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# The role of legal status and uncertainty in the reproductive aspirations of 1.5 and second generation Mexican-origin immigrant young women: An exploratory study

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#### ARTICLE INFO

#### Keywords: Immigrants Pregnancy desires Legal status Structural inequity Young adults

#### ABSTRACT

*Background:* The 1.5 generation, brought to the U.S. prior to age 16, faces barriers that the second generation, U. S.-born to immigrant parents, does not, including only temporary legal protection through the Deferred Action for Childhood Arrivals (DACA) Program. Little is known about how legal status and uncertainty shape cisgender immigrant young women's reproductive aspirations.

Methods: Drawing on the Theory of Conjunctural Action with attention to the immigrant optimism and bargain hypotheses, we conducted an exploratory qualitative study using semi-structured interviews with seven 1.5 generation DACA recipients and eleven second generation Mexican-origin women, 21-33 years old in 2018. Interviews focused on reproductive and life aspirations, migration experiences, and childhood and current economic disadvantage. We conducted a thematic analysis using a deductive and inductive approach.

Results: Data resulted in a conceptual model on the pathways through which uncertainty and legal status shape reproductive aspirations. Participants aspired to complete higher education and have a fulfilling career, financial stability, a stable partnership, and parents' support prior to considering childbearing. For the 1.5 generation, uncertainty of their legal status makes the thought of parenting feel scary, while for the second generation, the legal status of their parents makes parenting feel scary. Achieving desired stability before childbearing is more challenging and uncertain for the 1.5 generation.

Conclusions: Temporary legal status constrains young women's reproductive aspirations by limiting their ability to achieve desired forms of stability prior to parenting and making the thought of parenting frightening. More research is needed to further develop this novel conceptual model.

#### 1. Introduction

Reproductive justice is the right to have or not have a child and to parent in safe and healthy environments (Ross and Solinger, 2017). Social and structural inequities (i.e., social, political, and economic disadvantages) in the United States are created and reinforced by federal, state, and local policies. These racism-driven inequities prevent reproductive justice and self-determination by constraining people's abilities to both develop and act on their reproductive aspirations or

goals, including if and when they want to parent. Inequities disproportionately affect Black people, indigenous people, people of color, and immigrants. Immigrants make up 14% (44.9 million people) of the U.S. population (Batalova et al., 2021) and their families face multifaceted oppression, reflecting the intersection of gender, race/ethnicity, immigration status, and socioeconomic status. Mexican-origin immigrants, the largest U.S. immigrant group (Batalova et al., 2021), experience structural inequity rooted in xenophobic and racist policies (Castañeda et al., 2015; Wallace et al., 2018).

https://doi.org/10.1016/j.jmh.2023.100156

Received 24 May 2022; Received in revised form 30 September 2022; Accepted 22 January 2023 Available online 24 January 2023

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<sup>&</sup>lt;sup>1</sup> We use "young women" to refer to our participants because they all identify as cisgender women. When we discuss prior literature or make broader statements, we use "young adults" since reproductive aspirations apply to everyone, not just those who identify as women.

The 1.2 million 1.5 generation immigrant young adults eligible for the Deferred Action of Childhood Arrivals (DACA) program (Bachmeier et al., 2022), those who migrated to the U.S. without authorization prior to age 16, have had their lives shaped by shifting immigration policies and their temporary ability to live and work lawfully in the U.S. This creates a state of *liminal legality* (Menjívar, 2006) that renders DACA recipients' futures uncertain and contingent on the sociopolitical context in the U.S. (Burciaga and Malone, 2021). How structural inequity and resulting uncertainty shape reproductive aspirations, defined as hopes and desires related to pregnancy and childbearing, among immigrant young adults remains unknown.

Research on reproductive health among Latinx communities largely overlooks legal status and other structural inequities, focusing instead on cultural norms. In this study, we isolate the role of uncertainty related to legal status by comparing the 1.5 and second generations; both of whom are raised by immigrant parents and have similar cultural norms and structural inequity but different degrees of uncertainty regarding their legal status. Drawing on the Theory of Conjunctural Action (Johnson-Hanks, 2002) with attention to the immigrant bargain (Smith, 2008) and immigrant optimism (Kao and Tienda, 1995) hypotheses, we conducted an exploratory qualitative study on how uncertainty related to legal status shapes reproductive aspirations among 1.5 and second generation Mexican-origin young women.

