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Trajectory Patterns of Ethnic–Racial Identity Among Immigrant Mothers: The Predictive Role of Acculturative Stress

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Limited attention has been given to ethnic–racial identity (ERI) development beyond emerging adulthood, which is a critical gap identified in the Lifespan Model of ERI. Previous research suggests that age of arrival in a host country may shape one's overall exposure to sociocultural contexts. The adaptation process can also be stressful, particularly as immigrants often navigate challenges related to "fitting in" and the perception of being seen as outsiders. These experiences could trigger various ERI trajectories at a later stage of life (e.g., during adulthood). Using a three-wave longitudinal data set of 596 Mexican-born mothers, three independent growth mixture models were estimated to identify variations in trajectory patterns of ERI *exploration*, *resolution*, and *centrality*. For exploration and resolution, *high-stable* and *low-increasing* trajectories were found. For centrality, *high-mild decline* and *low-increasing* trajectories were found. Associations between age of arrival, acculturative stressors (i.e., feeling like a misfit and foreigner stress), and trajectory patterns were examined, controlling for age, income, and education at Wave 1. Results showed that greater feelings of misfit at Wave 1 predicted a higher likelihood of belonging to the high-stable exploration and high-mild decline centrality groups, versus belonging to the low-increasing groups. These findings add to our understanding of the Lifespan Model of ERI by showing that ERI evolves beyond emerging adulthood. This study highlights the role of ongoing acculturative stress in shaping identity development, with potential clinical implications for psychological and sociocultural adaptation in adult immigrants.

Public Significance Statement

This study highlights the importance of continuous efforts to promote healthy identity development of immigrant mothers, given that ethnic identity is a dynamic, lifelong developmental process. The identification of distinct patterns underscores the need for longitudinal research to better understand the diverse pathways of immigrant mothers' ethnic identity development and provides important implications for studies in exploring how psychological and sociocultural adaptation experiences may shape ethnic identity trajectories.

Keywords: ethnic–racial identity development, trajectory patterns, acculturative stress, age of arrival to the United States, immigrant mothers

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continued

Ethnic–racial identity (ERI), broadly defined, refers to the perceptions (or awareness), sense of belonging (or affiliation), attitudes, behaviors, and knowledge an individual has toward their ethnic–racial membership. These five core dimensions and components, for instance, *exploration* and *resolution* (within the behavior dimension) and *centrality* (within the attitude dimension), are not static but instead evolve in response to individuals' lived experiences and sociocultural contexts (Williams et al., 2020). ERI development is crucial for ethnocultural minorities, such as immigrant-origin populations, to achieve successful adaptation in a host country (Suárez-Orozco et al., 2018). For many immigrants, the experiences of migration and resettlement in a new culture may prompt them to question who they are and who they will become in that host country (Phinney & Ong, 2007). As the largest immigrant group in the United States (U.S. Census Bureau, 2017), Mexican-origin immigrants may face psychological challenges involving the exploration of and reflection on their culture of origin (i.e., ERI *exploration*; Umaña-Taylor et al., 2004), gaining clarity about what Mexican identity means to them (i.e., ERI *resolution*; Umaña-Taylor et al., 2004), and understanding how important being Mexican is to their self-concept (i.e., ERI *centrality*; Sellers et al., 1997) as part of adapting to mainstream U.S. culture (e.g., Meca et al., 2017; Schwartz et al., 2010). These adaptive challenges could be particularly salient for Mexican mothers, who serve as the primary caregivers and main source of information about ethnicity for their children in the Mexican culture (Umaña-Taylor et al., 2013), as mothering reflects the values and expectations that are deeply rooted in the cultural norms and sociocultural experiences of their heritage culture. However, these experiences can be shaped by emergent cultural and contextual tensions after moving to the United States, prompting Mexican mothers to negotiate the tensions and reconsider their perceptions of their culture of origin (Weisner, 1997). While a substantial body of research has focused on changes in ERI during adolescence and into emerging adulthood (e.g., Gonzales-Backen et al., 2016; Lu et al., 2020; Zhou et al., 2019), little is known about how it develops over time beyond emerging adulthood, which is a critical gap identified in the Lifespan Model of ERI (Williams et al., 2020).

ERI development is a dynamic process, as individuals may engage in various activities to explore and deepen understanding of their cultural heritage through diverse sociocultural contexts (i.e., ERI *exploration* and *resolution*; Umaña-Taylor et al., 2004). In addition, the perceived importance of one's culture of origin related to their sense of self may shift throughout this process (i.e., ERI *centrality*; Hoffman et al., 2017). ERI dimensions and components within them may change according to identity-relevant experiences across the lifespan (Williams et al., 2020). For instance, age of arrival to a host country may influence how ERI development unfolds, as the timing of migration determines overall exposure to sociocultural contexts in both the country of origin and the host country (Diaz-Strong & Gonzales, 2023; Gonzales-Backen et al., 2016). Immigrant mothers who arrive at a younger age may be likely to be influenced by institutional structures such as schools (Hooker, 2015), whereas those who migrate at an older age may be more susceptible to changes in social roles related to work contexts, such as entering the workforce (Mehta et al., 2020). Depending on the age at which migration occurs, exposure to sociocultural contexts may differ, offering immigrant mothers opportunities to reexamine the practices, norms, and values of their culture of origin, which may later trigger different trajectory patterns of ERI. Immigrant mothers, who came to the United States with certain cultural traditions, attitudes, and beliefs (Berry, 1997), may experience stress related to fitting in as they navigate tensions in reconciling the beliefs, practices, and values of mainstream U.S. culture. This adaptation process can also be stressful, as immigrant mothers may feel compelled to forego certain cultural traits to avoid being perceived as foreigners in the host country (Corona et al., 2017). Previous studies suggest that immigrants from cultural backgrounds significantly different from that of the host country may encounter greater challenges in adapting to mainstream culture, which can potentially increase their motivation to maintain connections with their ethnic group (e.g., Berry, 1997; Bobowik et al., 2017). Understanding these processes has important implications for the psychological well-being of Mexican mothers (Calzada & Sales, 2019). Grounded in the Lifespan Model of ERI, the present study aimed to untangle the variations in trajectory patterns of ERI components (i.e., *exploration*, *resolution*, and *centrality*) among Mexican mothers and to examine how identity-relevant experiences, more specifically age of arrival to the United States and acculturative stress, may predict trajectory membership of ERI. These findings may inform future research and clinical efforts to promote healthy ERI development in adult immigrants during the adaptation process.

The Lifespan Model of ERI: Multidimensionality and Continuity

Most of the existing ERI literature has centered on the developmental periods of childhood and adolescence, with some extending into emerging adulthood. However, the Lifespan Model of ERI postulates that ERI continues to evolve beyond emerging adulthood (Williams et al., 2020). Recognizing its multidimensional and continuous nature, recent studies on adolescence have examined specific ERI dimensions and components (e.g., Sladek et al., 2020; Umaña-Taylor et al., 2018). For instance, *exploration* and *resolution* (within the ERI behavior dimension) are often studied together, as this composite reflects ERI achievement, which was found to be strongly associated with psychosocial well-being (Yip et al., 2019).

While Shirai et al. (2016) identified distinct trajectory patterns in identity exploration and identity commitment (also referred to as identity resolution) among Japanese adults, they did not extend to examine other ERI dimensions and components, such as *affirmation* and *centrality* (within the ERI attitude dimension), which are often frequently studied alongside *exploration* and *resolution*. Previous

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research suggests little change over time in *affirmation* (e.g., Kiang et al., 2010; Seaton et al., 2009). Instead, *centrality*, another key component of the ERI attitude dimension, has been found to vary across adulthood, as middle-aged adults continue to seek meaning of their ERI in response to life transitions such as switching jobs or relocating (Atewologun & Singh, 2010). It is possible that Mexican mothers came to the United States at an older age with a clear understanding of what Mexican culture means to them, but the emergent sociocultural experiences in the host country made them explore and reevaluate the importance of their heritage culture in the adaptation process.

These findings suggest that while components within or across dimensions are interrelated, each follows distinct developmental trajectories and therefore should be examined independently. To address existing gaps in the literature, this study aimed to examine multiple dimensions and components that show variations in the ERI literature, specifically how individual ERI components (i.e., *exploration*, *resolution*, and *centrality*) representing multiple dimensions (i.e., attitude and behavior) develop beyond emerging adulthood.

