Examining Trauma, PTSD, Other Mental Disorders and Healthcare Patterns During Early Parenthood: The Role of Immigrant Status, Identity, and Social Support

by

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Abstract

The transition to early parenthood marks a period of increased psychological risk, yet immigrant generational differences remain underexamined. Using the National Epidemiologic Survey on Alcohol and Related Conditions–III (NESARC-III), this study analyzed new parents with a child <5 years (*n*= 4,129) to test associations between immigrant generational status (IGS; first-, second-, third+/U.S.-born) with (a) trauma exposure, (b) PTSD and any other lifetime mental disorder/substance use disorder (MD/SUD), and (c) mental healthcare utilization among those with a lifetime MD/SUD. Survey-weighted logistic regressions adjusted for sociodemographic correlates. Interactions with racial discrimination, ethnic identity, social support, and sex were probed. First-generation parents had lower odds than third+ of trauma (AOR= 0.50, $p < .001$), PTSD (AOR= 0.35, $p < .001$), and any MD/SUD (AOR= 0.29, $p < .001$); second-generation estimates were generally comparable to third+. Sexual assault odds were lower for first- and second-generation than third+. Racial discrimination was positively associated with PTSD in all IGS groups (AOR range 2.10-4.94; all *p*'s < .001). Social support was protective for any trauma and any MD/SUD among third+ only; ethnic identity did not significantly moderate trauma or any MD/SUD by IGS. Across service types, first-generation parents showed lower utilization than third+ (AOR range 0.21-0.34, all *p*'s <.001). Findings support a "healthy immigrant" pattern for disorder prevalence, but reveal pronounced under-utilization of mental healthcare services among first-generation parents. Results highlight the need to identify and address concrete access barriers to improve engagement with mental-health services in early parenthood.

Keywords: immigrant new parents, trauma, PTSD, mental healthcare utilization, ethnic identity, racial discrimination

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Chapter I: Introduction

The transition to parenthood involves a complex period marked by major physiological, psychological, and social adjustments for new parents, with as many as 85% of new mothers experiencing a mood disturbance during the postpartum period (Dekel et al., 2019), and new fathers reporting a 68% increase in depressive symptoms in their child's first five years (Garfield et al., 2014). To date, most research has focused on parental mental health during the postpartum period only (e.g., Buist et al., 2008; Gavin et al., 2005; O'Hara & Swain, 1996; Matthey et al., 2000; Matthey et al., 2003; Paulson & Bazemore, 2010; Wenzel et al., 2005). However, the challenges associated with parenthood (involving parenting stress, burnout, and dyadic adjustment; Rollè, 2017) extend far beyond the first year of a child's life (Williford et al., 2007; see also Barroso et al., 2017; Mulsow et al., 2002), while mental health symptoms in women can persist for years after childbirth (Lyons-Ruth et al., 2000; Putnick et al., 2020). Thus, in addition to postpartum studies, evaluating parental mental health outcomes and their interactions with healthcare systems throughout a child's early developmental years is imperative.

Additionally, past studies on parental mental health during early parenthood have predominantly focused on the experiences of mothers, and have failed to account for the experiences of fathers, despite this period being significantly straining to both maternal and paternal mental health (Fisher, 2017; Reupert & Maybery, 2009). In fact, one systematic review and meta-analysis of 96 studies found that the postpartum depression prevalence in fathers was comparable to that of mothers, with some studies indicating higher rates of depression among fathers during this period than in the general population (Philpott & Corcoran, 2018; Woody et al., 2017). Despite this, research indicates that fathers are far less likely to seek help for symptoms during their partner's pregnancy. For example, in one large, longitudinal study of

nearly 2,000 U.S. fathers, only 3.2% sought assistance for any mental health challenges through counselling (Isacco & Molloy, 2016). In contrast, Canadian data indicates that among new mothers concerned about their emotions and mental health, 24% reported speaking with a psychiatrist, psychologist, social worker, or counsellor (Statistics Canada, 2019). Given the evolving roles, shifting social expectations, and varied support needs of fathers, it is crucial to also understand their experiences, and ensure that all parents have access to essential mental health resources.

Furthermore, some studies have found particular subgroups of mothers and fathers to be at an even greater risk of facing mental health challenges and barriers in accessing mental healthcare within the new parent population. One such subgroup, may include those who have migrated from another country (defined as immigrant new parents). However, studies that have examined the mental health and mental healthcare utilization of these immigrant new mothers and fathers have primarily focused on protecting the mental health of immigrant children rather than fostering parental well-being (Hamari et al., 2022; see also Bachem et al., 2024; McNaughton et al, 2004; Perreira & Ornelas, 2013). Nevertheless, in one longitudinal cohort study of 1,706 U.K. immigrant women (i.e., born outside of the U.K.) and 8,627 U.K. non-immigrant women (i.e., born in the U.K.) at nine months and five years postpartum, immigrant women were found to face higher risks of poor postpartum mental health (Moore et al., 2019). They additionally encountered more barriers in accessing mental healthcare compared to non-immigrant women. High cultural stress (defined as the harmful effects of negative immigration-related experiences such as racial discrimination; Schwartz et al., 2015) may explain these findings. Although the experiences of these parents remain understudied, theories relating to ethnic identity, racial discrimination, and social support suggest that this group may experience

distinct patterns of trauma exposure, mental disorders (MDs) such as post-traumatic stress disorder (PTSD), and mental healthcare utilization compared to their non-immigrant counterparts.

Literature Review

Individuals of immigrant descent are estimated to represent one in three Canadians by 2041 (Statistics Canada, 2023). As a result of their rapid integration, understanding their unique mental health profiles has become increasingly salient. Past studies have often conceptualized immigrants homogenously, as any individual born in another country. However, prior research in the U.S. has demonstrated various socioeconomic, mental, and physical health differences across immigrant generational statuses (IGS) that may distinguish them from their non-immigrant counterparts. This differentiation includes first-generation immigrants (i.e., born in another country) and second-generation immigrants (i.e., those with at least one parent born in another country; Dustmann et al., 2012). Beyond the third generation, however, differences in observed socioeconomic and health outcomes tend to diminish.

Risk Factors: Traumatic Experiences and Racial Discrimination Among Immigrant New Parents

According to the American Psychiatric Association (APA), trauma, or a traumatic event, involves “having experienced, witnessed, or been confronted with an event that involved actual or threatened death or serious injury, or threat to the physical integrity of oneself or others” (American Psychiatric Association, 2013). Unlike other stressors, trauma refers to experiences that exceed one’s ability to cope, making it distinct in its psychological impact- especially for immigrants. However, this definition is predominantly Western in nature, and fails to

acknowledge other stressors laying outside of this operationalization, such as racial discrimination.

Heightened trauma exposure rates among immigrants compared to the general population have been well documented (Bustamante et al., 2017; Garcini et al., 2017; Kieseppä et al., 2021; Sangalang et al., 2019; Trabsa et al., 2023). For example, one study of undocumented Mexican immigrants found an overall prevalence of 84% having experienced a history of traumatic events (Garcini et al., 2017). This estimate is significantly higher than the predicted 70% of adults worldwide who have experienced at least one potentially traumatic event (Benjet et al., 2016; Kessler et al., 2017). In another study of adult immigrants and non-immigrants receiving psychological care in Ireland, a substantial number of immigrant participants had experienced two or more lifetime trauma (70.3%) compared to their Irish-born counterparts (47.4%; Wilson et al., 2013). These higher rates of trauma exposure may be, in part, due to the range of adverse and potentially traumatic experiences immigrants uniquely face. Such traumas may be encountered: (a) before arriving in the host country (i.e., pre-migration events), (b) during the migration process (i.e., migration events), or (c) as challenges upon and after arrival in the host country (i.e., post-migration events).

In general population samples, first-generation immigrants may experience pre-migration traumas in their home countries, such as conflict, violence, persecution, or displacement, and these experiences may impact their mental health upon arrival in their host country (Guruge et al., 2015). In fact, a consistent finding in the literature is that when exposed to armed conflict, immigrants are at an especially higher risk of mental health disorders than non-immigrants (Mesa-Vieira et al., 2022); these events are mainly experienced by first-generation individuals.

Additionally, the process of migration itself can be a source of stress and potential trauma. Challenges related to navigating immigration procedures, finding employment, and establishing a new life in their host country can significantly contribute to the overall burden of trauma among immigrant individuals (Mak et al., 2021). Finally, after migrating to a new country, immigrants may face post-migration stressors, including acculturation stress (i.e., difficulties adapting to a new culture/language), racial discrimination, separation from families (either due to leaving family members behind in their home countries, or facing barriers to reunite), financial challenges, and uncertainties related to legal status (such as detention, reclusion, or deportation)- all of which can contribute to their ongoing trauma exposure (Bustamante et al., 2017).

As mentioned previously, immigrants are also at higher risk of experiencing racial discrimination (Nangia, 2021), which may influence their exposure to traumatic events, mental health outcomes, and interactions with healthcare systems. Racial discrimination can be understood as both (a) beliefs and ideologies that position some racial groups as superior (racism**)** and (b) the institutional and interpersonal processes that maintain dominance and oppression between racial groups (Neville et al., 2009). It can show up through experiences of exclusion (being ignored or rejected), overt hostility (demeaning, intimidation, or being treated as “less than”), and aversive or structural hostility (where race-related barriers limit opportunity or create chronically unwelcoming environments; Carter et al., 2016).

Racial discrimination- particularly in the forms of avoidance, hostility, and aversive-hostility- is identified as a stressor (Carter et al., 2016), and stressors, including those related to racial discrimination, are linked to trauma exposure. Additionally, the theory of race-based traumatic stress (Carter, 2007) suggests that racial discrimination can be a unique type of trauma in and of itself, contributing to an individual's overall trauma load.

Exposure to traumatic events, including experiences related to racial discrimination, can later lead to MDs, such as PTSD. While the conventional definition of PTSD has been critiqued for not adequately addressing racial discrimination (Butts, 2002; Carter, 2007), the theory of race-based traumatic stress highlights the potential connection between racial discrimination and symptoms similar to PTSD (Carter & Forsyth, 2010). The emotional reactions associated with interpersonal trauma, which are especially prevalent in experiences of race-based stressors, further suggest an association between racial discrimination and PTSD-like symptoms (Courtois, 2004).

These stressors in turn, may influence patterns of healthcare utilization. Past studies have demonstrated that racial discrimination has been consistently linked to underutilization of mental healthcare services among minority groups, particularly in the form of avoidance (Burgess et al., 2008; Lee, 2009; Richman et al., 2007; Schouler-Ocak & Moran, 2023; Williams et al., 2019;). This is due to perceived provider discrimination, which may cause immigrant new parents to delay seeking care, and adhere poorly to medical recommendations (Casagrande et al., 2007).

To date, no study has directly compared the prevalence rates of traumatic experiences for immigrant new parents versus nonparents. Moreover, existing literature on the traumatic experiences of immigrant new parents primarily centers on their impacts on children, rather than on the parents themselves (Perreira & Ornelas, 2013; Sangalang et al., 2017; Silwal et al., 2019), and on refugees and asylum seekers, despite the proportion of non-refugee migrants being much higher in the general population (Rasmussen et al., 2012; Wilson et al., 2013). Among these studies, however, pre- and post-migration trauma has shown to be linked to mental health issues, including PTSD, among both immigrant new parents and their children (De Arellano et al., 2018;

Perreira & Ornelas, 2013; Sangalang et al., 2019). These traumatic events can result in lasting effects and, in some instances, may develop into PTSD or other MDs.

