their emotional well-being. Implications for social work practice and policy as well as recommendations were emphasized in the study.

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Chapter 1 Introduction

The United Nations described the growth rate of adults aged 60 and over to be alarming across the globe (World Population Ageing, United Nations 2017). In the United States (US), there are 52.5 million older adults 65 years and over and that population is projected to increase rapidly by 2060 (U.S. Census Bureau, 2018a). Foreign-born elders are among the older adults in the US; these are individuals not born in the US and are referred to as older immigrants. According to the American Community Reports, there are 7.3 million older immigrants in the U.S., accounting for 13.9% of the total older population in the US in 2018 (Mizoguchi et al., 2019). Older immigrants are expected to increase by about 200%, to 22 million by 2060 (Mizoguchi et al., 2019). Since immigration plays an important role in the social, economic, and political dynamics of the US, immigrants who are citizens in the US are more likely to continue to bring their parents to live with them in the US, as supported by the family reunion policy of 1965 (Villazor, 2015). This policy encouraged already established immigrants to bring in their spouse, children, and parents to live with them in the US. Older immigrants in the US are from diverse continents of the world, with many diverse cultural backgrounds. The population of interest in this study is older immigrants from the sub-Sahara region of Africa as little is known about this group.

As confirmed by experts, developmental transitions are part of human life cycles, but migration in late life is a milestone for older adults due to the challenges associated with transitioning from their original countries to an unfamiliar country (Elder & Johnson, 2003). Previous studies have reported that transition in late life exposes older people to acculturation challenges, particularly language barriers, unfamiliar culture, and acculturation stress, which may negatively impact their mental and physical well-being

and lead to a decrease in life expectancy (Li et al., 2018; Rhee 2019). Scholars reported that social isolation and loneliness are common problems for older adults, with older immigrants being more vulnerable to these challenges (Elder & Retrum, 2012; Gardiner et al., 2018; Nicholson, 2012). Although people of all ages may experience social isolation, it was most common among older adults because younger people have many more opportunities to integrate socially through education, employment, and social media (Child & Lawton, 2019; Chile et al., 2014; Kotian et al., 2018; Miyawaki, 2015). Scholars described social isolation as a lack of sense of belonging, minimal social contact, decreased quality of social relationships, and lack of engagement with others in the community (Diaz et al., 2019; Nicholson, 2009). Loneliness referred to the psychological aspect of social isolation, which reflects a discrepancy between one's desired relationship with others and one's actual relationship with others and/or dissatisfaction with the frequency of ones' social contact (Peplau & Perlman, 1982). Loneliness and social isolation are used interchangeably in studies on social relationships; however, the concepts are distinct with one likely leading to the other. In distinguishing loneliness from social isolation, scholars described feeling lonely as subjective isolation and the lack of frequent contact as objective isolation (Cornwell & Waite, 2009; Nicholson, 2009; Valtorta et al., 2016).

Prior research estimated that 15 to 40% of older adults in the US experienced social isolation (Elder & Retrum, 2012; Nicholson, 2012). Hence, if we consider that 25% of older adults in the US experience social isolation, that translates to about 10 million socially isolated people. Similarly, a study of loneliness among ethnic minorities in Britain reported a higher rate of loneliness in older immigrants from Africa, China, the

Caribbean, Pakistan, and Bangladesh, ranging from 24 to 50% as compared to 8 to 10% of those from India (Victor et al., 2012). Additionally, scholars reported that older immigrants, irrespective of ethnic and racial background, experienced a higher level of social isolation in the US, Canada, and beyond. For example, findings show that older immigrants from Mexico, Asia, and South America experienced social isolation, as did women immigrants from Africa (Babatunde-Sowole et al., 2016; Jang et al., 2016; Ogunsiji et al., 2012). Previous studies showed that older African immigrants in the US are vulnerable to social isolation, depression symptoms, and trouble falling asleep (Nkimbeng et al., 2021). A needs assessment found that the needs of this population included health care and transportation, among others (Darboe & Ahmed, 2007). However, there is very limited empirical data on social isolation experiences in older immigrants from the regions of sub-Saharan Africa.

Considering social isolation as a threat to older adults' well-being, scholars have identified potential risk factors for social isolation to include demographic characteristics such as age at migration, gender, living arrangements, acculturation, English language proficiency, and neighborhood factors (Booth et al., 2012; Chatter et al., 2018; Chile et al., 2014; Jang et al., 2016; Ng & Northcott, 2015). Since we know that social isolation and loneliness are a challenge for older adults in the United Kingdom among ethnically diverse older adults, it is important to learn more about the social isolation experience of older immigrants from a diverse ethnic background in the US. Additionally, there is a lack of knowledge on social isolation among older African immigrants, as well as its impact on their well-being. While a few studies described the factors contributing to social isolation, there has been insufficient research on the multiple effects of other risk

factors and social isolation on the well-being of older immigrants. Against this background, this study argues that examining a single risk factor for social isolation would fail to capture the combined effects of social isolation with other risk factors on the well-being of older African immigrants. Therefore, this study examines the experiences and effects of social isolation and other risk factors to better understand how these relationships influence older African immigrants' poor or deteriorating emotional well-being. This study draws on empirical and theoretical insights, as well as fieldwork, to identify the pertinent stressors/risks contributing to social isolation among older immigrants. In this regard, it alludes that the presence of social isolation, which is already existing in older immigrants (Chile et al. 2014; Mbanaso & Crewe, 2011; Jang et al., 2016), in addition to other risk factors, would result in older immigrants' poor or deteriorating emotional well-being. While considering older African immigrant samples, this study raises the question, "What is the association of social isolation and other risk factors on emotional well-being among older African immigrants?" Another important question in this study is, "In what ways do older African immigrants cope with social isolation?" The study uses a convergent mixed-method approach to answer these questions.

Overall, the recognition of higher levels of social isolation due to migration, disruptions in social relationships, support systems, and their trajectory among older immigrants can help social workers devise culturally relevant interventions for an aging nation. Failing to intervene early can force rapid decline in mental and physical health (Miyawaki, 2015; Seifert, et al., 2021), necessitating more complex medical care and support challenges for older adults than the public health system can sustain.

African Elders and Migration

Black African immigrants were one of the fastest growing populations in the US and constituted 3% of the nation (Akinsulure-Smith, 2017; Darboe & Ahmed, 2007; Venter & Gany, 2011). A study reported that the Black African population increased by 200% between 1980 and 1990 and is projected to increase by 100% in the 2000s (Capps et al., 2011). Most Black African immigrants were admitted through the Family Reunification Act of 1965, for employment and education purposes, as refugees, and through the Diversity Visa Lottery, with the aim to increase the flow of underrepresented countries in the US (Capps et al., 2011, Mbanaso & Crewe, 2011). As individuals settled and gained legal status in the US, they engaged in serial migration where they brought in their children, spouses, and parents. Therefore, the serial migration and family reunification policy influenced the increase in the influx of children, spouses, and older immigrants in the US (Rusch & Reyes, 2012). It appears that the current changes in the immigration policy emphasizing the enforcement and reduction of immigration to the US and the elimination of the Diversity Visa Lottery would lead to a decrease in the entry of African immigrants to the US (Collen et al., 2019). But the policy supporting admission to the US as foreign-born professionals would likely increase the growth of African immigrants in the labor market. This may likely be an avenue for a continuing increase in the immigrant population. Chidinma & Kopf (2019) stated that despite the immigration policy, African immigrants grew at a rate of almost 50% in the US from 2010 to 2018.

Older African immigrants are those who migrate to the US later in their life course from different geographical regions of Africa, the sub-Saharan Africa in particular. The regions of the sub-Saharan Africa include West Africa, East Africa,

Central Africa, and Southern Africa. Among the top African countries represented in the US are Ethiopia, Cameroon, Nigeria, Ghana, Liberia, among others (US Department of Homeland Security, 2008). Prior reports showed that foreign-born older immigrants, as a whole, consistently increased from 4.8% of immigrants of all ages in 1965 to 13.9% in 2015 and is estimated to increase to 17.7%, or nearly one in 5, by 2065 (Pew Research Center, 2018; Marther et al., 2015). Studies showed that sub-Saharan African born immigrants residing in the US were approximately 36% from West Africa, 29% from East Africa, 17% from North Africa, and 5% from South Africa (Gambino et al., 2014; US Census Bureau, 2017ACS). Based on statistics from the 2017 US Census Bureau, American Community Survey, the age distribution of African immigrants from sub-Sahara region was 11% under the age of 18, 82% between the ages of 18-64, and 7% over 65 (Echeverria-Estrada & Batalova 2019). Due to the growth in the number of older African immigrants in the US, it is important to explore the challenges they may be facing as they go through the acculturation process. Moreover, improvements in life expectancy in the western world are also a factor that necessitate caring for this population. The US Census Bureau (2017) reported that older people aged 65 and over, on average, have additional 19.4 years (20.6 years for females and 18 years for males) life expectancy. The life expectancy of foreign-born immigrants was reported to increase from 2.3 years in 1979-81 to 3.4 years in 1999-2001 compared to the native-born population in the US (Singh & Hiatt, 2006). Singh and Miller (2004) added that compared to the US-born counterparts, black immigrant men and women from African countries had 9.4 and 7.8 years longer life expectancy, respectively, than immigrants from China, Japan, and Philippines. Mehta et al. (2016) explained that life expectancy for

foreign born individuals at age 65 is correlated to the first social security card application and a proxy for the time of arrival in the US, hence recent applicants had a lower mortality rate than earlier applicants. Immigrants who arrived earlier, such as the 1960's, had a mortality advantage relative to the US. It was concluded that immigrant mortality advantage declined with an increased duration. This report indicated that older immigrants tend to live longer, and their life expectancy may decrease as they age in the migrating country. This necessitates learning how best to support this aging group.

Study Rationale

Previous studies on social isolation have widely examined the prevalence, causes, consequences, social networking, and social disconnection among natives and ethnically diverse older adults (Chatters et al., 2018; Jang et al., 2016; Jetten et al., 2018; Klok et al., 2017; Li et al., 2018; Sanchez et al., 2019), but with little or no focus on older African immigrants. Scholars agreed that the scarcity of empirical research on older African immigrants may be due to Africans being considered as a monolithic population in terms of race, ethnicity, and nationality (Agbemenu, 2016; Hugo, 1997; Leach, 2009). As a result of this misleading identity uniformity, African immigrants are classified as African American/Black (Capps et al., 2011), thereby limiting knowledge about the challenges African immigrants experience related to aging. Though African immigrants share a similar skin color, they are from 54 diverse countries with different cultures and languages. Understanding their challenges, needs and assets requires background knowledge about the variations in culture, language, and life experiences.

Among the few studies on older African immigrants, social isolation was identified as their major challenge in the American community (Darboe & Ahmed, 2007;

Mbanaso & Crewe, 2011). Further, in a review of literature, Mbanaso and Crewe (2011), described the challenges "facing older African immigrants to include social isolation, loss of culture, and loneliness; an impersonal way of life and individualism that they are not accustomed to; feelings of irrelevance and loss of control; language barriers; and lack of services that are available to the elderly in American society" (p. 330). Nkimbeng et al. (2021) reported depressive symptoms and trouble falling asleep as prevalent among the older African immigrants' sample in their study. Darboe and Ahmed (2007) used qualitative and quantitative methods to describe the needs of older African immigrants centering around affordable housing, transportation, assistive technology, language interpreters, health insurance, recreational facility, residential home care, and skilled nurse visits. These studies lack empirical data to confirm the finding that social isolation is a problem. At the same time, obscurity characterizes the factors that impact the emotional well-being of this population.

Although prior studies have extensively identified the risk factors contributing to social isolation among older adults and older immigrants (Chatter et al., 2018; Jang et al., 2016), little is known about how social isolation interacts with other risk factors to influence emotional well-being among older immigrants. Therefore, it is important to study how multiple risk factors may impact the emotional well-being of older immigrants. In this regard, this study analyzes how social isolation and other risk factors interact to affect the emotional well-being of the participants selected for this study. Moreover, Palgi (2013) stated that "well-being is a very complex phenomenon" (p. 1141), and that quantitative approaches may be too simple to aid our understanding of the uniqueness of well-being and the general and cultural phenomenon of well-being among

people (George, 2010; Palgi, 2013). Therefore, applying mixed methods may provide greater insight into understanding how adaptation to ongoing cumulative chronic stressors in later life may lead to a sense of well-being (Palgi, 2013). With this focus, Palgi (2013) suggested a need to examine whether ongoing cumulative chronic stressors [or multiple risk factors] caused the deterioration of well-being among older adults.

Further, studies on African immigrants emphasized the importance of resilience in overcoming adversity associated with post-migration stressors, particularly among female African immigrants in the US (Babatunde-Sowole et al., 2016; Ogunsiji et al., 2012) and African immigrants in Australia (Udah et al., 2019). However, little is known about how resilience may help older African immigrants to adapt to life in the US. Thus, this study used a resilience lens to examine how resilience moderates the relationship between social isolation and other risk factors and the emotional well-being of older African immigrants.

Based on the identified gaps in scholarship, this study uses the cumulative perspective lens to examine the effects of social isolation and other risks factors on the emotional well-being among older African immigrants. It also investigates the moderating effects of resilience on the relationship among these factors. A cumulative risk perspective is applied to increase our understanding of the influence of multiple risk factors on emotional well-being and diminishing coping capability among older African immigrants. This study aims to (a) examine the effects of risk factors on social isolation among older African immigrants, (b) examine the effects of social isolation and other risk factors on the emotional well-being of older African immigrants, (c) examine the moderating effect of resilience on the relationship between social isolation, ethnic social

relation, and financial satisfaction on the emotional well-being of African older immigrants, and (d) explore the coping strategies of older African immigrants facing social isolation.

Significance of the Study

This study is considered the first known study to explore the influence of social isolation and other risk factors on emotional well-being of older African immigrants in the US. Using a convergent mixed method for this study provides a detailed understanding about how social isolation as an ongoing stressor combined with other risk factors to impact the emotional well-being of the participants. Further, this study provides us with knowledge on how to improve services and policies regarding older immigrants' integration in the society, as well as allow proactive steps in developing evidence-based interventions to meet the mental and physical health needs of older immigrants.

Theoretical Framework

The theoretical framework for this research is built on four theories, namely life course perspective, acculturation theory, resilience theory, and cumulative risk factors. The choice of these theories is premised on the effects of culture and psychological adaptation to a new unfamiliar dominant culture as well as exploring the strengths of older African immigrants in adjusting to adverse migration challenges as they age in the US. The life course theory emphasizes the fit and adaptation of an individual to his environment considering a historical review of time with an emphasis on social location and cultural impact on an individual's experience in each stage of life (Gitterman & Germain, 2008). Acculturation theory adds a perspective that older immigrants relate to the society of their settlement based on their chosen acculturation strategies and how

acculturative stress impacts their adaptation to the host community. Resilience theory emphasizes the ability of older immigrants to adapt to the environment despite adversity. The cumulative risk factors state that social problem cannot be understood from a single pathway. Each of the theories is discussed as it relates to social isolation, risk factors and emotional well-being.

Life Course Perspective

The life course perspective pioneered by Glen Elder explained the impact of life circumstances concerning migration. The life course theory used various concepts such as cohort, transition, trajectory, life events, and turning points to explain the effect of life changes on the individual (Elder et al., 2003). Cohort referred to people of the same age group. Transition meant changes in roles and status such as relocation and experiences of culture change. Trajectories referred to discrete transitions such as language trajectory, migration trajectory, and health trajectory. Life events referred to a long-lasting change that occurs in the life course which required older immigrants to readjust to a host community.

Lack of adjustment to the host community may lead to social isolation, which may have negative consequences on one's mental and physical health. The turning points are moments when a long-lasting change may occur in the life course, which for older immigrants may include adaptation to a new culture. Several studies have applied these concepts to older immigrants (Child & Lawton, 2019; Ejlskov et al., 2019; Montes de Oca et al., 2011; Pettigrew et al., 2014). For instance, Ejlskov et al. (2019) used a quantitative approach to examine the concept of cohort and how life events in different stages influenced an individual in later life, with a focus on the effect of social

relationship adversity in childhood (<18 years), mid-adulthood (36-53 years), and late adulthood (54-64 years) to predict loneliness in old age (68 years). The authors found that social relationship adversities experienced in childhood and mid-adulthood predicted loneliness (subjective isolation) later in life, suggesting that the adverse experience of social relationships early in life impact the experience of subjective and objective isolation in later life. Parallel to these findings, Child and Lawton (2019) found that younger cohorts (21-30 years) were more sensitive to connectedness of social networks while older cohorts (50-70 years) were more concerned with close network ties, indicating that perception of one's network and satisfaction with one's contacts can be associated with loneliness throughout the life course. Younger cohorts reported a greater number of network members on average and more days of loneliness and isolation than older counterparts. This report shows that a larger network size does not necessarily decrease loneliness among younger cohorts. However, for older adults, large network size and strong relationships among family may be protective of mental health. The difference in the cohort age groups may be due to differences in the social needs and expectations of the different age groups.

Several studies using the life course perspective revealed historical time periods, age at migration, timing of migration, and the conditions for the migration trajectories had a significant influence on the health and quality of life of older immigrants (Leach, 2009; Montes de Oca et al., 2011; Okafor et al., 2013). Similarly, Heinz and Krtiger (2001) added that life course theory explains the impact of life stressors such as language barriers, health challenges, and culture change on individuals, and how these factors may lead to social isolation for older immigrants. The life course perspective demonstrated

that the historical period could modify the physical and mental health of migrants based on personal, family, and contextual situations. For example, using an ethnographic method, Montes de Oca et al. (2011) explored the differences across three historical periods in the last 60 years of migration for immigrants from Mexico to the US. The findings showed that the first group who came to the US between age 18 and 34 through the Bacero program (1942-1964) experienced health challenges in later life due to accumulation of stress from work over their life course, despite having access to health care. The second group were the undocumented immigrants who came to the US through the Immigration Reform and Control Act (IRCA) between age 16 and 34 (1965-1986) and who experienced poor health in old age due to work consequences and unhealthy habits, for example eating junk food. Likewise, the third group were those who came after IRCA (1987-2010) at age 28-53 years and who also experienced negative health consequences in late life. The explanation of these findings may be due to the conditions associated with each immigration program for the population examined.

The concepts of cohorts, age at immigration, and the historical period in the life course are integral to comparing social isolation experiences among different cohorts and facilitates understanding of the differences in social isolation experience pre- and post-migration for older immigrants. Life course theory emphasizes individual experiences in the migration trajectory, which helps to understand the psychological impact of social isolation on the mental and physical health of older immigrants. On the other hand, it may not illuminate our understanding of the social interaction of the older person with others in the community.

Acculturation Theory

Acculturation theory was pioneered by John W. Berry in the 1980s to explain how an individual new to a culture responds to a dominant culture and its members (Agbemenu, 2016). Acculturation is the act of moving from one's own culture to another culture. Berry (2005) defined acculturation as the "dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members" (p.698). When people migrate to a new culture, they are faced with the challenge of either retaining or rejecting their own culture or the dominant culture (Agbemenu, 2016). Based on this premise, Berry (1997) identified four strategies of acculturation to understand the attitude of people towards the adoption of a new culture. The acculturation strategies are separation (holding to one's culture and avoiding interaction with others), integration (maintaining one's culture and interacting with others in the new culture), marginalization (rejection of both cultures), and assimilation (not maintaining one's cultural identity, but seeking to acquire a new culture). Berry (1997) stated that older persons who adopt assimilation or integration strategies retain the dominant culture of the migrating country, while those who feel separated or marginalized may have challenges with adaptation to a new culture. Thus, social isolation may appear to be commonly experienced by the separated and marginalized individuals compared to those who assimilate and integrate into the dominant culture in the host country. In line with Berry (1997), Klok et al. (2017) reported that older Turkish and Moroccan migrants who adopted marginalized/separated acculturation strategies were lonelier than those who were integrated and assimilated into

the dominant culture; hence, the integrated and assimilated older immigrants had a stronger sense of belonging to their new communities.

Acculturation scholars (Berry, 1997, 2006; Ward, 2001) asserted that acculturation theory is rooted in psychological theory of stress and coping proposed by Lazarus and Folkman (1984). Following this theory, Berry (1997) distinguished acculturation into individual-level and group-level factors to explain the stressors (events that threatens an individual's safety) and coping strategies (behavioral and psychological effort for managing stress) in the process of acculturation. The group-level factors refer to the changes in the social structures, institutions, and cultural practices. The individual factors are the changes in individual behavior that act as the moderating variables prior to and during the acculturation process. The individual-level factors prior to migration include age, gender, education, migration motivation, and cultural distance such as language, religion, and personal characteristics, while the individual-level factors during the acculturation process include length of stay, acculturation strategies, coping strategies and resources, social support, and social attitudes such as discrimination and prejudice (Berry, 1997). Thus, as immigrants go through the acculturation process, they make efforts cognitively and behaviorally to cope with stress brought by migration (Berry, 1997). For instance, the acculturation process involves older migrants appraising the stressors such as social isolation and coming up with coping strategies for adapting to the dominant culture. This process, according to Berry (1997), encouraged a long-term adjustment to a new culture.

Further, immigrants experience acculturative stress, which is referred to as negative and emotional reactions associated with adjustment to a new culture (Berry et

al., 1987). To cope with the acculturative stress, individuals identify and apply a wide range of coping strategies to better adjust to the dominant culture (Berry, 2006). Sequentially, acculturation theory helps to identify the stressors that may lead to social isolation and the coping strategies needed for adjusting to a new culture. According to Berry (1997), in describing the individual-level factors prior to and during the acculturation process, said "moderating factors [prior and during] can be seen as both risk and protective factors, depending on their degree or level [of stressor]" (p.18). Drawing on this assertion, it is imperative to focus on the risk and protective factors for social isolation among older immigrants to understand how risk factors increase the onset or continuity of the stressors, and how the protective factors protect immigrants against social isolation. Hence, a value-added model along with the life course perspective and acculturation theory needs to be considered. Greene (2013) described an additive model as "a model in which risk factors increase the probability of a negative outcome [stress]" (p.3). The additive model is grounded in the risk, protective, and resilience theory (Greene, 2013). Risk factors increase the likelihood of an event to occur in the future under certain conditions. Risk factors can be individual characteristics (traits), specific life events (migration, loss of loved ones), or contextual factors (neighborhood safety), while protective factors predict future outcomes, modify risk, and may compensate for risk by reducing the social problem and moderating the relationship among risks and problems (Fraser et al., 1999). Protective factors can be individual characteristics, family factors, and extra-familial conditions (a network of supportive friends or religious attendance). According to Rutter (1987), "risk and protective factors interact to produce an outcome when stress is low, and at such times protective factors are of less influence"

(p.3 as cited in Greene, 2013). The interactions among the risk and protective factors may help decrease the impact of social isolation on emotional well-being of older immigrants. Borrowing from Fraser et al. (1999), the concepts of risk, protective and resilience factors are important in describing older immigrants' ordeal in new host countries in relation to acculturation and social isolation. Identifying the risks, protective factors, and resilience from strengths perspective is worth investigating.

Resilience Theory

Resilience provides a framework for understanding how people overcome risk exposure and develop strategies to cope with the challenging situation (Rashid & Gregory, 2014; Zimmerman et al., 2013). Scholars defined resilience as the ability to overcome life adversities and successfully adapt to negative situations and function well in the context of high risk (American Psychological Association, 2017; Fraser et al., 1999; Gillespie et al., 2007; Kashyap, 2014). When people are exposed to adverse situation, they develop the "capacity to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to negotiate for these resources to be provided and experienced in culturally meaningful ways" (Ungar, 2008, p. 225). For instance, exposure to late life developmental challenges, for example declining health and cognitive functioning, migration, social isolation, and grief, are stressful situations that may require an older person to appraise the situation and develop the capacity to overcome and maintain optimism to cope (Rashid & Gregory, 2014). Hence, resilience centers around the interactions of risks and protective factors in the individual and environment to enhance positive adaptation despite adversity and trauma (Cardoso & Thompson, 2010;

Lavretsky & Newhouse, 2012; Masten, 2001). Resilience theory emphasizes a strengths-based approach to develop preventive interventions to reduce exposure to risk (Fraser et al., 1999).

Zimmerman et al. (2013) identified three basic conceptual models to understand resilience in research. These are compensatory, promotive, and challenge. The compensatory model is when promotive factors counteract exposure to risk through an opposite, direct and independent effect on outcomes. Similarly, Fraser et al. (1999) described compensatory protective effects as factors that have a direct effect on a problem while the buffering protective effects moderate a problem. Precisely, the buffering effect buffers an individual against the full effect of risk by directly reducing a problem. The promotive factor, also known as protective factor, predicts future outcomes, modifies, and moderates the negative effects of risks for predicting negative outcomes (Fraser et al., 1999; Rutter, 1987). Additionally, the challenge model, as identified by Fraser and colleagues (1999), operates with exposure to average levels of risk, which helps people overcome subsequent exposure, but the initial exposure must be strong enough to help people develop coping mechanisms to overcome the effects of the risks.

The resilience theoretical underpinning in this paper focused on the promotive/protective resilience paradigm. Resilience protective factors were referred to as "assets and resources" (Fergus & Zimmerman, 2005). According to Windle (2011), "assets and resources within the individual, their life and environment facilitate this capacity for adaptation and bouncing back in the face of adversity" (p. 163). Thus, assets were factors within the individual, such as self-efficacy, identity, and orientation to the future that encourages resilience, while resources were the external or environmental

factors around the individual. Examples of resources were caring family members, friends, mentors, and opportunity structures that promotes social connections (Zimmerman et al., 2013). Zimmerman et al. (2013) further described promotive factors, including ethnic identity, social support, and prosocial involvement. Prosocial involvement referred to participation in organized activities, as in the church, and ethnic association to foster healthy development as well as promote sense of community. The integration of assets and resources encouraged prosocial involvement (Zimmerman et al., 2013). Expanding on the concept of prosocial involvement, Johansson et al. (2013) and Li et al. (2018) explained that older adults can become resilient by reconstructing their relationship within their new environment and engaging in activities connecting their past and present environments.

Moreover, protective resilience was also categorized into internal and external protective factors. The internal protective factors included positive temperament, self-esteem, sociability and being good, while the external protective factors were developed in the environment, such as family bonds, social ties, supportive social environment relationships, and meaningful participation in social activities (Greene & Conrad, 2002). Both internal and external resilience helped people to resist/modify the effect of risk and enhance adaptation.

Cumulative Risk Perspective

Fraser et al. (1999) conceptualized risk factors as nonspecific or specific risk factors. The nonspecific risk factors were the factors that are not directly related to an increase in a particular outcome, but can be linked to diverse negative outcomes, while the specific risk factors were those likened to specific negative outcomes. When

considering both nonspecific and specific risk factors, scholars opined that it was necessary to focus on an integrated perspective to understand social problems because social problems cannot be adequately understood from a single pathway. Applying cumulative perspective would better help to identify diverse risk that impacts the problem and also provide multiple pathways for addressing the social problem, such as social isolation, which was considered in this study (Fraser et al., 1999; Richman & Fraser, 2001; Rutter 2001; Sameroff, et al., 1999). Hence, cumulative risk was an accumulation of risk factors or stressors, which collectively increased the likelihood of negative outcomes or behaviors (Price & Hyde, 2009). The cumulative risk model proposed that the number of risk factors experienced would be the most determinant of an individual summative level of risk instead of focusing on one risk factor. Examining the cumulative model, scholars reported that diverse factors may lead to social isolation and loneliness for older adults, including older immigrants, but examining the effect of the number of risk factors on an individual is crucial to understand a social problem (Gierveld & Van der Pas, 2015). Examining the cumulative risk factors for loneliness in older immigrants residing in Canada applying ecological perspective, Gierveld and Van der Pas (2015) found that the number of contact and satisfaction with network members were associated with loneliness, likewise a sense of identity with the local community, but immigrants who speak the same language may be at higher risk of loneliness. In line with this finding, while assessing the association of ongoing cumulative chronic stressors (health problems of close friends or family, financial strain, job/work difficulties) on well-being in late life, it was reported that age and the perceived number of ongoing chronic cumulative stressors predicted emotional well-being in late life (Palgi, 2013). These

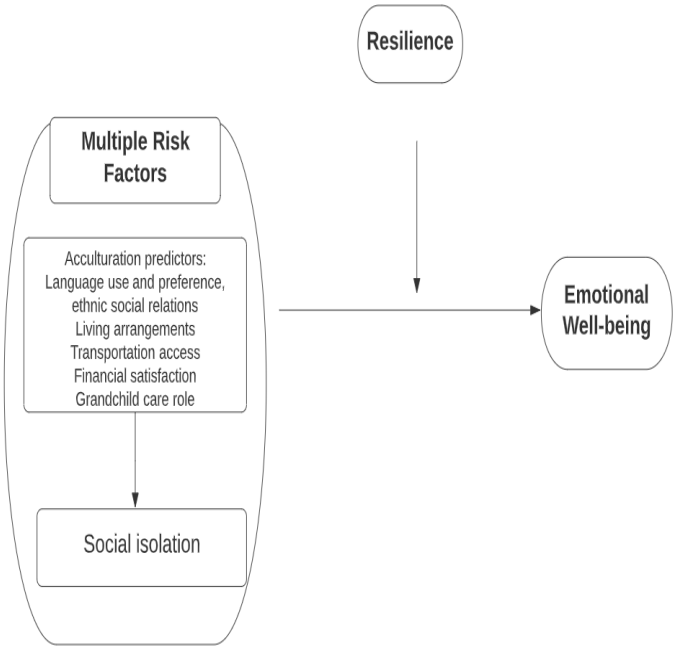
studies agreed that examining the cumulative risk factors was crucial in understanding social isolation, loneliness, and well-being of older adults.

Combination of the Theories/Perspectives

This study is guided by a combination of theoretical frameworks/perspectives discussed earlier in this paper. The life course theory offers explanation on transition in late life in line with migration effects; acculturation theory helps to understand the risk factors (stressors), such as language barriers, older immigrants experience upon migration; and the resilience theory further explain the interactions of the risks and resilience to overcome adversity. Lastly, the cumulative model provides insight into understanding the importance of examining how social isolation and other risk factors impact the emotional well-being of older adults. The three theories/perspectives and the cumulative risk perspective add different components to the model as represented in Figure 1.