#### 1.1. Immigrant generation and uncertainty

Immigrant families, particularly of Mexican-origin, experience greater structural inequity than many U.S.-born families. They often lack health insurance, are prohibited from accessing public resources (López and Radford, 2017) and experience employment exploitation and discrimination (Fussell, 2011; Horton, 2016). Both the undocumented 1.5 and second generations are raised by immigrant parents, may experience similar levels of structural inequity (*Immigrant Children*, 2018), social and cultural norms, and may even be siblings. However, the second generation are U.S. citizens by birth and the 1.5 generation are not. Although DACA has provided opportunities for higher education and employment and social integration (Gonzales et al., 2020; Siemons et al., 2017), it is only a temporary protected status resulting in liminal legality and uncertainty (Abrego and Gonzales, 2010; Enriquez, 2015).

Although the second generation does not directly experience liminal legality, both the 1.5 and second generations experience consequences of immigration policy targeted at their undocumented parents through structural inequity and by constraining decision-making to minimize legal risks (Enriquez, 2015). Thus, the uncertain immigration policy context may indirectly impact the second generation who are often members of mixed-status families, i.e., families comprised of members with various legal statuses, such as documented, citizen, and undocumented (Abrego, 2019; Enriquez, 2015).

#### 1.2. Reproductive health and uncertainty

Reproductive health research with Latinx immigrant communities examines reproductive events, such as adolescent births (Darney et al., 2022; Goldberg, 2018), behaviors, such as contraceptive use (Samari and Coleman-Minahan, 2018; Tapales et al., 2018), or health care access (Potter et al., 2017; Tapales et al., 2018). These studies do not examine immigration policy or uncertainty, which is found within the social context in which events occur, not in the event itself (Johnson-Hanks, 2002). Even the limited studies on pregnancy intentions among Latinas rely on cultural norms or social disadvantage as explanatory variables, rather than immigration policy (Aiken et al., 2015; Hernandez et al., 2020). Exploring reproductive aspirations allows us to describe how legal status and uncertainty constrain people's hopes and dreams, which are essential to reproductive justice and self-determination.

#### 1.3. Theoretical framework

We utilized the Theory of Conjunctural Action (TCA) to explore the role of uncertainty in young women's formation of reproductive aspirations. A vital conjuncture is a "socially structured zone of possibility that emerges around specific periods of potential transformation in a life or lives. It is a temporary configuration of possible change, a duration of uncertainty and potential" (Johnson-Hanks, 2002, p. 871). Reproductive health outcomes such as contraceptive use or childbirth result from actions that occurred within a vital conjuncture.

People use social and cultural norms, as well as material resources to develop aspirations and make sense of vital conjunctures (Johnson--Hanks et al., 2011). For example, reproductive aspirations may be shaped by norms related to gender roles and expectations learned from parents, including the value of motherhood, and parental expectations for educational and economic success. Specifically, immigrant optimism may influence reproductive aspirations of young adults. The immigrant optimism hypothesis developed by Kao and Tienda (1995) suggests that immigrant parents' optimism about their children's educational and economic potential in the U.S. explains why children of immigrants have higher educational aspirations (Rosenbaum and Rochford, 2008) and similar or better educational outcomes than children of U.S.-born parents (Cebolla-Boado et al., 2021; Hirschman, 2001; Kao and Tienda, 1995), despite their lower socioeconomic status. However, children of immigrants themselves may not always believe in or reflect their parents' optimism and thus scholars should empirically study young adult's own optimism and goal orientation (Cebolla-Boado et al., 2021).

Rooted in immigrant optimism, the immigrant bargain hypothesis (Smith, 2008) explains how immigrant parents expect their children to honor their migration-related sacrifices by attaining educational and economic success, often because children are better positioned to succeed than their immigrant parents (Louie, 2012). Children interpret the immigrant bargain as confirmation that to be successful they must work hard in school to achieve more than their parents (Alvarez, 2015). They often embrace the bargain and attempt to meet their parents' high expectations (Louie, 2012), partially buffering them from structural inequity and other barriers.