PTSD and Other Mental Disorders Among Immigrant New Parents

The unique array of traumatic experiences and stressors faced by immigrants may contribute to a higher prevalence of PTSD among new immigrant parents. The DSM-5-TR classifies PTSD as a "trauma and stressor-related disorder that arises following the experience of a traumatic event involving actual or threatened death, serious injury, or sexual violence" (i.e., index trauma; American Psychiatric Association, 2013). Symptom clusters include intrusive re-experiencing (e.g., unwanted memories, nightmares), avoidance of reminders, persistent negative shifts in mood and cognition (e.g., guilt, shame, detachment), and heightened arousal/reactivity (e.g., sleep disturbance, irritability, exaggerated startle).

In one recent meta-analysis by Amiri (2022), the PTSD prevalence among immigrants was estimated to be 25%, far exceeding general-population prevalence rates (0.2% to 3.8%; Shalev et al., 2017). In another comprehensive review by Bustamante et al. (2017), a notably high prevalence of PTSD among immigrants was also observed, reaching 47%. This was especially observed among refugees, who experienced the disorder nearly twice as much as immigrant workers. However, the likelihood of PTSD decreases over generations, with the prevalence among immigrant populations reaching similar proportions to the general population by the third generation (Guardia et al., 2017). This pattern is thought to emerge due to the various socioeconomic, mental health, and physical health differences across IGS declining over time (Dustmann et al., 2012).

Among new immigrant mothers, a comprehensive review of 135 studies found that PTSD was prevalent, with 8.9% of all immigrant women, and a higher proportion of 17.1% among

displaced people meeting the criteria for PTSD within one year of giving birth to their child (Stevenson et al., 2023). In simpler terms, this means that approximately one in 11 immigrant mothers experience PTSD during the postpartum period. An additional study that focusing on the mental health of Canadian new parents (i.e., those with infants less than four months old) also found notable differences among different immigrant groups with regards to PTSD prevalence rates (Gagnon et al., 2013). Specifically, refugees (n = 144), asylum-seekers (n = 369), all other immigrants (n = 30), and Canadian-born mothers (n = 311) exhibited significant variations in PTSD symptoms four months after giving birth, with prevalence rates of 33.8%, 48.2%, 15.0%, and 0%, respectively. No other known studies have examined this condition among immigrant parents. However, in light of the higher prevalence of PTSD, examining additional mental health conditions independently may also be critical, as increased trauma exposure can lead to a variety of mental health challenges among immigrant parents.

Apart from PTSD, the most commonly cited MDs that immigrant population may be at higher risk for developing than the general population involve anxiety or depressive symptoms (Fellmeth et al., 2017). For example, one meta-analysis of 40 studies revealed that among general immigrant populations, the prevalence of specific mental health disorders among migrants varied, with conditions such as agoraphobia, generalized anxiety disorder (GAD), panic disorder, obsessive–compulsive disorder (OCD), social phobia, and specific phobia having distinct prevalence estimates (4%, 9%, 4%, 3%, 5% and 8%, respectively; Amiri et al, 2022). These estimates are significantly higher than general global population estimates (1.3-6.7%, 2-3%, 2%, 0.7%- 2.5%, 0.5%-2.6% 4.8%, respectively; Salehi et al., 2022; see also Martin, 2003). In line with the Healthy Immigrant Hypothesis (HIH), however, it is interesting to note that some studies have found individuals who have immigrated from another country to have

better mental health outcomes compared to their non-immigrant counterparts. In a U.S. nationally representative sample of 36,309 adults, immigrants were less likely than U.S.-born respondents to meet criteria for a lifetime mental disorder and less likely to report a parental history of psychiatric problems (Salas-Wright et al., 2018). However, several factors may limit the extent to which this finding is generalizable to the sub-populations of focus in this thesis (i.e., this study did not differentiate between first and second-generation immigrants and account for experiences of new parents vs. nonparents).

Regarding new parents, extant literature has consistently shown that first-generation immigrant parents are at greater risk of adverse mental health outcomes compared to their non-immigrant counterparts. For example, one Canadian longitudinal survey following 7,716 immigrant parents and nonparents across three-time points after arrival in their host country (six months, two years, and four years), found that emotional problems were more prevalent among two-parent, OR = 1.12 (1.01, 1.24), lone parent, OR = 2.24 (1.75, 2.88), and divorced nonparent, OR = 1.30 (1.01, 1.66) immigrants compared to native-born nonparents (Browne et al., 2017), with increasing prevalence of emotional problems over time (5.17% at 6-months vs. 28.77% at four-years post-migration, respectively.). This was especially true for new parents who identified as visible minorities. This study was consistent with previous work suggesting that, compared to non-immigrants, immigrant mothers (Moore et al., 2019; see also Bjørknes et al., 2015; Graham et al., 2015; McNaughton et al., 2004; Tinghög et al., 2010; Tulli et al., 2020;), and first-generation immigrant fathers, were at greater risk compared to non-immigrant fathers (Giallo et al., 2017; see also, Vaage et al., 2011; Van Ee et al., 2013) of reporting clinically significant symptoms of mental illness. These studies note that factors such as family separation due to

migration, lack of access to mental healthcare, and the experience of discrimination and trauma contribute to this increased risk.

Stevenson et al.'s systematic review and meta-analysis in 2023 additionally determined the pooled prevalence of depressive disorders during this postpartum period. This prevalence rate was estimated to be 24.2% among immigrant mothers. Additionally, the prevalence of postpartum anxiety disorders was 19.6% for this group. Other studies have demonstrated that compared to non-immigrants, immigrant women may be twice as likely to experience depressive symptoms within the first year of parenthood (Falah-Hassani et al., 2015), and the prevalence of these estimates may be even higher among certain types of immigrants, as a meta-analysis by Henkelmann et al. in 2020 documented an elevated prevalence of depression (ranging from 30% to 40%) among refugees and asylum-seekers in particular.

Fewer studies have specifically examined the prevalence of MDs among immigrant fathers. However, one cross-sectional Australian study found higher psychological distress among immigrant and refugee fathers than among Australian-born fathers (Giallo et al., 2017). Odds of distress were elevated for fathers with a refugee background (OR = 3.17) and for fathers from non-English-speaking countries (OR = 1.79). At the same time, immigrant fathers (from both non-English- and English-speaking countries) were less likely to report light through moderate-to-harmful alcohol use than Australian-born fathers. These findings highlight the varied health profiles among fathers with different immigration backgrounds, and emphasizes the importance of examining their experiences in mental health research.

Mental Healthcare Utilization Among Immigrant New Parents

Immigrants have consistently been found to underutilize mental healthcare resources and report a large number of barriers in seeking help compared to non-immigrants. For example, one systematic review conducted by Derr in 2015 revealed that in most studies examining nativity status, those of immigrant descent exhibited lower rates of mental health service utilization compared to U.S. natives. This trend persisted consistently among immigrants originating from Latin America and Africa in particular, who notably underutilize mental health services in comparison to other ethnic minority groups (Abebe, 2017; Bauldry & Szaflarski, 2017; Bridges, 2012; Chen & Vargas-Bustamante, 2011; Hochhausen, 2011; Saasa, 2021; Salami, 2018; Vega, 2009). Several contributing factors to this underutilization have been identified, including financial constraints, lack of health insurance, language barriers, and stigma (Bridges, 2012; Saasa, 2021; Salami, 2018). Barriers related to geographic access, economic limitations, restricted hours of operation, language challenges, navigating the healthcare system, and cultural differences, also emerge as significant impediments to accessing mental healthcare services (Chiarenza et al., 2019; see also Higginbottom et al., 2015). Moreover, some studies have found social support can help mitigate these barriers among different immigrant groups (Prati et al., 2016).

In Canada, immigrants exhibited significantly lower rates of healthcare service utilization for psychological distress compared to non-immigrants (5.5% vs. 14.7%; Kirmayer et al., 2007). This discrepancy is attributed to both a reduced usage of specialty mental health services by immigrants (2.5% vs. 11.7%) and varied utilization of medical services for psychological distress (3.5% vs. 5.8%). One study using a general population sample of immigrants in the U.S. from the NESARC also indicated how first-generation individuals, especially those of African and Latino descent, were much less likely to access healthcare (Bauldry & Szaflarski, 2017).

Although, this study did not specifically focus on the experiences of new parents among this group, or immigrants who had received a mental health diagnosis. For example, even when prior mental health history is taken into account, barriers after migration- such as social isolation, unfamiliarity with the healthcare system, limited proficiency in the host language, and insecure legal status- can reduce immigrant new parents' use of mental health services (Falah-Hassani et al., 2015).

To date, literature on immigrant new parents' healthcare utilization is limited, and centres on accessing healthcare for their children (e.g., Tulli et al., 2020; see also Finno-Velasquez et al., 2016). Among the few studies that focus on parental experiences, immigrant new parents have been found to face notable obstacles when seeking mental healthcare for themselves as well. In one study of recently arrived culturally and linguistically diverse migrant mothers, these individuals accessed fewer healthcare resources and reported more negative healthcare experiences compared to more established immigrant and non-immigrant populations (Chen et al., 2019). These findings may, in part, be explained by the increased language barriers, varying beliefs about mental illness, and perceived stigma faced by this group (Giacco et al., 2014; Guzder et al., 2013; Tulli et al., 2020). For example, one systematic review focusing on ethnic minority women's experiences of mental health services in the U.K. during the postpartum period revealed that a lack of awareness about mental health, cultural expectations, stigma, culturally insensitive, and interactions with dismissive health providers all impacted immigrant parents' ability to receive adequate mental health support (Watson et al., 2019). The stressors inherent in the immigration process, including documentation status and acculturation, may further contribute to these barriers (Dougherty et al., 2020; Finno-Velasquez, 2016).

Resiliency Factors: Ethnic Identity, The Healthy Immigrant Hypothesis, and Perceived Social Support

While immigrant parents face well-documented mental health challenges- such as trauma exposure, discrimination, and barriers to accessing care- emerging research suggests that ethnic identity may function as a critical and underrecognized protective factor. Ethnic identity refers to one's sense of belonging to a cultural group, including the internalization of heritage values, practices, and shared meaning (Schwartz et al., 2008). For immigrant new parents, navigating this identity while raising children in a different sociocultural environment often involves integration of their own cultural norms with host country expectations, which can amplify psychological strain (Rogers-Sirin & Gupta, 2012; see also Costigan & Koryzma, 2011). Yet, having a strong sense of ethnic identity may not inherently be a source of stress. Some research has shown that a strong and positive connection to one's cultural background- manifested through ethnic pride, cultural continuity, and affirmation- can foster resilience. For instance, many studies have found that higher levels of ethnic identity commitment are associated with lower depressive symptoms, reduced perceived discrimination, and stronger self-esteem in both adolescents and adults (Mossakowski, 2003; Umaña-Taylor et al., 2014; Yip et al., 2006). In parenting contexts, these strengths may be particularly meaningful, helping immigrant mothers and fathers cope with cultural dissonance, navigate intergenerational tensions, and support their children's early identity development (Gonzales-Backen et al., 2018; Williams & Berry, 1991).