Trajectory Patterns of ERI Beyond Emerging Adulthood

ERI Exploration

Empirical findings on ERI *exploration* (i.e., learning about one's ethnic group) during adulthood are limited, as most research has focused on adolescence (with some extending into emerging adulthood)—a period when identity exploration is considered a critical developmental task for ethnoracially diverse youth (e.g., Branje et al., 2021; Umaña-Taylor & Guimond, 2010). Studies using growth curve modeling have produced inconsistent results; some indicate an increasing trajectory of ERI *exploration* from mid- to late adolescence in Latino adolescents (e.g., Umaña-Taylor & Guimond, 2010), while others suggest a decreasing trajectory from early adolescence into late adolescence/emerging adulthood in a large sample of Mexican-origin youth (e.g., Lu et al., 2020). Additionally, some studies have found that ERI *exploration* remains relatively stable in early adolescence but increases during midadolescence among adolescents of color, with a substantive sample of Latino adolescents (e.g., French et al., 2006). These findings suggest that a single, continuous trajectory may not apply to all ethnoracially diverse adolescents, including those of Mexican origin.

In fact, these patterns are also observed in adulthood. A longitudinal study by Maehler (2022), using a sample of German adults aged 21–73 years, found variations in ERI *exploration* trajectories: (a) remained unchanged (i.e., stable), (b) transitioned forward (i.e., increasing), and (c) transitioned backward (i.e., decreasing). Adulthood is a developmental period in which entering parenthood is common, particularly among Mexican women, who are more likely to adhere to traditional gender role expectations that center on their families and emphasize being the main source of strength and emotional support (Marano & Roman, 2017). As the primary caregivers of their children, Mexican mothers are deeply involved in the socialization process, and this transition provides ample opportunities for them to get exposure to various sociocultural contexts, including family, neighborhood, children's schools, and workplaces, to explore their heritage culture (Williams et al., 2020). This may inform diverse trajectories of *exploration* (i.e., increasing, decreasing, and stable) in Mexican mothers.

ERI Resolution

Findings on ERI *resolution* (i.e., understanding the meaning of one's heritage identity) are consistent in the literature from late adolescence into emerging adulthood, typically indicating a linear increase over time in ethnoracially diverse adolescents (e.g., Zhou et al., 2019), including Mexican-origin girls (e.g., Gonzales-Backen et al., 2016). However, little is known about how *resolution* changes beyond emerging adulthood, a period during which individuals' developmental capacities mature, enabling them to reflect on their previously formed sense of ERI clarity, especially when they transition between contexts or roles in adulthood (Williams et al., 2020).

Prior research suggests that *resolution* during emerging adulthood (and beyond) follows a normative developmental process, where contextual changes and experiences, such as becoming a parent or moving to a new neighborhood, prompt new evaluations of ERI (Umaña-Taylor et al., 2014). These reevaluations can become especially salient within multiethnic sociocultural environments, particularly among immigrants (Balidemaj & Small, 2019). In a qualitative study, Torres et al. (2012) found that changes in social-environmental cues or significant life events substantially influenced Latino adults' efforts to reexamine and derive meaning from their ERI. Sociocultural exposure related to the developmental timing of arrival in a host country can alter life trajectories (Crafter et al., 2019), which are likely to shape varied trajectory patterns of ERI *resolution* (e.g., increasing, decreasing, and stable).

ERI Centrality

ERI centrality (i.e., the importance of one's heritage group to sense of self) appears to remain relatively stable during emerging adulthood (e.g., González et al., 2025; Seaton et al., 2009) as well as from mid- to late adulthood (e.g., Hoffman et al., 2017) in ethnoracially diverse samples, particularly among Black youth/adults. This highlights the need to expand the current literature to better understand how ERI *centrality* changes in other ethnic–racial groups, including those of Mexican origin, who also face significant marginalization in the United States (Vidal-Ortiz & Martínez, 2018). ERI *centrality* is a key component of ERI that shapes the lens through which individuals perceive the world and influences how they interpret and respond to race-related experiences (Umaña-Taylor & Rivas-Drake, 2021).

For Mexican mothers, perceptions of ERI may be reshaped by new sociocultural experiences, such as responding to the stress of feeling excluded, stigmatized, or devalued in the host country, which may lead to a decreasing trajectory of ERI centrality. On the other hand, while navigating these discriminatory experiences, stronger connections to the Mexican community may help immigrant mothers cope with being perceived as foreigners, resulting in an increasing trajectory of ERI *centrality*. Additionally, mothering may strengthen their Mexican identity through the ethnic–racial socialization process, during which they make efforts to inculcate their traditional values and ways of knowing (e.g., respeto, machismo, and marianismo) to their children (Vesely et al., 2019), which may also inform an increasing trajectory of ERI *centrality*. Meanwhile, those who retained their history, traditions, and customs during adaptation are more likely to view their ERI as an inseparable part of their self-concept (Perez & Arnold-Berkovits, 2018), suggesting the possibility of a stable trajectory of *centrality*.

Identity Relevant Experiences

Age of Arrival to the United States

Life-course theory posits that "the developmental impact of a succession of life transitions or events is contingent on when they occur in a person's life" (Elder, 1998, p. 3). This suggests that the timing at which immigrants experience major transitions (e.g., arriving in a host country) may predict their ERI trajectory membership. A longitudinal study found that age of arrival to the United States—rather than age—is a more significant predictor of ERI trajectories among Mexican-origin girls (Gonzales-Backen et al., 2016). Focusing on young Latin American migrants, Diaz-Strong and Gonzales (2023) suggested that the timing of immigration serves as a central pivot point in shaping their experiences and creates meaningful differences between those who arrived as children and those who arrived as adolescents, including in educational and employment opportunities, relationships, and sense of belonging. A meta-analysis by Maehler and Daikeler (2024) also highlights the importance of examining migration-related factors, including age at migration in first-generation adult immigrants, given that they have different socialization experiences in accordance with their sociocultural environments. Cheung et al. (2011) posited that there is a sensitive developmental period for cultural identification, during which immigrants who migrate at a younger age may have greater capacity for sociocultural learning. This capacity may enable them to be more susceptible to learning, understanding, and developing a connection to their cultural heritage as a means of coping with stress in the host country (Greenaway et al., 2015). Given this sensitive period where individuals are more actively engaged in exploring and constructing identity, it is plausible that a younger age of arrival in the United States would predict a higher likelihood of following an increasing trajectory, rather than a decreasing or stable one, in ERI *exploration* and *resolution* among Mexican mothers. On the other hand, those who arrive in adulthood—having spent most of their lives learning the language, history, customs, and traditions of their country of origin—may be more likely to endorse their heritage culture and maintain a strong sense of ethnic belonging (Cheung et al., 2011). Therefore, a later age of arrival may increase the likelihood of following a stable trajectory in ERI *centrality*, as Mexican mothers may have already experienced their sensitive period of cultural identification prior to migration.

However, it remains unclear whether age of arrival to the United States has a parabolic effect on ERI trajectories. Specifically, a quadratic relationship may exist in which the age of arrival predicts trajectory patterns in nonlinear ways. Prior research identified an inflection point around age 24, suggesting that individuals may follow normative developmental processes and become more actively engaged in exploring their ERI during young adulthood, with such exploration peaking during this period (Yip et al., 2019). For Mexican mothers, this curvilinear effect may reflect not only age-related developmental transitions but also the changes of sociocultural experiences due to migration. That is, Mexican mothers who arrive at different ages may think about, perceive, and understand their ERI in distinct ways. From a life-course perspective, young adults typically experience more transitions in life, for instance, finishing college, entering the workforce, and establishing a family (Buchmann & Kriesi, 2011). In addition to navigating adult role transitions, Mexican mothers who arrive at a younger age may be exposed to more diverse sociocultural contexts, which can further prompt a reevaluation of their Mexican identity.

With limited theoretical and empirical research on age of arrival, the present study is among the few to explore both linear and quadratic effects of age of arrival in predicting trajectory patterns of ERI components (i.e., *exploration*, *resolution*, and *centrality*) beyond emerging adulthood.