Given potentially high educational expectations transferred to Mexican-origin children of immigrants by their parents, it is crucial to explore the relationship between these expectations and reproductive aspirations. Moreover, vital conjunctures, such as pregnancy, are bidirectionally contingent on the sequencing of other vital conjunctures, such as graduation from school (Johnson-Hanks, 2002). In this study, we used TCA to explore the domains on which reproductive aspirations may be contingent (e.g., education, employment) and how they shape reproductive aspirations and are shaped by legal status and uncertainty.

## 2. Methods

We worked with two community organizations serving Latinx and immigrant communities in the Denver-metro area to recruit participants who identified as women of Mexican-origin, were of the 1.5 or second generation, and were 18–34 years-old, to reflect DACA eligibility. Staff at community organizations referred potentially eligible participants. We hung study flyers at local community colleges and universities, restaurants and stores, and local family planning clinics. We conducted interviews until a cohesive conceptual framework emerged (Fig. 1).

We obtained a waiver of documentation of consent from the Colorado Multiple Institutional Review Board. Participants received \$50 for participation. Interviews were conducted in-person at the location of the participant's choice, such as coffee shops or a community organization's office, and in the language of the participant's choice. All participants consented to audio-recordings which were destroyed after transcription. We conducted follow-up interviews with two participants to obtain detail that was missed in the original interview. Interviews were completed between June and August 2018, after a federal judge ordered

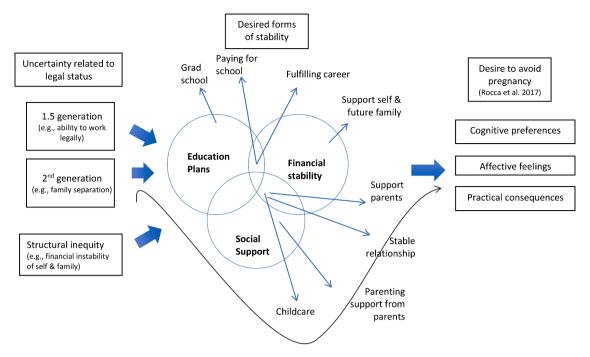


Fig. 1. Conceptual framework showing uncertainty and structural inequity shape the desire to avoid pregnancy through constraining forms of desired stability and directly shaping affective feelings

the Trump administration to restart DACA after an attempt to end the program in 2017 (Bachmeier et al., 2022).

Interviews were semi-structured, lasted about one-hour, and the interview guide was based on prior literature and our theoretical framework. Related to this analysis, we asked about the migration experiences of the participant and/or family, childhood family life, current living situation, education and employment, life goals and the likelihood of achieving those goals, worries and fears, and reproductive history. Following TCA, we operationalized reproductive aspirations by asking open-ended questions to assess Rocca and colleagues' (2019) Desire to Avoid Pregnancy scale (DAP) domains: cognitive desires and preferences, affective feelings and attitudes, and anticipated practical consequences (Table 1). The scale was developed using preference construction theory that accounts for individuals without clear preferences and is responsive to uncertainty about the future and the ways in which agency is constrained (Borrero et al., 2015).

We used a thematic analysis that included deductive coding from our theoretical framework and literature and inductive coding to identify emergent themes. We reduced and displayed data in matrices to visualize immigrant generation and legal status, DAP domains, future goals, and uncertainty about legal status. We developed a Venn diagram displaying the emergence of the importance of life domains on which reproductive aspirations were contingent. We created a flow chart to identify pathways between legal status, structural inequity, and reproductive aspirations. Data were analyzed within and between immigrant generations to isolate the role of legal status. We reviewed analyses and displays together, reflected on biases, and verified conclusions with the

 $\begin{tabular}{l} \textbf{Table 1} \\ \textbf{Interview Questions Related to the Desire to Avoid Pregnancy Scale (Rocca et al., 2017).} \\ \end{tabular}$ 

Domain	Interview question
Cognitive Desires and Preferences Affective Feelings and Attitudes Anticipated Practical Consequences	Do you want to be pregnant in the future? If so, when? How would you feel if you became pregnant in the next three months? What would your life be like if you had a child in the next year?

original data. Data are presented with pseudonyms.