Figure 1

Theoretical Framework for Examining Social Isolation of Older African Immigrants



Chapter 2 Literature Review

This chapter discusses previous findings regarding the relationship among social isolation, acculturation, resilience, and emotional well-being of older immigrants. The chapter defines social isolation, identifies the factors contributing to social isolation, describes the concepts of acculturation, social isolation, and resilience as well as the effects of their associations on the emotional well-being of older immigrants. Due to a dearth of literature on older African immigrants, most of the studies reviewed considered older adults and/or immigrants from diverse ethnic backgrounds.

Defining Social Isolation

Social isolation reflects discrepancies in people's social relationships. As a social construct, social isolation yields various definitions including lack of contact with others and physical separation with people in one's life (Biordi & Nicholson, 2009; Child & Lawton, 2019). Other ways of describing social isolation includes deficits in social network size and infrequent social contacts (Alpert, 2017; Cloutier-Fisher et al., 2011), social disconnection (Cornwell & Waite, 2009), lack of belonging (Diaz et al., 2019), social exclusion, and physical separation (Tomaka et al., 2006; Townsend, 1957; Weiss, 1982). Further, scholars examined social isolation in relation to reduced network size, quality, and quantity of social interaction, appraisal of related resources and emotional relationships, and social support received from the community (Cloutier-Fisher et al., 2011; Cornwell & Waite, 2009; Nicholson, 2009; Wang et al., 2017; Zavaleta et al., 2014). Concisely, social isolation refers to few social ties and a lack of social contact with others.

Social isolation may be either voluntary or involuntary. Voluntary isolation occurs when a person chooses to isolate himself/herself from others and still has positive feelings. Involuntary isolation occurs when an individual or a group of people are forced to isolate themselves due to a given circumstance, which may include chronic illness, disability, discrimination, oppression, stigmatization, among others, leading to social exclusion for the isolated individual (Biordi & Nicholson, 2009).

While referring to social isolation as having multiple constructs, Nicholson (2009) classified the constructs into two types, namely objective and subjective isolation. Objective isolation refers to the frequency of contact with others in an individual's network, while subjective isolation is the feeling of being lonely. Both objective and subjective isolation draw on the importance of social relationships. For instance, an older immigrant may be socially isolated and not feel lonely, and conversely, a person may feel lonely yet not isolated. Therefore, both objective and subjective isolation are worth investigating empirically in aging research, particularly with older immigrant samples (Biordi & Nicholson, 2009; Chatters et al., 2018; Pettigrew et al., 2014).

Using quantitative approaches, scholars agreed that subjective and objective isolation are independent of each other (Child & Lawton, 2019; Cloutier-Fisher et al., 2011; Cornwell & Waite, 2009; Nicholson, 2009; Wang et al., 2017; Zavaleta et al., 2014), but social isolation and loneliness could be studied separately instead of considering both as types of social isolation (Child & Lawton, 2019). The scholars opined that both objective and subjective isolation could improve understanding about the experience of social isolation in older adults (Cloutier-Fisher et al., 2011; Cornwell & Waite, 2009; Nicholson, 2009; Wang et al., 2017; Zavaleta et al., 2014).

Drawing from the objective and subjective isolation types, Newall and Menec (2019) identified four dimensions of social isolation and loneliness: 1) the socially isolated and lonely (the vulnerable group), 2) the socially isolated and not lonely (lifelong isolate), 3) not lonely and not socially isolated (the majority), and 4) the lonely and not socially isolated (lonely in crowd). The authors concluded that the category in which an older adult belonged would determine the type of intervention needed. Therefore, studying loneliness and social isolation together will aid in the understanding of the complete social climate of older immigrants.

Moreover, Chile et al. (2014) identified structural and functional isolation as two forms of social isolation. Structural isolation occurs due to loss of contact with cohorts or relocation, physical isolation, or physical and mental disability, while functional isolation refers to situations where an individual does not engage in social activities or has a low level of engagement with agencies, organizations, and others outside one's formal network. Comparing social isolation among people of different age groups, young adult (16-34 years), middle-aged (35-59 years) and older adult (60+), Chile and colleagues found that older immigrants had the highest social isolation compared to other age groups. This report supports findings from prior studies on older immigrants' experience of isolation due to fewer opportunities to develop social interactions outside their family network because of domestic responsibilities, particularly childcare, housework, and lack of English language skills (Da & Garcia, 2015; Serafica & Reyes, 2019). Social isolation in this study is conceptualized as lack of or limited social interactions with others outside one's informal network. Hence, those who score higher on the scale used to measure

social isolation in this study are more socially isolated, while those who score lower on the scale are less socially isolated.

Factors Contributing to Social Isolation

Scholars have identified social isolation as a risk for physical and mental well-being (Hawton et. al., 2011; Miyawaki, 2015). Hence, the factors contributing to social isolation is extensively explored among older adults, but there is need to focus on older immigrants from diverse background to better understand the unique factors that constitute risks for this population. Fraser et al. (1999) defined risk as "a probability describing the likelihood of a future event, given a certain condition or set of conditions" (p. 131). Therefore, risk factors are regarded as the causes, markers and correlations of an event, an example of which is social isolation, language barriers and acculturation. This section will be organized based on the categorization of risk factors according to Fraser et al. (1999): individual characteristics, specific life experiences, and contextual factors. Some risk factors are contrasted positively to reflect protective factors that modify and/or moderate risks (Rutter, 1987) in some cases.

Individual Characteristics

Sociodemographic Characteristics. Fraser et al. (1999) identified sociodemographic characteristics such as age, gender, culture, socioeconomic status, and religion as important for understanding how risk factors for social isolation differ. Sociodemographic characteristics are reported to correlate with the level of social isolation in Black, Hispanic, and White older adults (Cudjoe et al., 2018). Other studies also found significant differences in social isolation experiences based on age, gender, financial resources, health status, marital status, employment status, time lived in an

apartment, place of birth, and geographical location (Chatters et al., 2018; Chile et al., 2014; Jang et al., 2016).

The ongoing findings make it obvious that scholars have conflicting views about the role of gender in social isolation among older immigrants. Gender differences were found to be associated with objective isolation from family and friends; men were more likely to be objectively isolated from both family and friends compared to women (Chatters et al., 2018; Cudjoe et al., 2018; Jang et al., 2016; Taylor et al., 2018). Cudjoe et al. (2018) reported that older men with lower education and lower income were severely isolated (have no contact with whom to share important matters) compared to older women. In contrast, other studies reported that women were more socially isolated than men (Kotian et al., 2018; Salma & Salami, 2020). Parallel to the latter, studies on West African immigrants in Australia revealed that women experienced greater social isolation and loneliness stemming from challenges with developing social networks, employment difficulties, and lack of communal assistance (Babatunde-Sowole et al., 2016; Ogunsiji et al., 2012).

Age also plays a role in the experience of social isolation in late life. However, factors such as mobility and being younger appear to mediate the effects of age in social isolation experiences. For instance, studies revealed that age was associated with objective isolation from friends because being older and not having mobility access may limit social contact with friends (Chile et al., 2014; Jang et al., 2016). Similarly, adults younger than 75 were more likely to have marginal ties with family members than those who were older than 75 (Jang et al., 2016). Also, adults who were older than 90 were three times less likely to experience severe social isolation compared to those who are

socially integrated (have more than two contacts with whom to share important matters) (Cudjoe et al., 2018). An elder's living arrangement was a known variable that contributes to social isolation in aging studies. Living alone, living with family members, or living with a spouse has been used to explain the level of social isolation in older adults. Findings showed that older adults who live with or close to their family may be objectively isolated from friends due to factors such as age and mobility challenges (Chatter et al., 2018; Jang et al., 2016). Ng and Northcott (2015), in a quantitative study, examined the relationship between self-reported loneliness and living arrangements among 161 South Asian older immigrants (60 or older) at Edmonton and Alberta in Canada. Their findings revealed predictors of loneliness when living with others including extended family, either with spouse or without spouse. The majority of the participants reported they never felt lonely, however, 27% reported feeling lonely occasionally, 9% frequently, and 1% all the time. Ng and Colleague further found that the quality of family relationship and waking time spent alone at home predicted self-reported loneliness than living arrangements. Hence, living with others protected against loneliness to some extent for the older immigrants in their study.

Apparently, the socioeconomic status of older immigrants matters in explaining the risk for social isolation. Older immigrants who migrated late in life were disadvantaged in terms of financial resources which was pivotal to meeting health needs and other needs for survival. Other variables such as length of stay in the US, impaired health, and self-care contributed to social isolation for older adults (Jang et al., 2016). However, scholars agreed that limited financial resources constitute a risk for objective isolation (Cudjoe et al., 2018; Diaz et al., 2019; Jang et al., 2016). Older immigrants who

lived in below-average financial status may have difficulty accessing programs and participating in programs that promote social interaction. The length of stay in the US determined an individual's adaptation to the migrating community. For instance, staying longer in a community increased one's social connectedness. Jang et al. (2016) found that fewer than 10 years residence in the US may constitute higher risk for fewer social ties. The longer older immigrants stayed in the US, the higher their levels of perceived social support (Diaz et al., 2019; Jang et al., 2016). Impaired health was consistently reported in the literature as a common risk factor for social isolation (Jang et al., 2016; Steptoe et al., 2013). Jang et al. (2016) explained that older people with one or two chronic conditions (heart diseases, high blood pressure, liver disease, digestive disease, stroke, diabetes, arthritis, and cancer) had a lower likelihood of marginal ties to family and friends compared to those with more than two chronic conditions. Exposure to multiple chronic illnesses and needing help with three or more Instrumental Activities of Daily Living (IADLs) such as cooking, house cleaning, taking medications, dressing, and walking may led to reduced social contact with friends. Findings also showed that increased self-care is associated with decreased risk for objective isolation from friends only, likewise, increased mobility impairment may decrease objective isolation from friends (Jang et al., 2016).

Life Experiences

Life experiences are long-lasting events which may impact an individual's ability to adapt successfully in the acculturation process. Examples include migration stress, loss of loved ones, health challenges, and societal problems such as discrimination, and stigmatization (Salma & Salami, 2020). Scholars opined those societal attitudes such as

discrimination, racism, intolerance, and exclusionary practices (i.e., ageism and sexism) often contributed to risk for social isolation for older immigrants (Negi, 2013; Salma & Salami, 2020; Stacciarini et al., 2015). Applying a community-based participatory approach to explore 51 older Muslim immigrants' and 16 stakeholders' experiences with social isolation in Canada, Salma and Salami (2020) identified religious intolerance, and social, emotional, and economic exclusion as major stressors for the participants. The Scholars found that the negative attitude of the majority in a dominant culture may increase social isolation for older immigrants who perceive being discriminated against in society.

Contextual Factors

Neighborhood Environment. Scholars agreed that the neighborhood environment influences social isolation experiences of older immigrants (Booth et al., 2012; Klinenberg, 2016). According to Klinenberg (2016) "The risks of social isolation depend not only on who you are but also on where you live. Certain social environments foster social isolation, while others promote local contact and mutual support" (p.5). To buttress this statement, Booth et al. (2012) reported that perceived neighborhood safety is positively related to psychological distress. Likewise, mistrust in neighbors contributed to the feelings of being unsafe in one's neighborhood, a situation which may lead to social isolation for older immigrants. Using in-depth ethnographic interviews and participant observation with 20 older adults living in a high-crime neighborhood, Portacolone et al. (2016) found that social isolation stemmed from personal (limited social ties, poverty, chronic health condition), physical (lack of community rooms, health care, social services) and social environmental (weak norms of reciprocity, crime environment)

factors. In tandem, Stacciarini et al. (2015) reported that family and rural social environment can impair or protect the well-being of immigrants. Therefore, social isolation due to limited social ties, unsafe environment, and lack of social services may have a negative effect on the well-being of older immigrants. On the other hand, safe and friendly environments with social service availability would have positive influences on socialization among neighbors. For example, Taylor et al. (2018) said that awareness of the activities in the neighborhood could increase social participation and decrease social isolation. Consequently, Taylor and colleagues (2018) found that older ethnic minorities with a lower level of education were more likely to be aware of the social groups and social activities in their neighborhood than those who were more educated. Interestingly, educated older immigrants would be expected to be more current about the activities in the neighborhood, but findings showed that the less educated were likely to participate more in local social activities.

Geographical Residence. Considering the impact of geographical (regions) residence in terms of proximity to ethnic enclaves on social isolation, some scholars described the place people live as effecting their perception of safety, which could define geographical location or zip codes as either protecting against or encouraging social isolation. For example, Taylor et al. (2018) found that living in the southern US for older African Americans protected them against objective social isolation. Similarly, older Koreans who lived in Florida reported reduced risk for marginal ties from family members compared to those who lived in New York, meaning that living nearer to relatives and ethnic enclaves prevented people from experiencing social isolation (Jang et al., 2016). A study showed that unemployed students living in the inner-city experienced

functional isolation compared with older immigrants who had the highest mean for both functional and structural isolation (Chile et al., 2014). Surprisingly, Cudjoe et al. (2018) found no difference in the effect of geographical residence in the social isolation of older ethnic adults who lived in metropolitan versus rural locations.

Promotive/Protective Factors

Relational Experiences

Social relationships are an integral part of the human lifestyle; hence, the lack of social relationships means greater social isolation (Child & Lawton, 2019; Jang et al., 2016). Scholars in gerontology have attributed different constructs to explain social relationships, which included social networks, social contacts, social connectedness, social ties, social integration, and social capital (Cornwell & Waite, 2009; Diaz et al. 2019; Jang et al., 2016). Older immigrants value social relationships, but their ability to make friends may vary due to the accompanying factors such as age at migration and acculturation level (Rote & Markides, 2014). It therefore follows that a decrease in social network size may lead to an increase in social isolation experience (Klinenberg, 2016).

Previous studies emphasized the importance of social network size in understanding social isolation (Cloutier-Fisher et al., 2011; Gierveld et al., 2015), but a certain network size for an individual experiencing social isolation has not been reported in aging studies. However, some scholars emphasized that individual satisfaction with one's network size matters most when describing social isolation of older adults (Child & Lawton, 2019; Cloutier-Fisher et al., 2011). Child and Lawton (2019) reported that network size was not associated with loneliness and social isolation among either younger or older cohorts. Child and colleagues concluded that network size did not really

determine the experience of social isolation, but more so the individual satisfaction with network size. In contrast, Cloutier-Fisher et al. (2011), using a grounded theory approach with 28 socially isolated older adults (69-92 years), reported that older adults with small network sizes may experience subjective isolation because of life event stressors such as multiple losses, death of a spouse or loved ones, and preferences for few ties or a need for solitude. Therefore, a positive social relationship in a person's network could protect against loneliness and social isolation while a negative relationship was a risk for social isolation and loneliness in both early and later life (Ejlskov, 2019). Based on in-depth interviews with older Chinese immigrants, Li et al. (2018) found language barriers, loneliness, and social isolation were challenges for aging in the US, but the availability of interethnic social support and a formal social welfare system constituted protective factors against social isolation.

Social Support

Family and friend relationships are recognized as a pivotal source of social support and social networks for older adults (Medvene et al., 2016; Nilsen et al., 2018). Scholars agreed that family and friends were most supportive of older adults. For example, the minority groups (African Americans, Hispanics, and the Black Caribbean) had less social isolation from family and friends compared to the dominant group (Non-Hispanic Whites) in the US (Chatters et al., 2018). Also, frequent contact with family and friends decreased social isolation while restricted contact increased it. In a study on culturally diverse older home- and community-based service (HCBS) clients, Medvene et al. (2016) found family members were the most recognized social network, followed by friends, and religious groups, respectively. Medvene and colleagues (2016) reported that

older persons who were ingrained in family and friendship networks were more likely to have positive relationships (frequent contact with others) while an older person in a restricted (low frequency of contact among children, family, friends, and religious groups and diverse groups) social network may have higher social isolation. Taylor et al. (2018) reported no difference in objective isolation from family and friends among African Americans, Black Caribbean, and non-Hispanic Whites, whereas other scholars found that African Americans, Black Caribbean, and Hispanic older adults experienced less isolation from family and friends than their non-Hispanic White counterparts (Chatters et al., 2018; Cudjoe et al., 2018). Gerst-Emerson et al. (2014) and Tomaka et al. (2006) explained that older ethnic minorities may not always have high social isolation from family members, except when the older person has mobility and disability challenges, which prevented frequent contact with family members.

Diaz et al. (2019) suggested that ethnic minorities who hold collectivist cultural views would ascribe primary importance to family roles and expectations, meaning that viewing the family as a referent group may be a predictor for loneliness and social isolation because relying on family members may prevent older ethnic minorities from establishing meaningful social interaction with others outside their family (Chatters et al., 2018; Jang et al., 2016; Taylor et al., 2018). Chatters and colleagues concluded that older adults who were subjectively isolated from family and friends were likely to be objectively isolated from family and friends as well.

Intra and Transnational Belongingness

A sense of belonging also emerged as an important factor in the study of social isolation. For instance, Ditchman et al. (2017), in a study of older adults with disability

challenges, reported social support network size predicted a sense of community and also mediated the relationship between self-efficacy and sense of community. The findings suggested that integrating people with disabilities into society promoted a sense of belonging in the community as well as decreased social isolation. Similarly, using a national survey of Turkish and Moroccan older migrants, Klok et al. (2017) reported that some form of belonging to a group protected against loneliness and social isolation. Diaz et al. (2019) emphasized the importance of connecting with others in the dominant culture to promote a sense of belonging, identity, self-efficacy, and community. In regard to transnational belonging, findings showed that transnational belonging did not decrease loneliness; instead, it encouraged feelings of loss, which led to an increase in loneliness. Da and Garcia (2015) explained that the feeling of loss among older Chinese immigrants in Canada correlated with a lack of frequent contact with other children and the family members they left behind in their country. Similarly, Jetten et al. (2018) found that loss of status and a low sense of connection with significant others in an immigrant's country of origin influenced social isolation in older immigrants in Australia. According to Jetten et al. (2018), people who were least isolated valued social contact, social identity, and made effort to connect with others more that the most isolated people who had little evidence of social identity.

Congregational Membership

Apparently, studies agreed that identifying with religious and ethnic associations positively impacted social isolation (Mbanaso & Crewe, 2011; Medvene et al., 2016; Sanchez et al., 2019). Medvene et al. (2016) reported that older adults who had a religious network experienced positive relationship with others. Using a quantitative

approach with 408 Latino immigrants, Sanchez et al. (2019) found that religious social capital was positively associated with social support, and social support served as a protective factor against immigration stress for documented and undocumented immigrants. Comparing the supportive role of religion in decreasing social isolation among older ethnic minority groups, Taylor et al. (2018) reported that non-Hispanic whites (50.4%) experienced isolation from congregational members more than Black Caribbean (33.7%) and African Americans (31.28%).

Mbanaso and Crewe (2011) posit that older African immigrants received social support from community-based ethnic-oriented associations and religious affiliations to compensate for their social isolation and loss of social network among peers. However, scholars reported that in spite of the religious and ethnic association support, older immigrants were still isolated from others in the dominant culture (Jang et al., 2016; Mbanaso & Crewe, 2011). This report is not surprising because reliance on the family network only may decrease older immigrants' self-efficacy, self-esteem, social identity, and willingness to familiarize themselves with people outside their family network or ethnic enclave.

Communication and Technology

Diverse means of communication exist in the current technological age, making it easier to make social connections and sustaining social relationships. Technology use for older adults is credited for enhancing social communication virtually through social media, but one scholar contended that the time spent on the internet does not equate to social connectedness (Toepoel, 2013). However, several studies revealed that internet and technology use decreased social isolation and loneliness in older adults (Cotten et al.,

2014; Cotten et al., 2013; Khosravi et al., 2016). In a systematic review, Chen and Schulz (2016) reported that information computer technology (ICT) helped to alleviate social isolation by connecting older people with others to gain social support, allowing people to engage in activities of interest and boost self-confidence. For instance, in a study with 42 frail HCBS older adults (Caucasian, African American, and Hispanic/Latino), Nilsen et al. (2018) found that the participants who used the computer for social communications were less lonely and had more social network members than those who did not use a computer. The majority of the studies agreed that the internet and social media promoted social connection with others in one's social networks; however, no studies have noted the impact of internet use among older African immigrants' experience of social isolation. Additionally, Morgan, et al. (2020) found that watching TV was used as coping strategies for loneliness, and that television served as a primary distraction from loneliness.

Grandchild Care Role

Seo and Muzumda (2011), in a study of older Korean immigrants, found that Korean culture valued grandparent caring for grandchildren instead of non-family childcare. As a result, older Koreans come to live with their adult children in the US to provide childcare to the grandchildren. This arrangement made the elderly Koreans feel needed. This influenced adult Korean Americans to live with parents and numerous older Koreans to come to the US to join their son's household to take care of grandchildren. In some instances, grandparent shared their rooms with the grandchildren and provided different activities for the children which made them feel needed. Seo and Muzumda (2011), added that the participants in their study expressed feeling estranged and

alienated when the childcare role diminished as grandchildren were grown, and older Koreans gave up their rooms to move to a guest room, leading to social and psychological effects. Seo and Muzumda (2011) also noted that changes in familial and domestic roles from caretaker of the family and younger grandchildren to the eventual dismissal from these responsibilities led to the realization that the elders were no longer needed, a situation which could increase feelings of isolation. Other scholars found older immigrants took the responsibility of grandchild care upon migration (Da & Garcia, 2015; Jetten et al., 2018; Serafica & Reyes, 2019; Treas & Mazumdar, 2002). Playing this role could cause social isolation and loneliness for them because playing the role of caregiver was contrary to being a breadwinner and created a loss of sense of agency (like shifting from overseeing their family to depending on their adult children), feeling alienated (disconnected and isolated by their families, limited resources from their network), and experienced a decline in power status and decision-making (Serafica & Reyes, 2019). On the other hand, these participants reported coping with the situation because they perceived their services as being needed by their adult children (Serafica & Reyes, 2019).

Acculturation and Social Isolation

Acculturation is conceptualized as the cultural and psychological changes that occur when an immigrant meets other cultural groups in the migrating country. Immigration experiences influence social isolation greatly because of leaving behind family, friends, familiar environments, and expected norms of social care (Mbanaso & Crewe, 2011). These norms change from country-to-country and culture-to-culture. Immigrant groups from Africa are particularly vulnerable to social isolation due to

feelings of irrelevance and loss of control as a result of language barriers, impaired mobility, major life transitions, cultural differences, rejection of Western individualistic lifestyle, migration trajectory, and low level of adaptation to the immigrating country (Alpert, 2017; Mbanaso & Crewe, 2011). Thus, transitioning from a different culture to a new unfamiliar culture in late life can be especially demanding as they experience language differences, living in two or multiple cultures, and having to adjust to the ways of life of the dominant culture. Berry (1997) described different strategies of acculturation, namely integration, marginalization, assimilation, and separation, which connoted that an older immigrant would adapt to one or two of the strategies when adjusting to an unfamiliar culture.

Studies demonstrated that older immigrants differ in their acculturative strategies. From a post-positivism perspective, Rhee (2019) examined how acculturative strategies were associated with psychosocial adaptation and acculturative stress among older (aged 60-88) Korean immigrants in the US. The authors identified three acculturative clusters - separated, moderately bicultural, and fully bicultural. The findings showed that the three groups identified stressors differently. The participants in the fully bicultural group reported language difficulty and social isolation to be less stressful compared to the completely separated and moderately bicultural group who reported language difficulty and social isolation to be stressful. Similarly, a study guided by acculturation theory and the life course perspective with African immigrants (Ethiopians, Nigerians, and other parts sub-Saharan Africa) aged 18-77 found that those who assimilated (speak English very well) and integrated (bicultural, speak English well) differed from the marginalized/separated (who do not speak English well or at all) on self-related health

(SRH). The increase in language acquisition skills of older African immigrants was associated with better current SRH (Okafor et al., 2013). Scholars reported that language barriers and limited use of service are major stressors in adjusting to a dominant culture for older immigrants (Li et al., 2018). Additionally, lack of resources, linguistic isolation, age, frailty, and widowhood also contributed to social isolation in later life for ethnically diverse older immigrants in the US (Treas & Muzumdar, 2002).

Appraising the differences in the collectivist (being ingrained in a larger group) versus individualistic (personal freedom) culture, older immigrants may face culture shock, and evaluate their interdependent cultural background as more satisfying compared to the American culture. This attitude may likely make older African immigrants cling to the collectivist culture instead of adapting to the individualistic culture in the US. This can contribute to lack of social connection and social ties to natives in American community. A study of West African immigrant traders living in New York reported that the participants felt isolated and lonely as well as restricted in their level of activities and interactions in the community (Stoller & McConatha, 2001). This finding showed that changing from the collectivist lifestyle to the individualistic lifestyle may decrease interest in social integration into a new environment. In tandem, Babatunde-Sowole et al. (2016) emphasized communalism as a resilience factor for immigrants. However, communalism may limit older immigrants' social connectedness with the non-immigrant group. Therefore, the predictors of acculturation in this study included language use and preference, and ethnic social relations. Older immigrants who were high on the acculturation scale were considered as being highly acculturated. Those with lower score were not acculturated (they speak their native language only) to the

American community, while those in the midpoint were bicultural, meaning that they can speak their native and English language, as well as were able to interact with people from their ethnic relations and other cultures.

Emotional Well-Being and Social Isolation

Social isolation is a multifaceted and multidimensional problem, which negatively impact the mental health of individuals. Nicholson (2009) identified the nature of social isolation as rooted in sociological and psychological perspectives. The sociological nature of social isolation reflects challenges with socialization, loss of social networks and support, and social exclusion influence on older immigrants' integration into a new culture. The psychological nature refers to the mental health challenges with adjustment to a new culture. Prior studies have reported social isolation to lead to greater risk for physical and mental health problems such as depression, anxiety, psychological distress, poor health, reduced sleep quality, increased blood pressure, physical inactivity, functional decline, cognitive impairment, suicidal ideation, and mortality (Cohen-Mansfield & Perach, 2015; Dahlberg & McKee, 2014; Newall et al., 2014; Steptoe et al., 2013; Wright-St Clair et al., 2017). This report necessitates understanding the emotional well-being of older adults as it is influenced by social isolation and other factors. According to the National Wellness Institute (1976), wellness dimensions included emotional, physical, occupational, social, intellectual, and spiritual. However, emotional well-being was considered as an outcome variable in this study. Emotional well-being referred to the emotional quality of an individual's experiences in everyday life (Li et al., 2014). The experiences may be positive such as joy, happiness, and affection or negative

feelings such as sadness, anger, anxiety, and depression. The frequency of these experiences would determine an individual's emotional state.

Examining the emotional well-being of older immigrants in association with social isolation is integral to understanding the mental health state of this population as they age in the US. Studies on emotional well-being assessed the mental health component of older adults to determine their emotional stability on constructs such as depression, feelings of sadness, lack of interest in activities, and anxiety (Connor 2012; McInnis-Dittrich, 2014). According to McInnis-Dittrich (2014), a "prolonged state of sadness is not a normal part of the aging process" (p. 98). Thus, a depressed older immigrant may experience feelings of sadness, loss of interest or pleasure in doing things, depressed mood, frequent crying, anxiety, loss of appetite and disrupted sleep pattern (The American Psychiatric Association, 2013; Engel et al., 2011).

A group of scholars reported that "anxiety and depression are dimensions of emotional state that can be assessed with self-report measures" (Aluoja, et al., 1999 p.443). However, diverse measures are reported in the literature for assessing emotional well-being. Using the Geriatric Depression Scale (GDS-5) to measure emotional well-being and appetite of older people, Engel and colleagues reported a decreased appetite, social networks, and widowhood due to depression. To understand the influence of different sources of social support (spouse, children, and friend) on the emotional well-being of Chinese older adults, Li et al. (2014) found that family support played an important role in buffering negative effects and spousal support was replaced by children for the elderly person who was not married. Comparing family and friends support, Li and colleagues reported that friend support did not play a significant role in the emotional

well-being compared to family support. In contrast, higher levels of support from family and friends were associated with greater emotional well-being for both partnered and unpartnered older adults (Ermer & Proulx, 2019). Moreover, Ermer and Proulx (2019) reported that social connectedness was differently associated with well-being among partnered and unpartnered older adults. Although, there were similarities in social connectedness with neighborhood social ties, family support, and social networks on the emotional well-being of the partnered and unpartnered individuals. However, the association of partnered individuals to friendship support, social networks and emotional well-being was weaker compared to the unpartnered individuals. In terms of self-rated health, individuals who had a larger social network size and had closer relationship with the social networks reported better self-rated health, while those who interacted more with their social network had poorer self-rated health (Ermer & Proulx, 2019). The expectation would be that talking more to one's social network would be associated with better self-rated health, but the authors concluded that talking frequently to one's social network may not be on topics related to health concerns. Emotional well-being in this study was measured using the Emotional Well-being Scale developed by Aluoja et al., (1999). In this study, emotional well-being is conceptualized as the presence or absence of negative emotions. The presence of sadness, boredom, anxiety, difficulty to sleep, and loneliness to mean negative emotional well-being while the absence of the sadness, boredom, loneliness, and anxiety among others as positive emotional well-being.

Resilience and Social Isolation

Scholars described the acculturation process to be challenging for immigrants as it may negatively impact their physical and mental well-being (Agbemenu, 2016;

Covington-Ward et al., 2018), however, one's ability to adapt to the host community despite facing challenges with social isolation indicated the ability to be resilient (Akinsuluure-Smith, 2017). Resilience sums up as the interaction of risk and protective factors resulting in the ability of a person to overcome adversity (Cardoso & Thompson, 2010; Fraser et al., 1999; Gillespie, et al., 2007; Kashyap, 2014; Lavretsky & Newhouse, 2012; Masten, 2001).