Acculturative Stress

When immigrants leave their country of origin and arrive in a new country, they undergo acculturation—a process of navigating psychological and sociocultural adaptation (Berry, 1997). This process is often stressful for Latino immigrants (Whitehead et al., 2020), particularly for Mexican mothers, who come from a culture with traditional gender expectations that position women as primary caregivers (Bernhard & Bernhard, 2022; Ghahari et al., 2020). These individuals may experience tension between maintaining a connection to their heritage culture and adapting to U.S. cultural norms. Such tension often manifests as two key forms of acculturative stress: feelings of misfit and foreigner stress (Corona et al., 2017). Feelings of misfit are characterized by a sense of alienation or disconnection, particularly related to the differences between one's ethnic background and the dominant culture they are in, whereas foreigner stress arises from being perceived as an outsider, which often results in exclusion, stigmatization, or devaluation based on race or ethnicity (Corona et al., 2017). Prior research has shown that these acculturative experiences are important determinants of ERI development (Maehler & Daikeler, 2024). For example, Bobowik et al. (2017) found that immigrants who experience rejection from the host culture may have a stronger desire to maintain ties to their culture of origin as a way to support their well-being during the adaptation process.

Although acculturative stress has important implications for their mental health and well-being (Choy et al., 2020), less is known about how it influences the trajectory patterns of ERI among adult immigrants. For example, Mexican mothers who serve as primary caregivers and continue to practice the norms and knowledge of their culture of origin may feel less pressured to fit in the host country. With frequent contact and engagement with their heritage culture, they may be more likely to follow a stable or increasing trajectory in ERI *exploration*, *resolution*, and *centrality*. Additionally, Latino immigrants have been found to strongly identify with their culture of origin in response to the "anti-Latino climate" in the host country (Martinez-Fuentes et al., 2020). This may suggest that greater foreigner stress is likely to be associated with an increasing trajectory, rather than stable or declining trajectory patterns of ERI components for Mexican mothers. Understanding how acculturative stress influences different trajectories of ERI can inform efforts to support positive identity development in adult immigrant populations, particularly immigrant mothers.

The Present Study

Taken together, guided by the Lifespan Model of ERI, the present study aimed to (a) examine variations in the trajectory patterns of each ERI component (i.e., *exploration*, *resolution*, and *centrality*) during adulthood (aged 27–61) and (b) investigate how identity-relevant experiences predict these trajectory patterns. Specifically, we examined the linear and quadratic effects of age of arrival to the

United States (aged 12–54) and acculturative stress in predicting the probability of trajectory membership for each ERI component among Mexican mothers (Figure 1).

Accordingly, two main hypotheses were proposed:

1. Multiple trajectory patterns—rather than a single, continuous trajectory—would emerge for each ERI component across the three waves. It was expected that at least three distinct trajectories would emerge in ERI exploration, resolution, and centrality.

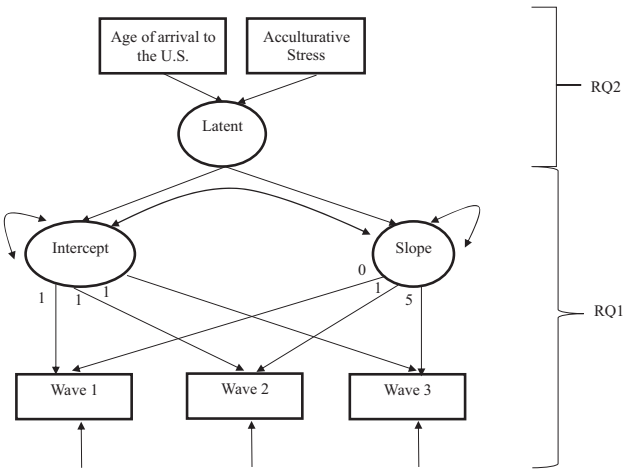
2. Although exploratory, it was expected that both the linear and quadratic effects of age of arrival to the United States would significantly predict trajectory membership for exploration, resolution, and centrality. More specifically, a younger age of arrival would predict a higher likelihood of following an increasing trajectory, rather than a decreasing or stable one, in ERI exploration and resolution among Mexican mothers. On the other hand, a later age of arrival may increase the likelihood of following a stable trajectory in ERI centrality. Acculturative stress was also expected to be a significant predictor across all three components. That is, greater feelings of misfit were expected to be associated with a stable or increasing trajectory in ERI exploration, resolution, and centrality, whereas higher levels of foreigner stress were expected to predict an increasing, rather than stable or declining, trajectory in these components.

Method

Participants

Participants were drawn from a multiwave longitudinal study on Mexican families in central Texas in the United States. At Wave 1 (2012–2015), 596 Mexican mothers with a mean age of 38.46 (age range = 27–61, *SD* = 5.79) were recruited. Age at Wave 1 was calculated by taking the difference between the date of the visit and their date of birth reported at the visit. At Wave 2 (2013–2016), 476 Mexican mothers stayed in the study. At Wave 3 (2017–2020), 326 of them continued. All participants were born in Mexico. The range of their mean household income at Wave 1 was $20,001–$30,000. Their highest education level was some middle/junior high school at Wave 1. Attrition analyses showed that overall, Mexican mothers with higher education levels were also more likely to participate from Waves 1 to 3, $t(591) = 3.29$, $p < .01$. Specifically, those with higher education levels at Wave 1 were more likely to continue their participation at Wave 2, $t(591) = 2.51$, $p = .01$, and those with higher education levels at Wave 2 were more likely to stay at Wave 3, $t(471) = 2.35$, $p = .02$.

Figure 1
Conceptual Model of Conditional Growth Mixtures Modeling



Note. RQ1: What are the trajectory patterns in ethnic identity among Mexican-origin female adults? RQ2: How age of arrival to the United States (linear and quadratic effect) and acculturative stress related to the patterns of changes in ethnic identity among Mexican-origin female adults? Demographic variables (i.e., age, income, and education) were controlled in RQ2. RQ = research question.

Procedure

Mexican-origin families were recruited through community recruitment, public records, and school presentations. To qualify for participation, families needed to include parents of Mexican descent and at least one middle school–aged child who served as a language broker (i.e., translating between English and their heritage language for English-limited parents). Screening calls were conducted with families who were interested in participating during recruitment. Informed consents were obtained from qualifying families before scheduling family visits for the interviews and proceeding with questionnaires. Questionnaires were available in both English and Spanish. Participants were presented with both versions together, and the interviewer read the version in the language they felt most comfortable using. At each wave, bilingual interviewers went on family visits to administer the questionnaires by reading questions aloud to participants and recording participants' responses on a laptop computer. Compensation was offered to participants (i.e., Wave 1: $60, Wave 2: $90, Wave 3: $90).

Measures

English questionnaires were first translated into Spanish and then back-translated into English by bilingual and bicultural research assistants. Any discrepancies were resolved through team discussion.

ERI

ERI was measured through three independent dimensions (i.e., *centrality*, *exploration*, and *resolution*) on a self-reported scale of 1 (*strongly disagree*) to 5 (*strongly agree*) across three waves.

Mexican Identity Exploration. *Mexican identity exploration* was assessed using items adapted from Umaña-Taylor et al.'s (2004) Ethnic Identity Scale. Participants provided their perspectives on how they initiate behaviors to learn more about their ethnic–racial background through three items: "I have spent time trying to find out more about being Mexican, such as its history, traditions, and customs," "I have often done things that will help me understand my Mexican background better," and "I have learned about being Mexican by doing things such as reading (books, magazines, and newspapers), searching the internet, or keeping up with current events." Composite scores were created by averaging the scores across the three items.

Higher mean scores reflect a greater sense of *exploration* (Wave 1_α = .85, Wave 2_α = .89, Wave 3_α = .87).

Mexican Identity Resolution. *Mexican identity resolution* was assessed using three items adapted from Umaña-Taylor et al.'s (2004) Ethnic Identity Scale. Participants reported how they gain clarity about one's ethnicity/race as part of their self-concept through three items: "I understand how I feel about being Mexican," "I have a clear sense of what being Mexican means to me," and "I know what being Mexican means to me." Composite scores were created by averaging the scores across the three items. Higher mean scores reflect a greater sense of *resolution* (Wave 1_α = .88, Wave 2_α = .88, Wave 3_α = .86).

Mexican Identity Centrality. *Mexican identity centrality* was assessed using three items adapted from the Centrality subscale of the Multidimensional Inventory of Black Identity Scale–Teen (Scottham et al., 2008). Mexican mothers reported the extent of their ethnic–racial group membership linked to their self-concept through three items, including "I have a sense of belonging with other Mexican people," "If I were to describe myself to someone, one of the first things that I would say is that I'm Mexican," and "Being Mexican is an important part of who I am." Composite scores were created by averaging the scores across the three items. Higher mean scores reflect a greater sense of *centrality* (Wave 1_α = .60, Wave 2_α = .65, Wave 3_α = .63).