#### 3. Results

#### 3.1. Sample

We interviewed 1.5 generation (N=7) and second generation women (N=11) who all identified as cisgender and were 21–29 years old; one participant was 33. Two participants, one 1.5 generation and one second generation were sisters. Among the 1.5 generation, all were current DACA recipients; one migrated at age 15, the rest migrated prior to adolescence: one at age 11, and five before age seven. Among the second generation, all but two participants confirmed at least one parent currently had legal documentation, but most were undocumented when they migrated. All 1.5 generation participants and the parents of second generation participants migrated prior to 2005.

All participants experienced structural inequity at some point during their lives and/or knew their parents struggled economically before they were born or could remember. All but two participants, Liliana, whose parents owned a business and migrated due to political and economic "turmoil" in Mexico and Erika, who migrated alone to escape gang violence, explained that their families migrated for "more opportunities," "better work," or a "better life." More than half of participants explicitly described financial instability during their childhoods, explaining how their parents worked long hours for low wages, experienced foreclosures, were laid off, or could only afford necessities.

All 1.5 generation participants had a high school diploma, two had completed a bachelor's or master's degree, and two were enrolled at a four-year university. All were currently employed. Five participants identified as straight and all had a current or prior sexual relationship with a cisgender man. One participant was currently pregnant and two were parenting. All second generation participants had a high school diploma, eight had bachelor's degrees, and two were enrolled in a four-year university. All but two were currently employed. Six participants identified as straight and nine had a current or prior sexual relationship with a cisgender man. None had ever been pregnant.

Our conceptual framework emerged with three main components (Fig. 1). Following the framework in Fig. 1 from right to left, we first

describe participants' reproductive aspirations. Next, we describe how reproductive aspirations are contingent on education, finances, and social support. Finally, we describe how legal status makes the prospect of parenting feel "scary" and makes it logistically harder and more uncertain to achieve the desired stability on which their reproductive aspirations are contingent.

#### 3.2. Reproductive aspirations

#### 3.2.1. Cognitive preferences

Describing the three domains of the desire to avoid pregnancy shown in Fig. 1, all but two 1.5 generation participants who never wanted a child, desired to have a child or another child five to 10 years in the future. Among the second generation, several participants reported they were very or somewhat sure they never wanted a child and the majority desired children five to 10 years in the future, one of whom would like to adopt a child.

#### 3.2.2. Affective feelings

In both generations there was a range of feelings about the possibility of a pregnancy in the next three months. Several participants said they would feel happy about a pregnancy and a few would not feel like it's "the end of the world." Second generation Maya does not want a child for another eight years, but she would feel happy if she became pregnant in the next three months because "I feel like I've gotten to an age, and I'm in a good relationship that if it were to happen, it wouldn't be a sad thing." Second generation Gabriella would not feel happy but, "it wouldn't be the end of the world at this point. I have my undergrad degree...my parents would [say] 'we know you're responsible." The majority of participants would feel scared or overwhelmed thinking about, as 1.5 generation Vanessa, put it, "how to take care of it all." Almost half of participants said, without prompting, that they would consider abortion.

# 3.2.3. Practical consequences

Both 1.5 and second generation participants described negative ways their lives would change if they had a child in the next year. Participants worried about achieving their educational and career goals, financially supporting a child, being "emotionally ready," and missing out on opportunities like traveling. Maria, 1.5 generation, said her "dreams of school and following my career would end." Echoing this, Bertha, second generation, who never wants children, felt she could not attend graduate school with a child. Finally, 1.5 generation Jennifer, felt like her goal to advance in her career would be "a lot harder" with a child, because of sexism and racism in her chosen field of finance. In general, participants' cognitive preferences, affective feelings, and practical consequences reflected strong desires to avoid pregnancy, although several participants would find a pregnancy acceptable.