Prior studies on the association among acculturation, resilience and social isolation indicated that resilience factors enhanced immigrant's ability to adapt to host community. Meanwhile, scholars agreed that resilience of older immigrants could basically be described at the following levels, personal/individual, relational, societal, and spiritual (Bolton et al., 2016; Li et al., 2018; Rashid & Gregory, 2014; Udah et al., 2019). The personal/individual resilience was demonstrated by the ability to be acceptanted, be optimistic about their dreams of a better life, self-efficacy, self-determination to survive hardship such as loneliness, social isolation, grief, self-care to maintain healthy lifestyle and avoiding drugs, independence of thoughts and behaviors and positive perspective on life. The relational/community levels were social support and network availability and use, connections with family, social and the community, altruism such as engaging in a variety of altruistic activities like advocacy, volunteer work, selfless acts of service, and mentoring younger generations. The spiritual level of resilience centered around creating meaning about life, spiritual grounding, strong use of faith and religious practices as a way of drawing strength through prayers as the only thing that gets them inspired (Bolton et al., 2016). While describing the protective role of religion and spirituality, Babatunde-Sowole et al. (2016) reported that religious beliefs and spirituality were strong sources of

resilience in an integrated review of African women immigrants' resilience. Similarly, Girgis (2020) reported that cultural and religious values helped older Egyptian Americans cope with psychological distress. Girgis (2020) also found interpersonal relationships such as emotional support from family, religious community, and social service networks were helpful sources of resilience for older adults. In line with this study, faith was identified as an important strategy for managing loneliness, particularly church congregation which is described as an essential source of comfort, social contact and sense of community, and support in crisis (Morgan et al., 2020). Girgis (2020) also added that resilience involved behavioral strategies embedded in gender roles and cognitive strategies such as education, for managing stress by older immigrants (Girgis, 2020). For instance, men engaged in laborious physical work such as building, fixing, mowing lawns, while the women engaged in domestic duties such as cooking, cleaning, sewing, organizing home, and caring for grandchildren (Babatunde-Sowole et al., 2016; Girgis, 2020; Treas & Muzumdar, 2002).

Exploring studies on resilience of immigrants, Ogunsiji et al. (2012) found that the health of African women immigrant in Australia was negatively impacted due to social isolation and loneliness resulting from difficulties in developing social networks and obtaining employment. Similarly, Udah et al. (2019) found that Africans from the sub-Sahara region living in Australia reported employment barriers such as feeling marginalized and discriminated against based on educational qualifications and overseas work as the challenges they faced in Australia. In line with these findings, Salma and Salami (2020) affirmed that immigrants in Canada also experienced marginalization and discrimination. Combining these findings, Rashid and Gregory (2014) in a study

exploring the pre- and post-migration experience of women immigrants in Canada, concluded that the challenges experienced by immigrant women sampled was a journey of compound stressors such as loneliness, social isolation, lacking Canadian friends, and liminal travelers (not recognizing foreign credentials). Hence, Rashid and Colleague, reported that the participants in their study described loneliness and social isolation from non-migrant Canadian society was severe dominant stressors in addition to language barriers and unfamiliarity with the Canadian culture, all of which limited their ability to make friends from non-ethnic groups. Since they had difficulty relating with non-Canadian friends, the immigrants strengthened their connection with ethnocultural communities. Furthermore, communalism (Babatunde-Sowole et al., 2016) were reported to help migrants overcome migration adversities because communalism encouraged immigrants to stay connected with their ethnic enclaves. Girgis (2020) conducted a phenomenological study with 30 older Egyptian Americans to explore the factors that foster resilience and buffer psychosocial distress. The findings showed that opportunities (such as freedom of religion practices, access to healthcare, access to social welfare benefits and ethnic senior services, living in ethnic enclave "enjoying comfort and belonging to a place" as well as being with their children and grandchildren) available in the US helped to foster their resilience. Hence, despite exposures to the stressors, the immigrants were resilient (Rashid & Gregory, 2014). For example, immigrants from West Africa and those in Canada were reported to be resilient by drawing on their native culture and applying coping strategies which included community/social support network, religion, and culture (Akinsulure-Smith 2017; Babatunde-Sowole et al., 2016; Salma & Salami, 2020). Therefore, the collectivist culture was also found to foster

resilience of African immigrants. Akinsulure-Smith (2017) reported that West African immigrants living in New York reported they find comfort in the collectivist culture as it helped them deal with emotional distress.

Resilience demands that immigrants take a proactive step while experiencing adversities in the process of acculturation. Considering the social aspects of resilience in relation to perceived health and well-being in older adults, Damajnko and Pahor (2014) described the social factors contributing to resilience in older people as socialization, which led to adoption of coping strategies, social support networks, and intergenerational ties. This study emphasized the significance of social engagement as a proactive step for being resilient despite diagnosis of ill-health of participants. In a study with 712 Chinese rural-to-urban migrant, Liang et al. (2019) explored the mediation role of loneliness and resilience in the relationship of social support and depression. Liang and colleagues found that resilience and loneliness partially mediated the relationship between social support and depression, meaning that higher levels of social support would lower loneliness as well as decrease the risk for depression. Moreover, the participants described their strength as reframing their everyday life, marital relationship, technology use, having a safety net such as going back to their countries if things do not work out well, and being optimistic about the promised future in the host country. On the other hand, scholars opined that although immigrants, both young and old, faced many challenges in the US, they tended to be resilient when they compared the benefits of life in the US with that of their developing countries (Babatunde-Sowole et al., 2016; Johansson et al., 2013; Li et al., 2018). For instance, African women immigrants

expressed they become resilient when they reflect on the differences between life in the US and their home country (Babatunde-Sowole et al., 2016).

Coping Strategies

While exploring the coping strategies that enhances resilience, Covington-Ward et al. (2018) found that African immigrants used both interpersonal-based (talking to family and friends) and individual-focused (listening to music, watching TV) strategies for coping with stressors. Similarly, Morgan et al. (2018) found that management of loneliness depended on several factors which included interpretation of the causes of loneliness [and social isolation]. Morgan and Colleagues highlighted four strategies for decreasing loneliness, which are problem focused, meaning focused, emotional focused and negative. These strategies could further be conceptualized as positive and negative. The positive strategies were problem focused such as revisiting social group, chatting, joining social interest group, meaning focused, and the emotional focused such as gardening, puzzles, shopping, watching TV as positive coping. The negative strategy included drinking alcohol (Covington-Ward et al., 2018; Morgan et al., 2018). Morgan and Colleagues added that the range of coping categories to which an individual belonged, or used, could determine how effective their coping strategies would be. For instance, using a wide range of coping strategies would decrease loneliness, engaging in solitary activities would lead to stable loneliness experience, while using fewer numbers of coping strategies would lead to degenerating loneliness. Meanwhile, the absence of coping reflected inability to modify unpleasant life experiences. Therefore, Morgan et al. (2020) found that those who experienced stable or degenerating coping strategies could be chronically lonely because they perceived their situation to be unmodifiable due to

personal characteristics such as sensory and physical impairments. Those who felt they could modify their loneliness using a wide range of coping strategies would direct effort to problem focused strategies while those who felt they could not modify their loneliness due to fewer coping strategies would be emotion focused instead of problem focused. To conclude, Morgan et al. (2020) opined that applying a wide range of coping strategies could be effective in decreasing loneliness and social isolation. Exploring the resilience factors and coping strategies, the identified coping strategies in this study were found to help the immigrants adapt to the host country despite the challenges of language barriers, loneliness, social isolation, and limited use of social services. Therefore, both internal factors, such as personal resilience, and external factors, such as relational, protective factors, combine to influence adaption in the face of the adversities experienced in a new country (Rashid & Gregory, 2014).

In the literature, studies with older African immigrants in regard to social isolation are relatively few. The majority of the studies focused on ethnically diverse older immigrants (Chatters et al., 2018; Jang et al., 2016; Jetten et al., 2018; Klok et al., 2017; Li et al., 2018; Sanchez et al., 2019; Taylor et al., 2018). Among the studies conducted on social isolation of older immigrants in North America, only six studies included African descendants as their participants (Chatters et al., 2018; Cudjoe et al., 2018; Nilsen et al., 2018; Portacolone et al., 2016; Salma & Salami, 2019; Taylor et al., 2018). Only three studies with older African samples were identified: Darboa and Ahmed (2007) investigated needs of older African immigrants in Minnesota using descriptive and interviews, Mbanaso and Crewe (2011) explained social isolation as a challenge for older African immigrants based on conversation with gatekeepers, and Nkimbeng et al.

(2021) examined the depression symptoms and its prevalence rate among this population. Obviously, there is a lack of knowledge on social isolation of older African immigrants and its impact on their well-being. However, the literature sufficiently described the factors contributing to social isolation but have not adequately considered the multiple effect of other risk factors and social isolation on the well-being of older immigrants. Based on this, the researcher argues that examining single risk factor for social isolation would fail to capture the combined effect of other risk factors and social isolation on the well-being of older African immigrants. Therefore, this study examined the effects of social isolation and other risk factors on emotional well-being to better understand how these relationships would lead to poor or deteriorating emotional well-being of older African immigrants. The researcher draws on research and field work to identify the pertinent stressors/risks contributing to social isolation for older immigrants. Considering the impacts of social isolation and other risk factors on emotional well-being of older immigrants, I argue that the presence of social isolation, which is already existing in older immigrants (Chile et al. 2014; Mbanaso & Crewe, 2011; Jang et al., 2016), in addition to other risk factors, would result in poor or deteriorating emotional well-being of older immigrants. While considering older African immigrant samples, I raised the question "What is the association of social isolation and other risk factors on the emotional well-being of older African immigrants?" The study used a convergent mixed method approach to answer the question.

Summary

The goal of this study is twofold; 1) to examine the experience and effects of social isolation and other risk factors on the emotional well-being of older African

immigrants, and 2) to understand how resilience moderates the relationships among social isolation, ethnic social relations, financial satisfaction, and emotional well-being of older African immigrants. The overall research question was "What are the experiences of social isolation and emotional wellbeing for older African immigrants?" Since the study used convergent mixed methods, the research questions will be stated accordingly:

Quantitative Research Questions

1. What is the effect of language barriers, ethnic social relations, financial satisfaction, transportation access, living arrangements and grandchild care role on social isolation of older African immigrants?
2. When controlling for gender, age, educational levels, and marital status of older African immigrants, how does social isolation, language barriers, ethnic social relations, financial satisfaction, transportation access, living arrangements and grandchild care role influence emotional well-being?
3. How does resilience moderate the effects of ethnic social relations, social isolation, and financial satisfaction on emotional well-being of older African immigrants?

Hypotheses

1. Language barriers, ethnic social relations, financial satisfaction, transportation access, living arrangements and grandchild care role negatively impact social isolation in older African immigrants.
2. Controlling for age, gender, education, and marital status, social isolation and other risk factors among older African immigrants are negatively associated with emotional well-being.

3. Resilience significantly moderates the relationship between social isolation, ethnic social relations, financial satisfaction, and the emotional well-being of older African immigrants.

Qualitative Research Questions

1. What is the experience of older African immigrants in relation to social isolation in the US?
2. What are the older African immigrants' coping strategies for managing social isolation?

Mixed Method Research Purpose

The mixed method part of this study is to merge the qualitative and quantitative findings to obtain a more comprehensive understanding of the participants' experience with social isolation and other risk factors and how their emotional well-being is impacted.

Chapter 3 Methods

In this chapter, the methods used for the research process are described. The research design used was the convergent mixed methods. The phases of the convergent mixed methods approach included 1) quantitative, 2) qualitative, and 3) the mixed methods. The third phase provides a deeper understanding of the participants experiences around social isolation and how their emotional well-being was impacted.

Research Design

The convergent mixed method design is an approach that uses qualitative and quantitative methods simultaneously to gain insights into statistical association and in-depth individual perspectives on social problems (Creswell & Plano Clark 2011; Finlay & Kobayashi, 2018). The convergent design is used when a researcher collects and analyzes both quantitative and qualitative data during the same phase of the research process, and then merges the two sets of results into an overall interpretation (Creswell & Plano Clark, 2011). The primary aim of convergent mixed methods is to obtain different but complimentary data on the topic examined to better understand the research problem. Using a mixed method approach helps to develop a deeper understanding of the problem being examined instead of using only one method (Creswell & Plano Clark, 2007). The quantitative result is illustrated with the qualitative findings, synthesizing the complementary results to develop a more complete understanding of a phenomenon and to compare multiple levels within a system (Creswell & Plano Clark, 2011).

The qualitative aspect allows the voice of the participants to be heard and encourage multiple perspectives of the participants as it provides detailed understanding of the research problem examined. The quantitative aspect helps to understand the relationship

among the variables (Creswell & Plano Clark, 2011). The use of a mixed method research design for this study is appropriate because little or nothing is known about this population. The steps used in the convergent mixed methods include data collection for quantitative and qualitative data separately, analysis of the qualitative and quantitative data separately, merging the two datasets and interpreting the merged results (Finlay & Kobayashi, 2018). For better understanding and for the sake of parsimony, the quantitative and qualitative methods are discussed separately.

Phase I: Quantitative Method

The aim of this study was (a) to examine the effects of social isolation and other risk factors on emotional well-being of older African immigrants, and (b) to examine the moderation effect of resilience on the relationships among social isolation, ethnic social relations, and financial satisfaction on emotional well-being of older African immigrants. Based on this purpose, quantitative method was used to examine the relationships among variables using 163 participants through a cross-sectional approach to collect primary data from older African immigrants residing in the US. Exploring social isolation among this group using a quantitative approach allowed more participants, as well as enabled the association among multiple variables to be examined. A quantitative method applied an epistemological approach of objectivism to gain knowledge free of values (Guba, 1990). Hence, using reliable and valid instruments, recruiting a sample, and using statistical tests for analysis encouraged generalizability and prediction in this study. However, this study used a nonprobability sampling technique; the samples may not be representative, since the samples were not randomly selected.

Population of Interest

Older African immigrants were the population of interest in this study. Older African immigrants came to the US at different stages of life from diverse parts of Africa, specifically, sub-Saharan Africa. Since the Family Reunification Act of 1965 was enacted, children, spouses, and older adults were granted permission to gain entry into the US. The African immigrants in the US are few compared to their counterparts from other countries, such as Asia and Mexico, however the African immigrant population is growing due to sequential/serial migration that allows immigrants with legal status to bring their parents to live with them in the US. The political and economic hardship in some African countries has also contributed to the increase of this population as people flee from their countries to seek asylum in the US (Mbanaso & Crewe, 2011). Few studies have examined the experiences of older African immigrants around their general health and social needs (Darboa & Ahmed, 2007; Okafor et al., 2013).

The study was conducted among older African immigrants, age 60 years and over, currently living in the US. The quantitative study aimed to understand how social isolation and other risk factors, language use and preference, and ethnic social relations (acculturation predictors), transportation access, grandchild care role, financial satisfaction, and living arrangements influenced emotional well-being of older African immigrants. And how resilience moderated the relationships among social isolation and other risk factors, and emotional well-being of the study participants. Understanding these factors will inform the development of interventions to better help this population adjust to life in the US. The study was conducted in the English language since the majority of the participants are from English-speaking parts of African countries.

Study Sample/Sample Size

Prior to data collection, an acceptable sample size was calculated using G-Power software (Faul et al., 2007) for family of F-test, and statistical test of linear multiple regression (Fixed model, R^2 increase) with 7 predictors and 5 tested predictors. The estimated sample size required to achieve a study power of 0.95, a medium effect size of 0.15 and a significance level of <.05 was 138. However, after data collection, 249 participants were recruited, 23 did not meet the selection criteria and 63 had completion rate ranging from 3% to 16%, all of whom were removed from the analysis. The remaining 163 participants constituted the sample size for the study. The incomplete data were largely attributed to lack of technology know-how because the data were collected primarily through an online survey due to COVID-19 pandemic. COVID-19 refers to severe acute respiratory syndrome coronavirus (SARS-CoV-2), a virus that causes respiratory illness in humans (Gorbalenya et al., 2020)

Inclusion and Exclusion Criteria

The inclusion criteria for participation in this study were: 1) age 60 years or over, 2) being an immigrant from sub-Saharan African countries, and 3) residing in the US for one year or more. The exclusion criteria are: 1) not born in sub-Saharan African countries, 2) arrived in the US less than a year ago. Age 60 was chosen as the onset of old age in this study based on age classification by Forman et al. (1992). Moreover, the sub-Saharan region of the African continent was selected because the growth rate of this population is rapid, and little is known about this population from empirical research.

Recruitment/Sampling Procedure

Probability sampling was not feasible for this study because of the inaccessibility of the target population. Thus, the study used non-probability sampling, which allowed selection of study participants that were available to the researcher. The non-probability sampling approaches used were snowball and purposive. Snowball sampling is a convenient sampling method (Naderfar et al., 2017), also referred to as the 'Chain method' (Polit-O'Hara & Beck, 2006) and/or 'Word-of-mouth' (Rashid & Gregory, 2014). The snowball sampling method involved inviting the first few participants to share the survey link with anyone who had similar characteristics and was interested in participating in the study. Rashid and Gregory (2014) stated that the use of word-of-mouth is helpful in recruiting immigrants in research. The authors described word of mouth as a way of gaining support of people in the recruitment process by asking people for access to older immigrants who may be interested in participating in the study. Snowball and purposive sampling methods were considered appropriate for this research because the study explored the experiences of a hard-to-reach population around social isolation, other risk factors, and emotional well-being. Hard-to-reach population refers to those who are difficult to reach or engage in research (Cudjoe et al., 2019; Shaghaghi et al., 2011). Scholars reported that using multiple sampling techniques such as purposive, snowball, online data collection through Qualtrics, WhatsApp, text messages, and Facebook helped to increase survey participation of members of hard-to-reach populations (Cudjoe, et al., 2019; Rashid & Gregory, 2014). Participants were recruited from the states where African immigrants are densely populated in the US. These states

included Indiana, Minnesota, New Jersey, Georgia, New York, Texas, Chicago, Washington DC, and Maryland (Anderson, 2015).

The sampling process focused on three main types of contacts: individual, religious institutions, and ethnic association leaders. The recruitment process began with making individual contacts with friends and family who connected the researcher to their personal cell phone contact lists. Likewise, the researcher connected with religious and African association leaders through phone calls and emails to discuss the study. The gatekeepers (religious and African association leaders) informed their members about the study and posted the study invite and link on the group chat medium, WhatsApp, as well as provided the researcher with the contacts of their older adult members. A few of the religious groups invited the researcher to speak to their congregation about the research through virtual zoom, a secure and reliable video platform that encouraged virtual interactions to meet communication needs including meetings, chat, phones, webinar and online events. Prior studies revealed that engaging community leaders, religious leaders, and religious organizations such as churches and mosques encouraged Africans' participation in research (Commodore-Mensah et al., 2015; Cudjoe et al., 2019). The researcher connected with each of the persons on the contact lists through phone calls, discussed the purpose of the study, eligible age requirement for participation, risks, confidentiality issues, and voluntary participation in the study. The researcher sent the survey link to the participants who gave oral consent to participate in the study through WhatsApp, a popular social medium of communication among Africans (Cudjoe et al., 2019). WhatsApp, as a social media and telecommunication platform, is easy to use and encourages sharing of information among users. Cudjoe et al. (2019) reported that online

recruitment using WhatsApp was an effective strategy for recruiting African immigrants because this is a commonly used forum for sharing information within the community. Studies showed that the internet and social media and faith-based organizations are promising strategies to consider when recruiting African immigrants in research (Akinde, 2013; Commodore-Mensah et al., 2015). The potential participants and those who consented to participate in the study were encouraged to share the study information and link for the survey with their phone contacts. The survey was created using Qualtrics, a web-based survey tool. The researcher chose Qualtrics because it is a cloud-based survey tool which ensures confidentiality of participants' information. Qualtrics is easy to use and provides a web-based link for the online survey that is shareable. The survey was provided online, electronically through email, and a paper-based format based on potential participant preference. The paper copy was mailed to the participants, and some were dropped off in an envelope at the religious centers, based on the religious leader's request, for adult children who attended religious programs during the COVID-19 pandemic to pick up for their older parents who were unable to attend religious programs in-person. The COVID-19 pandemic was a global health challenge, which placed restrictions on connecting with older adults who are considered vulnerable to contacting the disease. The COVID-19 pandemic limited the researcher's ability to meet with the older adults face-to-face.

Data Collection

Data collection was conducted after obtaining approval from the Institutional Review Board (IRB) from Indiana University to ensure protection of the research participants. The survey was in the English language and the information about

confidentiality, risk of harm, voluntary participation, and compensation methods were explained in the survey. The first part of the survey were screening questions to ensure participants met the eligibility criteria. Those eligible to participate in the survey were able to continue with the survey while those not eligible were automatically dropped off of the online survey. The compensation method used was a $10 Walmart gift card, which was delivered electronically through participant's email address. The data collected from the online survey were secured in Qualtrics, those collected through electronics were secured in a password-protected computer, and the paper copies were kept in a secured place. The data collection period lasted 11 weeks. Reminder text messages were sent to the contacts in four-week intervals through WhatsApp, emails, and through the gatekeepers. The purpose of the reminder messages was to encourage participation/completion of the survey (Cantrell et al., 2018). The participants were informed that the study was for academic purposes to disabuse the participants fear of associating the study with immigration policy, particularly fear of deportation.

Data was collected online through Qualtrics and paper-based method using cross-sectional design. The survey was a single document, which included closed-ended questions and a few open-ended questions. The first page of the survey introduced the potential participants to the purpose, risks, benefit, confidentiality, and voluntary participation in the survey. The participant's ability to skip any questions or stop participating in the survey when feeling uncomfortable to continue with the survey was emphasized in the survey. Prior to completing the survey, the participants were informed about an incentive of an optional $10 Walmart gift card as a compensation for their time. Participants interested in receiving the incentive were instructed to include their email

address in a space provided at the end of the survey. The first part of the survey were screening questions such as “Are you 60 years or over?”, “Were you born in the US?”, with response choices of Yes or No. The question “What part of African countries are you from?” had an open-ended response for the participant to include the African country from where they came. The participants who did not meet the screening criteria were dropped from the survey.

The key variable scales included Social Isolation Scale (8 items), Resilience Scale (10 items), Emotional Well-Being Scale (11 items), Acculturation Scale (12 items), and demographic information items. Additionally, the survey had four open ended questions to provide opportunity for more in-depth understanding of the experiences of older African immigrants on social isolation, such as “What is your biggest challenge(s) since moving to the US?”, “What do you like best in the US?”, “What do you miss in your home country?”, and “What do you think about aging or getting older in the US?”. Due to prior studies on limited language proficiency among older immigrants, a question that indicated whether or not the participant was assisted in completing the survey was included. The survey also included an item which asked participants who were interested in participating in an interview to contact the researcher via the researchers’ phone number at the end of the survey. The completion time for the survey ranged from 5 to 20 minutes.

Informed Consent and Confidentiality

The potential human subject review issues relevant to this study were confidentiality and informed consent. The participants were informed to not put any means of identification on the survey, particularly for the paper-based and electronic

copies. The online survey was anonymous. Participants' immigration status and religious affiliation may have been a barrier for participating in the study, but none of the questions in the survey related to migration status or religious affiliation. The participants were assured of the protection of their information on the survey. Another barrier that could affect completion rate was connecting with older adults apart from adult children. The researcher connected with the adult children of potential participants following the cultural value of collectivism to obtain permission to participate in the study, particularly for those who lived with their adult children. The researcher then obtained the participants' consent before proceeding to the survey. The inclusion and exclusion criteria were explained, risks, and benefits of the study, the confidentiality of the information, voluntary participation, and the right to stop the research were all explained. Since data were obtained using Qualtrics and social media (WhatsApp), agreeing to participate in the survey represented the participants' consent.

Pilot Testing

Pilot testing may not be required because the already existing scale that was used to measure the variables were reported to be valid and reliable with adequate Cronbach alpha levels. However, since the survey was westernized, the researcher pretested the survey on four representatives of the population to understand their comprehension of the information on the survey. The researcher asked the respondents specific questions relating to clarity, relevancy, and accuracy of the survey items to real experiences within their cultural context. The questions were: "How do you interpret the survey questions?", "Are the questions relevant to you?", "Are the questions clear?", and "Is the time allotted to completing the survey appropriate?" The researcher received feedback from the

participants, which included “inclusion of age range” and “a question that asks if participants were assisted in completing the survey” as well as “making the incentive optional”. The feedback was incorporated into the final version of the survey. Based on the overall feedback, the researcher reviewed the questions for clarity and parsimony.

Quantitative: Variables and Measures

Data was collected through existing instruments and several demographic items. The variables measured included demographics such as gender, age, marital status, and educational status. The independent variables were language use and preferences and ethnic social relations (acculturation predictors), living arrangements, grandchild care role, transportation access, and financial satisfaction. The dependent variable was emotional well-being. The moderator variable was resilience. According to Nicholson (2009) social isolation can be considered as either an independent variable or as a dependent variable. Hence, social isolation was used as a dependent variable in a model on multiple regression for the predictors of social isolation, while social isolation was used as an independent variable in another model on hierarchical regression for predictors of emotional well-being in the study. The study instruments included the PROMIS short form 8a Social Isolation Scale, Connor-Davidson Resilience Scale (CD-RISC-10), A Short Acculturation Scale for Filipino Americans (ASASFA, dela Cruz & Galang 2008) renamed A Short Acculturation Scale for African Immigrants (ASASAI), and Emotional Well-Being Scale. Permission for using some of the scales was obtained from the original authors of the instruments such as the PROMIS Scale and Emotional Well-being Scale.

Demographic Variables

Four background variables were used as covariates: age, gender, education, and marital status.

Age: Two questions were provided in the survey on participant's age for confidentiality purposes and cultural peculiarity on age disclosure among Africans. One of the questions was, "In what year were you born?" with room for an open-ended response. The second was, "What is your current age range?" Age range was measured in the survey on a 5-stage ordinal scale that reflected 5-year categories, 60-64 years, 65-69 years, 70-74 years, 75-79 years, and additional category for those aged 80 and over (Howard Litwin, 2001; Forman et al., 1992). Due to cultural peculiarity, exact age was not solicited, instead the birth year was solicited. However, there was large missingness in the years of birth. The year of birth was calculated to reflect the age of the participants, while the midpoint was used for the missing value. Thus, the age range was considered as an ordinal scale in the analysis.

Gender: "What is your sex (gender)?", with two options of "Male" or "Female"; Male was coded 1, and female coded 2.

Marital Status: This variable was measured with the question, "What is your marital status?" The response options were 1=Single, 2=Married, 3=Widow/Widower, 4= Separated, 5= Divorced, 6=Never married

Educational Level: The educational level was measured using the question, "What is your highest level of education?" No education=1, Primary education=2, Secondary=3, Tertiary=4

Independent Variables

Social Isolation: The Patient Reported Outcomes Measurement Information System (PROMIS) Social isolation Short Form 8a v2.0 (Cella et al., 2010) was used to measure perceived social isolation. This measure was adapted from the University of California, Los Angeles, Loneliness Scale. The scale measured the feelings of social disconnectedness such as being avoided and excluded from others around. The scale did not consider time frame for assessing social isolation. The original scale had eight items with the following response options in Likert scale: 1=Never, 2=Rarely, 3=Sometimes, 4=Usually and 5=Always. The eight items include "I feel left out", "I feel people barely know me", "I feel isolated from others", "I feel people are around me but not with me", "I feel isolated even when I am not alone", "I feel that people avoid talking to me", "I feel detached from other people", and "I feel like a stranger to those around me". Due to cultural peculiarities and parsimony reasons the response options were collapsed into a 3-point Likert scale, which were Never=1, Sometimes=2, and Always=3. The scale has been reported to have Cronbach alpha of .93 with adult samples and .90 with adolescent samples using the 5-Likert format options (Stacciarini et al., 2015). The scale for this study with 3-Likert responses demonstrated a good reliability with Cronbach alpha .89. The scale was obtained directly from the author. The sum of the scores were obtained with a higher score indicated greater perceived social isolation while lower scores indicate lower perceived social isolation. Studies indicated that social isolation could be considered as an outcome or independent variable (Nicholson, 2009). As earlier stated, perceived social isolation was considered as an outcome and independent variable in different models. Social isolation was an independent variable when looking at the

impact of social isolation and other risk factors on emotional well-being, and as an outcome variable for the relationship between social isolation and other risk factors.

Other Risk Factors

The variables that formed the other risk factors of social isolation of older immigrants were derived from previous literature. The risk factors were acculturation (language use and preferences and ethnic social relations), financial satisfaction, transportation access, grandchild care role, and living arrangements.

Acculturation: Acculturation was operationalized using a 12-item standardized acculturation scale originally developed for Hispanics (Marin et al., 1987), and used with Filipino Americans (dela-Cruz et al., 2018) and validated with multi-ethnic Asian population (Park et al., 2021)**.** The scale was named A Short Acculturation Scale for African Immigrants (ASASI). The 12 items measured a person's acculturation level. The scale had three parts- language use preference (5 items), media use (3 items), and ethnic social relations (4 items). The responses are measured on 1 point to 5-point Likert type scale. The response choices were slightly modified for African immigrants, language preference and media use: 1=Only African languages, 2=More African languages than English, 3=Both Equally [African and English language], 4=More English than African languages, 5=Only English. The response choices for ethnic social relations included: 1=All Africans, 2=More Africans than Americans, 3=About half and half [African and American], 4=More Americans than Africans, and 5=All Americans (dela-Cruz et al., 2018). The 12 items were summed and averaged to produce a general acculturation score ranging from 1-5. Lower scores indicated lower acculturation towards the American culture, middle scores (that is 2.5) indicated biculturalism (Pérez, 2015), and higher

scores indicated a higher level of acculturation towards American culture (dela-Cruz et al., 2018). The subscales had a similar scoring format. The subscales: language use and preference (language use and media preference), and ethnic social relations were used as predictors of acculturation in this study. The scale was widely used among immigrant groups and had demonstrated adequate psychometric properties with alpha coefficient 0.92 (Marin et al., 1987). While testing for the alpha coefficient with 11 items, excluding item on "Item 7: In what language(s) are the radio programs you usually listen to", due to no variance in the response with Filipino American, Cronbach alpha yielded .82 for the total score; .86 for language preference and media use subscale, and .81 for ethnic social relations (dela-Cruz et al., 2018). The current study used face validity by experts, and the Cronbach alpha coefficient of the scale based on 12 items were .89 for total acculturation scale, .90 for language use and preference, and .75 for ethnic social relations.