Identity Relevant Experiences

Age of Arrival to the United States. Mexican mothers self-reported their age of arrival to the United States (age range = 12–54, mean age of 23.44). Both linear and quadratic effects of age of arrival were investigated to predict the probability of being assigned to each trajectory pattern in each ERI component (i.e., *exploration*, *resolution*, and *centrality*).

Acculturative Stress: Feeling of Misfit. Mexican mothers' sense of misfit was measured with four items from the Cultural Estrangement Inventory (Cozzarelli & Karafa, 1998). On a scale of 1 (*strongly disagree*) to 5 (*strongly agree*), individuals rated their perceptions of feeling like a misfit in the context of U.S. culture. An example is "I feel as though most U.S. Americans do not understand me." Higher mean scores indicate more experiences of cultural estrangement (α = .71).

Acculturative Stress: Foreigner Stress. Mexican mothers' perceptions of foreigner stress were measured at Wave 1 using three items adapted from Kim et al. (2018). A sample item is "When people look at me, they see a foreigner." This measure is on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher mean scores indicating higher levels of experienced foreigner stress (α = .73).

Analytical Plan

First, correlational analyses were conducted using SPSS 28 to describe the bivariate associations between all study variables. Second, growth mixture modeling (GMM) was used to explore whether there is variation in trajectories of each ERI component among Mexican mothers across three waves. All analyses of GMMs were conducted using Mplus 8.0 (Muthén & Muthén, 1998–2017) with full information maximum likelihood, a recommended method to handle missing data in longitudinal studies (Enders, 2022). Three independent series of measurement invariance tests were conducted to evaluate whether Mexican mothers' *centrality*, *exploration*, and *resolution* were structurally invariant across the three waves. Partial scalar invariance was achieved. The results of the measurement invariance tests are presented in Supplemental Table S1.

After longitudinal invariance of each ERI component (i.e., *exploration*, *resolution*, and *centrality*) was achieved (Little, 2013), up to five classes were fit to explore the potential variation in trajectories of each ERI component from Waves 1 to 3 using three independent sets of GMMs. To determine the best fitting GMM (Nylund et al., 2007), multiple model fit indices were evaluated, including Bayesian information criterion (BIC; Schwarz, 1978), Akaike information criterion (AIC; Akaike, 1987), the sample size–adjusted BIC (A-BIC; Sclove, 1987), adjusted log likelihood–based test (i.e., Lo–Mendell–Rubin [LMR] test; Lo et al., 2001), and entropy (Celeux & Soromenho, 1996), as well as stability and parsimony. Lower BIC, AIC, and A-BIC values indicate better model fit. A $p < .05$ in the adjusted LMR test indicates that the k-class model is statistically improved compared to the $k - 1$ class model. Higher entropy values, which are greater than .80, indicate a higher overall quality of classification. The number of trajectories in each ERI component was determined based on a comprehensive consideration of all model fit indices and the conceptual meaning of each class. Different labels for the classes were assigned in accordance with the shape of the trajectory and the interpretation regarding the shape and meaning of the trajectory.

Third, to test the second aim of the study, the automated three-step approach to latent class analysis (R3STEP; Vermunt, 2010) method was used to examine the linear and quadratic effects of age of arrival to the United States and the effect of acculturative stress in predicting the probability that a person belongs to one class over another class in each ERI component (i.e., *exploration*, *resolution*, and *centrality*) while controlling for demographics, including age, income, and education level at Wave 1. The R3STEP method in Mplus, which automatically incorporates a series of logistic regressions, also allows for all analyses to be conducted in a single model without compromising the integrity of the latent class analysis due to the influence of covariates (Asparouhov & Muthén, 2013; Zhu et al., 2017). The most probable latent class membership variable, which was generated when deciding the best fitting GMM, was regressed on auxiliary variables, including a linear term and a quadratic term of age of arrival to the United States and linear terms of acculturative stress (i.e., feeling of misfit and foreigner stress) at Wave 1 (i.e., predictors) and age, income, and education level at Wave 1 (i.e., covariates).

Transparency and Openness

We provide a comprehensive description of our procedures for handling missing data, data processing decisions, measure administration, and composite score construction in the present study. All analysis code and output can be obtained from the corresponding author upon reasonable request. This study was not preregistered.

Results

Table 1 presents the descriptive information and correlations of the study variables. Baseline age was positively associated with age of arrival to the United States and age of arrival to the United States squared at Wave 1 (r = .571, $p < .01$ and r = .569, $p < .01$, respectively). To capture possible curvilinear trends between age and age of arrival at Wave 1, age at Wave 1 was controlled in the GMMs where age of arrival was a predictor of the probability of

Table 1
Descriptive Statistics and Correlations Among Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. W1 EI exploration	—															
2. W2 EI exploration	.572**	—														
3. W3 EI exploration	.485**	.524**	—													
4. W1 EI resolution	.526**	.377**	.392**	—												
5. W2 EI resolution	.351**	.504**	.374**	.389**	—											
6. W3 EI resolution	.366**	.377**	.573**	.430**	.404**	—										
7. W1 centrality	.439**	.381**	.357**	.515**	.268**	.303**	—									
8. W2 centrality	.318**	.518**	.300**	.263**	.478**	.331**	.452**	—								
9. W3 centrality	.285**	.359**	.484**	.330**	.319**	.569**	.421**	.490**	—							
10. W1 age of arrival to the United States	.01	.09	.137*	.03	.06	.02	.01	.06	.01	—						
11. W1 age of arrival to the United States squared	.984**	.00	.07	.113*	.02	.05	.01	.01	.06	.00	—					
12. W1 foreigner stress	.04	.00	.07	.229**	.00	.10	.228**	.101*	.168**	.02	.01	—				
13. W1 feeling as a misfit	.185**	.118*	.148**	.06	.002	.083	.155**	.093*	.129*	.104*	.115**	.257**	—			
14. W1 age	.01	.106*	.122*	.00	.06	.04	−.04	.03	−.01	.571**	.569**	.00	.04	—		
15. W1 education	−.087*	−.07	−.06	.06	.09	.07	−.02	−.03	−.05	.090*	−.07	.00	−.06	.00	—	
16. W1 family income	.01	.106*	.122*	.00	.06	.04	−.04	.03	−.01	.07	−.07	−.03	−.104*	.04	.130**	—
N	590	476	325	587	475	326	589	475	326	593	593	593	594	596	593	492
M	3.44	3.50	3.56	4.15	4.11	4.16	3.95	3.91	3.94	23.44	587.14	3.59	2.64	38.46	4.81	2.24
SD	0.92	0.94	0.85	0.61	0.64	0.55	0.64	0.65	0.65	6.16	333.09	0.88	0.78	5.79	2.2	1.558

Note. W1 = Wave 1; EI = ethnic identity; W2 = Wave 2; W3 = Wave 3.
* $p < .05$. ** $p < .01$.

being classified in each trajectory pattern of the ERI component. Wave 1 age of arrival and age of arrival squared were positively associated with Wave 3 ERI exploration ($r = .137$, $p < .05$ and $r = .113$, $p < .05$, respectively). Wave 1 foreigner stress was positively related to ERI *centrality* at Wave 1, Wave 2, and Wave 3 ($rs = .118–.185$, $p < .05$). Wave 1 feeling as a misfit was positively related to ERI *exploration* ($rs = .101–.228$, $p < .05$) and *centrality* ($rs = .093–.155$, $p < .05$) at Wave 1, Wave 2, and Wave 3.

Unconditional Growth Curve Models of ERI

ERI Exploration

For ERI *exploration*, both the intercept ($M = 3.453$, $p < .001$) and slope ($\beta = .019$, $p = .036$) were statistically significant, indicating a meaningful linear increase in *exploration* over time. The significant variance of the intercept ($\sigma^2 = .513$, $p < .001$) further suggests that individuals differed in their initial levels of *exploration* at Wave 1. The variance of the slope is not significant ($\sigma^2 = .010$, $p = .270$).

ERI Resolution

For ERI *resolution*, the intercept was significant (*resolution*: $M = 4.136$, $p < .001$), as was its variances (*resolution*: $\sigma^2 = .150$, $p < .001$), reflecting individual variability in baseline levels at Wave 1. However, the nonsignificant means and variances of the slope parameters indicate that *resolution* ($M = 3.453$, $p < .001$; $\sigma^2 = -.001$, $p = .840$) remained stable over time, showing no significant increases across the three waves.