#### 3.3. Contingent life domains

Exemplifying TCA's assertion that vital conjunctures, like pregnancy, bring together other life domains, we found that reproductive aspirations were contingent on other life domains. Supporting the immigrant bargain hypothesis, participants would consider having a child only after they had stability in three contingent life domains as visualized in the middle component of Fig. 1: education, finances, and social support.

#### 3.3.1. Education

All participants, except for two who already attained their educational goals, described educational goals. Participants explained how their parents highly valued education, made sure "school was a top priority," and "motivated" or "pushed" them in school. Several reflected on how their parents migrated to give them "a better opportunity" and, as Gabriela said, they needed to "make their [parents'] hardships worth

it." However, exemplified by Liliana, their immigrant parents "couldn't really understand what education meant in the U.S." and could not help them with college or financial aid applications. Despite these barriers, participants desired to attain their education *prior* to having a child.

Education was bidirectionally on contingent participants' desire for financial stability in two ways. First, the ability to complete school was contingent on financial stability. Even without having a child, almost all participants described substantial difficulties paying for school. Second, participants' desire for a meaningful career, rather than just a job, was contingent on education. Liliana, a 1.5 generation recent college graduate, was searching for "a career job, something where I feel like I'm passionate about what I'm doing."

#### 3.3.2. Financial stability

Reproductive aspirations were contingent on financial stability. While most participants felt they made ends meet most of the time, many clarified they could do so because they lived with their parents or a roommate or had some help from parents. The ability to make ends meet did not preclude them from worrying about finances, particularly paying tuition or school debt. Several participants, like Vanessa who was "always paycheck to paycheck" felt they barely made ends meet. Almost all participants desired greater financial stability prior to parenting and described how a child would worsen their financial situations.

Financial stability was partially contingent on social support. Several participants financially helped parents and siblings, and others hoped to do so in the future. Second generation Xochitl wants to "like give my parents some rest, you know, because of all that they've done for me." Similarly, Bertha wants to "start financially—not helping him [father]—but just supporting him, 'cause they're [parents] getting older." Considering almost all participants' families experienced economic disadvantage, it is unsurprising that participants described a reciprocal financial relationship with their families, both depending on parents for some financial support and either helping their parents or wanting to give back in the future.

Social support would also reduce the cost of raising a child. Sylvia, second generation, said, "I feel like it's easier with my mom. Like I could probably have more time for my education and more time with – be able to leave my [hypothetical] child with someone I know that my child's gonna be fine." This was true also for Brenda, 1.5 generation, who already has a young child. She can live comfortably and pay bills "most of the time." However, when her mother cannot provide childcare, she must either pay for childcare or miss work.

# 3.3.3. Social support

Many 1.5 and second generation participants reported they want a stable romantic partnership or marriage prior to parenting and several were concerned with the prospect of being a single mother. Vanessa said: "Let's say that me and my boyfriend end up breaking up, now I'm a single mom and... I don't know how I'd do it. It's hard." Brenda is a single mom and although she desires another child in the future, "What if I become pregnant and [he] doesn't take care of the baby. I don't want that again, you know, have my parents take care of the baby."

Only two participants, both second generation, felt they had reached sufficient stability to parent although they did not desire a child in the next year. Sylvia, a teacher in a romantic relationship, said her parents would be supportive and "I would feel competent, I mean as competent as you can be to become a parent (laughs) and that I would be able to support that child." Recent college graduate Maya is in a "good relationship" and she does not want a child until after graduate school, but if it happened she said, "I wouldn't feel disappointed. My parents wouldn't feel disappointed. It'd be a good thing." In sum, participants desired stability prior to considering parenting through completing higher education, having a meaningful career, financial stability, and a stable romantic partnership.

#### 3.4. Uncertainty related to legal status

#### 3.4.1. Uncertainty and desire to avoid pregnancy

Linking all three components of our conceptual framework (Fig. 1), we describe how legal status and uncertainty shape reproductive aspirations, directly and through the desired forms of stability. The 1.5 generation participants overwhelmingly reported that their legal status did not play a role in their reproductive aspirations. Jennifer explained, "If I'm ready to have a child, citizenship shouldn't stop me from having a child. But that's only if I'm mentally ready." Among the second generation who mentioned legal status, only Bertha, who does not desire children in the future, believed that legal status influenced her aspirations:

I think that I live my life in accordance to that possibility of whether or not these people that I care about would get deported. That's my number one priority. Part of the reason why I feel like I should get higher ed and why I have to move forward with these goals and dreams...that way I can end up taking care of these people. The thought has crossed my mind, like, "Why would I have children if these people wouldn't be here for that child?"