Financial Satisfaction: This variable was measured using a single item "How satisfied are you with your financial status?" The response options had a 3-point Likert scale format: "Not satisfied=1", "Satisfied=2" and "Very satisfied=3". Higher scores indicated higher satisfaction with an individual's financial status while lower scores indicate lower satisfaction with one's financial status.

Transportation Access: This variable was measured using a single item, "Do you have access to a car for your personal use?" (Lee & GlenMaye, 2014). The response options were Yes=1 and No=2.

Grandchild Care Role: This variable was measured with a single item question, "Do you provide childcare for your family here?" The response option was in dichotomous format; Yes=1 and No=0. The respondent who cared for grandchild(ren) was coded 1

while those who did not care for grandchildren was coded 0. For descriptive analysis purpose, participants who answer Yes to grandchild care were instructed to complete the following closed-ended questions: ” How many children do you care for?”, with response option 1-2 children=1, 3-4 children=2, and More than 4 children=3; ” What is the age(s) of the child(ren)?”, with response format 0-1 year =1, 2-5 years =2, 6-10 years =3, and More than 10 years = 4; ” What do you do every day for the children?”, participants were to check all that apply in the options - babysit, prepare meals, laundry, homework, and an open-ended option.

Living Arrangements: This variable was measured with a single item, “Who do you live with in the US?” The response options included Alone=1, With spouse=2, With adult children=3, With friends=4, and With spouse and children=5. There was an open-ended option for the participant to include other living arrangements.

Outcome Variable

Emotional Well-being: Emotional well-being, as an outcome variable, was measured using the emotional well-being scale selected from originally existing scale “Emotional State Questionnaire (EST-Q)” developed by Estonian researchers (Aluoja, et al., 1999). The scale assessed a range of negative experiences and mood problems, which included depressive mood, anxiety, insomnia, fatigue, and panic. The original scale had 33 items with five subcategories but was reduced to 28 items upon factor analysis by the authors. The subcategories had the following Cronbach alpha reliability respectively: depression (0.87), anxiety (.69), insomnia (0.48), fatigue (0.77) and agoraphobia-Panic (0.61). The total scale has Cronbach alpha of .88 (Aluoja, et al., 1999) and .94 (Gugushvili, et al., 2020). A total of 11-items were selected from each subcategory of the original scales.

The items and their item-total correlation include Depression-feelings of sadness (0.56), feeling of no interest or pleasure in things (0.69) and feeling lonely (0.59); Anxiety-feeling easily irritated or annoyed (0.33), tension or inability to relax (0.46), excessive worries about several different things (0.40), feeling anxious or fearful (0.50); Insomnia-difficulty falling asleep (0.48); Fatigue-feeling slowed down/bored (0.50), being easily fatigued (0.59); and Agoraphobia-panic, fear of being outside home alone (0.61). The original scale responses were measured on a five-point Likert format response: Not at all=0, Rarely=1, Sometimes=2, Often=3, and All the time=4. The scale for the selected 11 items was slightly modified for African immigrants. For example, the response options were: “Not at all=1”, “Sometimes=2” and “All the time=3”. The scores for the items were summed. In line with Gugushsili et al (2020), the scores for the scale were reversed, such that “All the time=1”, “Sometimes=2” and “Not at all=3”. Hence, higher scores reflected higher levels of emotional well-being (i.e., the absence of negative emotions), while lower scores reflected lower levels of emotional well-being (i.e., the presence of negative emotions). The Cronbach alpha for the scale in the current study is .84.

Moderator Variable

Resilience: The Connor-Davidson Resilience Scale (CD-RISC-10) (Campbell-Sills & Stein, 2007) was used to measure resilience. The scale measured psychological resilience of the participants (Reyes et al., 2018). The original scale had 10 items with 4-Likert scale response format: not true at all, rarely true, sometimes true, and true nearly all the time. The scale was slightly modified for African immigrants by reducing the response choice to 3-point Likert scale: “Not true at all=1”, “Sometimes true=2” and True nearly

all the time=3". Participants rated themselves on each item on the scale. The scores were generated by adding the total score of 10 items. Higher scores indicated greater resilience and lower scores indicated lower resilience. The scale was reported to have good construct validity and reliability at Cronbach alpha of .85 (Campbell-Sills & Stein, 2007). The scale demonstrated a high Cronbach alpha .97 with a study of resilience of older immigrants in the US (Serafica, et al., 2019). The scale in this study has a good reliability with Cronbach alpha of .85.

Data Analysis Strategy

Data analysis was performed on 163 cases using IBM SPSS statistics version 27. The missingness for key variables were less than 2% missingness, hence, listwise deletion was applied to handle the missingness. The age variable was measured originally in the survey in two ways, as a continuous and an ordinal variable to protect the confidentiality of the participants (Howard, 2001), and due to cultural peculiarity of age disclosure. The age as a continuous variable had 36.2% missingness, which was replaced with the median value of age range for each category of the participants who did not indicate the year they were born (Tabachnick & Fidell, 2013). However, age as an ordinal variable was included in the multivariate analysis. The nominal /categorical measurement level for the demographic characteristics (age, gender, marital status, educational level); living arrangements, transportation access, and grandchild care role were reported in frequencies and percentages. The variables with interval measurement levels such as social isolation, emotional well-being, resilience, and acculturation were described using mean, standard deviation (SD), minimum and maximum values. The continuous variables were checked for outliers using standardized residuals, which were residuals converted to

Zscores and box plot (Field, 2018), The result showed that one value was greater than 3.29, outside the acceptable range (normal range is -3.29 and +3.29). Only resilience variable was found to have outliers. Resilience variable was negatively skewed as evidenced by the test of normality (Kolmogorov-smirnov and Shapiro-wilks, both significant at <.001), histogram, and the descriptive values (skewness=-1.023 and kurtosis=1.229), which showed that the values were not normally distributed. A normal distribution would have values of skewness and kurtosis to be zero (Tabachnick & Fidell, 2013). Transformation was undertaken to render the variable normally distributed. Thus, because the distribution differs substantially, a logarithm 10 transformation was used to correct the skewness (Tabachnick & Fidell, 2013). Despite the transformation, the outcome was not satisfactory, hence, the variable in its original form was included in the model.

The emotional well-being variable was reverse coded before including it in the model for ease of interpretation. The assumptions for multivariate statistic were performed on the emotional well-being variable before and after it was reverse coded. The assumption was satisfactory before it was reverse-coded while it was skewed after the reverse-coding. However, the reverse-coded value was included in the analysis. The associations among the major continuous/categorical variables; social isolation, resilience, emotional-well-being, and acculturation-language use and preferences and ethnic social relations, were analyzed using Spearman correlation coefficient. The Cronbach alpha was used to measure the internal validity of the interval scales. The larger the Cronbach alpha, the more reliable the scale (Cronbach, 1987). The inferential statistics used for analyzing the data are multiple and hierarchical regression, organized

based on the hypotheses. For example, hypothesis 1: “Language use and preference, ethnic social relations, financial satisfaction, transportation access, living arrangements and grandchild care role significantly impact social isolation in older African immigrants” was analyzed using multiple regression analysis. Hypothesis 2: “Controlling for age, gender, educational level, and marital status, social isolation and multiple risk factors among older African immigrants is negatively associated with emotional well-being”, and Hypothesis 3: “Resilience significantly moderates the relationship between social isolation, financial satisfaction and ethnic social relations, and emotional well-being of older African immigrants” were statistically analyzed using hierarchical multiple regression.

Dummy coding was performed for the dichotomous and categorical variables prior to including them in the multivariate analysis. The reference category for each of the dummy coded nominal/categorical variables were selected based on the normative category (Karen Grace-Martins, n.d.). To test for the interaction among social isolation, financial satisfaction, ethnic social relations, and resilience, each of the variables were centered. The centered variables were entered in the model to determine their main effects, then, the interaction terms among each centered variables and resilience were obtained before including them in the model.

Hierarchical regression was appropriate for examining the influence of additional variables on the relationships among the variables examined. Scholars have demonstrated the appropriateness of using hierarchical regression in studies that examined the effects of multiple factors on the relationships among variables (Gierveld & Van der Pas, 2015; Palgi, 2013). The assumptions for multivariate statistics must be met before running

multiple and hierarchical linear regression analyses (Field, 2018; Tabachnick & Fidell, 2013). However, the normality and linearity were checked using normal P-P plot, histogram, and the scatter plot; multicollinearity was tested using the correlation matrix to ensure no perfect linear correlation between two or more of the predictors (Field, 2018). The sample size was adequate for the analysis, independent error was checked using Durbin-Watson test. The normality of the variables was acceptable based on the skewness and kurtosis values as shown in Table 1. The assumptions were satisfactory before running multiple and hierarchical regression analysis.

Table 1

Skewness and Kurtosis Values for Key Variables N=149

Measures	Skewness	Kurtosis
Emotional Wellbeing	-.653	1.039
Social isolation	-.040	-.330
Language use and preference	-.148	-.379
Ethnic social relations	.181	-.364
Financial satisfaction	.090	-.459
Resilience	-.804	.319

Phase II Qualitative Method

Narrative Research

The qualitative method allowed the researcher to study issues in-depth with data collection using an open-ended question (Creswell & Plano Clark, 2011). Qualitative research was categorized into five major forms: phenomenology, grounded theory, discourse analysis, intuitive inquiry, and narrative research (Wertz et al., 2011). The form of qualitative approach chosen for this study was the narrative research. Narrative research attempted to capture the experiences of people in terms of their own meaning making and theorizing about it in insightful ways. The purpose of using the narrative method was to explore the experience of social isolation among older African immigrants through their narratives (story telling). The construction of stories reflects the internal world of the narrator as well as aspects of the social world in which a person lives (Wertz et al., 2011). Thus, understanding that humans are naturally storytellers, made it easier to elicit their stories in-depth and make meanings from their stories around social isolation, emotional well-being, and coping strategies. Using this approach, the researcher collected narratives (stories) of the participants through semi-structured interviews to explore and conceptualize their experience as it was presented in textual form (Wertz et al., 2011). According to Sharp et al. (2019), the thematic analysis technique could be used to analyze narrative data inductively (and deductively) as it helps to make sense of the data. Thus, thematic analysis was used in this study to explore the pattern of relationships among the themes identified in the participant's narratives (Braun & Clarke, 2006).

Sample Size/Sampling Method

A total of 11 older African immigrants were recruited for the qualitative portion of the study. “There are no rules for sample size in qualitative inquiry” (Patton, 2002). Sample sizes depended on the answers sought, theoretical framework, type of data collected, resources, saturation, and time, among others (Merriam 2009; Patton, 2002). Snowball and purposive sampling methods were used to identify the participants recruited for the interview. Snowball and purposive sampling are common sampling techniques in qualitative research, used to identify and select individuals who have experienced the phenomenon of interest in the study (Creswell & Plano Clark, 2011; Palinkas, et al., 2016).

Inclusion and Exclusion Criteria

The eligibility criteria for participating in the study were age 60 years or over, living in the US for one or more years, and being born in the one of the countries of sub-Saharan Africa. The exclusion criteria included being born in the US, less than 60 years of age, and less than one year living in the US.

Data Collection

Research participants were recruited using snowball and purposive sampling methods. Gatekeepers (religious and African association leaders) and individuals who were informed about the study connected the researcher to potential participants. This method was used because older African immigrants are hard to reach for research purpose. The researcher obtained permission from adult children of the participants who were willing to participate in the study. Oral consent was obtained from the participants through telephone due to COVID-19 pandemic, which restricted contact with older

adults. Seeking permission from adult child(ren) who is a guardian or caregiver for older adults is part of African culture; this enables the participant to have a sense of support and fulfilment of cultural obligations. The purpose of the study, risks, benefits, confidentiality, voluntary participation, duration of the interview, and incentive for the time spent for the interview were explained to each potential participant. Each potential participant responded to a mini survey on demographic information on the telephone. Participants who met the eligibility criteria participated in the interview. The researcher obtained each participant's consent to audio-record the interview. A semi-structured, in-depth interview was conducted with each participant via telephone in the English language or the participants preferred local language, specifically Yoruba and Creo (known as Pidgin English among Africans), at their convenient time. The researcher speaks English and Yoruba language, as well as understands the Creo language. However, the researcher used the service of an interpreter for Creo language into English. The interviews lasted approximately 30-85 minutes. Interviews took place within 12 weeks (February-April 2021). Interviews were undertaken by the researcher using an interview guide developed from the literature.

Further, the experiences and narratives of the participants was accepted as reality during the interviews. The interviews in the local languages were translated by the researcher. All interview transcripts were transcribed into English language for analysis. The interviews were conducted in two phases: the first interviews enabled the participants to tell their stories around social isolation. Participants checked their responses for accuracy after which they were interviewed the second time to enable participants to share more about their experiences in response to questions obtained from the

quantitative survey (see Appendix E and F). The purpose of the two interviews was to encourage participants to provide more details of their experiences around social isolation, acculturation, emotional well-being, and resilience/coping skills. Some follow-up questions included during the interviews were: “Can you talk about how frequent you interact with Americans?”, “What do you do when you are at home alone?”, “What can you say about feeling sad because you are not able to go out?”, “What are your reasons for saying it is not easy to relate with people?” and “What are some specific things you observe that makes you put limitation to the extent you can go in relating with people in the community?”

Data Analysis Strategies for Qualitative Study

Qualitative data analysis is “the process of making sense out of the data” (Merriam, 2009). By using qualitative method, the researcher looked for patterns/themes in the data (Butina, 2015). The data were analyzed using thematic analysis (TA), “a method for identifying, analyzing, and reporting patterns (themes) within data” (Braun & Clarke, 2006, p.79). Thematic analysis has three main approaches: the code reliability, code book, and reflexive thematic analysis. The orientation for these approaches could be deductive or inductive. Deductive orientation is theory or variable driven. It allows the researcher to approach the data with various ideas, concepts and theories or potential code, which are then explored and tagged within the dataset, while inductive orientation derives its idea/codes from raw data information (Boyatzis, 1998; Braun et al., 2018). Scholars opined that the TA approach used in a qualitative study depend on its appropriateness for the research (Braun et al., 2018). Hence, in line with Maine et al. (2017), the analysis strategy used in this study was informed by both deductive (Boyatzis,

1998) and inductive (Braun & Clarke, 2006) thematic analysis. The code reliability approach, which uses the deductive method (Boyatzis, 1998) was used in the initial phase of the analysis. The code reliability involves collection of narrative data and analyzing data using the qualitative technique of coding and theme development (Braun et al., 1998). First, the interview transcripts were entered into an Excel spreadsheet according to the interview questions. There were two levels for the pre-themes: the key variables such as social isolation, resilience, emotional well-being, and acculturation derived from the theoretical framework formed the first theme, while the semi-structured questions under each variable formed the pre-themes. The transcripts were coded by two other independent coders using inductive (reflexive) thematic analysis to determine the accuracy of the codes and themes (Boyatzis, 1998) in the second phase.

The second phase, the inductive thematic analysis as guided by Braun and Clarke (2006) is a data driven approach in which the participants experiences are represented. The transcripts were coded using Braun and Clarke's (2006) coding procedure, which involved six phases: 1) familiarization with the data - the researcher familiarized with the data by listening to the audio-recorded data multiple times while transcribing the data, read the transcribed data many times, and took notes to have a better understanding of the data. Similarly, the independent coders read and re-read the transcripts and took side notes in the Excel spreadsheet, while making notes of the interesting data and phrases; 2) generating initial codes inductively from descriptions which were important to the participants. Braun and Clarke (2006) opined that generating codes involves more detailed and systematic engagement with the data. The researcher and the independent coders read the data and systematically identified the codes from the transcripts; 3)

searching for themes by organizing the codes around similar meanings to reduce the chunk of the text; 4) potential themes were organized to reflect the voices of the participants. The themes were also reviewed, and validity was checked by the principal investigator for accuracy, consistency, and agreement of themes; 5) defining and naming themes where analysis was organized into narrative structure with accompanying description; and 6) finally, the report was produced in the result section.

Validation of Qualitative Research

Qualitative research requires the researcher to check for validity and reliability of the interviews "for accuracy of the findings by employing certain procedures" (Creswell, 2014). There are no specific strategies for validating qualitative research, but at least two strategies are recommended (Creswell, 2009). To ensure trustworthiness, the interview guide was pilot tested on one representative participant prior to conducting the interview. Also, data analysis was reviewed by the dissertation committee to ensure trustworthiness (Maanen, 1983) by making judgment about how many categories the data should have, what each category contained, and what each category should be called (Jonsen & Jehn, 2009).

Member checking approach was used to check for credibility (internal validity) of the data by allowing the participants to review the data obtained after it has been transcribed. The interview script was returned to the participants to check for accuracy prior to the follow-up interview where the researcher re-consented the participants (Birt et al., 2016; Doyle, 2007). The participants returned the checked interview transcript. The process enabled the participant the opportunity to remove or add to their data by co-constructing new meaning. Four of the participants added to the information they

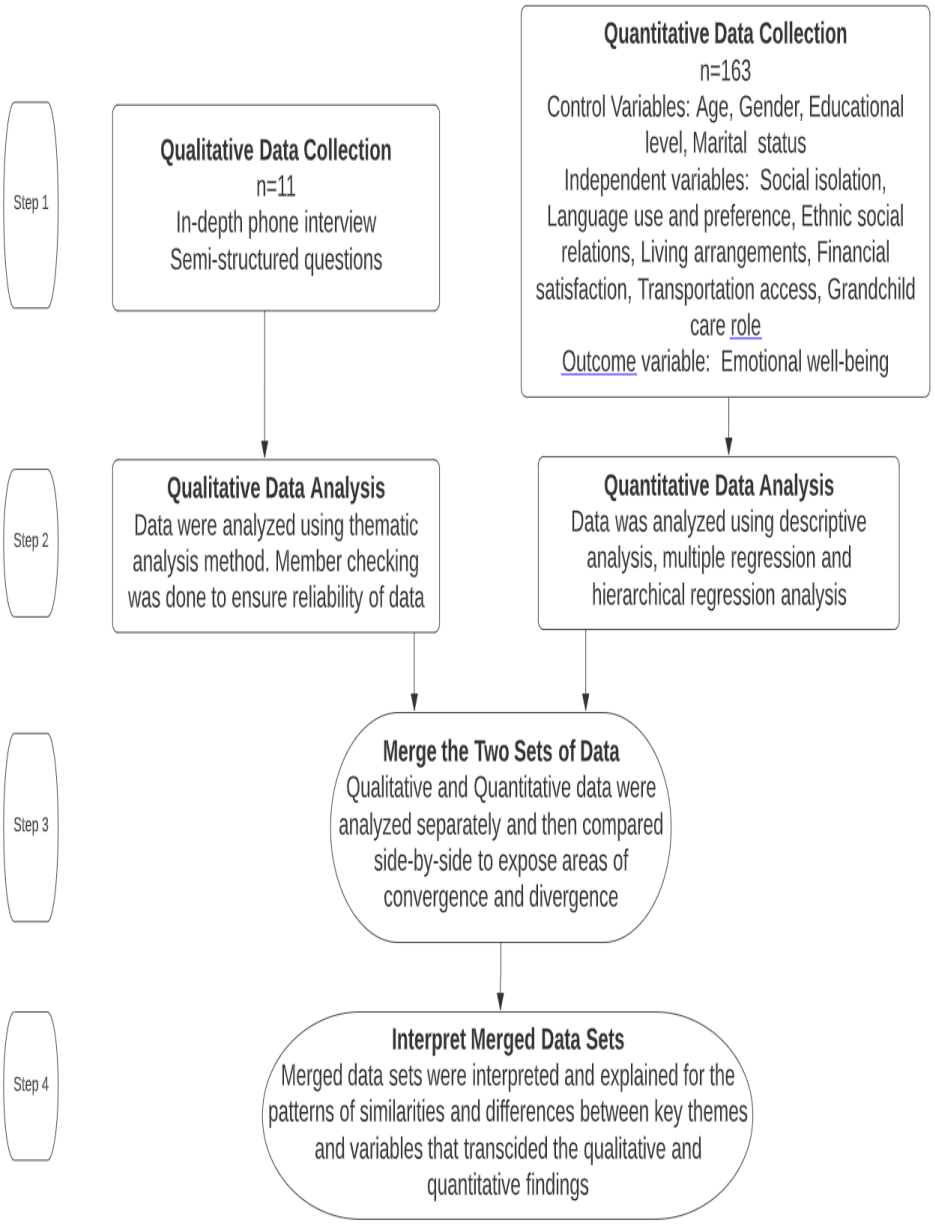
provided. Member checking provided an in-depth approach to triangulation of the data. Dependability was ensured by reporting the details of the research to enable future researchers to repeat the study and possibly gain the same result (Shenton, 2004).

Phase III: Mixed Method Integration and Analysis

As earlier reported in this study, mixed methods involve integration of two data sets, qualitative and quantitative. According to Creswell (2014), the purpose of the design determines the choice of mixed methods approach. The convergent mixed-method design was used because the purpose of this study was to integrate the findings from both qualitative and quantitative data. The convergent method was evidenced in different parts of this study such as in the study design, during data collection for qualitative and quantitative data, which occurred within the same time frame, and in analyzing of the data separately before the findings were merged/integrated at the result level (see Figure 2) (Fetters et al., 2013).

Figure 2

Parallel Convergent Mixed Methods

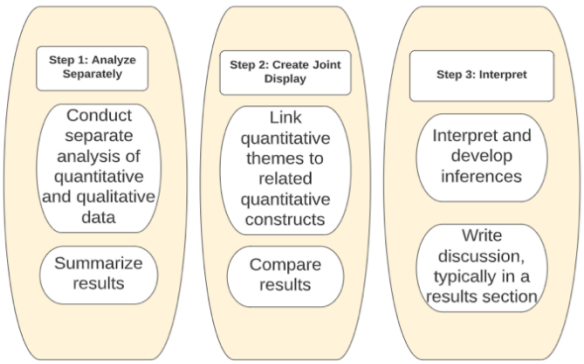


Source: Finlay & Kaboyasi (2018). Social isolation and loneliness in late life: A parallel convergent mixed -methods case study of older adults and their residential contexts in the Minneapolis area, USA *Social Science and Medicine* 208: 25-33

According to Fetters et al. (2013) and Haynes-Brown and Fetters (2021), integration of the quantitative and qualitative findings are an integral part of the mixed methods design (Fetters et al., 2013; Haynes-Brown & Fetters, 2021). The technique used in this study for merging the findings was integration through joint display (visual display integrating the quantitative and qualitative findings), which is the second step in mixed methods analysis (See Figure 3) (Fetters et al., 2013; Guetterman et al., 2015).

Figure 3

Steps in Mixed Methods Analysis



Source: Getterman, T. C. & Fetters, M. D. (forthcoming Routledge). Data visualization in the content of integrated analyses. Hitchock and RB Johnson, Eds. The Routledge Handbook for advancing integration in mixed methods research

"Joint display analysis involves explicitly merging the results from the two data sets through a side-by-side comparison to access for "Fit" of the two data types of data" (Haynes-Brown & Fetters, 2021 p.2). Fetters et al. (2013) described "Fit" of data

integration as the coherence of quantitative and qualitative findings which may have three outcomes--confirmation (findings reinforced each other), expansion (findings diverged or expanded insights into social isolation experience), and discordance (findings contradict or disagree with one another) between data sets (Fetters et al., 2013; Guetterman, et al., 2015). The process of looking across the quantitative and the qualitative findings and making an interpreting of how they address the mixed methods is called "inferences" and "meta-inferences" (Tashakkori & Teddlie, 2009, p.300). Additionally, the joint display analysis can be used for presentation such as display of the quantitative survey and qualitative interviews during data collection (Table 2), and interpretation of the integrated results (Younas et al., 2020).

Table 2

Complementary Quantitative and Qualitative Data

Quantitative data collected through self-administered questionnaires	**Qualitative data collected through semi-structed interviews**
PROMIS social Isolation – Short Form 8a (Cella, et al., 2010)	• Please explain the extent to which you feel people do not know you in your neighborhood • Explain the extent to which you feel people avoid talking to you in the neighborhood • Describe the extent to which you feel like a stranger in your neighborhood • Describe your experience regarding staying home alone
Emotional Well-being Scale (Aluoja et a., 1999)	• Describe your feelings about being alone/staying alone in the house • Describe the extent to which you feel bored/slowed down at home • Describe the extent to which you feel sad when you are alone at home

A Short Acculturation Scale for African Immigrants (ASASAI) (dela Cruz & Galang 2008)	• Please explain the language you spoke before coming to the US. may talk about multiple language you spoke before coming to the US • Describe the language or languages in which you listen to radio or watch TV since you came to the US. • Describe the ethnicity or race of your friends. Example, White, Hispanic, African Americans or black or Asians • Explain the new language you began to speak when you came to the US.
Connor-Davidson Resilience Scale 10-Item: CD-RISC-10 (Campbell-Sills & Stein, 2007)	• Describe the extent to which you are able to adjust to changes in the US • Please explain the extent to which you handle life challenges and remain stronger • Please, explain the extent to which you deal with painful feelings like sadness, fear, discouragement, failure. • Describe the things that you do to cope with staying alone
Transportation access: Do you have access to a car for your personal use?	Describe how access or lack of access to transportation contribute to staying home alone for you
Grandchild care: Do you provide childcare for your family here?	• Explain how you are caring for grandchildren since you came to the US • Describe the specific things you do in caring for grandchildren since you came to the US. (Feeding, babysitting, homework, laundry)
Living arrangements: Who do you live with in the US?	Who do you live with in the US?
Financial satisfaction: How satisfied are you with your financial status	Describe how satisfied you feel with your life including your financial status.

Table 2 displays the integration at the analysis level by matching the questions from the questionnaire and the semi-structure interview guide. This enabled matching, merging, and weaving of the quantitative and qualitative data.

In this study, the purpose of the quantitative component was to examine the extent of the relationship between social isolation, other risk factors (language use and preferences, ethnic social relation, living arrangements, transportation access, financial satisfaction, and grandchild care role) and emotional well-being of older African immigrants. The purpose of the qualitative component was to explore the experiences of older African immigrants in relation to social isolation and the coping strategies they used in managing social isolation. Further, the overall aim of the mixed methods was to explore the extent to which the qualitative and quantitative data converged and explained the participants' experience with social isolation and the other risk factors, and how they impacted the emotional well-being of older African immigrants. Additionally, the study aimed to obtain a more comprehensive understanding of the participants experience with social isolation, emotional well-being, and what they do to cope with social isolation in the American community.

Chapter 4 Results

This chapter discusses the results for the study on social isolation, resilience, and emotional well-being of older African immigrants. Since the study uses a convergent mixed method, the results will be presented in three phases: 1) quantitative findings, 2) qualitative findings, and 3) mixed methods data integration

Phase 1: Quantitative Findings

Descriptive Statistics

Description of Study Respondents

The frequency, mean and standard deviation, minimum and maximum scores of respondents are presented in Table 3. Of the 159 respondents, 62.0% were female (n=98). On average, respondents were 68.16 years of age (SD=5.72). Of the total participants, 34.0% (54) were 60-64 years, 32.1% (51) were 65-69 years, 18.9% (30) were 70-74, 11.9% (19) were 75-79, and 3.1% (5) were 80 years and over.

Table 3

Descriptive Information of Participants

Variable	Frequency (%)	M	SD	Min	Max	n
Age		68.16	5.72	60	85	159
Age range						159
60-64 years	54(34.0)					
65-69 years	51(32.1)					
70-74 years	30(18.9)					
75-79 years	19(11.9)					

80+ years	5(3.1)	
Gender		158
Male	60(38.2)	
Female	98(62.0)	
Marital status		158
Never married-single	2(1.3)	
Married	100(63.3)	
Widow	36(22.8)	
Separated-Divorced	20(12.7)	
Educational level		156
No education	9(5.8)	
Primary education	23(14.7)	
Secondary education	30(19.2)	
Tertiary education	94(60.3)	
Living arrangements		157
Alone	16(10.2)	
With spouse	52(33.1)	
With adult child's family	79(50.3)	
With Spouse and children	7(4.5)	
With friends	3(1.9)	
Transportation access		155
Car access	83(53.5)	
No car access	72(46.5)	

Childcare role		154
Grandchild care	83(53.9)	
No grandchild care	71(46.4)	

The sample's mean total acculturation score was 2.63 (SD=.73) indicating biculturalism, which means that participants were comfortable with their heritage culture and American culture. The mean score for language use and preference, and social ethnic relations measured at 2.88 (.90) and 2.15 (SD=67), respectively (see Table 4).

The mean score for older African immigrants' language use and preference indicated their ability to speak English language and their native language, especially with the mean score 2.88 (SD=.90). Thus, biculturalism in language use and preference highlights the important mainstream of American socialization. However, the mean score for ethnic social relation 2.15 (SD=.67) shows a lower acculturation towards members of American culture. This result indicates that older African immigrants are more likely to socialize with members of their own cultural heritage than people from the American culture. Those who score higher on the social isolation scale feel socially isolated, while those who score lower do not. The mean score for social isolation was at 13.83 (SD=4.56), indicating that, overall, the participants feel socially isolated. The mean score for resilience was registered at 24.75 (SD= 4.25), indicating high resilience among participants. Hence, the finding shows that the older African immigrants are demonstrating ability to adapt to cultural changes in the host country. The mean score for emotional well-being shows an average of 26.24 (SD=4.61), reflecting higher levels of emotional well-being.