ERI Centrality

Similarly, for ERI *centrality*, the intercept was significant (*centrality*: $M = 3.936$, $p < .001$), as well as its variances (*centrality*: $\sigma^2 = .192$, $p < .001$), indicating that there was individual variability in baseline levels at Wave 1. However, the nonsignificant means and variances of the slope parameters indicate that *centrality* ($M = 0.003$, $p = .666$; $\sigma^2 = .006$, $p = .282$) remained stable over time with no significant increases, revealing a consistent developmental trajectory across the three waves.

Trajectory Patterns of ERI

ERI Exploration

The fit of the trajectory models in ERI *exploration* was tested from two to five classes. As displayed in Table 2, BIC, AIC, and A-BIC were minimized at the two-class solution. The adjusted LMR test showed that the two-class model was significantly better than the one-class model ($p < .01$). The entropy of the two-class model was 0.69. The three-class solution had smaller AIC and A-BIC and a slightly better entropy than the two-class model (entropy = 0.70). However, it had a larger BIC value, meaning that the three-class model became less parsimonious. The LMR-adjusted test also indicated that the three-class model and beyond was not significantly better than the two-class model ($p = .13$). Despite an entropy at 0.69, considering the overall patterns of fit indices, distributions of class, model stability, and parsimony of the classes (Grzanka et al., 2016), the two-class model was selected as the best class solution.

Figure 2 displays the two-class model, and Table 3 presents the intercepts and slopes of each class membership. The two trajectories were labeled as *high-stable* and *low-increasing* based on the initial values and changes of the trajectory patterns. Approximately 70% of the Mexican mothers were in the high-stable trajectory, where their initial level of ERI *exploration* was relatively high ($M = 3.88$, $SE = .04$) but stable over time from Wave 1 to Wave 3. The slope of the high-stable trajectory was not significant ($B = -0.01$, $SE = .01$, $p = .61$). About 30% of the Mexican mothers were in the low-increasing trajectory, where their initial level of ERI *exploration* was relatively low ($M = 2.46$, $SE = .07$) but increased over time from Wave 1 to Wave 3. The slope of the low-increasing trajectory was significant ($B = 0.08$, $SE = .03$, $p = .01$).

ERI Resolution

Testing from two to five classes, the fit of the trajectory models in ERI *resolution* was explored. As displayed in Table 4, BIC, AIC, and A-BIC were significantly leveling off at the two-class solution. The $p < .05$ adjusted LMR test and a high entropy (entropy = .94) also indicated that the two-class solution has a good model fit. Although good model fit indices were also observed in the three-class solution, the sample size (1.3%) in one of the potential classes was too small. Given low confidence in the distributions of class in the three-class solution (and beyond), along with consideration of the overall patterns of fit indices, model stability, and parsimony of the classes, the two-class model was the best solution.

Figure 3 displays the two-class model, and Table 3 presents the intercepts and slopes of each class membership. The two trajectories were labeled as high-stable and low-increasing based on the initial level and changes of the trajectory patterns. In the high-stable trajectory, 97.5% of the Mexican mothers reported a high initial level of ERI *resolution* ($M = 4.19$, $SE = .02$) but stable over time from Wave 1 to Wave 3. The slope of the high-stable trajectory was

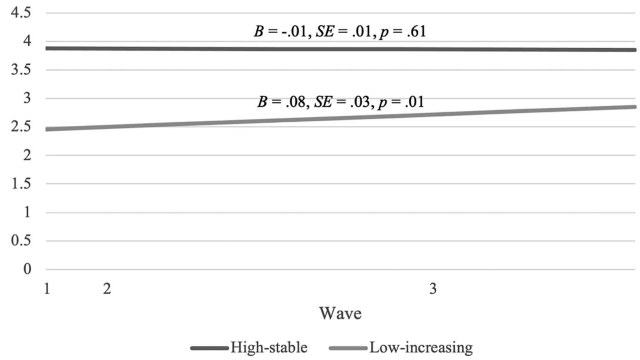
Table 2
Model Fit Information and Selection Criteria for Growth Mixture Modeling Analyses for Ethnic Identity Exploration

Number of class	Log likelihood	BIC	AIC	A-BIC	LMR	Entropy	Distribution across class
1	−1687.14	3425.38	3390.27	3399.98			
2	**−1663.04**	**3383.57**	**3344.07**	**3355.00**	**0.000**	***p* = .69**	**70.4%–29.6%**
3	−1656.66	3389.98	3337.32	3351.89	0.133	*p* = .70	26.2%–3.0%–70.8%
4	−1651.26	3398.34	3332.52	3350.72	0.109	*p* = .70	70.4%–25.1%–3.0%–1.3%
5	−1648.96	3412.91	3333.92	3355.77	0.082	*p* = .71	2.0%–4.3%–69.2%–24.0%–0.3%

Note. The bolded row indicates the number of classes selected for the present study. BIC = Bayesian information criterion; AIC = Akaike information criterion; A-BIC = sample size–adjusted BIC; LMR = Lo–Mendell–Rubin test.

Figure 2

Trajectory Patterns of Ethnic Identity Exploration



Note. Two trajectory patterns were identified, including *high-stable* and *low-increasing*. The *high-stable* group comprised approximately 70% of the sample, whereas the *low-increasing* group comprised approximately 30% of the sample. Betas represent estimates of the slope. *SE* = standard error.

not significant ($B = -0.01$, $SE = .01$, $p = .35$). In the low-increasing trajectory, approximately 2.5% of the Mexican mothers reported a low initial level of ERI resolution ($M = 2.66$, $SE = .02$) but increased over time from Wave 1 to Wave 3. The slope of the high-stable trajectory was significant ($B = 0.23$, $SE = .08$, $p = .01$).

ERI Centrality

The fit of the trajectory models in ERI *centrality* was tested from two to five classes. As displayed in Table 5, BIC, AIC, and A-BIC were significantly minimized at the two-class solution. The adjusted LMR test also showed that the two-class model was significantly better than the one-class model ($p < .01$). The two-class model also had the highest entropy (entropy = .91). Despite good model fit indices in three-class, four-class, and five-class models, statistical differences between the two-class model and these models were minimal. Considering model parsimony, the two-class model was selected as the most optimal class solution.

Figure 4 displays the two-class model, and Table 3 presents the intercepts and slopes of each class membership. The two trajectories were labeled as high-mild decline and low-increasing based on the initial values and changes of the trajectory patterns. Approximately 94.3% of the Mexican mothers were in the high-mild decline trajectory, where their initial level of ERI *exploration* was relatively high ($M = 4.03$, $SE = .02$), followed by a slightly declining pattern from Wave 1 to Wave 3. The slope of the high-mild decline trajectory was marginally significant ($B = -0.01$, $SE = .01$, $p = .07$). About 5.7% of the Mexican mothers were in the low-increasing trajectory, where their initial level of ERI *exploration* was relatively low ($M = 2.58$, $SE = .11$) but increased over time from Wave 1 to Wave 3. The slope of the low-increasing trajectory was significant ($B = 0.16$, $SE = .05$, $p < .01$).

Identity Relevant Experiences

Age of Arrival to the United States

Tables 6–8 display the results of the R3STEP analyses, which automatically incorporate a series of logistic regressions. Results show that while controlling for all demographic variables, including age, income, and education at Wave 1, age of arrival and age of arrival squared were not significant predictors of the likelihood that a Mexican mother would be assigned to one class over another in ERI *exploration*, *resolution*, and *centrality*.

Acculturative Stress

As presented in Tables 9–11, the results of R3STEP for the links between acculturative stress show that, controlling for all the covariates, Mexican mothers with higher levels of feeling as a misfit were more likely to be assigned to the high-stable trajectory, compared to the low-increasing trajectory in ERI *exploration* ($B = 0.59$, $SE = .18$, $p < .001$, $OR = 1.80$; see Table 9) and *centrality* ($B = 1.27$, $SE = .33$, $p < .001$, $OR = 3.57$; see Table 11), but not in ERI *identity resolution* ($B = 1.50$, $SE = 0.84$, $p = .07$, $OR = 4.50$; see Table 10). Yet, no significant associations were observed between foreigner stress and ERI trajectories in *exploration* ($B = 0.03$, $SE = .14$, $p = .82$, $OR = 1.03$; see Table 9), *resolution* ($B = -0.46$, $SE = .28$, $p = .11$, $OR = 0.63$; see Table 10), and *centrality* ($B = 0.28$, $SE = .26$, $p = .28$, $OR = 1.32$; see Table 11).