Moreover, ethnic identity may shape how immigrant parents process trauma or seek care. Past studies have found that a stronger sense of ethnic identity may moderate the effects of racial and minority stress on mental health, leading to fewer internalized symtoms (Barrita & Wong-Padoongpatt, 2023). For example, one study found that among Latinx parents, greater cultural

engagement was linked to more adaptive parenting behaviors and fewer psychological symptoms (Santisteban et al., 2012). Similarly, bicultural competence- the ability to navigate both heritage and host cultures- has been associated with lower PTSD symptoms and better psychological adjustment (Ford et al., 2015; LaFromboise, et al., 1993).

Despite these promising findings, however, no known studies have directly examined how ethnic identity interacts with IGS, parenthood, or trauma history to shape mental health outcomes such as PTSD or service utilization. Most frameworks continue to focus heavily on the stress of adapting to the host culture (i.e., acculturative stress), often overlooking the protective potential of cultural strengths. Shifting from a deficit-based to a resilience-based lens could help reframe immigrant parent mental health in more empowering ways.

In contrast to previously mentioned theories which outline adverse mental health experiences among immigrant groups, the HIH describes a widely observed phenomenon in which immigrants tend to have better health outcomes compared to their native-born counterparts, despite potentially facing greater socioeconomic challenges (Domnich et al., 2012). One U.S. nationally representative study was able to demonstrate this theory by finding that Asian immigrants had a lower risk of having a mood, anxiety, or substance use disorder (SUD) than U.S.-born Asian Americans (Alegría et al., 2007). This phenomenon is often attributed to a combination of factors, including extensive health screening by recipient countries, healthy behaviours prior to migration, and immigrant self-selection (i.e., healthier individuals being more likely to migrate; Abraído-Lanza et al., 1999). One study examining pooled national cross-sectional data sets in the U.S., U.K., Canada, and Australia found strong evidence of positive selection effects for immigrants regarding education (Kennedy et al., 2015). This finding suggests that healthier and wealthier individuals were more likely to migrate from their countries

of origin compared to those with lower educational and socioeconomic backgrounds. This was further supported by Ichou and Wallace (2019), who demonstrated that educational selectivity is a significant factor in the health disparities between immigrants and non-immigrants in France. Vang et al. (2017) and Lu & Ng (2019) both confirmed the presence of the healthy immigrant effect in Canada, with better mental health and physical health outcomes observed across immigrant samples. Vang et al. (2017) further noted that this effect is most potent during adulthood, and for more recently arrived immigrants.

Another potential protective factor for immigrant parental mental health is perceived social support. As defined by Shumaker and Brownell (1984), social support theory outlines "the exchange of resources between individuals to enhance well-being." This theory emphasizes the importance of individual perceptions of support, which can influence their behaviour and emotional state (Sarason et al., 1990). In general population samples, social support is determined to be one of the strongest protective factors against adverse mental health outcomes (Falah-Hassani et al., 2015; Nowland et al., 2021). These findings extend to immigrant samples that have consistently shown how social support plays a crucial role in their mental health and well-being (Hombrados-Mendieta et al., 2019; Makwarimba et al., 2010; Salinero-Fort et al., 2011; Simich et al., 2005; Záleská et al., 2014).

While fewer studies exist on the relationship between social support and new parent mental health among immigrants, one systematic review of Chinese immigrant women found the prevalence of postpartum depression to be significantly higher than that of non-immigrants, with risk factors including lack of social support (Chen et al., 2019). Additionally, higher perceived social support has positive associations with physical and mental health among general immigrant populations, serving as a protective factor for mental health outcomes such as PTSD

(Szaflarski & Bauldry, 2019). Past studies have also highlighted how factors like poor social support, poor partner relationships, and recent immigration contribute to the risk of postpartum depression among migrant women (Stevenson et al., 2023).

Study Objectives and Hypotheses

In summary, the existing body of research on trauma exposure, mental health outcomes, and healthcare utilization among immigrant new parents is limited by several factors. These include the narrow focus only on the first year of a child's life, an emphasis on maternal mental health, a lack of exploration of intersecting factors within immigrant populations (such as IGS), insufficient exploration of trauma types and mental healthcare utilization patterns, a focus on child mental health outcomes rather than parental well-being, and a lack of direct comparison between immigrant and non-immigrant experiences.

To address these gaps, this thesis aimed to examine associations between IGS (differentiating between first-generation, second-generation, and non-immigrants) and 1) exposure to five different categories of lifetime traumatic events, lifetime PTSD, and any other mental or SUD, as well as 2) patterns of mental healthcare access among both male and female parents to children aged four years and younger. A second aim was to assess if additional factors, such as experiences of i) racial discrimination, ii) ethnic identity, iii) social support, and iv) the sex of the parent showed interactive effects with IGS in relation to these outcomes using a large, nationally representative sample.

As previously discussed, my thesis is informed by conflicting theories of risk (e.g., race-based traumatic stress theory) and resilience (social support and the healthy immigrant effect). On the resilience side, the healthy immigrant effect posits that immigrants may arrive with better overall health than native-born individuals, with health declining over time in the host country

(Dustmann et al., 2012). However, this pattern is neither uniform across outcomes nor guaranteed within specific life stages, such as early parenthood. The early parenting period can amplify vulnerability through heightened caregiving demands, reduced time and resources, and increased reliance on systems that may be unfamiliar or difficult to access, which may disproportionately affect immigrant parents.Accordingly, this study centers risk-oriented explanations to account for why first-generation immigrants may report higher trauma and mental health burden and lower service use.

Drawing from these frameworks, the following hypotheses were proposed:

1. First-generation immigrants would report higher rates of traumatic experiences, PTSD, and other MDs compared to second-generation immigrants and non-immigrants.
2. First-generation immigrants would be significantly less likely to access healthcare resources than second-generation immigrants and non-immigrants.
3. Second-generation immigrants would report significantly higher rates of trauma exposure, PTSD, and other MDs compared to non-immigrants.
4. New parents who reported higher racial discrimination and lower ethnic identity would exhibit more trauma and PTSD symptoms and engage less with mental healthcare; those with higher social support would report fewer PTSD symptoms.

5. Across IGS categories, male new parents would report similar trauma exposure and PTSD patterns as female parents, but would have lower rates of mental healthcare utilization.[1]

Chapter II: Method

Positionality Statement

It is essential to acknowledge that quantitative studies carry inherent biases. I intend to reflect on my own perspectives and contributions as a researcher in this study, acknowledging several intersecting identities I hold that may impact the research process and interpretations of this work. I identify as a woman, and a second-generation Sri Lankan immigrant, born and raised in Canada. While I have no children myself, I was raised by two first-generation Sri Lankan immigrants, and my upbringing has exposed me to the many barriers associated with healthcare utilization, as well as the unique stressors faced by immigrant parents. In an effort to mitigate my own biases and potential influences in this work, I approached this thesis from several competing theoretical lenses that concern immigrant experiences (ethnic identity theory, the HIH, etc.), and considered other possible theories beyond the immigrant lens. Additionally, I examined these impacts among both male and female new parents, as well as parents of both immigrant and non-immigrant status, to highlight that while certain subgroups may be more prone to specific stressors and barriers, all new parents are navigating a challenging period in which a greater need for mental healthcare resources may be needed.

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[1] NESARC-III assessed sex (male/female) rather than gender identity. Accordingly, “male” and “female” refer to reported sex; we could not assess parents’ gender identity or distinguish mothers from fathers.

Participants

This study utilized data from the National Epidemiologic Survey on Alcohol and Related Conditions-III (NESARC-III), administered between April 2012 and June 2013 (Grant et al., 2014). The NESARC-III is the third wave of a series of surveys by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), which aimed to gather data on substance use and disorders, related risk factors, as well as associated physical and mental health issues to inform public health planning in the United States (Grant et al., 2014). Multistage probability sampling techniques were used to select eligible participants from households across all 50 states randomly. To ensure the sample would be nationally representative of the U.S. population (in 2013), those identifying with a racial minority background (e.g., Hispanic, African American, or Asian) were given higher selection probabilities than nonminority household members. More detailed information about these sampling techniques can be found elsewhere (Grant et al., 2014).

A total of n = 44,931 non-institutionalized U.S. civilians aged 18 years or older were selected to participate in the NESARC-III. Of these potential respondents, active-duty military members (i.e., U.S. Armed Forces, Military Reserves, and National Guard workers) and those with severe mental or physical disabilities (n = 1,567) were ineligible to participate, as they were not offered protection under Certificates of Confidentiality or could not complete the interview. This left a a sampling pool of n = 43,364 suitable NESARC-III participants. From these eligible participants, a total of n = 36,309 respondents (response rate= 60.1%) completed the survey. This sample was determined to be comparable to the initial eligible sampling pool with a few sociodemographic differences (Grant et al., 2014).

This study utilized a subsample of new parents (i.e., those with at least one child aged four years or younger) who participated in the NESARC III. New parent status was assessed by having respondents indicate the number of children they had who were less than one year old (response range: having 0-2 children in this age group) and the number of children they had between the ages of one and four years old (response range: having 0-4 children in this age group). Respondents who reported having no children under the age of one nor between the ages of one and four were excluded from analyses in the current study, resulting in a final sample of only new parents with children four years and younger (n= 4,129).

Procedure

The NESARC-III data were collected using computer-assisted, face-to-face interviews conducted between April 2012 and June 2013. Interviews were available in English, Spanish, Korean, Vietnamese, Mandarin, and Cantonese by trained bilingual interviewers. Interviewers first contacted eligible participants to introduce the survey and determine their levels of cooperation. They then arrived at participants' homes to conduct in-person screening interviews, obtain consent, and administer the survey material immediately after. Participants were informed of the nature of the survey and that their participation was voluntary through a consent brochure before providing informed consent. Interviews were approximately 45-60 mins in length. More detailed procedural information for the NESARC-III can be found elsewhere (Grant et al., 2014). The quality of these interviews was maintained by using extensive and ongoing training for interviewers, standardized procedures and computer-assisted interviewing software, and regular supervision and monitoring of interviewers. This study (i.e., secondary data analysis) has received approval from the University of Manitoba Research Ethics Board (REB).

Measures

Immigrant generational status (IGS)

IGS was determined using the following NESARC-III items: whether a person was born in the U.S. (yes/no), where their mother was born (country of origin), and where their father was born (country of origin). I used these responses to create a three-level nominal variable: first-generation immigrants (i.e., born in a country outside of the U.S.), second-generation (born in the U.S. to at least one foreign-born parent), and third-generation or later (those born in the U.S. to U.S.-born parents, serving as a reference group). Because IGS is operationalized using nativity indicators, these categories do not capture within-group heterogeneity among immigrant groups (e.g., country/region of origin, time since immigration, or immigration pathway).