Table 4

Descriptive Information of Key Variables

Variable	M	SD	Min	Max	n
Acculturation	2.63	.73	1.00	4.33	160
Language use and preference	2.88	.90	1	5	160
Ethnic social relation	2.15	.67	1	4	159
Financial satisfaction	1.88	.617	1	3	153
Social isolation	13.83	4.56	1.00	24.00	162
Resilience	24.75	4.25	8.00	30.00	161
Emotional well-being	26.24	4.61	5.00	33.00	161

Bivariate Analysis

Bivariate correlation was checked using Spearman's rank order correlation (Table 5. Based on this test, social isolation (r(158) =-.405, p=<.001) negatively correlated with emotional well-being. Participants who felt socially isolated experienced negative emotional well-being. Further, financial satisfaction (r(150)=.217, p=.007) and resilience (r(157)=.252, p=<.001) were positively correlated with emotional well-being indicating that older African immigrants who are satisfied with their financial status experience higher emotional well-being. Similarly, the participants who are high on resilience experience higher levels of emotional well-being. Language use and preference (r(157)=-.039, p=629) and ethnic social relations (r(156)=-.031, p=.698) were not significantly correlated with emotional well-being.

The relationship among the predictors for social isolation shows that ethnic social relation (r(157)=.-206, p=009), financial satisfaction (r(150)=-.179, p=.028 and resilience (r(159)=-.238, p=.002) negatively correlate with social isolation. The findings indicate that strong attachment to one's own cultural heritage and concerns about financial status satisfaction were associated with social isolation for older African immigrants. Further, language use and preference (r(158)=.022, p=.778) did not significantly correlate with social isolation.

Table 5

Bivariate Analysis between Emotional Well-being, Social Isolation, Language Use and Preference, Ethnic Social Relations, and Resilience N=149

Measures	Emotional well-being	Social isolation	Language use and preference	Ethnic social relations	Financial satisfaction	Resilience
Emotional Wellbeing	1	-.405**	-.039	-.031	.217**	.252**
Social isolation	-.405**	1	.022	-.206**	-.179*	-.238**
Language use and preference	-.039	.022	1	.460**	.146	.261**
Ethnic social relations	-.031	-.206**	.460**	1	.156	.147
Financial satisfaction	.217**	-.179*	.146	.156	1	.220**
Resilience	.252**	-.238**	.261**	.147	.220**	1

Note. **. Correlation is significant at the 0.01level (2 tailed)
*. Correlation is significant at the 0.05 level (2 tailed)

Item-level Analysis

The mean (M), frequency, and standard deviation (SD) of each item were analyzed to understand which items mostly describe the social isolation experience of the participants as shown in Table 6. The findings show that the items have means between 1.51 and 1.96. All items describe the social isolation of the participants with similar patterns for the scores. Thus, feeling that people don't know me, feeling isolated from others in the neighborhood, feeling that people are around, but not with me, and feeling like a stranger to those around me in the neighborhood are the most popular items that describe the participants' perceived social isolation.

Table 6

Item-level Analysis for Social Isolation Scale

	Frequency (%)				
Item	Never	Sometimes	Always	M (SD)	n
I feel that people don't know me in my neighborhood	50(31.4)	66(41.5)	43(27.0)	1.96(.766)	159
I feel isolated from other people in my neighborhood	54(34.2)	70(44.3)	34(21.5)	1.87(.738)	158
I feel that people are around me but not with me	41(26.3)	85(54.5)	30(19.2)	1.93(.673)	156
I feel like a stranger to those around me in the neighborhood	55(35.3)	71(45.5)	30(19.2)	1.84(.723)	156
I feel left out in my neighborhood	61(38.6)	71(44.9)	26(16.5)	1.78(.710)	158
I feel detached from other people in the neighborhood	63(39.9)	72(45.6)	23(14.6)	1.75(.695)	158

I feel isolated even when I am not alone	87(55.4)	60(38.2)	10(6.4)	1.51(.616)	157
I feel that people avoid talking to me in the neighborhood	77(48.7)	68(43.0)	13(8.2)	1.59(.639)	158

Table 7 shows the mean, standard deviation and frequency of the items describing participants' emotional well-being. The purpose of this analysis was to understand the most frequent negative emotions among the participants. The findings show that the majority of participants sometimes experience all the items on the scale, while few participants always experience negative emotional well-being. The results further show that the most popular negative emotions sometimes experienced by the participants is feeling bored, followed by difficulty sleeping, feeling sad, feeling easily annoyed, feeling easily fatigued, and feeling lonely.

Table 7

Item-level Analysis for Emotional Well-being Scale

Item	Frequency (%)				
	All the Time	Sometimes	Not at all	M (SD)	n
Feeling slowed down/bored	4(2.5)	103(65.2)	51(32.3)	2.29(.51)	158
Difficulty falling asleep	8(5.1)	90(55.2)	60(36.8)	2.32(.56)	158
Feel sad	3(1.9)	87(54.7)	69(43.4)	2.41(.53)	159
Feel easily annoyed	2(1.3)	83(52.5)	73(46.2)	2.45(.52)	158
Being easily fatigued	4(2.5)	81(51.3)	73(46.2)	2.44(.54)	158
Feeling lonely	11(7.0)	80(50.6)	67(42.4)	2.35(.60)	158

Feelings of no interest or pleasure in doing things	4(2.5)	77(49.0)	76(48.4)	2.44(.54)	157
Feeling anxious or fearful	3(1.9)	73(46.2)	82(51.9)	2.50(.53)	158
Tension or inability to relax	1(.6)	63(40.4)	92(59.0)	2.58(.51)	156
Excessive worries about several different things	6(3.8)	77(47.2)	73(46.8)	2.43(.57)	156
Fear of being outside home alone	4(2.6)	43(28.5)	104(68.9)	2.66(.53)	151

Multivariate Analysis

Multiple regression analysis was conducted to determine which factors influence social isolation of older African immigrants in the US. It was hypothesized that language use and preference, ethnic social relations (acculturation predictors), living arrangements for participants, financial satisfaction, lack of transportation access, and inability to socialize outside of the home due to grandchild care would contribute to social isolation for older African immigrants. The assumptions of multiple regression were checked and were satisfactory before running the analysis. The regression model was significant (F (6, 143), 2.792, p=0.013). Results show that 1.05% of the variance in social isolation can be accounted for by the six predictors collectively. Looking at the unique individual contribution of the predictors, the results show that identifying with members of ethnic cultural heritage, ethnic social relation (β =-0.273, t=2.906, p=.004), and living alone compared to living with family and others, living arrangements (β =-0.196, t=-2.386, p=0.018) were negatively associated with social isolation for older African immigrants. Hence, socializing with people of one's ethnic group had the highest contribution to social isolation of the participants, followed by living arrangements (living alone

compared to living with family members). This suggests that an increase in attachment to one's own ethnic group leads to more isolation from the American community. Therefore, greater reliance on one's ethnic group would amount to less social interactions with Americans. The findings show that older African immigrants who live alone are socially isolated compared with those living with family or friends. Grandchild care role, lack of transportation access, language use and preference, and financial satisfaction did not have unique contribution to social isolation for older African immigrants (see Table 8).

Table 8

Multiple Regression for Predictors of Social Isolation N=149

	B	β	Sig	t	CI 95%
Constant	20.23	-	<.001	8.847	[15.708, 24.747]
Language use and preference	.729	.149	127	1.537	[-.209, 1.668]
Ethnic social relation	-1.825	-.273	.004	-2.906	[-3.066, -.583]
Financial satisfaction	-.942	-.130	109	-1.612	[-2.098, .213]
Grandchild care role[a]	-.042	-.005	.957	-.054	[-1.561, 1.477]
Living arrangement[c]	-2.951	-.196	.018	-2.386	[-5.397, -.506]
Transportation access[b]	.219	.024	.786	.273	[-1.370, 1.808]

Note. R=.324, R^2=.105, Adj R^2 =.067,
*Indicates regression coefficient significant at p<.05
**Indicates regression coefficient significant at p<.1
[R]Reference group
[a]Grandchild care role (0=Caring for grandchild, 1=Not caring for grandchild[R])
[b]Transportation access (0=No transportation access, 1=Transportation access[R])
[c]Living arrangements (0=Living with family/significant others, 1=Living alone[R])

Hierarchical multiple regression was used to determine whether social isolation and other risk factors influence the emotional well-being of older African immigrants in the US. It was hypothesized that social isolation, language use and preferences, ethnic social relations, living arrangements; financial satisfaction; lack of transportation access and inability to socialize due to grandchild care role, while controlling for marital status, age, educational level, and gender will negatively impact the emotional well-being of older African immigrants. To test this hypothesis, hierarchical multiple regression was used after checking for the assumptions and were accepted as satisfactory. The control variables were entered in Step 1, while the independent variables (language use and preferences, and ethnic social relation; living arrangements; financial satisfaction; lack of transportation access, grandchild care role, and social isolation) were entered as the Step 2 (see Table 9). The results in Step 1 show that four predictors accounted for .01% less variance (F (4, 144), 0.356, p=832). R^2 change for Step 1 was 0.010, while the R^2 change for Step 2 was 0.250 indicating a significant change in Step 2. The results in Step 2 show 25.0% of the variance can be accounted for by 11 predictors collectively (F (11, 135), 4.141, p=<.001) while controlling for the demographic variables. Hence, the findings in Step 2 shows a significant impact of ethnic social relations, financial satisfaction, language use and preference, living arrangements, grandchild care role, lack of transportation access and social isolation on emotional well-being.

Table 9

Hierarchical Regression for Predictors of Emotional Well-being N=149

	B	β	CI 95%	R^2	Adj.R^2	ΔR^2	F	ΔF
Variable								
Step 1				.010	-.018	.010	.356	.840
Age	-.028	-.037	[-.158, .102]					
Gender	-.469	-.054	[-2.046, 1.108]					
Marital status	.546	-.062	[-1.092, 2.184]					
Educational level	-.399	-.045	[-1.960, 1.163]					
Step 2				.250	.189	.240**	4.141**	6.252**
Age	.081	-.108	[-.203, .041]					
Gender	.066	.008	[-1.428, 1.560]					
Marital Status	.445	.050	[-1.097, 1.986]					
Educational level	-.437	-.050	[-2.119, 1.246]					
Language use and preference	.248	.054	[-.685, 1.181]					

Ethnic social relations	-1.187	-.187*	[-2.332, -.041]					
Financial satisfaction	1.145	.167*	[.091, 2.198]					
Living arrangements	-1.425	-.101	[-3.718, .868]					
Transportation	-.122	-.014	[-1.720, 1.476]					
Grandchild care	-1.228	-.144	[-2.597, .142]					
Social isolation	-.428	-.451**	[-.576, -.279]					
Step 3				.287	.224	.038**	4.563**	7.157**
Age	-.094	-.125	[-.214, .026]					
Gender	.219	.025	[-1.247, 685]					
Marital status	.226	.025	[-1.291, 1.743]					
Educational level	-.240	-.027	[-1.892, 1.413]					
Language use and Preference	.048	.010	[-.876, .973]					
Ethnic social relations	-1.138	-.179*	[-2.259, -.016]					
Financial satisfaction	.977	.143	[-.061, 2.016]					
Living arrangements	-1.310	-.092	[-3.555, .935]					

Transportation	.003	.000	[-1.563, 1.569]					
Grandchild care	-1.349	-.158*	[-2.691, -.006]					
Social isolation	-.380	-.401**	[-529, -.230]					
Resilience	.227	.216**	[.059, .394]					
Step 4				.324	.248	.037	4.248**	2.418**
Age	-.114	-.151	[-.235, .008]					
Gender	.527	.060	[-.962, 2.017]					
Marital status	-.003	.000	[-1.511, 1.506]					
Educational level	-.238	-.027	[-1.875, 1.399]					
Language use and preference	.102	.022	[.824, 1.029]					
Ethnic social relations	-1.144	.180*	[-2.249, -.040]					
Financial satisfaction	.958	.140	[-.081, 1.998]					
Living arrangements	-1.320	-.093	[-3.532, .892]					
Transportation	.235	.027	-1.325, 1.794]					
Grandchild care	-1.127	-.132	[-2.466, .211]					

Social isolation	-.378	-.399**	[-.527, -.228]
Resilience	.178	.170*	[.009, .347]
Financial satisfaction*Resilience	067	.044	[-.172, .306]
Ethnic social relation*Resilience	-.297	-.183*	[-.555, -.039]
Social isolation*Resilience	.013	.060	[-.022, .049]

Note. Two tailed tests, *p<.05, **p<.001
The control variables (age, gender, marital status, and educational level) were entered in Step 1. Financial status satisfaction, ethnic social relations, social isolation, and resilience were centered and included Step 3 as the main effect, while the interaction terms were included in Step 4
Married (0=Married, 1=Divorce/Widow/Separated/Single^{R})
Gender (0=Male, 1=Female^{R})
Education (0=Lower/No education, 1=Higher education^{R})
Living arrangement (0=Alone^{R}, 1=With family/friends)
Grandchild care role (0=Caring for grandchild^{R}, 1=Not caring for grandchild)
Transportation access (0=No transportation access^{R}, 1=Transportation access)

Further, looking at the unique individual contributions of the predictors, the results show that social isolation (β =-.428, p=<.001) and ethnic social relations (β =-.187, p=<042) were negatively associated with emotional well-being. However, financial satisfaction was positively associated with the emotional well-being of the participants (β =-.167, p=0.033). The findings show that older African immigrants who feel socially isolated have lower emotional well-being, indicating that lack of social interactions outside their ethnic social group is associated with lower levels of emotional well-being. Moreover, the result for the financial satisfaction indicates that as the participants feel satisfied with their financial status, they tend to experience better emotional well-being. Thus, social isolation has a unique contribution to emotional well-being of older immigrants, followed by financial satisfaction, and then identifying with ethnic social relations. The grandchild care role, lack of transportation access, and language use and preferences did not contribute to the emotional well-being of the older African immigrants (see Table 8).

Hierarchical multiple regression was also used to determine if resilience moderates the relationship between financial satisfaction, ethnic social relation, and social isolation on emotional well-being of the participants. Thus, it was hypothesized that resilience significantly moderates the relationship between financial satisfaction, ethnic social relations, social isolation, and emotional well-being of older African immigrants. Each independent variable, financial satisfaction, ethnic social relation, social isolation; and resilience (moderator) were centered and included in Step 3 to determine the main effects, then the interaction terms were conducted between resilience (moderator variable) and each of the following independent variables, financial

satisfaction, ethnic social relation, and social isolation (Table 9). The interaction terms were included in Step 4 to determine if resilience moderated the relationship of the independent variables with emotional well-being. As revealed in Table 9, Step 3, F(12, 134) 4.563, p=<.001) had more significant explanatory power (ΔR^2) compared with Step 2 (F(11, 135) 4.141, p=<.001). Moreover, Step 4, F (15, 131) 4.248, p=<.001) shows less significant explanatory power compared to the findings in Step 3.

Further, identifying with ethnic social relations (β =-.179, p=.047), and social isolation (β =-.401, p=<.001) were significant in a negative direction in Step 3. Interestingly, grandchild care role (β =-.158 p=.049) which was not centered because it was not a variable of interest in the moderation analysis, turned out to be significant in a negative direction in Step 3. Resilience, a moderator variable (β =. 216, p=.008) was found to be significant in a positive direction in Step 3 (see Table 9). The findings in Step 4 shows that resilience significantly moderated the relationship between ethnic social relations and emotional well-being (β =-.183, p=024), but in a negative direction, while resilience did not have a moderating effect on the relationship of financial satisfaction, and social isolation on emotional well-being of older African immigrants.

Phase II: Qualitative Findings

Phase II in the result section focuses on narratives from interviews conducted with participants on their experiences with social isolation in the US. Firstly, this section reports the demographic information of participants. The participant's age ranged between 63 -79 years with mean value (M) of 72.18 and standard deviation (SD) of 5.23. The participants for the qualitative study totaled 11 with 45.5% male and 54.5% female.

Majority of the participants have lived in the US between 1-5 years (63.1%) as represented in Table 10.

Table 10

Demographic Profile of Study Participants N=11

	Frequency (%)	Min	Max	Mean	SD
Age		63	79	72.18	5.23
Age arrived in the US		56	77	67.27	6.76
Years in the US					
1-5 years	7(63.6)				
6-10 years	3(27.3)				
>10 years	1(9.1)				
Gender					
Male	5(45.5)				
Female	6(54.5)				
Marital status					
Married living with spouse in US	3(27.3)				
Married spouse not in US- 4(36.4)	4(36.4)				
Widow	4(36.4)				
Educational level					
No education	3(27.3)				
Primary	1(9.1)				
Secondary	3(27.3)				

Tertiary	4(36.4)
Living arrangement	
Adult child	9(81.8)
Grandchildren	1(9.1)
With spouse	1(9.1)
Access to personal car	
No car access	10(90.9)
Car access	1 (9.1)
Country of origin	
Nigeria	7 (63.6)
Ghana	2(18.2)
Cameron	1(9.1)
Sierra Leone	1(9.1)

Secondly, the themes and sub-themes that emerged from the analysis of narrative data were also explained. In line with Creswell and Plano Clark (2011), the sub-themes were labeled from the "exact words of the participants" (p.208) to reflect the participants' voices. Pseudo names was used while presenting quotes from the participants for confidentiality reasons (see Table 11).

Table 11

Demographic Information Including Pseudo Names for the Participants

Pseudonym	Age	Gender	Year in US	Age arrived	Marital Status	Education
Eni	73	F	9	64	Widow	No Education
Victor	76	M	9	67	Married, Spouse not in the US	Secondary
Grace	79	F	3	76	Widow	No Education
Tito	63	F	5	58	Married, Spouse not in the US	Tertiary
Olu	79	M	2	77	Widow	Primary
Kalia	66	F	1	65	Widow	Secondary
Ire	73	M	5	68	Married, live with spouse in US	Secondary
Alex	69	M	13	56	Married, live with spouse	Tertiary
Rona	76	M	2	74	Married, live with spouse in US	Tertiary
Sisi	72	F	2	70	Married, live with spouse in US	Tertiary
Falia	68	F	3	65	Married, Spouse not in the US	No Education

While exploring participants' reasons for coming to the US, the majority of the participants were in the US for grandchild care, some for visitation, better life, and opportunities for their children. All the participants reported providing grandchild care irrespective of their reasons for coming to the US. The majority of the participants live with their children in the US. Only one participant lives with his spouse alone, and one with grandchildren. In response to a question on how participants connect with family and friends, the participants expressed connecting with their relatives and friends through social media, particularly, WhatsApp. One participant uses Facebook, and another

emails/text messages. All of the participants have a cell phone which they use to engage with their family and friends at home and abroad. A majority of the participants have no personal access to a car except for one participant. The participants' narratives around their experiences with social isolation and coping strategies were examined. The major themes from the participants' narratives include, (1) Minimal social engagement outside the family, (2) Barriers to social engagement outside the family, (3) Satisfaction with finances, "I feel more satisfied. I don't lack anything…", (4) Fewer Socialization consequences and (5) Coping strategies. Each of the main themes have subthemes that reflect participants' voices from their narratives.

Theme 1: Minimal Social Engagement Outside the Family

The study examined the participants' experience with lack of social interactions with others in the migrating community. The participants expressed a lack of social engagement outside their family unit. The relevant data describing their experiences in terms of relationship with others are captured under three subthemes: (1) "There is no place one can go in this place (US)", (2) "I feel like a stranger in the community…there is nobody I can socialize or interact with" and (3) "I don't have a friend to visit". Based on the narratives of the participants, their expectations concerning social interactions both within and outside the family were not met because most of the social interactions they experienced were limited to the family. A participant commented that "In America you don't have the socialization or community gathering, like in Africa, [where] you know all your neighbors, but here you don't know your neighbors, you barely see your neighbors outside" (Falia, age 68). Thus, not knowing others in the neighborhood limited the older immigrants' ability to socialize beyond their family in the US.

“There is no place one can go in this place (US)”

Having no place to go emerged in the narrative as a reason for minimal social engagement outside of the family. A majority of the participants mentioned they have no place to go in the US communities except to the store. For example, “There is no place one can go in this place (US), unless you go to store and come back to your house (Kalia, age 66). Social interactions for the majority of the participants were limited to people from their African community, though not as regular as desired. Ire (age 73) stated, “I don’t normally go out, I cannot say I relate with anybody except with the people that came from Africa, we do relate together.” Similarly, Tito, (age 63) expressed, “No regular interactions, its only when I go out, we greet each other and exchange greetings.” Hence, the social interactions experienced in the community is basically limited to exchange of pleasantries such as greetings. Since there is no place to go and the interaction outside of the home does not encourage deep interaction, participants often feel restricted to their home environment. Kalia (age 66) says, “If there is no place to go, one will be in the house and be going back and forth.” Additionally, “This country does not allow going here and there, I stay at home, I don’t go out, I don’t go to work” (Kalia, age 66). While expressing the challenges older immigrants experience with staying home for those who are active in their countries prior to coming to the US, Alex (age 69) stated, “Staying home is not a very interesting thing to experience, but it is challenging, especially for somebody who was used to moving around and associating with so many people.” Therefore, restriction to one’s home environment isolates older immigrants from engaging in social interaction in the community.

“I feel like a stranger in the community…there is nobody I can socialize with”

Participants reported they feel like a stranger to one another in the community because they don’t know the people around them to socialize with. For example, “I feel like a stranger in the community. There is nobody I can socialize or interact with. The language is a barrier” (Falia, age 68). Language barriers for this participant limited her ability to socialize with others. Alexi (age 69) stated, “We come to see that we are strangers to one another because…people mind their own business. When I see somebody in my neighborhood, I wave to them, the way they wave back we are like strangers to each other.” Thus, participants observed that both natives and immigrants are strangers one to another since there is no deep relationship. Grace (age 76) stated that, “I don’t know anybody, and nobody knows me.” Not knowing anybody shows that the participant is isolated from others. A participant expressed that:

> The neighbors…the people here don’t talk to people; each person goes on their own. If you greet some people, they may not even respond to your greetings. Since you don’t understand one another’s language, even if you do each person minds their own business (Olu, age 79).

Rona (age 76) stated that, “Since you don’t interact with them, they don’t interact with you…you feel you are a stranger because it is not so at home where people can easily interact with one another.”

“I don’t have a friend to visit”

Older adults who migrate in old age are likely to lose some friends in their original country, and coming to the migration country there may be challenges with forming a new set of friends, particularly for those who are not working or have limited opportunity to interact outside the home. Therefore, not having people [friends] to talk to can be described as a level of isolation for immigrants, especially when their adult

children are not at home and their grandchildren are at school. "[There are] No people to talk with where I am living" (Tito, age 63). Similarly, "I don't have a friend to visit and there is nobody I can call a friend that will come to visit me. Each person is on his own…no friend's house to go, I just accept the situation" (Olu, age 79). On the other hand, a participant who has a friend from her ethnic group expressed she engages with the friend on a weekly basis either on phone or in-person. Falia (age 68) shared:

> I was able to interact with the family and cousins on the phone … I interact with my family friend (African) on a weekly basis, twice or more in-person and on the phone. Also, I interact with my neighbor, African American lady once or twice a week by saying hello, and wave when I see her on her patio. Due to language barrier, I am not able to establish a deeper interaction with people outside my family.

From the participants' narratives it is evident that not having friends in the neighborhood can increase social isolation for older immigrants. Those who have friends appear to feel good with the little socialization they experience.

Theme 2: Barriers to Social Engagement Outside the Family

The barriers identified as contributing to minimal social engagement outside the family were discussed under three sub-themes: (1) Security concern, "We don't know their [the Americans way of] lives; we can't talk to anybody"; (2) Cultural Distance; and (3) Practical barriers, Transportation and Weather.

Security Concern: "We don't know their [the Americans way of] lives; we can't talk to anybody"

Security issues emerged as a factor that contribute to limited social interactions of older immigrants in the US. Some of the participants reported fear related to criminal acts such as shooting and people walking around with guns in their pocket. Thus, fear prevents them from interacting with people they do not know in their community. Rona

(age 76) shared, “We don’t know those outside, we don’t their lives, we can’t talk to anybody. People have guns in their pocket going around” In addition, Rona shared:

> I have learnt not to interfere with people I don’t know, sometimes there is fear, you hear gunshot here and there, it has kept us to be careful from mixing with people we don’t know…We don’t know what will happen in the next moment. The person whose needs have not been met, can easily get annoyed and do anything.

Fear about crime in the community led participants to avoid associating with people outside of the family. On the other hand, Falia (age 68) reported, “There is no safety concern for me in the neighborhood when I am at home by myself, because I am having communication with my daughter and her husband if anything happens.” Social support from adult children enables this participant to feel safe in the community.

Cultural Distance

Cultural distance in this study refers to language and cultural differences as associated with acculturation challenges for older immigrants. Two subthemes were identified: 1) Language barriers, "I don’t understand English”; and 2) Cultural differences, “We can’t relate freely.”

Language Barriers: "I don’t understand English”

Language barriers emerged as a contributing factor to minimal social engagement outside the family. Language barriers were described as the inability to understand or speak English and linguistic challenges such as semantics and word pronunciation for those who speak English. However, participants identified language barriers as being associated with lack of social interaction with people of other cultures in the American community. For example, a participant expressed. “Due to language barrier, I am not able to interact much with people outside my family” (Falia, age 68). Similarly, another

participant reported that, "I don't understand English. Communicating with people in English language is difficult for me. I understand what people say little by little. ... When I want to talk with people, my grandchildren interpret for me (Kalia, age 66). "I don't understand any other language, even when my children speak English, I don't understand it most times. They write the things in Yoruba [native language]. My little English is not more than "go and come" (Olu, age 79). A linguistic speed problem was also identified by some participants who speak English:

> I don't even know how to speak their language. When we are speaking, my grandson will speak American English, we speak our own African English. We are forced to say go and bring woora [water]…We don't even speak the type of English they speak. Their English is different from the way we speak our English in Africa. We don't speak American English. (Sisi, age 72)

Grace (age 76) stated that she only speaks her native language, and she would love to be able to read and write, but she did not have any education on how to read or write in English or her native language. The participant stated it is painful for her to not have any form of education. "I only speak my African language. I am not educated, which would have given me opportunity to learn another language. I don't know how to read… it is painful for me" (Grace, age 76). When asked if she would like to learn English language, the participant expressed, "Who will teach me! Is it those who [adult child] have gone to work or those who went to night shift? Are they the ones who will teach me how to read? They [adult child] don't have time" (Grace, age 76).

Cultural Differences: "We can't relate freely"

The participants frequently referenced their home countries during the interview. They mostly talk about the differences in the cultural values and expectations in the US

compared with their countries in Africa. Participants expressed how easy it is for them to move around in the neighborhood freely in their countries. Ire (age 73) stated:

> Going out is common when in Africa, you can go out when you want, even in the night sometimes, you can go out. The opportunity is there, we are natives we know ourselves but here now, we live amidst people we don't know before and we don't know where they come from, we only see ourselves when we come out of the house. So, to relate with people now is not easy. You know, this place is not as open as Africa, there are some things you do that they will say somebody has broken the law. And you cannot just come out and knock on other people's door… I wonder when I have no business to do with the person! You know in Africa, one can go to the other house and say hello and have something to tell them, it's not so here, people around us are the people of another nationality, we can't relate freely with them as we do with people from Africa.

Falia (age 68) acknowledged the differences in the American culture compared to her culture. In the light of this, she stated she was told about the cultural differences and expectations in the US, "The culture over here is different, they explain this to me when I came here, why people don't greet, they explain to me that American culture is different." Alexi (age 69) expressed that his neighbors are friendly, but there is a limit to social interactions with them, unlike in Africa where neighbors have closer relationships with one another.

> There are some neighbors I am very friendly with, but that I don't know their names. So, they are friendly, but the friendliness does not go beyond certain level like back home. Back home, your neighbor is closer to you than your brothers" (Alexi, age 69).

While reflecting on the collectivist culture in Africa, Sisi (age 72) stated that,

> You know in Africa we are all together, whether you know me, or you don't know me, when you see me, you greet me. But here everyone keeps to himself or herself. That is not …the life we live in Africa.

Practical Barriers: Transportation and Weather

Transportation: "I can't drive"

A means of transportation enhances free movement to places, but for older African immigrants who have no access to a car, many experience more difficulties with socialization outside of the family. Tito (age 63) stated that, "I don't know how to drive, so I rely on my daughter to go out." Similarly, Olu (age 79) stated that, "I don't know how to drive, if I have a car where will I take it to? …I don't have feeling that I don't have a car. I can't drive and even if I can I don't have a place to go, so lack of access to a car does not contribute to my problem." In contrast, Kalia (age 66) expressed:

> Lack of access to a car is the main problem I have…as an elderly person, I was told [by my children] I cannot work. I asked my children to let me look for a job an elderly person can do. They said no... that I should not work.

This participant feels limited due to a lack of access to a car and not being allowed by her children to work due to cultural expectations for elders in Africa. African cultural values and expectations concerning the care of older adults include providing financial, social, and health care support to older parents instead of allowing them to engage in circular career in old age. A majority of the participants expressed they must rely on family for a ride if they need to go out of the house and this can happen only when the adult child has the time. For example, Rona (age 76) shared:

> You have to depend on people, or else you'll be taking taxi or Uber, and that is expensive. People don't have the time to attend to you, so you feel isolated. Where you like to go to will depend on the availability of means of transportation. When they come back from work, you have to allow them to rest since they may feel tired, and you don't want to worry them.

A participant who is mobile expressed his experience with driving in busy places in the city. For example:

> With the environment, I am sometimes, I'm so scared when I go outside, like I drove to a friend's office downtown and I panicked because the place was just so busy, so many fast-moving vehicles. I have been home-bound most of the time, and when I leave home, it dawns on me that I am actually in America. I feel so scared of missing my way when I go out even with the GPS, but …I am adapting. (Alexi, age 69)

"Weather is cold… we cannot just move freely in the city"

The weather was mentioned as one of the barriers to socialization outside of the family, particularly when it is cold, but some of the participants stated they are adapting to the weather. A participant who lives with his wife in their adult child's house reported that:

> This type of weather is cold, and we cannot just move freely in the city, that is one of the things I experience. Well! It all depends on…because there is no option, we have to adapt to it…as we [participant and his spouse] stay in the house, because we are together. If I am alone, it would have been very boring. (Ire, age 73)

Additionally, Ire (age 73) stated:

> In my area…we don't go out, especially, the weather is one of the things that contribute to not going out for me…as the weather is getting better, when we come outside, you'll see people passing by, we can talk.