Discussion

Drawing from the Lifespan Model of ERI (Williams et al., 2020), the present study identified varied trajectory patterns of ERI *exploration*, *resolution*, and *centrality* in adulthood. Specifically, results revealed two distinct trajectories: (a) *high-stable* and (b) *low-increasing* for both ERI *exploration* and *resolution*, and two distinct trajectories: (a) *high-mild decline* and (b) *low-increasing* for ERI *centrality*. By examining the influence of identity-relevant

Table 3

Parameter Estimates for Growth Trajectories of EI Exploration, Resolution, and Centrality

Trajectory and parameter	EI exploration			EI resolution			EI centrality		
	B	*SE*	*p*	*B*	*SE*	*p*	*B*	*SE*	*p*
Intercept of high-stable trajectory	3.88	0.04	.00	4.19	0.02	.00			
Slope of high-stable trajectory	−0.01	0.01	.61	−0.01	0.01	.35			
Intercept of high-mild decline trajectory							4.03	0.02	.00
Slope of high-mild decline trajectory							−0.01	0.01	.07
Intercept of low-increasing trajectory	2.46	0.07	.00	2.66	0.20	.00	2.58	0.11	.00
Slope of low-increasing trajectory	0.08	0.03	.00	0.23	0.08	.01	0.16	0.05	.00

Note. The table displays three independent models for *ethnic identity exploration*, *resolution*, *and centrality*. EI = ethnic identity; *SE* = standard error.

Table 4
Model Fit Information and Selection Criteria for Growth Mixture Modeling Analyses for Ethnic Identity Resolution

Number of class	Log likelihood	BIC	AIC	A-BIC	LMR	Entropy	Distribution across class
1	−1188.98	2416.29	2389.96	2397.24			
2	**−1165.48**	**2388.46**	**2348.96**	**2359.89**	**0.009**	***p* = .94**	**97.5%–2.5%**
3	−1155.40	2387.47	2334.81	2349.38	0.011	*p* = .96	0.3%–97.1%–2.5%
4	−1105.45	2306.72	2240.89	2259.10	0.062	*p* = .75	1.5%–18.7%–6.2%–73.6%
5	−1079.04	2273.07	2194.07	2215.92	0.330	*p* = .77	5.3%–0.3%–0.1%–19.2%–74.0%

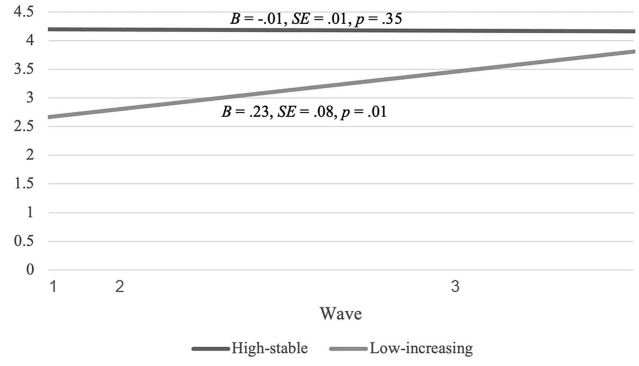
Note. The bolded row indicates the number of classes selected for the present study. BIC = Bayesian information criterion; AIC = Akaike information criterion; A-BIC = sample size–adjusted BIC; LMR = Lo–Mendell–Rubin test.

experiences, including age of arrival to the United States and acculturative stress, on the trajectory patterns of individual ERI components among Mexican mothers over an 8-year period, this study highlights the role of concurrent identity-relevant experiences in shaping ERI development in adulthood. While age of arrival did not predict ERI trajectories, greater feelings of misfit at Wave 1 were associated with a higher likelihood of being identified in the *high-stable exploration* and *high-mild decline centrality* groups, versus being identified in the *low-increasing* groups. Overall, study findings contribute to our understanding of the Lifespan Model of ERI by underscoring the multidimensional nature of ERI. The results align with the model's proposition that ERI is dynamic and continues to evolve beyond emerging adulthood (Williams et al., 2020). This may provide insights for future research to explore how distinct trajectory patterns of ERI dimensions and components within them relate to sociocultural and psychological adaptation among adult immigrant populations.

Trajectories of ERI Exploration

Based on the existing literature, this is one of the few empirical studies to examine trajectory patterns of ERI beyond emerging adulthood. In line with Maehler's (2022) study on a German adult sample, variations in trajectories of ERI exploration emerged across three waves among Mexican mothers. Two distinct trajectories were identified: (a) *high-stable* and (b) *low-increasing*. Supporting the hypothesis of a stable trajectory, 70% of participants were classified in the *high-stable* group, characterized by consistently high levels of exploration across the 8-year period. Contrary to expectations, no decreasing trajectory was observed. This may be partly explained by sample characteristics, as all participants were parents of middle school children who engaged in language brokering within Mexican immigrant families. The *high-stable* group may have experienced relatively high levels of parental ethnic socialization, which has been shown to promote exploration of heritage identity (Umaña-Taylor et al., 2009). Given that ERI is a key developmental task in adolescence and that Latina mothers are typically highly involved in helping their children explore and learn about their cultural heritage (Umaña-Taylor & Guimond, 2010), it is likely that Mexican mothers actively engaged in exploring their own ERI through everyday socialization with their children during this period.

Figure 3
Trajectory Patterns of Ethnic Identity Resolution



Note. Two trajectory patterns were identified, including *high-stable* and *low-increasing*. The *high-stable* group comprised approximately 96% of the sample, whereas the *low-increasing* group comprised approximately 4% of the sample. Betas represent estimates of the slope. *SE* = standard error.

The low-increasing group, comprising 30% of the sample, followed a different pattern. Mexican mothers in this group reported relatively low levels of ERI exploration at Wave 1, followed by an increase across 8 years. The significant slope of this group indicated an increasing trajectory. This pattern may be partly explained by the dual frame of reference (Suárez-Orozco & Suárez-Orozco, 1995), which suggests that while foreign-born parents maintain a strong connection to their culture of origin, they also recognize that their U.S.-born children may not share this connection. As such, driven by a desire to pass on cultural values and history to the next generation (Else-Quest & Morse, 2015), immigrant mothers may have become more engaged in exploring their heritage identity as part of the ethnic socialization process. However, this study did not examine how adolescents' ERI trajectories may relate to those of their immigrant mothers, highlighting an important direction for future research (e.g., Tse et al., 2024), particularly given that Mexican mothers often serve as the primary caregivers.

Trajectories of ERI Resolution

Two trajectory patterns were identified in ERI *resolution*: (a) *high-stable* and (b) *low-increasing*. Consistent with our hypothesis of a stable trajectory, the *high-stable* group, which comprised 96% of the sample, maintained a high and stable level of ERI resolution over the 8-year period. Prior research suggests that adults' perceptions of their ethnic membership tend to remain stable when they have spent years engaging in daily experiences within a consistent sociocultural environment (Williams et al., 2020). A majority of the sample (approximately 80%) migrated to the United States after the age of 18 and likely underwent their sensitive period of cultural

Table 5
Model Fit Information and Selection Criteria for Growth Mixture Modeling Analyses for Ethnic Identity Centrality

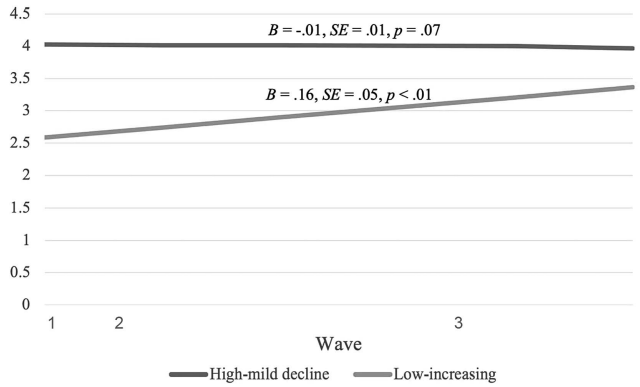
Number of class	Log likelihood	BIC	AIC	A-BIC	LMR	Entropy	Distribution across class
1	−1257.75	2566.61	2531.50	2541.21			
2	**−1234.44**	**2526.38**	**2486.89**	**2497.81**	**0.000**	***p* = .91**	**94.3%–5.7%**
3	−1221.96	2520.58	2467.92	2482.48	0.006	*p* = .85	1.8%–5.5%–92.6%
4	−1213.84	2523.51	2457.69	2475.89	0.011	*p* = .88	5.2%–92.6%–0.3%–1.8%
5	−1206.41	2527.81	2448.82	2470.67	0.010	*p* = .90	5.2%–0.34%–92.6%–1.7%–0.2%

Note. The bolded row indicates the number of classes selected for the present study. BIC = Bayesian information criterion; AIC = Akaike information criterion; A-BIC = sample size–adjusted BIC; LMR = Lo–Mendell–Rubin test.

identification in Mexico, where they had already spent considerable time learning about their heritage culture's language, history, customs, and traditions (Cheung et al., 2011). It is also likely that mothers in this group, as primary caregivers, continued to practice familiar behaviors, customs, and knowledge from their country of origin after migrating to the United States (Maehler & Daikeler, 2024). With years of endorsement of their heritage culture, they may have already developed a clear sense of what Mexican identity means to them, which may suggest the observed stability in ERI *resolution* among this group of Mexican mothers.