Sociodemographic variables

Among new parents in the NESARC-III, the following variables will be examined: sex (male, female), race/ethnicity (White, African American, American Indian/Alaska Native/Asian/Native Hawaiian/Other Pacific Islander, Hispanic), age (range 18 years to 90+), marital status (married/cohabitating, separated/widowed/divorced, never married), household income (<$19 999, $20-000 to $39,999, $40,000 to $69,999, ≥$70,000), and education (less than high school, high school, some post-secondary education or higher).

Trauma Exposure

Lifetime exposure to 34 possible traumatic events was measured by presenting respondents with a flashcard of 20 personally experienced traumatic events and 14 events they may have witnessed or learned about occurring to others, and then asking them whether they had experienced any of them. These experiences were then grouped into five categories with dichotomous ("yes" or "no") items denoting exposure to each traumatic event type (see Appendix B). These events were categorized in accordance with previous research (Braun et al., 2017), and

included severe or life-threatening injuries or illnesses (e.g., being beaten up by a romantic partner or spouse), sexual assault (e.g., sexually assaulted as an adult), child physical and sexual abuse related traumas (e.g., physically abused before age 18), experiences related to natural disasters (e.g., natural disaster, like flood, fire, earthquake, hurricane) and events of witnessing or learning about a trauma occurring to others (e.g., seeing a dead body or body parts). With the exception of deployment-related traumatic experiences, each event may have occurred in a variety of contexts. If a participant reported more than four event types, only the four most severe events were recorded, with scores of 1 representing exposure to at least one of four distinct trauma types, and a score of 0 representing exposure to no trauma types.

PTSD, Other Mental Disorder, and Substance Use Disorders

The NESARC-III used the Alcohol Use Disorder and Associated Disabilities Interview Schedule- Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) version (AUDADIS-5) to determine the prevalence of PTSD, SUDs and other MDs among respondents. This structured Diagnostic Interview has demonstrated fair to excellent reliability (Grant et al., 2014) and validity (Hasin et al., 2015) for all SUDs and MDs in accordance with criteria from the DSM-5. For my analyses, a dichotomous variable for lifetime PTSD, and an any other lifetime MD variable, including SUDs alcohol, sedatives, cannabis, opioid, cocaine, stimulants, hallucinogens, heroin and tobacco), mood disorders (depression, dysthymia, mania, hypomania, bipolar), anxiety disorders (specific phobia, social phobia, agoraphobia, generalized anxiety disorder), and personality disorders (borderline, schizotypal and antisocial personality disorder) were created. New parents who had met diagnostic criteria for any of the disorders above ("yes" vs. "no") were considered to have had a MD or SUD in their lifetime.

Mental Healthcare Utilization

Data on mental healthcare utilization were collected for NESARC-III respondents who met diagnostic criteria for any lifetime MD. A set of five dichotomous ("yes"/" no") questions regarding mental healthcare utilization were presented as follows: 1) Did you EVER go to any kind of counsellor, therapist, doctor, psychologist or any person like that? 2) Did you EVER go to a self-help or support group, use a hotline, or visit an internet chat room to get help? 3) Were you EVER a patient in a hospital for at least one night? 4) Did you EVER go to an emergency room for help during any time? 5) Did a doctor EVER prescribe any medicines or drugs? Additionally, as Waves I and II of the NESARC were separated by three years, the NESARC III additionally questioned if respondents utilized mental healthcare in the past year to be consistent with the one year considered in the diagnostic criteria. Respondents who answered “yes” to any of the preceding five questions were then asked: "During the last 12 months, did you go anywhere or see anyone to get help for [reference to a specific disorder]?" This item was designed to capture the nuances associated with various forms of seeking help for MDs.

Racial Discrimination

Racial/ethnic discrimination was assessed using twelve items that asked respondents how often they experienced discrimination related to their race or ethnicity in a variety of situations. These included experiencing discrimination a) in their ability to obtain healthcare or health insurance, and how they were treated when they received healthcare, as well as b) in non-healthcare settings (i.e., in public or any other situations, being called racist names, or being harmed or threatened with harm because of their race-ethnicity). Items were administered separately to respondents who self-identified as Hispanic (e.g., answered “yes” to the question *Are you of Hispanic or Latino origin?*) and those who identified with other racial/ethnic groups (e.g., answered “no: to the question to the question *Are you of Hispanic or Latino origin?*). Each

item was rated on a five-point scale ranging from 'never' to 'very often.' Scores of these items were summed, and two binary variables were created. One for experiences in a healthcare setting (2 items; 'any discrimination'; yes/no), and one for experiencing racial discrimination in any other setting (10 items; 'any discrimination'; yes/no). The creation of these variables was informed by previous work that has used this classification (e.g., Kimber et al., 2015). This scoring categorized new parents in my study as victims of racial/ethnic discrimination if they responded with anything other than 'never' to any of the items in each variable.

Ethnic Identity

Ethnic identity was assessed in the NESARC-III using an eight-item measure labeled "race ethnic orientation," which captures various dimensions of cultural affiliation and identification. This scale was interpreted as an index of ethnic identity, in line with prior conceptualizations that frame ethnic identity as a central component of one's self-concept shaped by group membership, heritage, and sociocultural belonging (Phinney, 1992; Umaña-Taylor et al., 2014). The scale includes items reflecting several core dimensions of ethnic identity: Self-identification (e.g., "Have a strong sense of yourself as a person of [racial/ethnic] origin"), Cultural pride (e.g., "Proud of your [racial/ethnic] heritage"), Perceived importance of cultural heritage in everyday life, Influence of background on social interactions, and Perceived shared values, attitudes, and behaviors within the racial or ethnic group. Items were administered separately to respondents who identified as Hispanic and those who identified with other racial/ethnic groups. Each item was rated on a 6-point Likert scale, ranging from 1 ("strongly agree") to 6 ("strongly disagree"). All items were reverse-coded so that higher scores indicated greater levels of ethnic identification. Total scores could range from 8 to 48, with

higher scores reflecting a stronger ethnic identity. In this study, ethnic identity was examined as a composite variable (summed total score).

Social Support

Social support was assessed as a continuous variable using a modified version of the Interpersonal Support Evaluation List (ISEL), developed initially by Cohen and Hoberman (1983). In the NESARC-III, a condensed 12-item version of the scale was utilized. These items examined the perceived availability of various social resources, with sample statements including, "If I wanted to have lunch with someone, I could easily find someone to join me" or "If I were stranded 10 miles from home, there is someone I could call who could come and get me." Six of the 12 questions assess negative social support, while the remaining six gauge positive support. Response options range from (1) definitely false to (4) definitely true. Negative-question responses were reverse coded, and scores on all items were summed to ensure that a higher score signified a greater perceived level of social support. Cronbach's alpha for this measure has demonstrated good internal consistency ($\alpha = .83$).

Analytic Plan

Analyses for the current study used STATA/SE Version 18 (StataCorp, 2023). Data from the NESARC-III were adjusted for oversampling and nonresponse, and were then weighted to represent the U.S. civilian population based on the 2012 American Community Survey (Grant et al., 2014). As standard in NESARC-III analyses, unweighted sample sizes (n) were reported while all descriptive statistics (e.g., proportions, means, standard errors) were calculated using the appropriate sampling weights (Grant et al., 2014). All models and tests were fit with Stata's survey procedures (svyset with weights, strata, and PSUs), yielding design-adjusted estimates and standard errors. First, I examined sociodemographic prevalence estimates and means of key

moderating variables across my three IGS groups (first-generation, second-generation, third-generation or later). This involved cross-tabulations and design-adjusted χ^2 tests for categorical variables (sex, race/ethnicity, marital status, household income, education) among new parents, as well as survey-weighted linear tests/ANOVA for continuous variables (age, ethnic identity, social support). Next, survey-weighted logistic regression was used to estimate associations in my sample between the three IGS categories and the outcomes listed below. Throughout, the reference group for IGS was third-generation or later (3rd+), and the reference for sex was males.

Trauma

First, I estimated the association between IGS and exposure to each of the five trauma category types while adjusting for age, sex, race, education, marital status, and household income (Adjusted Odds Ratio; AOR). I then examined whether four variables moderated the association between IGS and trauma exposure by adding a i) sex-by-IGS interaction term, ii) racial discrimination in non-healthcare settings-by-IGS term, iii) ethnic identity-by-IGS term, and iv) social support by IGS interaction term, as four separate analyses to the adjusted logistic regression model. For each, a Wald F-test was used to determine whether the interaction significantly improved model fit. All relevant variables were included as main effects in each model.

Lifetime PTSD

I then examined the association between the three IGS groups and the lifetime PTSD variable using logistic regression. These models were adjusted for age, sex, race, education, marital status, and household income (AOR). I then examined whether several relevant variables moderated the association between IGS and lifetime PTSD by adding a i) sex-by-IGS interaction

term, ii) racial discrimination in non-healthcare settings-by-IGS term, iii) ethnic identity-by-IGS term, and iv) social support-by-IGS interaction term, as four separate analyses to the adjusted model. For each, a Wald F-test was used to determine whether the interaction significantly improved model fit. All relevant variables were included as main effects in each model.

Any Other Lifetime Mental Disorders or Substance Use Disorders

Next, I examined the association between the three IGS groups and the any other lifetime MD or SUD variable using logistic regression. This model was adjusted for age, sex, race, education, marital status, and household income as well (AOR). I then examined whether several relevant variables moderated the association between IGS and any other lifetime MD by adding a i) sex-by-IGS interaction term, ii) racial discrimination in a non-healthcare setting-by-IGS term, iii) ethnic identity-by-IGS term, and iv) social support-by-IGS interaction term, as four separate analyses to the adjusted model (AOR). For each, a Wald F-test was used to determine whether the interaction significantly improved model fit. All relevant variables were included as main effects in each model.

Mental Healthcare Utilization

Finally, I examined the association between the three IGS groups and lifetime mental healthcare utilization for MDs using logistic regression analyses, adjusted for age, sex, race, education, marital status, and household income. Healthcare utilization for SUDs were excluded from these analyses, as they were assessed using a different set of mental healthcare utilization questions. To determine whether sex, ethnic identity, and social support may moderate the association between IGS and healthcare utilization among new parents, I added i) IGS-by-sex, ii) IGS-by-ethnic identity, and iii) IGS-by-social support interaction terms to the adjusted logistic regression model as three separate analyses. Additionally, a single item for racial discrimination

specific to healthcare settings was added to the adjusted model as an interaction term with IGS, in order to investigate the moderating effects of racial discrimination on healthcare utilization among immigrant and non-immigrant new parents. For each, a Wald F-test was used to determine whether the interaction significantly improved model fit. Relevant variables were added to each model as main effects.

Post-Hoc Analyses: Probing of Significant Interactions

For any significant interaction, I ran stratified, survey-weighted logistic regressions (simple-effect AORs) within levels of the moderator (e.g., sex effect on sexual assault within each IGS group; discrimination effect on PTSD within 1st/2nd/3rd+; social support effect on any trauma and MD/SUD within each IGS), as shown in Appendix C.

Chapter III: Results

Sample Demographics

Sociodemographic characteristics of my sample are summarized in Table 1. This sample consisted of n = 4,129 new parents, 24.3% who reported being first-generation immigrants (n = 1,002), 13.7% who were second-generation (n = 565), and 62.0% who indicated that they were of third-generation descent or beyond (n = 2,562). The majority of the sample identified as female (66.2%), White (42.4%) or Hispanic (29.5%), and were married or cohabiting (68.7%). Most had some post-secondary education (56.7%) and an annual household income under $70,000 (75.1%). Participants' average age was 31.42 years old (SD = 7.12).