Another participant added that:

> What obtains with the weather; winter or all those things, I don't have an option than to cope with what is available, I stay indoors, I don't have much feeling, if I have a job or move outside, and feel the cold… in most cases I am almost indoor (Victor, age 76).

Tito (age 63) stated,

> I do adapt especially during summer, before I used to feel too bad of that time, but I have adjusted. They [adult child] get jacket for me, and I don't usually go out during snow, so it does not affect me.

Theme 3: Satisfaction with Finances: "I feel more satisfied. I don't lack anything…"

A majority of the participants expressed satisfaction with their life in the US. They feel happy with their financial life because they are getting support from their adult children. Although participants are not working, they feel content with the care they benefit from their children. Victor (age 76) shared:

> I feel more satisfied. I don't lack anything since ... before I am the one that use to fend to do one thing or the other, but here now. It is … on the tip of the finger, I get what I want. I don't need anything; I don't lack anything I am comfortable. I am very happy. I am contented, everything that I need they [adult child] provide it for me, I do not lack anything. Do I pay for house; do I pay for food? I don't have anything to buy or to do. I have food and cloth more than I can wear, what do I spend money on again? Even they still give me some money, I don't go to Walmart; I don't go to any place where I will say I want to buy something. Most of my needs, … all my needs are well catered for, I don't need any finance because there is no one I'm taking care of. The issue of money or finance don't arise at all.

Similarly, Grace (age 76) stated, "I am satisfied, I eat and drink. If I need to buy anything, they get it for me, they satisfy me with my needs". Olu (age, 79) stated, "I feel satisfied, I can't lie (sincerely). I feel satisfied."

Theme 4: Fewer Socialization Consequences

Five sub-themes were identified while exploring the participants' feelings in regard to limited or lack of social interactions outside of the family. The sub-themes are: 1) Loneliness, "We are still lonely"; 2) Feelings of being trapped; 3) Boredom, "Boredom has become part of life here, in this country"; 4) Physical health changes, "Sitting down for long has negatively impacted my health"; and 5) Feeling happy. The subthemes were classified into negative and positive feelings.

Negative Feelings

Loneliness: "We are still lonely"

Loneliness was one of the common experiences reported by a majority of the participants. For example, Grace (age 76) reported, "Feel being alone, have no one to talk to, walk back and forth, staying home alone not easy" . Rona (age 76) reported:

> Actually, we feel lonely, since many people don't know us, and we don't interact with them since we don't know them. Here you don't talk to one another outside except there is something to connect you so that you can talk to one another.

Eni (age 73) stated, "I feel isolated sometimes. In my country one can be alone at home, and people will still visit you." Therefore, lacking people to visit is seen as contributing to loneliness. In tandem, Sisi (age 72) expressed a wish to have people around to talk to, but when the participant could find no one around to talk to she reported engaging in religious activities and sleep:

> When I am alone at home, I feel I should have somebody to talk to or interact with but since they are not there, I either resort to sleeping or reading or praying so to a large extent, we are still lonely. well! I don't feel sad because I read the bible and get my encouragement from the word of God.

Victor (age 76) expressed getting used to staying at home has been an experience he has been going through for years, "I am used to staying home alone, I am used to that, I have been doing that for years now. It does not make me different at all." Loneliness experience was observed in Grace's (age 76) narratives when she expressed missing her home country, "I miss home sometimes, and I think that if I am at home, Nigeria, I will not be alone like this!" One of the participants who lives with his wife in their adult child's family stated:

> I cannot say I am lonely because in the house here, I relate with my children and my wife. My children go to work. I cannot say I am lonely because I am restricted

> from movement unlike the place I came from where I have the privilege to go out, interact and relate with other people" (Ire, age 73).

Thus, the loneliness experience of older immigrants who live with their spouse may be less compared with those who are not with their spouse in the US. However, another participant who lives with her spouse stated, "we are still lonely" (Sisi, age 72), indicating a level of loneliness due to minimal socialization outside of the family. Grace (age 76) concluded "Though, we are alone but there is a difference."

"Feelings of being trapped"

A few participants expressed they are in the US doing nothing, which makes them have a feeling of being trapped because they think that if they were in their countries, they have many things they could be doing. Olu (age 79) stated that:

> When I am at home, I think about my house in my country and think about visiting friends and walk around to take fresh air…it is like one is in a jail in this place. There is nobody to identify with except the people you live together under the same roof.

Alexi (age 69) also stated:

> Sometimes I feel bad, I say wow! I am sitting here doing nothing, I have so much I should have been doing if I were not sitting here. So, once in a while that feelings keys in, but I know…that feelings come in once in a while that I should have been doing something, what am I doing here? I should do this… I think about a thousand things I should have been doing and I am not able to do them…You feel like you are trapped. That feelings of being trapped comes up once in a while.

Based on the voices of the participants on their feelings about being trapped, it is evident that they have a sense of unfulfillment and lack of productivity due to doing nothing here in the US, which may be associated with low self-esteem, feelings of being under-utilized, and under achieving.

Boredom: "Boredom has become part of life here, in this country"

A majority of the participants described their experiences with boredom as a negative consequence of lack of or less social engagement in the community. Interestingly, Alexi (age 69) stated that:

> Boredom has become part of life here, in this country. It is no longer a new feeling, because I have been retired over 10 years and…boredom no matter how occupied I am, once in a while I feel very bored…here you are all on your own, everybody here is busy, you stay home alone you look around you and don't know what to do, so, to while away the time you take a broom and sweep the backyard. You do the dishes; you try to occupy yourself and let out the boredom…I read to keep away from the boredom…it [boredom] has become a way of life. so, …I have adapted to it, but to be frank with you, the boredom is there.

While Rona (age 76) stated, "Staying home alone, one feels bored." While talking about missing friends, a participant stated "I must be sincere…I feel sad sometimes. I told my children to plan on my going back to my country" (Olu, age 79). On the other hand, Falia (age 68) reported, "I don't feel bored because I always take care of the grandkids, so, that constantly keeps me moving, but somedays I feel bored."

Based on the narratives of the participants, it is evident that they are experiencing boredom. Although they engage in activities such as house chores, they still feel bored staying at home most of the time. The feeling of boredom may be associated with feeling sad and depressed when they find themselves deprived of socialization outside the family due to diverse factors such as limited language proficiency, lack of transportation, and cultural differences. Boredom, sadness, and loneliness are signs of negative emotional well-being experienced by the older African immigrants.

Physical Health Consequences

Physical health changes "Sitting down for long has negatively impacted my health"

Participants described their experiences with physical health challenges resulting from staying home. One of the participants stated that, "One of the things I can say concerning my health…you see when someone is going up and down…blood will circulate, and one will be free…I know that one [immobility] affects my health too" (Ire, age 73). Alexi (age 69) stated that he noticed changes with staying in one place for too long every day:

> I notice the changes in my health; sometimes, I feel my hands and legs are getting numb. Probably, I sit down for too long. So, health wise, the situation is affecting my health, I can't go to the hospital because I hear stories, that some people who go to the hospital have contracted COVID-19…. Emotionally, I think I am balanced. I don't have any emotional problem, it's just that sitting down for long has negatively impacted my health.

Grace (age 76) acknowledged gaining weight despite engaging in house chores:

> Despite engaging myself with house chores, I am getting fat. The house chores are helping me... somedays when I am alone in the house, I sleep and at other times, I can do dishes, [and] cook. It helps me in exercising my body, when I walk around my body feels better, than sitting down.

The lack of social interaction outside of the home such as engaging in outdoor activities is negatively impacting their physical health. The participants feel they do not get adequate exercise since they are restricted to the home environment most of the time.

Positive Feelings

"I feel very happy"

Despite the negative feelings such as loneliness and boredom experienced by several of participants, they still expressed feeling happy being in the US. For example, Eni (age, 73) shared, "I am happy all the time!" Similarly, Victor (age 76) stated:

> I don't feel sad. I don't have any course to feel sad, there is no occasion or any reason to feel sad I am always happy, that is my characteristic from the beginning, I don't allow troublous situation, I take it easy…I don't think I have any course to feel any pain or bad feeling or sadness, I don't think I have had one day [or] one minute that I am sad since I came America here, I feel very happy.

Another participant stated that:

> When I am alone doing nothing, I sing praises, I take my hymn book and sing and sing choruses, by so doing, the loneliness will be gone. I watch TV, I learn from the Christian messages I listens to. I feel happy…that is what I do to have strength. I find hope that the future will be bright and better (Olu, age 79).

Theme 5: Coping Strategies for Lack of Social Engagement in the Community

Based on the participants' narratives, a majority of the participants expressed feeling isolated from the American community due to their experience with minimal social engagement outside of the family. However, the participants described various things they do to cope with the lack of socialization. The participants' coping strategies were described under four subthemes: 1) Positive self-talk, 2) Technology/social media use, 3) Socializing with grandchildren, and 4) Coping through their religious faith.

Positive Self-talk: "I have to cope with it" [Staying home]

The majority of the participants engaged in positive self-talk to make themselves happy despite experiencing loneliness and social isolation. For example, Grace (age 76) shared, "When I am alone sometimes, I thank God…and pray that some people want to stay in the house like this but are not able…I appreciate God. I thank God that I am in the US for good." Ire (age 73) said, "…I cannot say I am sad. I can just say adaptation, I am adapting to it [staying home], and I am used to it." "It [being alone] is an experience, since I left Nigeria, I can't go back, I have to adapt" (Tito, age 63). Falia (age 68) stated:

> …back home, it [staying at home] is not common to be by oneself, because you have family members going in and out, but since it is the system here, I don't feel alright with it, but I have to cope with it, I am adapting to that.

Therefore, to deal with social isolation, the participants expressed they learned to adapt to the US community because they see it as a privilege to live in a society with much stability.

Technology/social media: "if I cannot interact physically outside, then, I go through the social media"/Watch TV"

Technology and social media emerged as a common coping strategy for the older African immigrants who participated in the interviews. The participants expressed engaging with social media to connect with their friends and family back home in their countries.

> When I am alone, I go to social media…that takes care of the loneliness that I would have…and that kills the time, and I don't feel lonely at home…if I cannot interact physically outside, then, I go through the social media...I text with friends on Facebook and Instagram, we try to and make some comments, read what is happening, those are the things I do to remove the burden and isolation ... feel like in the midst of people. (Victor, age 76)

Another participant stated that, "We can't physically come together, most of the time, we talk on phone, watch videos and more of TV to keep ourselves busy. It has made me meditate more on life and the word of God" (Rona, age 76). Considering the benefits of social interactions such as having a happy mood and enjoying social relationship with one's social network, a participant expressed a change of mood when engaging with friends and family through social media.

> I am retired, being at home all alone, what I do sometimes to cope with this stress or isolation is communicate with people back home in [Africa]… reading, exercising a little and talking to friends are all helpful. There is a change of mood…. the mood is more jovial because you talk to friends and it evokes old memories; I talk to old friends who have retired like me, we joke about our experiences at school or at our former place of work. (Alexi, age 69)

While appreciating the usefulness of social media technology, Alexi (age 69) stated that:

> The adjustment we have done with the availability of WhatsApp to me is a wonderful adjustment in that I can call my brother back home in my country, so, the adjustment [is] I learn to communicate with other means not in-person back home.

Social media has helped participants decrease their loneliness and social isolation by giving them an opportunity to connect with their social convoy such as friends and family in their countries.

The participants also mentioned engaging with technology such as watching TV as a coping strategy for loneliness. For example, Rona (age 76) stated:

> Staying home alone one feels bored. So, the only thing you can do is to engage yourself in either reading or watching TV or trying to engage yourself in one thing or the other [and] listen to messages that keeps you a little bit engaged.

A few participants reported they watch TV to while away the time as well as prevent intrusive thoughts that can negatively impact one's emotional well-being. For example, Tito (age 63) stated that:

> When I am looking at the television, I while away the time so that I will not think anything which is not good in my mind. Sometimes, things will be funny on the TV, I will laugh and joke…I have to make myself happy by looking at old pictures, reading stories in the bible and calling old friends to chat.

Another participant also stated that she watches TV, even though she does not understand how to operate the TV nor understand English language.

> I listen to radio and watch TV in my African language (Yoruba). That is the language I understand. I watch TV in English, just to see what is going on. I don't know how to operate the TV. Sometimes, I enjoy watching movies in English, though I don't understand English (Grace, age 76).

Additionally, Eni (age 73) stated that, "I look at pictures of what is happening on TV, because I don't understand what they are saying in English, I look at the different pictures."

Socializing with Grandchildren

Socializing with grandchildren was discussed in terms of the activities the participants provide for their grandchildren and the benefits derived from social interactions with the grandchildren.

Activities for Grandchildren: "They [grandchildren] are my immediate constituency." One of the primary reasons for the participants' migration to the US was to provide grandchild care. Hence, a majority of the participants indicated that they provide care to their grandchildren by engaging in activities such as cooking, laundry, helping with schoolwork, among others, which keep them busy in the house. It was evident in the narratives that caring for grandchildren gives the older African immigrants a sense of purpose as they support their children. With a sense of pride and responsibility, Victor (age 76) reported:

> They [grandchildren] are my immediate constituency; they are the one I deal with from time to time, even when they are not around, I take care of their food, clothing, everything…like on Sundays, I get ready what they will wear, their shoes everything...They are the one that keep me busy. I am more or less in charge of them.

Acknowledging the cultural and religious obligations of grandparents, a participant expressed:

> It [grandchild care] is the duty God has created us to do in this world. They used to say one's child is a reward. I am happy the children are doing well in my lifetime. I am happy to come here to care for them (Kalia, age 66).

Furthermore, the participants reported cooking, doing laundry, babysitting, supervising the grandchildren, and playing the role of a guardian for the grandchildren.

"With the help of the grandchildren, we are okay." The participants described the services they provide for the grandchildren as beneficial to them in that it helps them cope with loneliness and social isolation. For example, Falia (age 68) stated:

> The only thing I am happy about is that I am having my children and the grandchildren that helps with the social interactions. The children and the grandchildren…at least somebody to talk to, besides that there is no community interaction with the neighbors because I don't speak English.

Similarly, Sisi (age 72) reported:

> If not for children we are staying with, Baba [spouse] and I will be lonely. The children will go out leaving you only in the house what will you do? You sleep and get tired, you read the bible and get tired, you do everything. With the help of the grandchildren, we are okay.

Some participants emphasized that their grandchildren keep them busy. Alexi (age 69) shared, "I am alone, …Like I said, the little girl keeps me on my toes." Also, "If not, we have grandchildren, the small ones that are entertaining us, if not for the children. we might be lonely" (Rona, age 76). Also, Ire (age 73) stated:

> I cannot say I am sad. The children are here, they are not giving me problems, sometimes…if I feel sad, the children may do something that may look funny and they want me to talk with them, in whatever kind of mood I am, the thing just vanishes away like that.

Caring for grandchildren was described as a helpful task because it enhances socialization, keeps the grandparents active, encourages self-actualization in fulfilling one's 'God-given role' as expressed by participants, and helps them feel needed as a care giver in providing support for their adult child. Alexi (age 69) reported that, "It [grandchild care] is most helpful when I babysit, I can't sit on a spot, I am jumping with the baby, it keeps me more active and alert." Caring for grandchildren unfolds reciprocity in the sense that the grandparents experience reduced loneliness and social isolation while engaging with the grandchildren. Additionally, they have the opportunity to learn how to

speak English from the grandchildren as the grandchildren are also enjoying care from their grandparents. For example, Eni (age 73) expressed, “The challenge is that I don’t speak English. I am learning from my children; my grandchildren are teaching me how to speak English." Another participant shared, “My grandchildren…interpret for me when people want to speak with me" (Kalia, age 66). The role of caring for grandchildren is unique for the participants as it is a way that the majority of the participants cope with limited socialization outside of the family.

Coping through religious faith: “Interactions have been mostly within the church [religious organization]”

All the participants reported having a strong connection with religious organizations as well as practicing their religion as a way of coping with loneliness and isolation from the American community. For example, Alexi (age 69) stated:

> For me, interactions have been mostly within the church...I manage to connect with the church community so the depression and all…emotional setback I should have been feeling if I have not been connected to prayer line and the church community…does not happen. [It is] because of the strength of the word of God, otherwise, if one is not very careful, depression and other mental troubles will not be far away…from staying at home for so long.

As described in the narratives of the participants on coping through their religious faith, most social interactions for older African immigrants take place in religious gatherings, either face-to-face pre-COVID-19 pandemic or virtually during the COVID-19 pandemic. Kalia (age 66) stated, “I interact with people in the church and with family friends.” Religious organizations were described by one of the participants as a big family that welcomes diversity. According to Alexi (age 69):

> The church is like a big family, with people from Nigeria, Ghana, Cameron, Sierra Leone, Togo, Benin, and so on. When there is a birthday, we bring cake to the church and celebrate the birthday together. Then a brother’s wife will cook

> food, and everyone will be served a portion. So, the interaction with the church family is so cordial; it's like being back home in Africa; you eat your pounded yam and jollof rice.

Olu (age 79) commented on the limited social interactions at church due to the COVID-19 pandemic restrictions, particularly, for older adults:

> When there is no COVID-19, I go to church, we speak the same language with people in the church, we greet one another, talk about our country and we feel happy…you feel happy because you talk to one another, but since COVID-19, there is no opportunity to do that.

This participant was unable to attend church services, which has been a place of socialization for him. The participants expressed they find encouragement through their religious practices. Kalia (age 66) shared, "I encourage myself through prayer. If I want to be thinking…I start singing." "When I get bored, I pray and sleep by the time I wake up, I feel relieved…so, when I feel bored…I get my bible and read until I fall asleep" (Olu, age 79). Another participant reported that, "…we read God's word, rely much on the word of God. It keeps us going. Encouragement comes, when we read the word of God, we ask for grace and more courage, it keeps us going" (Rona, age 76). Exploring the role of religious beliefs on reducing negative emotional well-being, Alexi (age 69) shared, "Emotionally as a believer, I trust in God, and I pray…concerning my emotional life, I don't have much to complain about because we believe God has the power to do everything; we pray a lot." In addition to practicing religious obligations, a participant who is unable to read and write in English or her native language feels unhappy for not being able to read the bible or sing from hymns. She stated:

> I would be glad if I am able to read the Bible and sing from hymn book…Like when I am alone in the house, I will be able to read the bible and find some words that will make me happy, [then] I would have been able to read and feel happy when one is thinking about different things. (Grace, age 76)

Eni (age 73) expressed, “I serve my God, I pray, and I call upon God and he answers. I do my oblation, my rosary and pray, and God abides with me.” Identifying with churches or mosque as well as practicing their religious faith was found to help the participants with social connection outside the home and to be a source of happiness and encouragement. However, the COVID-19 pandemic limited elders’ social interactions during the outbreak of the disease, during which some participants reported even more social isolation.

Phase III: Mixed Methods Results

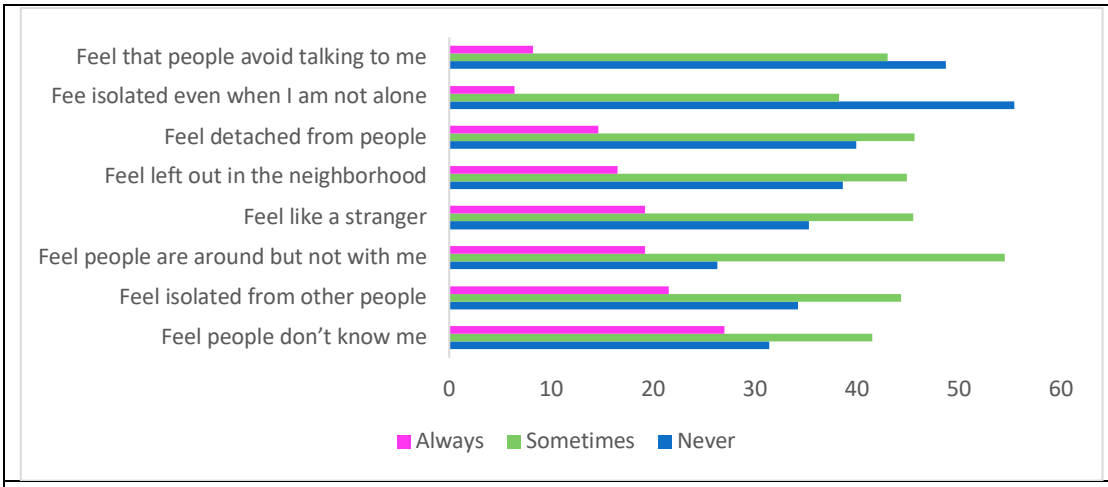
The findings for the mixed methods are presented as a joint display of qualitative and quantitative data.

Table 12 shows that the quantitative and the qualitative findings confirm each other. Both datasets indicate that the participants describe the lack of social interactions in the American communities as feeling unknown, having no one to visit, feeling like a stranger, and feeling people are around them but not with them.

Table 12

Joint Display Related to What Describes Older African Immigrants’ Lack of Social Interaction in the American communities?

Quantitative Findings: **Figure 4** *Indicators of Social Isolation*



Quantitative Findings:
Figure 4 shows a consistent pattern in the frequency of what older African immigrants define as lack of social interaction in the American community. The majority of the participants reported lacking social interaction in the American community, mostly due feeling unknown, feeling isolated from others, feeling that people are around, but not with them, and feeling like a stranger in their neighborhood.

Qualitative findings:
Findings from the qualitative data revealed that the participants experienced a minimal social engagement outside of the family, which they described as not having a place to go in the US, feeling like a stranger, not having a friend to visit, and not feeling known in the community. A participant shared, "In America you don't have the socialization or community gathering, like in Africa, [where] you know all your neighbors, but here you don't know your neighbors, you barely see your neighbors outside" (Falia, age 68). Grace (age 76) expressed that, "I don't know anybody, and nobody knows me." Additionally, Rona (age 76) stated that, "Since you don't interact with them, they don't interact with you…you feel you are a stranger because it is not so at home where people can easily interact with one another."

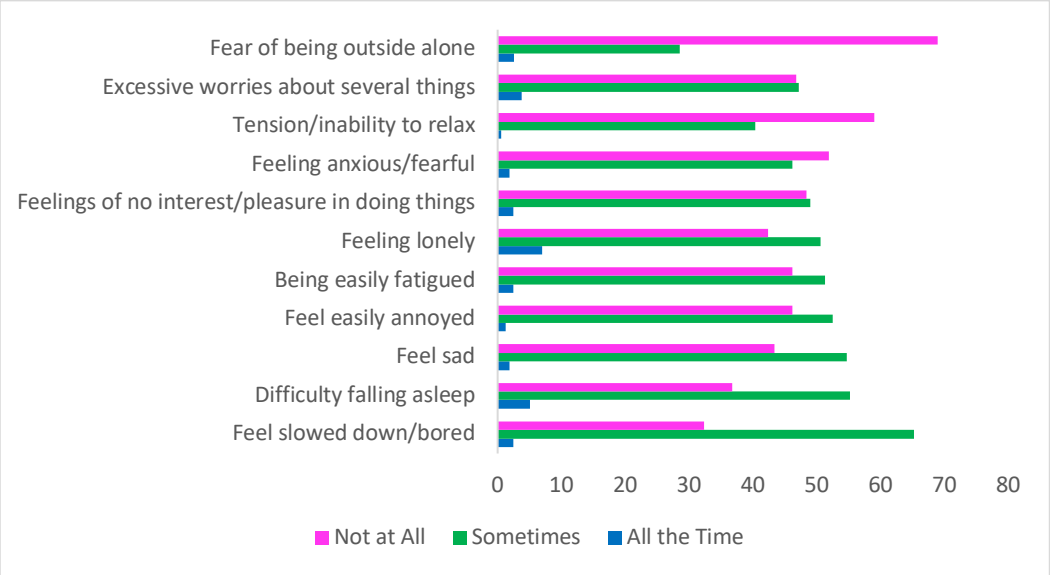
Mixed methods inference: Confirmatory
The qualitative and the quantitative findings regarding what described social isolation experiences of the participants confirmed each other, both indicated participants feeling unknown, no social interactions in the American community, and feeling like a stranger in the US community. Further evidence of experiences around social isolation was provided by the quantitative and qualitative findings.

Table 13 shows that the quantitative and qualitative findings on the emotions commonly experienced by participants confirmed each other. The quantitative findings indicated that most participants sometimes experience boredom, loneliness, and sometimes sadness due to staying home most of the time. In the qualitative findings,

participants expressed they feel lonely due to staying home most of the time, boredom which they describe as being part of life in the US and feeling sad and trapped when they feel they are in the US doing nothing.

Table 13

Joint Display of the Emotional Problems Commonly Experienced by Older African Immigrants in the US

Quantitative Findings: **Figure 5** *Emotional Well-being Items* 
Quantitative Findings: Figure 5 shows the frequency of the emotional problems commonly experienced by the participants. Findings show that most of the participants identified the presence of negative emotions sometimes. Although few participants are at high risk of negative emotional well-being. For those at high risk of negative emotional problems, feeling lonely, boredom, difficulty falling asleep, and feeling sad were identified as common among them.
Qualitative Findings: The presence of negative emotions was reported by the participants to include feeling lonely, feeling bored, and feeling bad sometimes. A participant explained, “Feel being alone, have no one to talk to, walk back and forth, staying home alone not easy” Grace (age 76). Similarly, Rona (age 76) shared, “Actually, we feel lonely, since many people

don't know us, and we don't interact with them since we don't know them." Sisi (age 72) added that, "We are still lonely". As regards feeling sad, Alexi (age 69) shared that, **"**Sometimes I feel bad, I say wow! I am sitting here doing nothing, I have so much I should have been doing if I were not sitting here…You feel like you are trapped." Likewise, Olu (age 79) expressed, "I must be sincere…I feel sad sometimes." Rona (age 76) shared, "Staying home alone, one feels bored."
Mixed methods inference: Confirmation The qualitative and quantitative findings confirm each other as both indicate the presence of emotional problems experienced by the participants due to minimal social engagement outside of the home.

Findings in Table 14 show that for the quantitative data, all variables predict social isolation, but only ethnic social relation and living arrangements had a unique contribution to social isolation. However, the qualitative findings expand our knowledge by explaining that language barriers, cultural differences, lack of transportation access, and living within the family system contributed to social isolation. Financial satisfaction and grandchild care role was supported by the qualitative findings to help combat social isolation instead.

Table 14

Joint Display of Factors that Contribute to Social Isolation of Older African Immigrants

Quantitative Findings Findings show that the association of language use and preference, and ethnic social relation, living arrangements, financial satisfaction, transportation access, and grandchild care role on social isolation was significant (F (6, 143), 2.792, p=0.013). The results show that 1.05% of the variance in social isolation can be accounted for by six predictors collectively. However, among all the predictors, ethnic social relation (β =-0.273, t=2.906, p=.004), and living arrangements such as those living alone compared to those living with family and others (β =-0.196, t=-2.386, p=0.018) has unique individual contribution on social isolation experience by the older African immigrants. While financial satisfaction, grandchild care role, language use, and preferences were not statistically significant.
Qualitative Findings:

The participants reported: Language barriers, "I don't understand English"; Transportation, "I can't drive"; Cultural differences, "We can't relate freely"; Security concerns; and Weather as the barriers to social engagement in the American communities. A participant shared, "Due to language barrier, I am not able to interact much with people outside my family" (Falia, age 68). Despite being able to speak English, a participants expressed, "I don't even know how to speak their language. When we are speaking, my grandson will speak American English, we speak our own African English.…We don't even speak the type of English they speak…(Sisi, age 72). Grace (age 76) who has no formal education shared, "I only speak my African language. I am not educated, which would have given me opportunity to learn another language. I don't know how to read…it is painful for me" As regards cultural differences, Sisi (age 72) stated that, "You know in Africa we are all together, whether you know me, or you don't know me, when you see me, you greet me. But here everyone keeps to himself or herself. That it is not …the life we live in Africa." Concerning transportation challenge, Tito (age 63) stated that, "I don't know how to drive, so I rely on my daughter to go out." Similarly, Olu (age 79) stated that, "I don't know how to drive, if I have a car where will I take it to? …I don't have feeling that I don't have a car…so lack of access to a car does not contribute to my problem." While lack of access to a car was considered as a barrier to social engagement as expressed by Kalia (age 66), "Lack of access to a car is the main problem I have…"
Mixed methods inference: Expansion The findings from the qualitative data expanded our knowledge on why ethnic social relation was found to have a unique contribution to social isolation. likewise, living arrangements such as living alone compared to living with family/others. Language barriers, lack of transportation access, and cultural differences were found to limit the participants socialization outside home. Thus, all participants explained that their social interactions were limited to people of their ethnic groups with whom they interact in the church or mosques. Also, childcare role does not contribute to social isolation for these participants, rather it gives them a sense of pride and helps them decrease social isolation as they consistently socialize with the grandchildren.

Table 15 reveals that the qualitative and the quantitative findings expand one another regarding the impact of social isolation, language use and preference, ethnic social relation, living arrangements, transportation access, and grandchild care role. Findings show that all of the variables predict social emotional well-being of the participants, but social isolation, ethnic social relations and financial satisfaction have unique contributions to the emotional well-being of the participants. The qualitative

findings expanded our understanding on how living arrangements such as living within a family system, not having transportation access, having friends limited to one's ethnic groups, and language barriers impact the emotional well-being of older African immigrants.