The low-increasing group, which accounted for 4% of the sample, is also consistent with our hypothesis. Mexican mothers reported relatively low levels of ERI *resolution* at the beginning of the study but showed an increase over time. Contrary to our expectations, no decreasing trajectory was identified. One possible explanation for this may be related to the proposition of ongoing sociocultural experiences in established adulthood. Approximately 80% of participants began the study between ages 30 and 45. Mehta et al. (2020) suggested that established adulthood is an ongoing developmental process during which there are increasing life tasks and responsibilities for adults to explore and make commitments to, for example, decision making about childbearing, entering a new job and/or position, and moving to a new neighborhood. Following broadly normative development, these life transitions may offer more opportunities for middle-aged adults to reevaluate and gain clarity about their identities (Crafter et al., 2019), including ERI. As such, a *low-increasing* trajectory (and not a *decreasing* trajectory) was observed among Mexican mothers. These findings also support a prior study that shows that changes in sociocultural environment could have a substantial impact on adult Latinos' reexamination of their ERI (Torres et al., 2012). It may highlight the complexity of sociocultural experiences during established adulthood for immigrant populations. Further research is needed to identify effective strategies for supporting adult immigrants who may face unique challenges in a host country—revisiting their ERI while managing normative developmental tasks during midlife.

Figure 4
Trajectory Patterns of Ethnic Identity Centrality



Note. Two trajectory patterns were identified, including *high-mild decline* and *low-increasing*. The *high-mild decline* group comprised approximately 93% of the sample, whereas the *low-increasing* group comprised approximately 7% of the sample. Betas represent estimates of the slope. *SE* = standard error.

Trajectories of ERI Centrality

Two trajectory patterns, including (a) *high-mild decline* and (b) *low-increasing*, emerged in ERI *centrality*. The *high-mild decline* group, comprising 93% of Mexican mothers, reported a relatively high initial level of ERI centrality, followed by a mild decline across the three waves. This high initial level of ERI *centrality* may be partly explained by participants' strong sense of belonging to their heritage culture prior to migrating to the United States (Perez & Arnold-Berkovits, 2018). However, the mild decline over time was contrary to our hypothesis of a stable trajectory, given that ERI *centrality* appears to be relatively stable in mid- to late adulthood (Hoffman et al., 2017). One possible explanation may be due to the long-standing anti-immigrant sentiment targeting Mexican communities, which intensified during and after the 2016 U.S. presidential election (Hooghe & Dassonneville, 2018). It is plausible that Mexican mothers who perceive their ERI as devalued by mainstream society may distance themselves from their ethnic group as a coping mechanism in response to negative stereotypes and prejudice (Shinnar, 2008). This may account for the gradual decline in ERI centrality observed in the *high-mild decline* group between 2012 and 2020.

The low-increasing group, representing 7% of the sample, began with a relatively low level of ERI *centrality* but exhibited an increasing trajectory across the three waves. One possible interpretation is that, unlike the *high-mild decline* group, members of the *low-increasing* group may adopt a different strategy to manage the psychological stress of being an immigrant and navigating adaptation challenges in the host country (Shinnar, 2008). These individuals may respond to these discriminatory experiences by making their Mexican identity more salient and central to their self-concept and strengthening their connection to the broader Mexican community (Dalton, 2016).

Table 6

Three-Step Approach to Latent Class Analysis Method for EI Exploration: Age of Arrival of the United States as a Predictor

Predictor	EI exploration (outcome: high-stable trajectory)				
	B	*SE*	*OR*	*OR* 95% CI	*p*
W1 age of arrival to the United States (predictor)	−0.22	0.13	0.80	[0.63, 1.03]	.08
W1 age of arrival to the United States squared	0.00	0.00	1.00	[1.00, 1.01]	.11
W1 age	−0.02	0.03	0.98	[0.93, 1.03]	.41
W1 education	0.10	0.06	1.11	[0.99, 1.25]	.09
W1 family income	0.05	0.08	1.05	[0.89, 1.23]	.56

Note. The table displays three independent models for *ethnic identity exploration. Low-increasing* trajectory was used as a reference group. EI = ethnic identity; *SE* = standard error; CI = confidence interval; W1 = Wave 1.

Table 8

Three-Step Approach to Latent Class Analysis Method for EI Centrality: Age of Arrival of the United States as a Predictor

Predictor	EI centrality (outcome: high-mild decline trajectory)				
	B	*SE*	*OR*	*OR* 95% CI	*p*
W1 age of arrival to the United States (predictor)	0.12	0.15	1.12	[0.83, 1.52]	.45
W1 age of arrival to the United States squared	0.00	0.00	1.00	[0.99, 1.00]	.38
W1 age	−0.01	0.04	0.99	[0.92, 1.07]	.81
W1 education	0.04	0.08	1.04	[0.89, 1.22]	.60
W1 family income	−0.23	0.12	0.80	[0.63, 1.01]	.06

Note. The table displays three independent models for *ethnic identity centrality. Low-increasing* trajectory was used as a reference group. EI = ethnic identity; *SE* = standard error; CI = confidence interval; W1 = Wave 1.

Nonsignificant Associations Between Age of Arrival and ERI Trajectories

Contrary to our hypothesis, no significant associations were found between age of arrival to the United States (linear or quadratic effects) and trajectory patterns of any ERI component. These findings contribute to a growing literature suggesting that age-related variables may not consistently predict ERI development in adult immigrants (e.g., Diaz-Strong & Gonzales, 2023; Maehler, 2022; Verkuyten et al., 2024). Instead, normative aging processes (aging effects), formative life experiences linked to one's birth cohort (cohort effects), and broader sociopolitical shifts during specific historical periods (period effects) may interact to shape ERI development over time in adults. Migration-related factors, such as age at migration and length of residence, may also be confounded with age–period–cohort effects (Maehler & Daikeler, 2024). One recent longitudinal study by Verkuyten et al. (2024) shows that ERI *centrality* across adulthood can be shaped by the interplay of all three processes, highlighting the importance of accounting for age–period–cohort effects in future research on ERI component trajectories.

In addition, the small sample size of the *low-increasing* trajectory group across ERI *exploration*, *resolution*, and *centrality* may have limited statistical power to detect significant between-group associations (Maxwell et al., 2015). This limitation is especially relevant given that the present study examined age of arrival as a between-group predictor of trajectory group membership, rather than modeling within-person change. Future research should consider adopting more nuanced, within-person approaches to assess how age of arrival may influence initial levels and longitudinal changes in each ERI component.

Table 7

Three-Step Approach to Latent Class Analysis Method for EI Resolution: Age of Arrival of the United States as a Predictor

Predictor	EI resolution (outcome: high-stable trajectory)				
	B	*SE*	*OR*	*OR* 95% CI	*p*
W1 age of arrival to the United States (predictor)	−0.34	0.31	0.71	[0.39, 1.31]	.28
W1 age of arrival to the United States squared	0.00	0.00	1.00	[1.00, 1.01]	.40
W1 age	0.04	0.10	1.04	[0.86, 1.25]	.71
W1 education	0.54	0.10	1.72	[1.42, 2.08]	.00
W1 family income	0.37	0.30	1.45	[0.81, 2.60]	.21

Note. The table displays three independent models for *ethnic identity resolution. Low-increasing* trajectory was used as a reference group. EI = ethnic identity; *SE* = standard error; CI = confidence interval; W1 = Wave 1.