Significant sociodemographic and psychosocial differences emerged across IGS groups. First-generation parents were significantly older on average (M = 33.80) than both second- (M = 29.67) and third-generation participants (M = 30.87), F (2, 4126) = 171.74, $p < .001$. A higher

proportion of first-generation individuals were male (41.2%) compared to second- (32.0%) and third-generation groups (31.3%), $\chi^2(1) = 32.79$, $p < .001$. Racial/ethnic identity showed clear generational patterns: 67.2% of first- and 61.2% of second-generation participants identified as Hispanic, whereas 60.0% of third-generation participants identified as White. This distribution was highly significant, $\chi^2(6) = 2000.00$, $p < .001$. Marital status also varied, with 82.8% of first-generation parents married or cohabiting versus approximately 64% of second- and third-generation participants, $\chi^2(4) = 136.37$, $p < .001$.

On average, first-generation participants had also completed a lower educational attainment: 34.8% had less than a high school education, compared to just 10.5% of third-generation participants, $\chi^2(4) = 308.88$, $p < .001$. Income also differed significantly across groups, $\chi^2(6) = 35.83$, $p < .001$, though fewer first-generation parents reported household incomes above $70,000 (19.8%) than second- (26.6%) or third-generation participants (26.5%).

Psychosocial indicators revealed that first-generation immigrants scored highest in ethnic identity ($M = 5.21$, SD = 0.82), followed by second- ($M = 4.73$) and third-generation ($M = 4.48$) groups, $F(2, 4126) = 464.59$, $p < .001$. Social support scores were relatively consistent across generations, though second-generation participants reported slightly greater support ($M = 3.52$) compared to the first- ($M = 3.52$) and third-generation groups ($M = 3.45$), $F(2, 4126) = 27.11$, $p < .001$.

Experiences of racial discrimination were more frequently reported by first-generation immigrants. Over half (51.2%) reported experiencing lifetime racial discrimination, compared to 48.3% of second- and 39.1% of third-generation participants, $\chi^2(2) = 49.57$, $p < .001$. Similarly, healthcare-related racial discrimination was reported by 26.3% of first-generation parents,

compared to 14.2% and 10.2% of second- and third-generation participants, respectively, $\chi^2(2) = 147.96$, $p < .001$. Discrimination in all other settings followed a similar pattern, $\chi^2(2) = 44.59$, $p < .001$.

Trauma Exposure and IGS Differences

Table 2 presents the prevalence estimates and adjusted odds ratios (AORs; for age, sex, race, education, income, marital status) of associations between trauma exposure, mental health outcomes, and IGS among new parents in my sample (n = 4,129). Across nearly all trauma categories, first-generation parents reported significantly lower odds of trauma exposure compared to third+ generation parents. Specifically, 45.9% of first-generation parents reported experiencing any trauma, compared to 66.7% of third+ generation parents (AOR = 0.50, $p < .001$). This trend was observed consistently across trauma types, including serious illnesses (15.6% vs. 28.2%), child abuse (3.9% vs. 14.4%), and witnessing trauma (36.2% vs. 51.7%; AOR range 0.25- 0.62, all p's < .001). In contrast, second-generation parents reported estimates of trauma exposure in-between those of first and third+ generation immigrants, including 62.5% for any trauma, 25.0% for serious illness, 11.7% for child abuse, and 48.9% for witnessing trauma. However, their odds of exposure to these events did not differ significantly from third+ generation parents.

The exception to these patterns was for sexual assault. Relative to the third+ generation reference group, odds of sexual assault were significantly lower for second-generation parents (AOR = 0.32, $p < .01$) and for first-generation parents (AOR = 0.34, $p < .05$).

There was a Social Support × IGS interaction on any trauma (AOR = 0.79, $p = .014$). Stratified post-hoc analyses revealed that higher social support was significantly associated with

lower odds of trauma among third+ generation parents (AOR = 0.67, p = .001). However, this association was not significant for first-generation (AOR = 1.00, p = .984) or second-generation parents (AOR = 0.82, p = .343). There was also a significant Sex × IGS interaction for sexual assault (AOR = 4.25, p = .036). Stratified post-hoc analyses showed that the effect of sex on sexual assault was significant only among third+ generation parents, in that females reported significantly higher rates compared to males (AOR = 58.76, p < .001). This association was not significant among first-generation (AOR = 3.00, p = .356), or second-generation parents (AOR = 3.53, p = .343). No other significant interactions were observed in the trauma models (all p's > .05).

Lifetime PTSD and IGS Differences

As displayed in Table 2, lifetime PTSD was also significantly lower among first-generation parents compared to their third+ generation counterparts. Only 4.7% of first-generation parents met criteria for lifetime PTSD, compared to 12.8% of third+ generation parents (AOR = 0.35, p < .001). There was no statistically significant difference between second- and third+ generation parents (AOR = 1.07, p > .05).

There was a significant interaction between racial discrimination and immigrant generational status (IGS) in predicting PTSD (AOR = 0.71, p = .046), indicating that the strength of the association between racial discrimination and PTSD differed by generational group. Stratified post-hoc analyses showed that racial discrimination was positively associated with higher odds of PTSD in all generational groups, but the magnitude of this association decreased across generations: it was strongest among first-generation parents (AOR = 4.94, p < .001), followed by second-generation parents (AOR = 3.80, p < .001), and was weakest among third-

generation or later parents (AOR = 2.10, $p < .001$). No significant interactions were observed between racial discrimination and sex, ethnic identity, or social support in predicting PTSD outcomes (all ps > .05).

Any Other Lifetime Mental or Substance Use Disorder and IGS Differences

First-generation parents had significantly reduced odds of meeting criteria for any MD/SUD compared to third+ generation parents (AOR = 0.29, $p < .001$). No significant difference was found between second-generation and third+ generation parents (AOR = 0.93, $p < .05$). There was a Social Support × IGS interaction on MD/SUD (AOR = 0.65, $p < .001$). Post-hoc analyses showed that social support was significantly associated with lower odds of MD/SUD among third+ generation parents (AOR = 0.40, $p < .001$), but this association was not significant for first-generation (AOR = 0.77, $p = .095$) or second-generation parents (AOR = 0.86, $p = .483$).

Healthcare Utilization and IGS Differences

Professional Help

As displayed in Table 3, estimates of professional help-seeking for any MDs were significantly lower among first-generation parents (23.7%) compared to third+ generation parents (37.4%), AOR = 0.29, $p < .001$. Second-generation parents (35.2%) did not differ significantly from third+ generation parents regarding their odds of seeking professional help. Interactions between IGS and sex, racial discrimination, ethnic identity, and social support were tested and were not significant for this outcome (see Table 3).

Self-Help

Self-help seeking was reported least often among first-generation parents (5.8%), compared to 9.7% of third+ generation parents, AOR = 0.21, $p < .001$. Second-generation parents (10.2%) did not differ significantly from third+ generation parents. Interactions between IGS and sex, racial discrimination, ethnic identity, and social support were tested and were not significant for this outcome (see Table 3).

Emergency Care

Emergency care utilization was lower among first-generation parents (6.1%) compared to third+ generation parents (11.0%), with significantly reduced odds of use (AOR = 0.30, $p < .001$). Second-generation parents (9.6%) additionally did not differ from the third+ generation group in their emergency care use (AOR = 0.84, $p = .521$). Interactions between IGS and sex, racial discrimination, ethnic identity, and social support were tested and were not significant for this outcome (see Table 3).

Prescribed Medication or Drug Use

Estimates of prescribed psychiatric medication use were significantly lower among first-generation (16.7%) compared to third+ generation parents (30.0%), AOR = 0.31, $p < .001$. Second-generation parents had non-significant odds compared to third+ generation parents for medication use. Interactions between IGS and sex, racial discrimination, ethnic identity, and social support were tested and were not significant for prescription medication use (see Table 3).

Follow-Up Care in Past Year

First-generation parents had significantly lower odds of past-year follow-up care (AOR = 0.34, $p < .001$), while second-generation parents (16.3%) did not significantly differ from third+ generation parents. Interactions between IGS and sex, racial discrimination, ethnic identity, and social support were tested and were not significant for this outcome (see Table 3).

Chapter IV: Discussion

To my knowledge, this thesis provided one of the most comprehensive investigations to date for how IGS shapes trauma exposure, mental health outcomes, and healthcare utilization patterns during early parenthood, while additionally evaluating the intersecting roles of racial discrimination, ethnic identity, social support, and parental sex. Using a large, nationally representative U.S. dataset (NESARC-III), this study was among the first to differentiate outcomes across first-, second-, and third-generation immigrant new parents- examining how risk and resilience factors unfold throughout their transitions of parenthood, migration histories, and systemic inequities. Additionally, these findings can help bridge conflicting theoretical frameworks, including ethnic identity theory (Phinney, 1992), race-based traumatic stress theory, (Carter, 2007), social support theory (Cohen et al., 1985), and the Healthy Immigrant Effect (Domnich et al., 2012), by demonstrating that IGS on its own does not appear to dictate mental health outcomes. Rather, an amalgam of cultural, structural, and psychosocial moderators shapes each generation's unique mental health profiles.

My first hypothesis, that first-generation immigrants would report higher estimates of traumatic experiences, PTSD, and other MDs compared to second-generation immigrants and non-immigrants, was not supported. In fact, first-generation parents consistently reported the lowest estimates of trauma exposure, PTSD, and other MDs. For example, compared with third-

generation or later (third+) parents, first-generation parents had lower odds of any trauma, serious illness, child abuse, witnessing trauma, lifetime PTSD, and any MD/SUD. Sexual assault odds were also lower for first- and second-generation parents, while second-generation estimates were generally between first- and third+ groups and did not differ significantly from third+ for PTSD or MD/SUD.

Although these findings countered my initial hypothesis, the pattern strongly aligned with the healthy immigrant effect/immigrant paradox (e.g., Domnich et al., 2012), which suggests that first-generation immigrants often arrive to a host country with better mental and physical health than their native-born peers due to positive selection, protective cultural norms, and cohesive family networks. However, these lower estimates should not be misinterpreted as an absence of risk. For example, interaction effects in my data did not indicate that social support decreased trauma exposure among first-generation parents. Rather, social support was associated with lower odds of any trauma only among third+ parents, with no significant association for first- or second-generation parents. Thus, the protective role of support appears generation-specific in this sample.