Table 15

Joint Display Related to the Effect of Social Isolation and Other Risk Factors, Language Barriers, Transportation, Living Arrangement, Financial Satisfaction, and Grandchild Care on Emotional Well-being of Older African Immigrants

Quantitative findings: While controlling for the demographic variables, the result for the association of language use and preference, ethnic social relation, living arrangements, financial challenges, grandchild care role, lack of transportation access, and social isolation with emotional well-being shows that 24.0% of the variance can be accounted for by 11 predictors collectively (F (11, 135), 4.074, p=<.001). The result shows that social isolation, ethnic social relation, and financial satisfaction have unique contributions to the emotional well-being of the participants. Hence, social isolation (β =-.451, p=<.001) and ethnic social relation (β =-.187, p=<042) were negatively associated with emotional well-being. Financial satisfaction (β =-.167, p=0.033) was positively associated with the emotional well-being of the participants. Living arrangement, grandchild care role, language use and preferences, and lack of transportation were not statistically significant.
Qualitative findings Participants reported limited social interactions outside of the home as having impact on their emotional well-being. The participants mostly reported staying home, not having places to go, feeling like a stranger, feeling bored, lonely, and sometimes sad. Thus, the majority of the participants described language barriers as contributing to their emotional well-being. Transportation was also associated with lack of socialization outside the family which further contribute to staying home for them. Grandchild care was described by participants as helping them with positive emotions as they reported feeling happy interacting with their grandchildren. Alex, (age 69). Shared, "Staying home is not a very interesting thing to experience, but it is challenging, especially for somebody who was used to moving around and associating with so many people." "I don't have a friend to visit and there is nobody I can call a friend that will come to visit me. Each person is on his own…no friend's house to go, I just accept the situation" (Olu, age 79). Regarding financial satisfaction, Victor (age

76) shared, “I feel more satisfied. I don’t lack anything since...before I am the one that use to fend to do one thing or the other, but here now. It is…on the tip of the finger, I get what I want. I don’t need anything; I don’t lack anything I am comfortable. I am very happy. I am contented, everything that I need they [adult children] provide it for me, I do not lack anything.”
Mixed methods inference: Confirmation/Expansion The qualitative and quantitative findings both identified social isolation, and lack of friends outside ethnic group as contributing to the emotional well-being of the participants. Due to social isolation such as having no place to go, not having friends in the community, language barriers, and not having personal transportation access causes participants to experience boredom, loneliness, feel trapped and sad sometimes. Hence, the qualitative and quantitative findings confirm each other as well as expand our knowledge on the factors that impacts the emotional well-being of older African immigrants.

Table 16 shows the qualitative and quantitative findings regarding resilience as a moderator for the relationship between social isolation, financial satisfaction, and ethnic social relations. The quantitative findings show that all the variables predicted emotional well-being, but resilience only moderated the relationship among ethnic social relation and emotional well-being in a negative direction. Thus, the qualitative findings expanded on the quantitative findings by explaining different coping strategies the participants used to manage social isolation and reduce its impact on their emotional well-being. Lacking social interactions with people in the American community increased their feelings of boredom and loneliness, however, interacting with friends from their ethnic group and family members who speak their native languages may help reduce negative emotional well-being. Thus, the coping strategies identified in the qualitative findings included developing a positive outlook on life, coping through religious faith, engaging with social media/technology, socializing with friends, among others, all of which increased their ability to adapt to the US communities despite experiencing social isolation and loneliness.

Table 16

Joint Display Related to Coping/Resilience Strategies for Managing Social Isolation and Enhancing Positive Emotional Well-being of Older African Immigrants

Quantitative findings: Resilience as a significant moderator of the relationship between risk factors of financial satisfaction, ethnic social relation, and social isolation on emotional well-being of older African immigrants was examined using hierarchical regression. The findings (see Table 8) show that resilience significantly moderate the relationship between ethnic social relation and emotional well-being (β =-.183, p=024), but in a negative direction. While resilience does not moderate the relationship among financial satisfaction, social isolation, and emotional well-being of the participants.
Qualitative findings: The qualitative findings show that participants used a variety of activities to manage their social isolation experience to increase their emotional well-being. The identified coping/resilience strategies included positive self-talk, coping through religious faith, social media/technology use, socializing with grandchildren, and domestic duties. A participant shared, "When I am alone sometimes, I thank God…and pray that some people want to stay in the house like this but are not able…I appreciate God. I thank God that I am in the US for good." Grace (age 76). Rona (age 76) stated, "Staying home alone one feels bored. So, the only thing you can do is to engage yourself in either reading or watching TV or trying to engage yourself in one thing or the other [and] listen to messages that keeps you a little bit engaged." Falia (age 68) stated, "The only thing I am happy about is that I am having my children and the grandchildren that helps with the social interactions. The children and the grandchildren…at least somebody to talk to, besides that there is no community interaction with the neighbors because I don't speak English." As regards religious coping on enhancing participants emotional well-being, Alexi (age 69) shared, "Emotionally as a believer, I trust in God, and I pray…concerning my emotional life, I don't have much to complain about because we believe God has the power to do everything; we pray a lot." Falia (age 68) shared, "I was able to interact with the family and cousins on the phone … I interact with my family friend (African) on a weekly basis, twice or more in-person and on the phone. Also, I interact with my neighbor, African American lady once or twice a week by saying hello, and wave when I see her on her patio. Due to language barrier, I am not able to establish a deeper interaction with people outside my family."
Mixed methods inference: Expansion The quantitative findings show that resilience does not moderate the relationship between social isolation and financial satisfaction with emotional well-being but does moderate the relationship between ethnic social relation and emotional well-being. The qualitative findings expand our knowledge on the different activities' participants engage with to manage social isolation to help them with their emotional well-being, especially interacting with people of their ethnic groups from the church and mosques.

Therefore, lacking friends in the American community may impact their emotional well-being, but engaging with family members and friends from ethnic groups help participant decrease the impact of negative emotions on their well-being.

Chapter 5 Discussion

Summary of Findings

Social isolation is considered a public health concern among older adults, especially among older immigrants (Centers for Disease and Control Prevention, CDC, 2021). Based on its negative impact on mental health, scholars agreed that social isolation is a risk for older adults' well-being, with older adults having the highest social isolation compared to other age groups of immigrants (Chile et al., 2014). Focusing on this premise, this study was primarily aimed at exploring the association of social isolation and other risk factors (living arrangements, language use and preferences, ethnic social relations, lack of transportation, financial satisfaction, and grandchild care role) on emotional well-being of older African immigrants. Further, the study examined how resilience acts as a moderator among social isolation, ethnic social relations and financial satisfaction, and emotional well-being. Since social isolation is prevalent among older adults, and older immigrants in the American community, it follows that social isolation and the other risk factors would negatively impact the emotional well-being of African older immigrants. While focusing on this issue, a convergent mixed methods approach was used to understand the experience and effects of social isolation and other risk factors on emotional well-being of this immigrant group, to better understand how to address social isolation and ongoing other risk factors. In sum, the study examined the extent of the relationship between other risk factors, social isolation, and the emotional well-being of older African immigrants.

Social Isolation and Other Risk Factors

The first hypothesis aimed to understand which of the risk factors, namely language use and preference, ethnic social relations (acculturation predictors), financial satisfaction, transportation access, living arrangements and grandchild care role, influence social isolation of older African immigrants. Findings show that the identified risk factors significantly influence social isolation of older African immigrants. However, ethnic social relations and living arrangements were found to have unique contributions to social isolation of older African immigrants. Thus, having a singular attachment to one's own cultural group creates acculturation challenges with the American community by limiting the participants' social interaction outside of their ethnic groups and family system. This was in line with the findings that communalism and allegiance to one's own ethnic group limits African immigrants' socialization with the American community (Babatunde-Sowole et al., 2016). In line with Rhee (2019), strong adherence to ethnic culture as psychological coping strategy for tolerating emotional distress may lead to more vulnerability to institutional and structural marginalization and higher depression symptoms. In the presence of institutional and structural barriers in host society, some immigrant older adults may be withdrawn into their ethnic culture which in turn leaves them more socially isolated. More interactions with people of one's own ethnic group tends to distance older immigrants from the American community, thereby increasing social isolation. The qualitative findings expand our knowledge on the depth of social isolation experienced by older immigrants. Some of the factors identified by participants as contributing to social isolation include cultural differences, language barriers, not having places to go, and lacking friends in the community. As a result, the majority of the

participants interact only within their family system and with members of their religious groups which are mainly from their ethnic heritage. However, the quantitative findings showed that language barriers did not have unique contribution to social isolation for the older African immigrants in this study. In contrast, the qualitative findings in this study, and the majority of the studies on older immigrants, reported language barriers as a major challenge for late life immigrants (Li et. al., 2018; Rhee, 2019). The majority of the participants in the quantitative study had formal education and are comfortable with speaking their native and English language, which indicate biculturalism, while the majority of the participants in the qualitative study had little or no formal education or had challenges with linguistic speed.

The findings on the influence of living arrangements in this study was supported by previous studies which conclude that living alone is a predictor of social isolation (Ng & Northcott, 2015; Russell, 2009). For example, in Russell's (2009) study, older adults living alone reported higher levels of loneliness than those living with their spouse and perceived lower social support from family members than those living with a spouse or others. Other studies reported that living alone is not the only living arrangement associated with loneliness and social isolation (Greenfield & Russell, 2011; Ng & Northcott, 2015), although living with others protects against loneliness to some extent (Ng & Northcott 2015). Hence, one can feel lonely despite living with other people and having a large social network, because something fundamental such as absence of a partner or close relationship and less contact with preferred person, among others, may be missing in their social contacts (Dykstra, 2009). Scholars also explained that older adults who live with family members tend to be objectively isolated from friends due to

advancement in age and mobility problem (Chatter et al., 2018; Jang et al., 2016). The qualitative findings show that although the participants live either with a spouse or without spouse, they still experience social isolation and loneliness. This finding echoes the report that older adults may experience loneliness because of waking time spent alone at home or the quality of family relationship with whom they live, either with or without their spouse (Ng & Northcott, 2015). Further, scholars agreed that the quality of the relationship older immigrants may be experiencing could be attributed to adult children's absence at home when they go to work, older grandchildren go to school, and the grandchildren may have little in common with the traditional grandparents (Ng & Northcott, 2015; Treas & Mazumdar, 2002; Victor &Yang, 2012). Additionally, lacking meaningful social relationship with non-related age peers who they can chat with when family members are busy, not at home, or when they feel uncomfortable in sharing feelings with their family (Cela & Fokkema, 2017) further described a deficit in their social relationships.

Previous studies reported that lack of transportation access in late life can decrease an older person's ability to socialize outside the home (Maleku et al., 2021; Treas & Mazumdar, 2002). However, transportation was found to not have significant influence on social isolation of the participants in the quantitative study. The reason for this finding may be because most of the participants in the quantitative study were working outside of the home and had access to transportation. Hence, the qualitative finding help us to understand that the participants who have no access to transportation feel socially isolated. However, in line with previous studies, a few of the participants expressed transportation access as not a problem because they get rides from family

members, are unfamiliar with navigating the environment, and have concerns around getting a driver's license (Maleku et al., 2021; Treas & Mazumdar, 2002). Maleku et al. (2021) added that older immigrant's reliance on their adult children caused them to be housebound, thereby increasing social isolation and inhibiting their access to needed services. Obviously, the qualitative findings showed that transportation is a problem despite getting a ride from adult children. Darboe and Ahmed (2007) also found transportation to be one of the needs of older African immigrants in Minnesota. Lacking transportation implies that the more people are cut off from others, the more they become socially disconnected in their community (Oh et al., 2002). Understanding that Africans do not want to be cut off when they are older, no matter how busy, they still find it difficult to be in the older age gap here in the US due to language barriers and feeling unaccepted (Salma & Salami, 2020). Salma and Salami (2020) concluded that older immigrants experience isolation from immediate family, counterparts in their home country, less time with busy adult children due to work schedule, and the larger society due to racism, discrimination, and language barriers. The qualitative findings also show that concerns about personal safety in environments with a history of crime makes older Africans feel restricted in their socialization outside of the home. This finding was supported by scholars who found that the environment where one lives determine one's feelings of safety. For example, living in a high crime environment may lead to social isolation due to feeling unsafe (Booth et al., 2012; Klinenberg, 2016; Portacolone et al., 2016).

Financial resources are pivotal to meeting health, social, and other needs for survival. Scholars agreed that limited financial resources constituted a risk for objective

isolation (Cudjoe et al., 2018; Diaz et al., 2019; Jang et al., 2016). However, the findings from the quantitative and qualitative study show that the participants are satisfied with their financial status. Based on the qualitative findings, most of the participants live with their adult children's family who serve as their guardian and their source of social and financial support. This finding was supported by previous studies on older immigrants relying on their family members for resources, although such behavior limits older ethnic adults from socializing outside of the home (Chatters et al., 2018; Diaz et al., 2019; Jang et al., 2016; Taylor et al., 2018; Treas & Muzumdar, 2002). Ogbu and Simons (1998) explained that older immigrants felt satisfied with their life and finances if they see their dreams fulfilled through their children because it gives them a sense of fulfilment and makes them feel happy. Moreover, immigrants compared their financial status with their counterparts in their country of origin, thus they perceived they were better off than their peers in their country. Hence, they felt satisfied with their financial resources.

The findings generated positive reports in regard to grandchild care. It was assumed that providing childcare would limit the participants from socializing outside of the home because of the need to engage with their grandchild when their parents were at work. Both qualitative and quantitative findings do not support this assumption. Instead, the participants described the grandchild care role as a cultural expectation, which gives them a sense of cultural fulfilment as well as helps to reduce loneliness. The majority of the participants in the qualitative study stated that if not for the children, they would have been lonely. This finding brings to light intergenerational relationship of grandparent-grandchildren as a way for alleviating loneliness. While the grandchild care role helps them with socialization in the family, participants still lacked social engagement with

peers outside of the home. In contrast to our findings, Koehn et al. (2014) found that older Punjab immigrants, upon migrating to Canada, reported loss of social status in the community because they felt obliged to provide care for their grandchildren. The authors added that the Punjab women were unable to join peer groups and health promotion programs unless they were provided with childcare facilities.

In sum, the findings from both quantitative and qualitative inquiries support one another on social isolation as a challenge facing older African immigrants. The participants in the qualitative study expressed a lack of social engagement outside the home due to not knowing places to go and feeling like a stranger in their community because they have no friends with whom to interact in their neighborhood.

Social Isolation, Other Risk Factors and Emotional Well-being

The second hypothesis, "while controlling for age, gender, education, and marital status, social isolation and other risk factors are negatively associated with emotional well-being among older African immigrants," was supported in the current study. The association of social isolation and other risk factors showed a statistically significant association with emotional well-being. Social isolation had the largest influence on emotional well-being of the participants, followed by ethnic social relations, and then financial satisfaction. A negative association of social isolation with emotional well-being implied that those who feel socially isolated had lower emotional well-being. Also, a lack of social interactions outside of their ethnic groups was associated with lower levels of emotional well-being. Further, financial satisfaction was positively associated with emotional well-being of the participants, indicating that as they feel satisfied with their financial status their emotional well-being improved. The qualitative findings

revealed that engaging with people from one's cultural heritage prevents acculturation to American culture. The study revealed that participants social circle is mainly people from their ethnic groups and, interestingly, they have limited interaction with the people from their ethnic groups.

The qualitative findings indicate that the participants feel lonely, bored, and trapped despite living with adult children and taking care of grandchildren. In tandem, scholars opined that loneliness in old age was due to staying home most days, maintaining the same sitting position, not having enough exercises, and not going outside the home fostered social isolation (de Jong Gierveld & Haven, 2004; Victor & Bond, 2009). Findings show that despite experiencing negative emotional well-being, the participants reported feeling happy. Their happiness may stem from various factors such as having their desires of coming to America fulfilled, seeing their adult children progressing, and having satisfaction with life and their finances. Theoretically, immigrants came to the US for financial opportunities. When older immigrants see their children living comfortably, they feel happier and more satisfied with life in general (Ogbu & Simons, 1998). Lack of financial resources may affect emotional well-being because the hope is that money brings fulfilment, hence, if not realized, it generates distress and affects one's well-being. Satisfaction with one's financial status implies happiness and better emotional well-being, but if they are not happy, they may feel they are a failure and then may experience depression and feel isolated. But when their children are doing well, capitalizing on opportunities in the host country, they feel happy as they compare their children's achievement with their counterparts in their respective countries. Hence, they identity through transatlantic comparison. Success for older

African immigrants is measured when their children are doing better off than their peer's children back home.

Social Isolation, Emotional Well-being, and Resilience

The study was conducted to test if resilience moderates the relationship among social isolation, financial satisfaction and ethnic social relations, and emotional well-being of older African immigrants. Thus, it was hypothesized that resilience significantly moderates the relationship between social isolation, ethnic social relations and financial satisfaction, and emotional well-being. The model testing the moderating effect of resilience on emotional well-being was statistically significant. However, in contrast to our assumption that resilience moderates the relationship between social isolation, financial satisfaction, and emotional well-being was not supported. The findings show that resilience moderated the relationship between ethnic social relations and emotional well-being, indicating that when people develop stronger resilient ability, their relationship with people outside their culture weakens their emotional well-being.

Findings from the qualitative results show positive self-talk, grandchild care, and practicing religious faith foster resilience among older African immigrants. Consistent with this finding, scholars reported that personal resilience, a positive outlook on life, and being optimistic about their dreams in life help to overcome migration adversities for African immigrants (Rashid & Gregory, 2014; Udah et al.,2019). Similarly, Girgis (2020) agreed that care of grandchildren fostered resilience for older adults.

The majority of the participants expressed having some interactions within their religious settings, whether churches or mosques. They reported seeing one another as a family in the religious institutions, but due to COVID-19 pandemic, which placed

restrictions on religious attendance, they were limited in their ability to enjoy maximum social interactions with other religious members. However, despite social distancing at home and limited socialization outside of the home, participants reported practicing their religious faith and networking with religious group programs virtually through online and social media. In line with this finding, scholars agreed that religious networking decreased social isolation and loneliness (Mbanaso & Crewe, 2011; Medvene et al., 2016; Sanchez et al., 2019). Parallel to previous findings, the qualitative findings emphasized the importance of cultural values and religion/spiritual beliefs as strong sources of resilience (Babatunde-Sowole et al., 2016; Girgis, 2020; Treas & Muzumdar, 2002). On the other hand, despite religious networking, scholars reported that older immigrants still felt isolated from the dominant culture (Jang et al., 2016; Mbanaso & Crewe, 2011). Further, the qualitative findings expand our knowledge on various strategies older African immigrants use to cope with loneliness and social isolation, which are engaging with grandchildren care, technology use to connect with friends back home, particularly through social media, watching television and engaging in domestic duties such as cooking, cleaning, and laundry. Previous studies affirmed that engaging with technology and social media decreased loneliness and social isolation of older adults (Cotton et al., 2014; Cotten et al., 2013; Khosravi et al., 2016; Nilsen et al., 2018).

In the quantitative findings, resilience was insignificant as a moderator for the interaction among social isolation and emotional well-being. The result for this finding may depend on the goal of the participants as relates to the purpose of coming to the US. If coming to the US was a desire for the success of adult children (Ogbu & Simons, 1998), and /or to provide grandchild care, then, once they achieved those goals, they feel

accomplished. Then, striving to connect with people in the community may not be of much concern for them in their stage of life. In relation to the stage of integrity versus despair in the psychosocial development stage (Erickson, 1950, 1963), an older African immigrant who was able to achieve the goal of coming to the US and seeing their children succeed would feel more self-actualized and have high self-esteem. However, whatever the goal of the older immigrants in coming to the US, social connection with people late in life matters as it encourages improved emotional well-being. Secondly, the COVID-19 pandemic may be a factor because resilience at this stage may not be effective since everyone across the globe was social distancing at the time of data collection. Thirdly, the resilience scale used in the study was developed for western culture, thus the participants in the study may be unfamiliar with the construct.

Strengths and Limitations

This research is the first known to use mixed methods in exploring the experiences and effects of social isolation and other risk factors in the emotional well-being of older African immigrants. Similarly, the study unfolds the coping strategies older African immigrants can engage in to adjust to life outside their indigenous countries despite the challenges of acculturation. Like every other study, this also has some limitations. The measures used for the quantitative study were originally developed for western culture, which may have different interpretation for the participants compared to the westerners, particularly on the constructs of social isolation and resilience. Social isolation for Africans may be not getting a call from people such as friends back home, not invited to celebrations to enjoy themselves, or not having places to go when desired. Similarly, resilience as a construct and the items on the resilience scale may not be well

understood by the participants. In the qualitative study, the majority of the participants responded to the questions on resilience based on their religious faith. The findings in this study revealed that resilience scale should include construct on religious beliefs. Additionally, researchers should step back and consider a more inclusive idea about what resilience means for immigrants.

The study was limited to older adults who are age 65 and over. The study would have given us a better perspective on differences among the variables tested if participants were to include people of other age groups (18+ years), which would have allowed comparison between the experiences of older and younger African immigrants on social isolation and emotional well-being. Another limitation was that the interview guide did not have a question on negative coping skills, which would have helped us to understand the negative coping skills the participants use to manage social isolation. Information about negative coping skills would have helped us in identifying appropriate intervention for the negative coping skills. Future research should focus on negative coping skills for older African immigrants. The survey did not explore the participants' knowledge about programs for older adults in the community. This information would have helped understand how the grandchild care role would prevent them from attending senior programs. Generally, scholars concluded that COVID-19 pandemic contributed to social isolation for many people across the globe (Hwang et al., 2020; Sepúlveda-Loyola et al., 2020; Williams et al., 2020) The COVID-19 pandemic led to the lockdown of many parastatals including religious centers and parks as well as influenced the policy on restrictions of older adults in public places and social distancing in the family and outside the home. Data on the COVID-19 pandemic was collected, but the findings were not

analyzed and reported in this paper. Since the qualitative and quantitative data were collected during the COVID-19 pandemic, it was challenging to understand the extent to which the pandemic influenced experiences of social isolation for the participants.

Implications for Social Work Practice

The results of this study have several implications for social work practice with older immigrants, particularly those who arrive in the US in late life. This study may help social workers and other practitioners to understand the multi-dimensional risk factors for social isolation for older African immigrants. Social workers can be better informed about connecting older immigrants with American natives to encourage social identity, social belongingness, social engagement, and social inclusion. The implications are categorized into the following: individual, relational, and societal. At the individual level, efforts are needed to identify older immigrants who are vulnerable to social isolation and negative emotional well-being. Using assessment tools such as Lubben Social Network Scale (LSNS) (Lubben 1988) and the PROMIS Social Isolation scale (Cella, 2010) during hospital visits may help to identify those who are at risk of social isolation and help determine if interventions are needed for the older person (Girgis, 2018; Taylor, 2016). Scholars emphasized that interventions for loneliness need to be tailored based on an individual or specific group and the degree of the loneliness and social isolation experienced because standardized interventions may not yield the best outcomes due to individual challenges (Fakoya et al., 2020; Saito et al., 2012).

The relational implications emphasize the importance of social connection with non-family members, particularly people in the American community, as the findings reveal a lack of social engagement with people outside of the family. Social connections

with older immigrants in one-on-one interaction and on a group basis, such as meeting with age peers at senior centers, would help decrease social isolation for this group. Previous studies emphasized group-based interventions compared to one-on-one intervention as more helpful in combatting social isolation (Cattan et. al., 2005). However, older immigrants in this study would benefit from both individual and group-based interventions for social isolation. The one-on-one intervention can involve social workers providing home visits with older immigrants as well as encouraging staff of senior centers and religious members to visit the older immigrants. Social workers can set up home visits, telephone calls, and/or online interactions with the older immigrants as this will promote socializing with people outside of the family. Social workers can encourage staff from Area Agencies on Aging to provide information about available services during home visits or visits to religious centers where an older immigrant can be most accessible.

Moreover, older immigrants can be connected to their age peers in the American community through community gatherings, religious gatherings, and participation in programs at senior -serving centers in the community. At the community level, social engagement can be encouraged by senior agencies as they extend their services to older adults from diverse cultural backgrounds, with multicultural social activities. In tandem, Li et al. (2017) opined that community-level interventions by senior-serving agencies for older immigrants should provide affordable language courses, social activities that bring in older immigrants and their co-ethnic peers and neighbors from other ethnic groups, facilitate participation in local affairs, and increase information promotion and knowledge about available resources to help reduce social isolation and loneliness. Li and

colleagues added that societal-level intervention should ensure the social welfare system is culturally sensitive to the needs of the older immigrants to increase their accessibility. The immigrant serving agencies can also provide brochures for senior-serving organization and also provide transportation. Programs at the aging centers should incorporate multiracial activities so that they can interact with people from diverse cultures to increase the social inclusion of the immigrant group as well as the opportunity to make friends among their age peers. This will also create opportunities for older immigrants to gather with others outside of their families who speak their language at senior centers. In a social support group, older immigrants can be introduced to their age peers, either other immigrants or non-immigrants, so that they can develop relationships with age peers. The study found that older immigrants often come to the US for grandchild care. Thus, caring for the grandchild was a positive source of resilience for them. However, providing child daycare facilities at senior centers for older adults who are taking care of grandchildren would enable older adults to attend such programs and socialize with peers. Specifically, Ukiru (2002) noted that older Africans required unique social work intervention modalities, which may include community activities, multicultural practice, promotion of independence, social interactions, education awareness, age-friendly community awareness, and grandchild care facilities at adult day centers. Older immigrants from diverse cultural groups can be encouraged to have hands-on activities relating to their cultural heritage as this will promote cultural acceptance and social integration.

As social workers consider promoting social integration of older immigrants in the community, we need to focus on language barriers as an issue identified in this study

and previous studies with older immigrants as a major predictor of social isolation and depression for this group (Li et al., 2017). Understanding that the majority of senior centers in the US offer programs in the English language may further isolate older immigrants who do not speak English from attending senior programs. Hence, social workers need to advocate for bilingual or multilingual staff at senior centers to help with the interpretation of the activities at the centers. Further, English language classes can be offered online or face-to-face at free or reduced cost for older immigrants. Similarly, they can be supported through organized intergenerational learning, particularly for English language either with their grandchildren or younger people in the neighborhood or religious groups.

Findings show that transportation is a barrier to social engagement outside of the home, although not having access to a car, difficulty navigating the environment, and challenges with obtaining driving skills further increase social isolation because the older person would have to depend on busy adult children for transportation. Hence, transportation is necessary for any program aiming to integrate older African immigrants into its activities. Social workers can encourage older immigrant communities to partner with centers for aging to help with transportation needs at free or low cost. In a situation where an older immigrant needs to take a driving test, they can be provided with education on driving skills for those who can read English, assistance with navigating their environment, and training on how to use technology devices such as smart phones to schedule a ride with local transportation, such as Uber, taxi, etc.

Religion plays a vital role in the life of older African immigrants; hence the religious and ethnic association leaders need to partner in programs organized for the

older immigrants for the intervention to be effective. Awareness about volunteering opportunities through religious and ethnic leaders is another possibility for decreasing social isolation. Furthermore, social workers should understand that older African immigrants who are vulnerable to social isolation might benefit from a support group that discusses some of the issues relating to cultural differences and helps to develop interventions targeted at providing participants purpose-building alternatives and socialization to prevent boredom and loneliness.

As social workers strive to support older immigrants, it is necessary to understand that immigrants have diverse values, beliefs, cultures, customs, and traditions, thus the need to apply the principle of cultural competence. Social workers can "demonstrate competence in the provision of services that are sensitive to clients' cultures and to differences among people and cultural groups" (NASW, 2008, p. 9). Therefore, understanding the cultural characteristics of the older African immigrant group can equip social workers with skills in cultural competence, cultural awareness, and cultural sensitivity as well as promote social diversity. The observation from the recruitment process in this study shows that respect for the relationship between the older person and their adult child is a valued cultural norm and expectation among this group. Therefore, the principle of dignity and worth of the person needs to be displayed while providing social work services to this group. Similarly, applying the principle of human relationships, establishing rapport, and building trust in social workers' relationships with older immigrants can promote social engagement as well as increase our ability to influence their decision on social participation in programs for older people in the

community. Social workers in academia can advocate for research funding to support studies that advance evidence-based intervention for social isolation of older immigrants.

Implications for Policy

As the older immigrant population continues to increase, their mental and physical health may continue to decline if their experience of social isolation is not addressed. Hence, policies that promote diversity in aging programs should focus on multiracial activities, hiring of bilingual and multilingual staff, and partnering with older immigrant community leaders to encourage social inclusion of older immigrants in community and senior programs. As the World Health Organization (2007) reports the importance of age-friendly communities, policies on aging can consider having older immigrant representatives on community and local government committees to promote social inclusion of older immigrants in programs at the community level (Neville et al., 2018). Secondly, public support for social welfare resources is highly essential for decreasing the social isolation of older immigrants. Creating awareness about social isolation challenges and the declining health of this group through social media can influence policymakers' decisions on providing funds for multicultural centers for seniors in our communities.

This study found that participants were satisfied with their financial status as the majority depend on their adult children for financial support. As they continue to age in the US, the aging parents are vulnerable to health decline, lack of insurance, such as Medicare, and have no income in some cases. Kang et al. (2021) added that older adults who migrated late in life were disadvantaged from benefiting from resources, such as Medicare, because they may not be able to enter the workforce or educational system at

the age of migration. Scholars found that age at immigration was associated with lower income, Medicare, and receipt of Social Security benefits, and higher participation in Supplemental Security Income (SSI) and Medicaid. Hence, late immigration increases older immigrants' vulnerability to poor economic status and low quality of life (Guo et al., 2019; O'Neil & Tienda, 2014). Understanding that lack of income, health insurance, and weak social relations may lead to social isolation should be taken into account in policies that address the healthcare of older immigrants. Barusch (2012) stated that the Older American Act (OAA) of 1965 should support older adults including ethnically diverse elders with access services (transportation), supportive services (healthcare, insurance), and nutrition services (congregate meals) to meet the needs of older people who lack employment opportunities, insurance, have little or no income, and who experience healthcare disparity and stigmatization. OAA supports the senior companionship programs, but may not have a multicultural component, hence OAA should consider including multicultural components to its program for seniors. Programs for seniors can consider peer-to-peer companion programs such as matching American older adults with older African immigrants. Therefore, the OAA policy should consider strategies for reaching out to the voiceless older immigrants requiring those services.