The Concurrent Acculturative Stress and ERI Component Trajectories

Significant findings regarding acculturative stress highlight the role of concurrent identity-relevant experiences in shaping ERI development during adulthood. Higher levels of feeling like a misfit at Wave 1 predicted membership in the *high-stable exploration* trajectory group versus in the *low-increasing* group. This finding partially aligns with our original hypothesis that greater feelings of misfit would be associated with a *stable* or *increasing* trajectory in ERI *exploration*, *resolution*, and *centrality* among Mexican mothers who felt they did not fit into U.S. society. However, no significance was observed for feelings of misfit from the host culture on ERI *resolution* trajectories. Prior research indicates that immigrant women from societies characterized by traditional gender hierarchies face distinct acculturative challenges (Maehler & Daikeler, 2024). Upon migration, immigrant women often have limited access to resources and opportunities supporting adaptation in the host country (Bernhard & Bernhard, 2022), partly due to their adherence to traditional homemaking roles (Ghahari et al., 2020). With limited sociocultural experiences and networks, it is possible that Mexican mothers may rely more heavily on familiar cultural practices from their countries of origin in the host country. Additionally, Mexican mothers, who often serve as primary sources of cultural information for their children, consistently engage in exploration activities with their children to help them understand their heritage, traditions, and customs (Tse et al., 2024; Umaña-Taylor et al., 2013). As Mexican mothers who engage more frequently with their heritage culture may be less likely to develop a full sense of belonging in the host society, this may partially explain their likelihood of identification with a *high-stable* trajectory of ERI *exploration*.

Contrary to our hypothesis predicting an increase, greater feelings of misfit at Wave 1 predicted a higher likelihood of identification with

Table 9

Three-Step Approach to Latent Class Analysis Method for EI Exploration: Acculturative Stress as a Predictor

Predictor	EI exploration (outcome: high-stable trajectory)				
	B	*SE*	*OR*	*OR* 95% CI	*p*
W1 foreigner stress	0.03	0.14	1.03	[0.79, 1.35]	.82
W1 feeling as a misfit	**0.59**	**0.18**	**1.80**	**[1.27, 2.54]**	**.00**
W1 age	0.04	0.03	1.04	[0.99, 1.09]	.10
W1 education	−0.06	0.06	0.94	[0.84, 1.05]	.29
W1 family income	−0.05	0.09	0.95	[0.80, 1.13]	.56

Note. The table displays three independent models for *ethnic identity exploration. Low-increasing* trajectory was used as a reference group. The bolded row indicates statistically significant associations between the predictor and the EI trajectories. EI = ethnic identity; *SE* = standard error; CI = confidence interval; W1 = Wave 1.

Table 11

Three-Step Approach to Latent Class Analysis Method for EI Centrality: Acculturative Stress as a Predictor

Predictor	EI centrality (outcome: low-increasing trajectory)				
	B	*SE*	*OR*	*OR* 95% CI	*p*
W1 foreigner stress	0.28	0.26	1.32	[0.80, 2.19]	.28
W1 feeling as a misfit	**1.27**	**0.33**	**3.57**	**[1.89, 6.76]**	**<.001**
W1 age	−0.02	0.04	0.98	[0.91, 1.07]	.69
W1 education	0.06	0.09	1.06	[0.90, 1.26]	.47
W1 family income	−0.24	0.15	0.78	[0.59, 1.05]	.11

Note. The bolded row indicates statistically significant associations between the predictor and the EI trajectories. The table displays three independent models for *ethnic identity centrality. High-mild decline* trajectory was used as a reference group. EI = ethnic identity; *SE* = standard error; CI = confidence interval; W1 = Wave 1.

the *high-mild decline* trajectory group (vs. identification in the *low-increasing* group) in ERI *centrality*. This finding suggests that Mexican mothers may intentionally distance themselves from their Mexican identity as a strategic response to stereotypes and prejudice. According to the rejection-disidentification model (Jasinskaja-Lahti et al., 2009), minoritized individuals may distance themselves from affiliation with their ethnic group to cope with feelings of rejection stemming from discrimination. Consistent with this model, Wiley et al. (2013) also found that minoritized individuals experiencing feelings of rejection due to ethnicity or race were less likely to identify with the majority culture. This finding may further indicate that most Mexican mothers in this study chose to dissociate from their ERI to counter stereotypes and prejudices, particularly amid heightened anti-immigrant sentiments targeting Mexican communities during and after the 2016 U.S. presidential election. Collectively, these findings highlight that ERI remains dynamic in adulthood and can be shaped by immigrants' adaptation experiences. Continued research that adopts a contextual perspective is essential for understanding how sociocultural stressors influence ERI trajectories and for supporting positive identity development in adult immigrants.

Limitations and Future Directions

Several limitations of the present study should be considered. First, the study focused only on three components of ERI, namely, *exploration*, *resolution*, and *centrality*. Future research should examine additional dimensions outlined in the Lifespan Model of ERI (Williams et al., 2020), such as the awareness dimension (e.g., *public regard*) and the attitude dimension (e.g., *affirmation*), to gain a more comprehensive understanding of how ERI trajectories unfold in adulthood. The relatively modest internal consistency ($\alpha = .60$) for the Centrality subscale should be noted as a limitation. This may be attributable to the short, three-item format of the scale and the restricted developmental range of the sample. Nevertheless, the Multidimensional Inventory of Black Identity–Teen Centrality subscale has shown acceptable validity and has been widely used in studies of ERI among adolescents and young adults. Future studies are encouraged to utilize the full version of the Multidimensional Inventory of Black Identity–Adult Centrality Scale (Sellers et al., 1997).

Second, while age of arrival to the United States was not a significant predictor of trajectory membership across ERI components, other life-course or contextual variables, such as years of residence in the United States or country of origin, may offer additional insight. These factors may also overlap with or be confounded by age–period–cohort effects, which should be taken into account in future analyses. Given the small sample sizes for young adulthood (ages 18–29) and middle adulthood (ages 46–65) in the present study, where most participants were in established adulthood (ages 30–45), we were not able to conduct separate analyses for these groups with adequate statistical confidence prior to combining the broader adult age range (ages 27–61). This limitation highlights the need for future research.

Third, the sample was limited to Mexican mothers, which may also not apply to Latino males, as gendered cultural expectations within Latino communities can shape individuals' opportunities to explore and commit to their ERI in different ways (Marano & Roman, 2017). The study sample of Mexican-origin immigrants may also restrict the generalizability of the findings to other Latino subgroups with distinct cultural histories, such as Puerto Ricans, Dominicans, and Cubans. Last, because migration experiences vary widely across Latino populations, future research should consider utilizing a mixed methods approach to better capture participants' lived experiences (Maehler, 2022). Such an approach may help address issues of ecological validity and enhance the contextual relevance of future findings.

Table 10

Three-Step Approach to Latent Class Analysis Method for EI Resolution: Acculturative Stress as a Predictor

Predictor	EI resolution (outcome: high-stable trajectory)				
	B	*SE*	*OR*	*OR* 95% CI	*p*
W1 foreigner stress	−0.46	0.28	0.63	[0.36, 1.10]	.11
W1 feeling as a misfit	1.50	0.84	4.50	[0.87, 23.18]	.07
W1 age	0.05	0.11	1.06	[0.86, 1.30]	.62
W1 education	−0.45	0.08	0.64	[0.55, 0.75]	<.001
W1 family income	−0.22	0.26	0.80	[0.48, 1.34]	.40

Note. The table displays three independent models for *ethnic identity resolution. Low-increasing* trajectory was used as a reference group. EI = ethnic identity; *SE* = standard error; CI = confidence interval; W1 = Wave 1.

Conclusion and Implication

This study fills a critical gap identified in the Lifespan Model of ERI (Williams et al., 2020) by examining ERI component trajectories beyond emerging adulthood and the role of concurrent acculturative stress in shaping these trajectory patterns. The identification of two distinct patterns underscores the need for further longitudinal research to better understand the diverse pathways of ERI development among adult immigrants in the United States. Findings suggest that difficulties in coping with psychological and sociocultural adaptation experiences, such as fitting in the host country, may shape trajectories of specific ERI components, leading to ongoing *exploration* of ERI and a slightly declining ERI *centrality*. Future research and culturally responsive programs that enhance belonging, meaning making, and community engagement could help reinforce positive identity and reduce isolation in adult immigrants. Taken together, this study highlights the importance of continuous efforts to promote healthy identity development in adult immigrants, especially given the current continuously changing social and political climates of the United States.

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