Ethnic identity may also have provided context for these patterns. First-generation parents reported the highest ethnic identity scores, which could explain resilience in day-to-day stress processes. However, in my adjusted models, ethnic identity did not significantly moderate PTSD or trauma outcomes by IGS, meaning I may not be able to infer a buffering effect here, statistically. At the same time, measurement issues for traumas related to war, migration, or political upheaval may be underrepresented in Westernized checklists (Sharma et al., 2022), and may nor comprehensively capture experiences of those affected, as cultural norms around disclosure could contribute to underestimation. In sum, first-generation immigrants in this cohort

reported lower exposure and disorder estimates than U.S.-born peers, but structural and measurement factors warrant caution in interpreting these differences. Alternative explanations for these findings may involve measurement, recall, or disclosure differences (e.g., stigma surrounding mental health, language nuances affecting self-report), as well as unmeasured contextual factors such as neighborhood safety or access to community supports. It is also possible that cultural variations in how distress and trauma are expressed or understood influenced reporting patterns (Wiley et al., 2018). Finally, the heterogeneity within immigrant generational groups may have contributed to variability in mental health and service use outcomes, reflecting the diverse experiences and acculturation contexts encompassed within each category. However, because my models adjusted for age, sex, race/ethnicity, education, income, and marital status, these differences are unlikely to be fully explained by sociodemographic differences alone.

My second hypothesis, that first-generation immigrants would be significantly less likely to access mental-healthcare resources than second-generation immigrants and non-immigrants, was strongly supported. First-generation new parents showed the lowest utilization across every service type examined. Compared with third-generation or later (third+) parents, first-generation parents had significantly lower odds of seeking professional help, self-help, emergency care, prescribed psychiatric medication, and past-year follow-up care for any MD. By contrast, second-generation parents did not differ significantly from third+ on any utilization outcome. Importantly, none of the IGS interactions with sex, racial discrimination, ethnic identity, or social support were significant for service use, indicating that these factors operated similarly across generations in my adjusted models.

This pattern was consistent with behavioral models of healthcare use and structural-barrier frameworks: cost and insurance constraints, language and documentation concerns, navigation challenges, and limited trust in systems likely lowered engagement among first-generation parents. First-generation participants reported higher estimates of healthcare-related racial discrimination, which may have contributed to avoidance; however, discrimination did not moderate utilization by IGS. Importantly, the NESARC-III help-seeking questions were only administered to respondents who met lifetime diagnostic criteria for any mental or SUD meaning that these findings reflect the likelihood of ever seeking help among those with a diagnosable condition rather than in the general population. Consequently, lower overall disorder prevalence among first-generation parents was not expected to account for the observed under-utilization. Even among individuals meeting lifetime diagnostic criteria, first-generation parents remained less likely to engage with mental-health services. These results underscored the importance of culturally and linguistically concordant outreach, insurance and cost protections, and navigation supports (e.g., community health workers) to address persistent barriers in access to care.

My third hypothesis- that second-generation immigrants would report higher estimates of trauma exposure, PTSD, and other MDs than non-immigrants- was not supported. Although second-generation parents' estimates generally fell between first-generation and third-generation or later (third+) groups, they did not differ significantly from third+ experiences. For example, the odds of PTSD were comparable, as were the odds of any trauma and any MD/SUD. The exception was sexual assault, where estimates were notably lower among second-generation parents relative to third+.

Conceptually, second-generation individuals often navigate bicultural identity and may face distinct stressors (Sarli et al., 2022); however, in this cohort of new parents, those dynamics

did not translate into higher adjusted odds of trauma exposure, PTSD, or MD/SUD compared to third+. It remains possible that heterogeneity within the second generation (e.g., ethnic subgroup, neighborhood context, language proficiency, partner nativity, length of residence) may obscure exposures within this subgroup. Future work with more precise measures and larger levels may clarify whether specific second-generation subgroups experience elevated risk.

Our fourth hypothesis- that higher racial discrimination and lower ethnic identity would predict worse outcomes, while higher social support would be protective- was partially supported.

In this thesis, the racial discrimination × IGS interaction was significant, indicating that the positive association between racial discrimination and PTSD was present across all immigrant-generation groups. Specifically, higher racial discrimination was associated with greater odds of PTSD among first-generation, second-generation, and third-plus-generation parents. This pattern aligned with minority-stress and allostatic-load perspectives, in which chronic exposure to racism functions as toxic stress that elevates risk for trauma-related symptoms (e.g., Williams & Mohammed, 2009). For newer immigrants, migration-related stressors and fewer institutional resources may amplify this impact, as discussed in prior literature (e.g., Mak et al., 2021).

Although first-generation parents reported the highest ethnic identity on average, ethnic identity did not significantly moderate PTSD or trauma outcomes by IGS in my adjusted models. Thus, I cannot claim an exacerbating or buffering effect here, statistically. Conceptually, although ethnic identity can theoretically buffer stress (Phinney, 1992), I may not have detected moderation in the current study as first-generation parents reported uniformly high identity

(limited variance) and my scale assessed identity strength more than belonging/affirmation (i.e., the facet most likely to be protective).

Contrary to my initial expectation, higher social support did not interact with IGS for PTSD outcomes. However, social support did show generation-specific protection for other outcomes. Among third+ parents, higher support related to lower odds of any trauma and lower odds of any MD/SUD, whereas these associations were not significant for first- or second-generation parents (see Appendix C). This pattern suggests that the benefits of support may depend on how networks are structured and mobilized across generations- consistent with the stress-buffering model (Cohen et al., 1985), but not uniform in its operation. Finally, predictors did not show significant IGS interactions for service utilization (professional help, self-help, emergency care, medication, follow-up), indicating similar patterns of help-seeking across generations once covariates are accounted for. These findings underscore the need to consider which forms of support matter, for which outcomes, and for whom, in my sample.

Our fifth hypothesis- that across IGS categories, male new parents would report similar trauma exposure and PTSD patterns as female parents but would have lower estimates of mental-healthcare utilization- was only partially supported.

On the exposure side, men and women showed broadly similar patterns across IGS. The only significant Sex x IGS interaction emerged for sexual assault. Stratified models indicated that females reported substantially higher odds of sexual assault only among third+ parents, whereas sex differences were not significant among first- or second-generation parents (see Appendix C). For other trauma categories and for PTSD, Sex x IGS interactions were not significant, suggesting comparable generational patterns for men and women after adjustment.

The interactions between sex and immigrant generational status (IGS) in relation to mental health service use were not significant across all service types (professional help, self-help, emergency care, psychiatric medication, and follow-up). As a result, I could not conclude that men used fewer services than women in this cohort once covariates and IGS were taken into account. This finding contrasts with prior research showing lower utilization among men, which has often been attributed to gender norms, emotional self-reliance, and stigma surrounding help-seeking (Mancinelli & Filippi, 2025). One possible explanation is that in this study, the NESARC-III help-seeking items were only administered to respondents who met lifetime diagnostic criteria for a mental or SUD, which primed my analysis on clinical needs and may have weakened typical sex differences in help-seeking. Additionally, because the sample consisted of new parents- who generally have increased contact with healthcare systems- sex differences in service use may have been further reduced after covariate adjustment.

Taken together, these findings imply that IGS, more than sex, structures trauma and PTSD likelihood in this sample of new parents, with the expected gender asymmetry evident only for sexual assault among third+ parents- consistent with known epidemiology and possible differences in disclosure. Although theories of masculinity and help-seeking stigma suggest lower service use among men (Mancinelli & Filippi, 2025), especially immigrant men (Mohammadifirouzeh et al., 2023), my results do not demonstrate that pattern**.** Future analyses should report adjusted main effects of sex on each utilization outcome and consider intersectional models (sex x discrimination; sex x language proficiency) to more sensitively detect gendered barriers to care.

Strengths and Limitations

This thesis offered a rigorous, strengths-based, and culturally grounded examination of immigrant new parent mental health and healthcare utilization. It demonstrated several key strengths in methodology, theory, and potential for practical application. A central strength of this study was its use of a large, nationally representative dataset. This allowed for strong generalizability across U.S. adults. Importantly, rather than treating immigrants as a single group, the study also distinguished IGS, differentiating between first-, second-, and third-generation new parents. This approach allowed for one of the first population-level examinational of how IGS shapes trauma exposure, mental health diagnoses, and healthcare utilization patterns during early parenthood.

In addition to its methodological design, the study applied an intersectional lens to better understand mental health disparities. Rather than examining prevalence alone, it explored how intersecting factors, including racial discrimination, social support, ethnic identity, and parental sex, moderated mental health outcomes. These outcomes were treated not as secondary variables, but as forces that shaped the lived experiences of new parents. The use of interaction terms and post-hoc analyses aimed to clarify who was most affected, and under what conditions.

This thesis is further strengthened by its theoretical foundation, which integrates ethnic identity theory (Phinney, 1992), social support theory (Cohen et al., 1985), race-based traumatic stress theory (Carter, 2007), and the HIH (Domnich et al., 2012). These frameworks informed both the design and interpretation of results, supporting a nuanced understanding of sociocultural and structural influences. While the HIH suggests better health outcomes among immigrants, this

study demonstrated that first-generation parents, though seemingly resilient in prevalence data, may face hidden risks due to systemic inequities and identity-related stress in help-seeking.

Beyond academic contributions, this study also offered practical insight for clinical work and policy. It highlighted the need for targeted, culturally sensitive, and trauma-informed approaches to care, particularly those that address accessibility barriers for first-generation immigrant parents. The findings pointed to potential gaps in healthcare navigation, cost and insurance challenges, and linguistic or cultural mismatches that may prevent engagement even when need is present. These insights could inform the design of early parenthood and primary-care programs that integrate outreach, community-based navigation, and interpreter or cultural-broker models to reduce disparities in service use.

Finally, this study meaningfully contributes to the field of immigrant mental health equity. It draws attention to a group rarely centered in quantitative mental health research: immigrant new parents. By doing so, it stations early parenthood as a formative life stage, deserving of greater attention in trauma and mental health research. It encourages future researchers to examine ethnic identity development, transmission through generations, and social dynamics as potential resilience mechanisms.

Despite the strengths and positive contributions of this study, several important limitations should be considered. First, the cross-sectional design of this thesis prevented any causal conclusions. While significant associations were identified between IGS, discrimination, social support, and mental health outcomes, it was not possible to determine the temporal order of these variables. For instance, although the study explored mental healthcare utilization among new parents, it remained unclear whether these services were accessed during early parenthood

or at an earlier point in participants' lives. Longitudinal research is needed to understand how trauma, identity development, and help-seeking evolve across the transition to parenthood. Additionally, because my sample was comprised of new parents, selection into parenthood may bias estimates as individuals with severe, chronic trauma or MD/SUD may be underrepresented if those conditions delay or prevent childbearing.

A second limitation involved the reliance on self-reported data, which may have been prone to underreporting, recall errors, and social desirability bias. This was particularly relevant when assessment stigmatized experiences such as PTSD, substance use, and trauma. These concerns may have been more pronounced among first-generation immigrant parents, who may have held cultural beliefs that discouraged disclosing psychological distress (Bridges, 2012; Saasa, 2021; Salami, 2018). Furthermore, trauma exposure and mental health diagnoses were based on retrospective recall, which is a method susceptible to memory issues, particularly for emotionally intense or distant events (Krayem et al., 2021).

Measurement limitations within the NESARC-III dataset also impacted the study, as several key variables relevant to immigrant mental health were collapsed or excluded. For example, the racial/ethnic categories grouped Asian, American Indian/Alaska Native, Native Hawaiian, and Other Pacific Islander individuals, were combined due low cell sizes, which restricted within-group analyses. Similarly, trauma categories lacked specificity for this group, as distinctions of pre- versus post-migration traumas could not be assessed. Additionally, I had initially aimed to examine acculturation stress in this study more directly. However, due to over 50% missing data (as relevant acculturation items were only administered to multilingual participants), I was unable to capture this highly relevant factor in my analyses. Moreover, the

NESARC-III was only administered to English, Spanish, Korean, Vietnamese, Mandarin. and Cantonese, speaking respondents, which also introduces bias and likely excluded more marginalized or recently arrived immigrant parents from many other countries, reducing generalizability to broader cultural groups.