Implications for Future Research

In line with Rhee (2019), future research needs to identify creative interventions to prevent the social isolation of older immigrants who are at risk, acculturative stress, and negative emotional well-being such as loneliness, boredom, and depressive symptoms. The research tools used in this study were developed primarily for western culture; hence, researchers should work towards developing culturally sensitive

assessment tools specific to African immigrants. Examining social isolation from a convergent mixed methods approach provided more understanding of this population and the importance of backing up quantitative data with narrative data. For instance, the quantitative study showed that language use and preferences were not contributing to the social isolation of the participants, meanwhile the qualitative findings showed that the language barrier was a major factor that limits the participants' socialization with others in the American community. Therefore, social work research should emphasize qualitative methods in research with immigrant groups. Future research with this population can apply ethnographic and community-based participatory research to explore their social identity needs in the American community and awareness about senior programs, and their interest in participating in the programs. Additionally, future study using quasi experimental designs would help understand the effects of multiracial activities in our senior centers on decreasing social isolation. Further, evidence-based research can be conducted to identify best practices for alleviating social isolation of older immigrants.

Recommendations and Conclusions

Social isolation had been documented as a significant problem in aging research. This study examined social isolation and other risk factors as it influences older African immigrants' emotional well-being and how resilience moderated the relationships among the variables examined. Using a convergent mixed methods approach, the findings revealed that older African immigrants experienced limited or lack of socialization with people outside of their homes. However, their emotional well-being was still impacted as they experience social isolation. This implies a need for interventions for decreasing

social isolation experienced among this group, and other older immigrant groups in the US.

Addressing social isolation and other risk factors will enhance the healthy emotional well-being of older immigrants. Therefore, active advocacy efforts by social workers in the local, public, and private sectors are crucial. In line with the findings in this study, recommendations for addressing social isolation among older immigrants include providing community rooms, social services (Portacolone et al., 2016) and connecting them with peers through social activities to promote a sense of belonging (Diaz et al., 2019). Further, encouraging technology use transnationally and nationally to connect with friends and family, promoting awareness of services available in the neighborhood to social participation (Taylor et al., 2018), and join social interest groups (Morgan et al., 2020) will help decrease social isolation. Additionally, providing online or offline English language education, free or no cost transportation to attend senior programs, grandchild daycare facility at senior centers, organized home visits by social workers, aging agencies staff, and religious members, and encouraging doorstep friendship in the neighborhood are ways of encouraging social engagement of older immigrants.

Appendices

Appendix A- Details of Measures

Variable Type	Variable Name	Variable Measure	Response Choice per Item	Number of Items used
Outcome variables	Emotional Well-being	Emotional Well-being Scale (Aluoja et a., 1999)	Five-Likert	11
	Social isolation	PROMISE social Isolation –Short Form 8a	Five-Likert Scale	8
Other Risk factors	Acculturation	A Short Acculturation Scale for Filipino Americans **(**ASASFA) dela Cruz & Galang 2008	Five-Likert Scale	12
	Grandchild care	Are you providing childcare role in your family in the United Stated? (Yoo & Russell, 2020)	Yes/No	1
	Living arrangements	Who do you live with in the United States?	Four options	1
	Lack of Transportation	Do you have access to personal car?	Yes/No	1
	Financial satisfaction	How satisfied are you with your financial status?	Yes/No	1
Moderator variable	Resilience	Connor-Davidson Resilience Scale 10-Item: CD-RISC-10	Five-Likert Scale	10
Covariates	Age Gender Marital status Educational levels			1 question each for 4 variable = 4 questions in all

Total				53 Questions

Appendix B- Sources of Measures and Changes Made by Research

Variable name	Sources of items	Changes
Acculturation	A Short Acculturation Scale for Filipino Americans (ASASFA) dela Cruz & Galang 2008	The name of the scale was changed to reflect African immigrants. The scale is now named "A Short Acculturation Scale for African Immigrants" (ASASAI). Also, Filipino and Filipino language in the original scale was changed to African and African languages in the response format
Emotional/mental well-being	Emotional Well-being Scale (Aluoja et a., 1999)	11-items were selected out of 28 items from the original scale. Changed seldom to rarely Bored was added to this item "Feeling slowed down"
Resilience	Connor-Davidson Resilience Scale 10-Item: CD-RISC-10 Campbell-Sills & Stein, 2007	Same
Social Isolation	PROMISE social Isolation –Short Form 8a (Cella, et al., 2010)	The researcher made some changes to items 1-3, and 6-8. Neighborhood was added at the end of each original items to reflect exclusion from the society
Transportation access	Lee & GlenMaye (2014)	The original question was changed to "Do you have access to a personal car?
Financial satisfaction	Developed	
Grandchild care	Yoo & Russell, 2020	Same
Demographic Variable • Age • Gender • Living	Developed from literature	

arrangements • Education levels	

Appendix C- Survey

The Effects of Social Isolation and Other Risk Factors on Emotional Well-being of Older African Immigrants

Indiana University School of Social Work

Study Title: Effects of Social Isolation and Multiple Risk Factors on Emotional Well-being of Older African Immigrants

Invitation

You are invited to participate in an online study lasting approximately 15 minutes. People who are 60 years old or over and immigrated from Africa are expected to participate in this survey. Your participation is voluntary. If you are uncomfortable answering a question, you can skip it. If you choose to complete the survey, your information will be kept confidential. Name or any form of identification is not required. There are no wrong or right answers. At the end of the survey, you will receive a $10 Walmart e-gift card (optional), for your time.

The study has been approved by the Indiana University IRB and is being conducted by:
Margaret Adamek, Ph.D. madamek@iupui.edu
Dolapo Adeniji doladeni@iu.edu

1.Are you 60 years or over?

- ○ Yes
- ○ No

2. Were you born in the United States?

- ○ Yes
- ○ No

3. What African country are you from?

_____

4. What was your age range when you came to the United States?

- ○ Less than 50 years
- ○ 50-55 years
- ○ More than 55 years

5. How many years have you been in the United States?

- ○ Less than 1 year
- ○ 1-3 years
- ○ 4-6 years
- ○ More than 6 years

6. Social isolation: After reading the statement, please, indicate how often each of the statements below is descriptive of you.

	Never	Sometimes	Always
I feel left out in my neighborhood	○	○	○
I feel that people don't know me in my neighborhood	○	○	○
I feel isolated from other people in my neighborhood	○	○	○
I feel that people are around me but not with me	○	○	○
I feel isolated even when I am not alone	○	○	○
I feel that people avoid talking to me in the neighborhood	○	○	○
I feel detached from other people in the neighborhood	○	○	○
I feel like a stranger to those around me in the neighborhood	○	○	○

7. Coping: After reading each statement below, choose the answer.

	Not True at All	Sometimes True	True Nearly All the Time
I am able to adapt when changes occur	○	○	○
I can deal with whatever comes my way	○	○	○
I try to see the humorous side of things when I am faced with problems	○	○	○
Having to cope with stress can make me stronger	○	○	○
I tend to bounce back after illness, injury or other hardships	○	○	○
I believe I can achieve my goals, even if there are obstacles	○	○	○
Under pressure, I stay focused and think clearly	○	○	○
I am not easily discouraged by failure	○	○	○
I think of myself as a strong person when dealing with life challenges and difficulties	○	○	○
I am able to handle unpleasant or painful feelings like sadness, fear, and anger	○	○	○

8a. What language(s) do you speak every day?

	Only African Languages	More African Languages than English	Both Equally [Africa and English]	More English than African Languages	Only English
Language(s) read and spoken	○	○	○	○	○
Language(s) spoken as a child	○	○	○	○	○
Language(s) spoken at home	○	○	○	○	○
Language(s) used in thinking	○	○	○	○	○
Language(s) spoken with friends	○	○	○	○	○
Language(s) of TV programs usually watched	○	○	○	○	○
In what language(s) are the radio programs you usually listen to	○	○	○	○	○
Language(s) of preferred movies, TV, and radio programs	○	○	○	○	○

8b. Ethnicity

	All Africans	More Africans than Americans	About Half and Half	More Americans than Africans	All Americans
Ethnicity of close friends	○	○	○	○	○
Ethnicity of social gatherings	○	○	○	○	○
Ethnicity of visitors or person visited	○	○	○	○	○
Ethnicity of children's friends	○	○	○	○	○

9. How frequent do you feel most of the time?

	Not at All	Sometimes	All the Time
Feeling sad	○	○	○
Feeling easily annoyed	○	○	○
Feelings of no interest or pleasure in doing things	○	○	○
Feeling slowed down/bored	○	○	○
Difficulty falling asleep	○	○	○
Feeling lonely	○	○	○
Feeling anxious or fearful	○	○	○
Being easily fatigued	○	○	○
Tension or inability to relax	○	○	○
Excessive worries about several different things	○	○	○
Fear of being outside home alone	○	○	○

10. Health: Choose which applies to you.

	Poor	Fair	Good	Excellent
How will you describe your physical health?	○	○	○	○
How would you describe your mental health?	○	○	○	○

11. How many days from 0-7 in a typical week do you interact or visit?

	0	1 Day	2 Days	3 Days	4 Days	5 Days	6 Days	7 Days
Family	○	○	○	○	○	○	○	○
Friends	○	○	○	○	○	○	○	○
Religious members	○	○	○	○	○	○	○	○
Health care workers	○	○	○	○	○	○	○	○
Social workers	○	○	○	○	○	○	○	○
Neighbors	○	○	○	○	○	○	○	○
Co-workers	○	○	○	○	○	○	○	○
Other	○	○	○	○	○	○	○	○

12. What year were you born?

_____

13. What is your current age range?

- ○ 60-64 years
- ○ 65-69 years
- ○ 70-74 years
- ○ 75-79 years
- ○ 80 years or over

14. What is your gender (sex)?

- ○ Male
- ○ Female

15. What is your marital status?

- ○ Single
- ○ Married
- ○ Widow/Widower
- ○ Separated
- ○ Divorced
- ○ Never Married

16. What is your highest level of education?

- ○ No Education
- ○ Primary School
- ○ Secondary School
- ○ Tertiary School

17. Who do you live with in the United States?

- [ ] Alone
- [ ] With spouse
- [ ] With adult child/Children
- [ ] With friends
- [ ] Other _____

18. Do you work full-time or part-time?

- ○ Yes
- ○ N0

19. How satisfied are you with your financial status?

- ○ Not Satisfied
- ○ Satisfied
- ○ Very Satisfied

20. Do you have access to a car for your personal use?

- ○ No
- ○ Yes

21. What is your primary means of transportation for getting around?

- [ ] My car
- [ ] Family's car
- [ ] Public transportation
- [ ] Other _____

22. Why did you come to the US? Choose all that apply.

- [ ] Better life
- [ ] Visitation
- [ ] Childcare Assistance
- [ ] Refugee
- [ ] Other _____

23. Do you provide childcare for your family here?

- ○ Yes
- ○ No

24. How many children do you care for?

- ○ 1-2
- ○ 3-4
- ○ More than 4

25. Age of child(ren). Choose all that apply.

- [ ] 0-1 year
- [ ] 2-5 years
- [ ] 6-10 years
- [ ] More than 10 years

26. What do you do every day for the children**?** Choose all that apply.

- [ ] Babysit
- [ ] Prepare meals
- [ ] Laundry
- [ ] Homework
- [ ] Other _____

27. How do you communicate with friends and family? Choose all that apply.

- [ ] WhatsApp
- [ ] Facebook
- [ ] Phone calls
- [ ] Emails/Text messages
- [ ] Letter
- [ ] In-person
- [ ] Other _____

28. What type of health insurance do you have? Choose which option(s) apply.

- [ ] Medicaid
- [ ] Medicare
- [ ] Private type
- [ ] No insurance

29. Do you feel more isolated during the COVID-19 Pandemic?

- ○ Yes
- ○ No

30. What are your biggest challenges since moving to the United States?

_____

31. What do you like best in the United States?

_____

32. What do you miss in your home country?

_____

33. What do you think about aging or getting older in the US?

_____

34. I was assisted in completing this survey

- ○ Yes
- ○ No

This is the end of the survey. To obtain your Walmart e-gift card (optional), please, enter your email address in the space provided below.

_____

THANK YOU for your time in completing the survey! If you're interested in participating in an interview, send email to doladeni@iu.edu

Feel free to forward this survey to others you know who may be interested in participating.

Appendix D- Interview Survey

Effects of Social Isolation and Multiple Risk Factors on Emotional Well-being of Older African Immigrants

Interview guide

Screening Questions

1. Are you 60 years or over? Yes/No
   If yes, please, what is your age? _____
2. Were you born in the United States? Yes/No
3. Are you from Africa? Yes/No
4. What country in Africa are you from? _____
5. What was your age when you came here? _____
6. How many years have you been here? _____

Demographic Characteristics

1. What is your gender?
   Male
   Female
2. What is your marital status?
   Married
   Single
   Widow/widower
   Separated
   Divorced
3. What is your highest level of education?
   No education
   Primary school
   Secondary school
   Tertiary school

4. Who do you live with in the United States?
   Alone
   With spouse
   With adult children
   With friends
   Other_____

5. Do you work full-time or part-time? Yes/No

Other Information

1. Do you have access to a car for personal use? Yes/No

2. Why did you come to the United States?
   Better life
   Refugee
   Childcare assistance
   Visitation

Other_____

3. How do you communicate with friends and family?
   WhatsApp
   Facebook
   Emails/Text messages
   Phone calls
   Letter
   In-person
   Other_____

Appendix E- Interview Guide 1

Older African Immigrants Experiences of Social Isolation

Interview guide/Questions

1. Please describe in detail what you understand by social isolation (lack of interaction with others in the community)?
2. How have you experienced social isolation in the US?
    a. Please describe in detail some of your experiences.
    b. Explain some of the challenges you experienced?
3. Explain how social isolation has changed your outlook on life or mental/emotional well-being?
4. Identify and explain the things you do well to cope with social isolation
    a. Describe the skills you used to cope with social isolation.
    b. Explain how you think your coping strategies are helpful?
5. Please explain how you adapt to change of culture or environment?
    a. Describe your experience or an example of your adaptation?
6. Describe how you engage in regular social interactions with others outside your family.
    a. Please describe one or two of these interactions.
7. What new roles have you taken in the family, since arriving in the US?
    a. Please describe in detail the roles you take in your family.
    b. To what extent has the role been rewarding or stressful?
8. How has COVID-19 changed your life?
    a. Describe how the pandemic has contributed to your social isolation.
9. Immigration experiences
    a. What were your biggest challenges since moving to the United States?
    b. What do you like best in the US?
    c. What do you miss in your home country?
    d. What have you lost because you live in the US?

e. Please describe how satisfied you feel with your life now that you live in the US?

10. Do you think aging or getting older in the US is good or bad? Please describe in detail.

Appendix F- Interview Guide/Questions 2

Social isolation	Resilience	Emotional Well-being	Acculturation	Grandchild Care	Access to car	COVID-19
Please, explain the extent to which you feel people do not know you in your neighborhood	Describe the extent to which you are able to adjust to changes in the US	Describe your feelings about being alone/staying alone in the house	Please, explain the language you spoke before coming to the US. may talk about multiple language you spoke before coming to the US	Explain how you are caring for grandchildren since you came to the US	Describe how access or lack of access to transportation contribute to staying home alone for you	Please explain the extent to which you stay by yourself during COVID-19
Explain the extent to which you feel people avoid talking to you in the neighborhood	Please, explain the extent to which you handle life challenges and remain stronger	Describe the extent to which you feel bored/slowed down at home	Describe the language or languages in by which you listen to radio or watch TV since you came to the US.	Describe the specific things you do in caring for grandchildren since you came to the US. (Feeding, babysitting, homework, laundry)		To what extent are you able to (a) Talk (b) Hug (c) Get closer to people during COVID-19
Describe the extent to which you feel like a	Please, explain the extent to which you deal with painful	Describe the extent to which you feel sad	Describe the ethnicity or race of your friends. Eg. White,			To what extent do you feel left out (stay alone) during COVID-19?

stranger in your neighborhood	feelings like sadness, fear, discouragement, failure.	when you are alone at home	Hispanic, African Americans or black or Asians			
Describe your experience regarding staying home alone	Describe the things that you do to cope with staying alone		Explain the new language you began to speak when you came to the US.			

Appendix G- Themes, Sub-themes, and Codes

Main theme	Sub themes	Codes
Less social engagement outside the family	"There is no place one can go in this place (US)" "I feel like a stranger in the community…there is nobody I can socialize or interact with" "I don't have a friend to visit"	Less social engagement outside the family (12) No place to go/visit (10) No friend to talk to (6) Restricted/Confined movement (8)
Barriers to Social Engagement Outside the Family	Security concern: "We don't know their [the Americans way of] lives; we can't talk to anybody",	Avoiding trouble with the law (3) Concern about insecurity in the neighborhood (3)
	Cultural distance: a) Language barriers: "I don't understand English" b) Cultural differences: "We can't relate freely"	Language barriers (11) Linguistic speed problem (3) Limited English knowledge by neighbors (1) Speak More English than native language (6) Speak African language only (4) Speak a bit of English, but mostly local language (2) Enjoy watching movies/TV in English, but don't understand English (6) Watch Programs[movie] in native language (4) Cultural differences: "We can't relate freely" (10) Busy lifestyle (6) Minding one's business (6) Adapting to the lifestyle in the US-dressing, food, childcare (5) Only African friends (10) More African friends (2)
	Practical barriers: Transportation and Weather Climate:	Can't drive-(6) No interest in driving (2) Depend on family for ride (4) No access to a car (3)

	a) Transportation: "I can't drive"	Plan to learn driving (1) Has personal access to a car (1) Not familiar with the environment (road) (2), Need tutoring for navigating the environment (1)
	b) "Weather is cold… we cannot just move freely in the city"	Weather restrictions (7) Adjusting to weather change (2)
Emotional Well-being/Less Socialization Consequences	Negative Feelings a) Loneliness: "We are still lonely"	We are still lonely/Feeling alone (8) Feel isolated (3) Stays mostly indoors (13) enduring loneliness (1) Being alone at home not a problem (5) Feel more isolated due to covid (1)
	b) Feelings of being trapped,	Feeling trapped (2)
	c) Boredom: "Boredom has become part of life here, in this country"	Feeling Boredom- Not frequently bored (5) Feeling very bored (5) Boredom reduced with engaging in activities with grandchildren (1) Feeling bored despite engaging with childcare (1) Feel sad when alone sometimes (4) No big painful feelings (1)
	d) Physical health changes "Sitting down for long has negatively impacted my health"	Physical Health decline due to confined movement (3) Imbalance sleep (1) Adding weight due to staying home (1)
	Positive Feelings "I feel very happy"	Feel happy all the time (7) Not feeling sad (2)
Coping Strategies for Less Social Engagement	Positive Self-talk: "I have to cope with it (Staying home)	Adaptation to staying home alone (5) No option than to stay home (4) Positive outlook on life/self-talk (5)

in the Community	Technology/social media use Technology/Social media: "if I cannot interact physically outside, then, I go through the social media"/Watch TV"	Watch TV and news, listen to music (15) Social media engagement (Facebook, WhatsApp) (6) Telephone conversations (3)
	3) Socializing with grandchildren a) Activities for Grandchildren: "They are my immediate constituency" b) "With the help of the grandchildren, we are okay"	 Babysitting (12) Supervision role (5) Daily activities for grandchildren-keeps me active [cooking, laundry, bathing etc.] (21) Engaging with grandchildren (5) Learning English from grandkids (5)
	Coping through religious faith: "Interactions have been mostly within the church [religious organizations]"	Religious beliefs/practices (23) Social interaction happens at religious gatherings (9)

Appendix H- Linking Mixed Methods Data Source

Appendix H Linking Mixed Methods Data Sources				
Qualitative Sources	**Qualitative Themes/Sub themes**	**Connect with lines**	**Quantitative Constructs**	**Quantitative Sources**
Qualitative interviews	Less social engagement outside the family **Barriers to Social Engagement Outside the Family** Security concern Language barriers Cultural differences **Practical barriers** Transportation Weather climate **Less socialization consequences** Loneliness: "We are still lonely" Feelings of being trapped Boredom: "Boredom has become part of life here, in this country" Physical health changes I feel very happy **Coping Strategies for Less Social Engagement in the Community** Positive Self-talk: "I have to cope with it (Staying home) Technology/social media use Socializing with grandchildren Coping through religious faith		Social isolation Acculturation Emotional well-being Resilience Grandchild care Transportation access	Surveys

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Curriculum Vitae

Dolapo Omolola Adeniji

Education

- Indiana University, PhD, Social Work, Minor in Gerontology, 2022
- Indiana University, Master of Social Work, Concentration in Mental Health, and Addictions, 2016
- University of Ibadan, Master of Education, Guidance and Counseling, 1995
- Obafemi Awolowo University, Bachelor of Science, Psychology, 1992

Professional Experience

- Graduate Assistant, Indiana University School of Social Work, August 2017-May 2019
- Research Specialist, Center for Aging, Regenstrief Institute, Indianapolis, IN, July -November 2018
- Service-Learning Assistant, Computer Information Technology, Indiana University-Purdue University Indianapolis (IUPUI), IN. August 2018 – July 2019
- Research Assistant/Data Analyst, Indiana University, Indiana University School of Social Work, IN July 25-31, 2021
- Behavior Support Clinician, DAMAR Services, Indianapolis, IN, May 2019 – Date
- Behavior Support Clinician, DAMAR Services, Indianapolis, IN, February 2017 – August 2017
- Direct Support Professional at Adult Daycare, Indiana Mentor, Indianapolis, IN, June 2013 – February 2017
- Lecturer, The Polytechnic, Ibadan, Nigeria
- Tutor, Baptist Medical Hospital School of Nursing, Nigeria

Publications

- Tonui, B. C., Miller, V. J., & Adeniji, D. O. (2022). Older immigrant adults' experiences with social isolation: a qualitative interpretive meta synthesis. Aging & Mental Health, 1-9.
- Oladeji, M., O. & Adeniji, D. O. (September 2015). Family security: An approach to achieving household livelihood in Nigeria. International Organization of Scientific Research (IOSR Journal), 20 (9)41-44.
- Adeniji D. O. (2013). The role of women in conflict resolution. In Generalities, A Multidisciplinary Journal 2(2) 37-43.
- Adeniji, D. O., & Adediran A. C. (2012). Overcoming barriers to distance learning through new media in Nigeria. The POLYCOM Journal, Nigeria.
- Adeniji, D. O., & Oladejo D. A. (2012). Developing positive attitude towards de-phasing elder abuse and its health implications. The Adults and Aged in Nigeria: Issues and Researches, 167-181.
- Adeniji, D. O., & Oladejo D. A. (2011). Child abuse: Causes, consequences and remedies, Generalities: A Multidisciplinary Journal, 1(1): 39-50.

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- Adeniji, D. O. (2009). Gender Equality: A panacea to violence against women in Nigeria. In Gender and Development: Essential Reading, Hope publications Nigeria: pp 38-66.
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- Oladeji, M. O., & Adeniji, D. O. (2008). Proliferation of female dominated organizations: Initiative, The Beacon Journal of General Education 1(1): 5-20

Books

- Adeniji, D. O. (2011). The antidotes to retirement, Real Success Consult, Nigeria.
- Adeniji, D. O., & Oladeji M. O. (2011). Psychology for Professionals. Real Success Consult, Nigeria.
- Oladeji, M.O., Olabode, B.O., Ajayi, L. T. & Adeniji, D. O. (2009). Applied Government, Real Success Consult, Nigeria

Manuscript Submitted for Publication

- Adeniji, D. O., Ashirifi, G. D. & Adamek, M. A. ("Nowhere to go:" Older African Immigrants' Experience of Loneliness While Living with Adult Children in the United States). Submitted to Journal of Cross-Cultural Gerontology. (Submission Date: December 4, 2021)
- Gentle-Genitty, C. S., Adeniji D. O. & Taylor, J. (School Technology Factors: The return to school after prolonged absence). Submitted to Continuity in Education [CiE] Journal. (Submission Date: December 31, 2021

Conference Presentations

- Adeniji, D. O. (May 2022). Social isolation of older African immigrants: Thematic analysis. Presented at Virtual Global Symposium of Social Work doctoral students
- Adeniji, D. O. Ashirifi, G. D. & Adamek, M. (November 2022). Nobody Knows me here: Loneliness among older immigrants. Gerontological Society of America (GSA) Annual Scientific Meeting, Nov 2-6, 2022 (Abstract Accepted)
- Adeniji, D. O. & Ashirifi, G. D. (November 2022). I have to cope with it: The voices of older African immigrants experiencing social isolation and loneliness in the US (Abstract Accepted)
- Adeniji, D.O. (May 2022). We can't relate freely: Barriers to Social Engagement of Older African Immigrants. Poster Presentation at the 26th Annual Ph.D. Symposium, School of Social Work, Indiana University, IN

- Adeniji, D.O., Adamek, M. & Catlin, S. (November 2021). The effectiveness of an intergenerational technology program for older adults: A pilot study. Gerontological Society of America (GSA) Annual Scientific Meeting, Nov 10-13, 2021
- Miller, V.J., Tonui, B. & Adeniji, D.O. (November 2021). Older immigrant adults experiences with social isolation: A qualitative interpretive meta synthesis. Gerontological Society of America (GSA) Annual Scientific Meeting, Nov 10-13, 2021
- Adeniji, D.O. (May 2021). Recruiting older African immigrants in research during COVID-19 pandemic: Challenges and Prospects. Poster Presentation at the 25th Annual Symposium, School of Social Work, Indiana University, IN
- Klemme, P., Hea-Won, K. & Adeniji, D.O (November 2020). Assessing clinical needs and barriers. CSWE's 66th Annual Program Meeting
- Adeniji, D.O. (March 2020) Ethical considerations for working with older Immigrants Experiencing Social Isolation. Doctoral Student Speaker Series, Indiana University School of Social Work, IUPUI
- Hong, M., Kim, H., Cornet, V. & Adeniji, D. O. (January 2020). Public perceptions towards older adults in Korea: Sentiment analysis of Tweets. Poster presentation at Society for Social Work and Research (SSWR) 24th Annual Conference at Washington DC
- Adeniji, D. O. & Hong, M. (March 2019). Factors associated with meaningful activities among Ethnically Diverse Older Adults. Poster presentation at the Gerontological Society of America's (GSA) Annual Scientific Meeting Austin, TX
- Johnson, K. & Adeniji, D. O. (March 2019). Does a perceived connection to a neighborhood Reduce Loneliness? Poster presentation at the Gerontological Society of America's (GSA) Annual Scientific Meeting Austin, TX
- Klemme, P. & Adeniji, D. O. (April 2018). Importance of social work in student run clinics. Poster Presentation at the 22nd Annual Symposium, School of Social Work, Indiana University, IN
- Adeniji, D. O. (April 2018). Analyzing the role of social technology use for improving quality of life in older immigrants. Poster Presentation at the 22nd Annual Symposium, School of Social Work, Indiana University, IN
- Abegunrin, A. O. & Adeniji, D. O. (July 2015). Psychological Implications of media reports of terrorist activities in Nigeria. Presented at 3rd National Conference, Osun Stated Polytechnic Ire, Faculty of Financial Studies.
- Adeniji, D. O. & Abegunrin, A. O. (July 2015). Religious fundamentalism and terrorism in Nigeria. Presented at 3rd National Conference, Osun Stated Polytechnic Ire, Faculty of Financial Studies.
- Oladeji, M. O. & Adeniji, D. O. (August 2012). Family Security: An approach to achieving household livelihood in Nigeria. Presentation at the Nigerian Transformation and Vision 20.2020. National Conference of Transformation and Vision 20.2020, Ibadan, Nigeria
- Adeniji, D. O. (July 2012). Counseling techniques for counselors and caregivers. A talk Presented at the Training Workshop for Caregivers organized by the State

House Malaria and Aids Foundation (a Non-Governmental Organization), Saki, Nigeria

- Adeniji, D. O. (May 2012). E-Learning and its inefficiencies in the developing countries. Presented at the 2011 International Conference on E-Learning and Cross-Discipline (ICELCD), Accra, Ghana
- Adeniji, D. O. & Adediran, A. C. (August 2011). Appraisal of the impact of new media on the operation of distance learning in Nigeria. Presented at the 2011 International Conference on New Media and Revolutionary Changes in the World, the Polytechnic Ibadan, Ibadan, Nigeria
- Adeniji, D. O. (July 2010). The role of women in conflict resolution: A global perspective. Presented at the 2010 National Conference on Globalization and Technical Education, the Polytechnic Ibadan, Nigeria
- Adeniji, D. O. & Oladejo, D. A. (May 2012). Developing a positive attitude towards Dephasing elder abuse and its implications. Presented at University of Ibadan National Conference on Network for health, Education & Welfare of Special People, the University of Ibadan, Ibadan, Nigeria
- Adeniji, D. O., Oladeji, M. O., & Popoola, M. O. (April 2010). Psychological appraisal of dialect acquisition at childhood and its effects on lingua -Franca in Oke-Ogun Sub-culture of Oyo State. 1st National Conference Emmanuel Alayande College of Education, Oyo, Nigeria
- Adeniji, D. O. & Oladejo, D. A. (April 2011). Child abuse and its health implications. Presented at the Conference on Face Out Malaria and Aids Foundation, the Polytechnic Ibadan, Saki Campus, Nigeria
- Adeniji, D. O, Oladeji, M. O., & Adeniji T. A. (May 2009). Cohabitation among Tertiary Institution Student: Females the Endangered Partner Exploited. Presented at the Fourth International Conference on Sustainable Development, Institute of Research and Development Network (IRDI), the University of Lagos, Lagos, Nigeria

Honors, Awards, Fellowships Research and Training Experience

- President's Diversity Dissertation Fellowship ($20,000), Indiana University, 2020/2021
- Research Support ($312): The Polytechnic Ibadan, Saki Campus, Nigeria, 2010
- Jump Start to Teaching Series. May 17-21, 2021. Teacher Training opportunity sponsored by the Indiana University School of Medicine
- Advanced in Mixed-Methods Analysis and Integration. February 24-26, 2021. University of Michigan
- MAXQDA Workshop. March 1, 2021. University of Michigan
- Webinar: Quality Matters at IU: Applying the quality matters rubric to online courses. August 14, 2020. IUPUI Center for Teaching and Learning