This study also did not explore within-group diversity among immigrant populations (e.g., country/region of origin, time since immigration, or immigration pathway). First-generation immigrants were treated as a single category despite wide variation in ethnicity, religion, spirituality, language, migration histories, reasons for relocation, and legal status. For example, refugees and economic migrants likely differ in their risk profiles and mental health outcomes (Rasmussen et al., 2012; Wilson et al., 2013). Future work should differentiate between migration pathways and oversample less visible or harder-to-reach groups, such as recent arrivals, non-English speakers, and racialized minorities.

In addition, while my thesis focused on immigrant parents, it did not closely examine the experiences of non-immigrant racialized groups such as Black or Indigenous families. These populations also experience racial discrimination and often face barriers to mental healthcare, however, many of their experiences would be considered with others in the third generation or beyond immigrant new parent group. Their exclusion represents a missed opportunity to explore broader systemic inequalities. Future research should prioritize inclusive designs, that incorporate both immigrant and non-immigrant minority parents to better understand the full landscape of mental health disparities.

Finally, the NESARC-III data were collected in 2012–2013, and therefore, reflected an earlier sociopolitical context**.** More recent U.S. immigration policies and enforcement practices

have exposed immigrant families to additional forms of trauma and chronic stress, which could shift current prevalence estimates relative to those observed here (e.g., Mercado et al., 2024). In accordance, these findings should be interpreted as historical baselines, and future work using newer cohorts is needed to assess whether trauma exposure and related mental-health patterns among immigrant parents have intensified under current conditions.

Implications for Research, Policy, and Practice

The findings from this thesis have direct implications for clinical care, public health outreach, and social policy. First, generationally tailored approaches are needed to increase mental-healthcare utilization among first-generation parents. Those facing language barriers, cultural stigma, and healthcare discrimination may benefit from interventions that are culturally affirming, linguistically accessible, and community-centered. Strategies such as mobile clinics, trusted cultural brokers, community health workers, doulas and birth workers, and partnerships with faith- or community-based organizations can help reduce access barriers and improve trust (e.g., Khatri et al., 2024). In addition, while the current study identified lower mental-healthcare utilization among first-generation parents, the specific barriers could not be examined directly with NESARC-III data. Future research should investigate which concrete factors, such as cost and insurance, navigation challenges, transportation, or childcare limitations, most strongly hinder service use in immigrant populations. Once identified, healthcare systems can target these areas through insurance and cost protections, navigation support, flexible scheduling, telehealth, and partnerships with trusted community organizations to improve accessibility for immigrant families.

Second, while prior research has highlighted unique identity challenges among second-generation parents such as bicultural stress, intergenerational conflict, and pressure to succeed (Romero & Piña-Watson, 2017), the present findings did not indicate marked differences between second- and third-plus-generation groups. This suggests that risk may not be uniform within the second-generation category, but instead, concentrated among specific subgroups, such as those experiencing higher cultural conflict or weaker ethnic identity. Future research is needed to identify which within-group factors contribute most to distress. Therapeutic approaches that foster bicultural competence, ethnic identity integration, and emotion regulation may still be beneficial for individuals within this population who experience elevated bicultural stress (Umaña-Taylor et al., 2014).

Third, although discrimination did not moderate utilization by IGS in these models, first-generation parents reported more healthcare discrimination. This higher prevalence among first-generation parents may have, in turn, contributed to lower service use through reduced trust, communication barriers, and protective avoidance. Therefore, systems should prioritize concrete accessibility efforts for these barriers: professional interpreter and language-concordant services, culturally concordant providers and teams, and navigation supports that make entry routes clearer and safer. Evidence from the broader literature has linked these strategies to improved access and trust (e.g., Beach et al., 2006).

Fourth, social support should be leveraged proactively- but matched to one's IGS and outcome. For example, programs can incorporate mentorship, group formats, and culturally rooted parenting circles to promote cohesion (e.g., Leahy-Warren et al, 2012; Sullivan-Bolyaiet & Lee, 2011). In my data, support was protective for any trauma and MD/SUD only among

third+ parents. For first- and second-generation parents, efforts should activate trusted networks (e.g., one's extended family, ethnic/community organizations, etc.) and ensure support is non-stigmatizing and practically helpful. Providers should also informally assess whether networks buffer stress or inadvertently reinforce stigma.

Finally, mental healthcare should focus on prevention and early action, not just crisis treatment. Preventive programs during prenatal and early parenting stages should screen for discrimination, assess support systems, and promote identity resilience with culturally adapted tools and warm handoffs to trusted, language-concordant providers. On account of the few sex differences being found, program designs should be father-inclusive in addition to mothers, and integrate community partners to reach parents at elevated risk for unmet needs.

Future Research Directions

There are several ways in which future research can build on the findings of this thesis. First, longitudinal studies are needed to explore how trauma, identity, and social support interact over time; especially during the transition to parenthood- a period marked by identity disturbances and psychological vulnerability (e.g., Fisher, 2017; Reupert & Maybery, 2009). Examining these dynamics would offer greater insights into causal relationships and developmental trajectories among immigrant and non-immigrant new parents. Second, future research should take a more explicit intersectional approach when examining this group. Investigating how IGS, gender, race, income, and migration pathways intersect to influence mental health outcomes would allow for a more nuanced understanding of risk and resilience. Quantitative designs that test intersectional moderation models could yield especially powerful insights here.

Third, qualitative and mixed-methods work is urgently needed to center the voices and lived experiences of immigrant new parents. While large-scale survey data provide important information, they often miss cultural nuance, help-seeking narratives, and the intergenerational dynamics that qualitative approaches can shed light on. For example, in-depth interviews with parents could help explain why certain interaction patterns emerge in the quantitative data. Additionally, research must begin to address immigrant fatherhood more directly. While most existing literature focuses on mothers, fathers are equally impacted by trauma, discrimination, and evolving cultural norms around masculinity (e.g., Giallo et al., 2017). Understanding their unique coping strategies and disclosure barriers could inform more inclusive, father-specific interventions. Lastly, comparative studies across national contexts- such as Canada versus the U.S.- could be conducted to reveal how different immigration, healthcare, and policy infrastructures shape mental health and mental healthcare utilization outcomes. These comparisons would support the development of more globally informed and grounded practices for immigrant mental health.

Conclusion

This thesis emphasized that immigrant generational status (IGS) is not just a background variable-it is a lens that reveals how identity, discrimination, culture, and support shape mental health during one of life's most intense transitions: becoming a parent. These findings suggest that mental health patterns do not shift in a simple, linear way across generations; instead, generational differences were most clearly reflected in service utilization and in how key psychosocial and structural factors related to outcomes. First-generation parents reported the lowest estimates of trauma exposure, PTSD, and other MDs (consistent with the healthy immigrant effect), yet also showed the lowest mental-healthcare utilization across every service

type examined- even among those meeting lifetime diagnostic criteria- highlighting that lower prevalence should not be equated with “no need” in the presence of barriers to disclosure and care. Second-generation parents did not show significantly higher adjusted odds of trauma exposure, PTSD, or MD/SUD compared to third-generation or later parents, and their service use patterns were comparable, suggesting that vulnerability may be concentrated within specific second-generation subgroups and contexts not fully captured by broad categories. Third-generation or later parents showed the highest overall estimates of trauma and MDs in this cohort, and social support appeared protective for some outcomes primarily within this group, reinforcing that support may not operate uniformly across generations. Across all generations, racial discrimination emerged as a central stressor linked to PTSD, underscoring racism as a clinically meaningful exposure rather than a peripheral factor, while ethnic identity-though conceptually important and highest among first-generation parents- did not statistically moderate PTSD or trauma outcomes in adjusted models, pointing to the need for more nuanced measurement and theory testing. Taken together, these results are a call to action: if first-generation parents are least likely to access care even when diagnosable need is present, perinatal and early-parenthood systems must move beyond one-size-fits-all models toward culturally safe, linguistically accessible, navigation-supported pathways that address discrimination and strengthen usable support, so that every new parent- regardless of where they were born or how they are racialized- has a real opportunity to be supported, be heard, and raise the next generation in safety and dignity.

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Table 1*:*

Sociodemographic Characteristics of New Parents by IGS

	1st Gen (n = 1002, 24.3%)	**2nd Gen (n = 565, 13.7%)**	**3rd Gen or Later (n = 2562 62.0%)**	**Overall (n = 4129, 100%)**	χ^2 or ANOVA	df
Sex						
Male	413 (41.2%)	181 (32.0%)	801 (31.3%)	1395 (33.8%)	32.79***	1
Female	589 (58.8%)	384 (68.0%)	1761 (68.7%)	2734 (66.2%)		
Race/Ethnicity						
White	90 (9.0%)	126 (22.3%)	1536 (60.0%)	1752 (42.4%)	2000***	6
African American	73 (7.3%)	60 (10.6%)	766 (29.9%)	899 (21.8%)		
Am. Indian/Asian/Other	166 (16.6%)	33 (5.8%)	63 (2.5%)	262 (6.4%)		
Hispanic	673 (67.2%)	346 (61.2%)	197 (7.7%)	1216 (29.5%)		
Age (M ± SD)	33.80 (7.242)	29.67 (6.578)	30.87 (6.955)	31.42 (7.116)	171.74***	2
Marital Status						
Married/Cohabitating	830 (82.8%)	361 (63.9%)	1645 (64.2%)	2836 (68.7%)	136.37***	4
Separated/Widowed/Divorced	78 (7.8%)	60 (10.6%)	256 (10.0%)	394 (9.5%)		
Never Married	94 (9.4%)	144 (25.5%)	661 (25.8%)	899 (21.8%)		
Household Income						
<$19,999	257 (25.7%)	153 (27.1%)	633 (24.7%)	1043 (25.26%)	35.83***	6
$20,000–$39,999	349 (34.8%)	151 (26.7%)	681 (26.6%)	1181 (28.6%)		
$40,000–$69,999	198 (19.8%)	111 (19.7%)	568 (22.2%)	877 (21.2%)		
≥$70,000	198 (19.8%)	150 (26.6%)	680 (26.5%)	1028 (24.9%)		
Education						
< High School	349 (34.8%)	100 (17.7%)	268 (10.5%)	717 (17.4%)	308.88***	4

High School	243 (24.3%)	138 (24.4%)	690 (26.9%)	1071 (25.9%)		
Some Postsecondary+	410 (40.9%)	327 (57.9%)	1604 (62.6%)	3241 (56.7%)		
Racial Discrimination (%)	513 (51.2%)	273 (48.3%)	1002 (39.11%)	1788 (43.3%)	49.57***	2
In Healthcare Settings (%)	263 (26.3%)	80 (14.2%)	262 (10.2%)	605 (14.7%)	147.96***	2
In Other Settings (%)	490 (48.9%)	266 (47.1%)	967 (37.7%)	1723 (41.7%)	44.59***	2
Cultural Identity (M ± SD)	5.21 (0.818)	4.73 (1.025)	4.48 (0.978)	4.69 (0.996)	464.59***	2
Social Support (M ± SD)	3.45 (0.515)	3.52 (0.508)	3.45 (0.515)	3.53 (0.489)	27.11***	2

Note. Group differences across immigrant generational status (IGS: 1st, 2nd, 3rd+ generation) were tested with design-adjusted χ^2 tests for categorical variables and survey-weighted ANOVA (F) for continuous variables. Income categories are in USD. Cells with small counts were collapsed where noted (e.g., "Am. Indian/Asian/Other"). $p < .05$ *, $p < .01$ **, $p < .001$ ***.

Table 2:

Trauma Exposure and Mental Health Outcomes of New Parents by IGS

Outcome & IGS Group		Prevalence of New Parents (n = 4129)	AOR (95% CI)	Sex × IGS Interaction AOR (95% CI, p)	Racial Discrimination × IGS Interaction AOR (95% CI, p)	Ethnic Identity × IGS Interaction AOR (95% CI, p)	Social Support × IGS Interaction AOR (95% CI, p)
Any Trauma	3rd+	66.7%	1.00	1.06 [0.88- 1.27], p = .550	1.08 [0.90-1.30], p = .389	1.06 [0.95-1.18], p = .300	**0.79* [0.65-0.95], p = .014**
	2nd	62.5%	0.93 [0.71-1.20]				
	1st	45.9%	**0.50*** [0.39-0.63]**				
Serious Illness	3rd+	28.2%	1.00	1.07 [0.86-1.32], p = .560	1.09 [0.88--1.36], p = .419	1.10 [0.98-1.23], p = .099	0.85 [0.68-1.06], p = .140
	2nd	25.0%	0.89 [0.65-1.21]				
	1st	15.6%	**0.46*** [0.33-0.63]**				
Natural Disaster	3rd+	8.2%	1.00	1.10 [0.80-1.51], p = .559	0.99 [0.72-1.37], p = .970	1.08 [0.93-1.25], p = .315	0.96 [0.68-1.35], p = .800
	2nd	7.6%	1.21 [0.77-1.90]				
	1st	7.6%	1.20 [0.78-1.84]				
Sexual Assault	3rd+	3.3%	1.00	**4.25* [1.10-16.47], p = .036**	0.87 [0.36-2.12], p = .760	1.23 [0.90-1.69], p = .201	0.78 [0.38-1.60], p = .504
	2nd	1.6%	**0.32** [0.13-0.74]**				
	1st	1.0%	**0.34* [0.13-0.92]**				
Child Abuse	3rd +	14.4%	1.00	1.27 [0.88-1.84], p = .203	0.97 [0.69-1.36], p = .854	1.14 [0.97-1.33], p = .112	0.87 [0.63-1.20], p = .400
	2nd	11.7%	0.82 [0.55-1.33]				
	1st	3.9%	**0.25*** [0.14-0.42]**				
Witness Trauma	3rd +	51.7%	1.00	0.99 [0.82-1.18], p = .879	1.04 [0.87-1.27], p = .659	1.02 [0.93-1.13], p = .648	0.92 [0.76-1.10], p = .340
	2nd	48.9%	0.95 [0.73-1.23]				
	1st	36.2%	**0.62*** [0.48-0.79]**				

Other Trauma	3rd +	2.0%	—	1.20 [0.46-3.17], p = .710	0.54 [0.21-1.40], p = .209	0.99 [0.66-1.50] p = .970	0. 67 [0.40-1.10], p = .109
	2nd	1.8%	(-)				
	1st	(-)	(-)				
Lifetime PTSD	3rd +	12.8%	1.00	1.11 [0.79-1.57], p = .540	**0.71* [0.51-0.99], *p* = .046**	1.08 [0.96-1.23], p = .200	0.88 [0.66-1.19], p = .409
	2nd	13.5%	1.07 [0.68-1.66]				
	1st	4.7%	**0.35*** [0.22-0.56]**				
Any Other MD/ SUD	3rd +	61.6%	1.00	1.01 [0.84-1.21], p = .894	0.89 [0.74-1.07], p = .220	1.07 [0.96-1.20], p = .189	**0.65*** [0.54-0.79], *p* < .001**
	2nd	58.6%	0.93 [0.72-1.21]				
	1st	31.5%	**0.29*** [0.23-0.38]**				

Note. *AOR* = adjusted odds ratio (adjusted for age, sex, race, education, income, and marital status); *CI* = confidence interval; IGS = immigrant generational status; MD = mental disorder; SUD = substance use disorder. The reference group for IGS is 3rd+ generation group. Reference group for sex is males. $p < .05$ *, $p < .01$ **, $p < .001$ ***. Rows with "—" or "(–)" indicate reference groups or cells flagged as underpowered (< 5 cases).

Table 3:

Healthcare Utilization for Any Mental Disorder of New Parents by IGS

Outcome & IGS Group		Prevalence of New Parents with MD (n= 2262)	*AOR* (95% *CI*)	Sex × IGS *AOR* (95% *CI*, *p*)	Racial Discrimination × IGS *AOR* (95% *CI*, *p*)	Healthcare Racial Discrimination × IGS *AOR* (95% *CI*, *p*)	Ethnic Identity × IGS *AOR* (95% *CI*, *p*)	Social Support × IGS *AOR* (95% *CI*, *p*)
Professional Help	3rd+	37.4%	1.00	0.97 [0.73-1.27], *p* = .810	0.85 [0.66-1.09], *p* = .199	0.95 [0.70-1.29], *p* = .740	1.06 [0.94-2.08], *p* = .356	0.98 [0.78-1.24], *p* = .870
	2nd	35.2%	0.87 [0.62–1.22]					
	1st	23.7%	**0.29*** [0.20–0.42]**					
Self-Help	3rd+	9.7%	1.00	0.81 [0.43-1.52], *p* = .511	0.69 [0.43-1.10], *p* = .120	0.91 [0.53-1.58], *p* = .742	0.97 [0.80-1.18], *p* = .779	0.95 [0.66-1.36], *p* =.787
	2nd	10.2%	1.05 [0.60–1.85]					
	1st	5.8%	**0.21*** [0.11–0.41]**					
Emergency Care	3rd+	11.0%	1.00	1.18 [0.75-1.85], *p* = .474	1.11 [0.70-1.75], *p* = .661	1.42 [0.84-2.38], *p* = .187	1.16 [0.95-1.43], *p* = .154	0.99 [0.69-1.41], *p* = .943
	2nd	9.6%	0.84 [0.49–1.43]					
	1st	6.1%	**0.30*** [0.16–0.56]**					
Prescribed Medications	3rd+	30.0%	1.00	1.24 [0.91-1.68], *p* = .174	0.81 [0.60-1.09], *p* = .168	1.20 [0.84-1.72], *p* = .312	1.03 [0.90-1.18], *p* = .677	0.94 [0.71-1.25], *p* = .690
	2nd	22.6%	0.76 [0.50–1.15]					
	1st	16.7%	**0.31*** [0.20–0.48]**					

Past-Year Follow-Up	3rd+	18.9%	1.00	1.10 [0.74-1.64], p = .631	0.80 [0.56-1.13], p = .206	1.17 [0.78-1.75], p = .450	0.90 [0.77-1.04], p = .159	1.05 [0.77-1.45], p = .753
	2nd	16.3%	0.68 [0.44–1.06]					
	1st	13.1%	**0.34*** [0.21–0.54]**					

Note. *AOR* = adjusted odds ratio (adjusted for age, sex, race, education, income, and marital status); *CI* = confidence interval; IGS = immigrant generational status; MD = mental disorder. The reference group for IGS is 3rd+ generation group. Reference group for sex is males. $p < .05$ *, $p < .01$ **, $p < .001$ ***.

Appendix A: Lay Statement

This thesis looks at how immigrant new parents feel and get help for their mental health, by checking if being the first, second, or third generation in a new country, and dealing with things like discrimination or stress, affects their mental health and the help they seek. I hope this thesis helps develop better mental health supports and resources for immigrant new parents.

Appendix B: List of Traumatic Events

Severe or Life-Threatening Injuries or Illnesses Serious or life-threatening injury Serious or life-threatening illness Injured in a terrorist attack Beaten up by spouse/romantic partner Beaten up by someone else Kidnapped/held hostage Stalked Mugged, held up, threatened with a weapon or assaulted in any other way Active military combat Peacekeeper/relief worker Civilian in war zone/place of terror Refugee Prisoner of war Juvenile detention or jail	**Y**	**N**
Sexual Assault Sexually assaulted as an adult	**Y**	**N**
Child Physical and Sexual Abuse Related Traumas Sexually abused before age 18 Physically abused before age 18	**Y**	**N**
Experiences Related to Natural Disasters Natural disaster, like flood, fire, earthquake, hurricane	**Y**	**N**
Witnessing Or Learning About a Trauma Occurring to Others Other person's serious or life-threatening injury Other person's serious or life-threatening illness Other person injured in a terrorist attack Other person exposed to natural disaster, like a flood, fire, earthquake, hurricane Other person's sexual abuse as a child under age 18 Other person's sexual assault as an adult Other person's physical abuse as a child under age 18 Other person beaten up by a spouse/romantic partner Other person beaten up by someone else Other person kidnapped/held hostage Other person stalked Other person mugged/held up, or threatened with a weapon Seeing a dead body or body parts Any other traumatic or stressful event to others that you witnessed, learned about or were repeatedly exposed to the details	**Y**	**N**

Other Events Any other traumatic or stressful event that happened to you	**Y**	**N**

Appendix C: Post-Hoc Stratified Survey-Weighted Logistic Regressions Probing IGS × Predictor Interactions

Outcome	IGS Group	Predictor	AOR	95% CI	*p*
Sexual Assault	1st Gen	Sex	3.00	[0.29, 31.04]	.356
	2nd Gen	Sex	3.53	[0.26, 48.77]	.343
	3rd+ Gen	Sex	58.76	[7.99, 431.79]	<.001***
PTSD	1st Gen	Discrimination	4.94	[2.16, 11.29]	< .001***
	2nd Gen	Discrimination	3.80	[1.83, 7.88]	< .001***
	3rd+ Gen	Discrimination	2.10	[1.55, 2.85]	< .001***
Any Trauma	1st Gen	Social Support	1.00	[0.74, 1.37]	.984
	2nd Gen	Social Support	0.82	[0.55, 1.23]	.343
	3rd+ Gen	Social Support	0.67	[0.52, 0.85]	.001***
MD/SUD	1st Gen	Social Support	0.77	[0.56, 1.05]	.095
	2nd Gen	Social Support	0.86	[0.57, 1.30]	.483
	3rd+ Gen	Social Support	0.40	[0.31, 0.52]	< .001***

Note. *AOR* = adjusted odds ratio (adjusted for age, sex, race, education, income, and marital status); *CI* = confidence interval; IGS = immigrant generational status; MD = mental disorder; SUD = substance-use disorder. The reference group for IGS is 3rd+ generation group. Reference group for sex is males. $p < .05$ *, $p < .01$ **, $p < .001$ ***.