Although participants denied legal status as a factor in their reproductive aspirations, for some 1.5 generation participants, liminal legality made the thought of parenting feel "scary." Maria felt if she became pregnant in the next three months, "my dreams of school and following my career would end." When asked whether having a permanent legal status would change when she wants to have a child, she replied, "I think it would be less scary." Brenda, who has a young child and would feel happy if she were pregnant in the next three months, explained how liminal legality would complicate a pregnancy: "Cause what if I get deported - you never know - and I have to have the baby down there [Mexico]. Then he [hypothetical baby's father] can't come down here. It's hard, you know, to think about things like that." The uncertain financial stability due to liminal legality also made the possibility of pregnancy feel scary. Vanessa feels trapped in her job because of DACA's temporary status. She said, "I don't think it [legal status] affects that – me having kids. I just think what would scare me is me not being able to provide for them."

Several second generation participants in mixed-status families described how the legal status of loved ones made the possibility of pregnancy feel scary. Alicia said parenting would feel scarier because of her mother's deportability: "I feel like it [legal status] does affect [pregnancy] because I would want the support of my mom. And I feel like it would be hard without her because I just feel – I don't know, she's like the responsible one (laughs)."

## 3.4.2. Legal status and attainment of life aspirations

In addition to making parenting feel scary, legal status made the stability on which reproductive aspirations are contingent more difficult to attain and uncertain, particularly for the 1.5 generation. Until 2013, when Colorado passed Advancing Students for a Stronger Tomorrow (ASSET) (Giron and Durand, 2013), undocumented young adults had to pay out-of-state tuition. Participants also described ineligibility for financial aid and many scholarships. Some felt ASSET allowed them to attend school; several participants who graduated from high school before ASSET had to forgo or delay college while working to pay out-of-state tuition. In high school, Vanessa realized that she could not afford out-of-state tuition and thought, "School is not my thing anymore."

The desire for financial stability is also constrained by legal status. Although participants experienced varying degrees of financial instability, the 1.5 generation's dependence on DACA to work renders financially stability more uncertain. Although Erika does not want another child in the future, she worries about DACA ending, "I don't wanna live in this uncertainty. Even now, when they took DACA away and then they gave it back. I'm about to graduate. I'm not gonna be able

to work. What am I going to do?" Vanessa, who would feel scared if she became pregnant because she's worried about providing for a child, described uncertainty about work:

That's why I feel like right now, I'm kinda just stuck there [current job] because there's not really a place for me to move... I feel like if I had a better legal status, I could go out and be like, "You know what? I can work here, too. I can apply here." Right now, I feel like if I go out, they might look at my permit and be like, "Oh, she's not gonna have one in three years, so what's gonna happen then?"

Finally, for the 1.5 generation, liminal legality shapes reproductive aspirations by complicating romantic partnerships and threatening social support. Maria was unsure if legal status affects her pregnancy plans because "I don't tell people that I meet or relationships about my legal status. *Ever*. The only reason why I told my ex-boyfriend was because we were together for so long." Legal status is not a reason Liliana does not desire children but she did say:

Sometimes I don't want to get married. I feel like I don't know if it's because I don't want to feel like I'm doing it out of necessity to like, change my status. I don't want it to be a factor in me thinking maybe I should get married because it's going to help me, essentially, it'll help me in so many ways.

Jennifer believed her employer will sponsor her for citizenship but if she is unable to change her legal status when she is ready for a child, she said: "[I] hope my husband would like to put in my paperwork so I could become a U.S. citizen, but I think it would be hard to have a child if I were to think about it because what if I was separated from him and then... I don't know." This fear was echoed by several other participants. The role of legal status in romantic relationships was less important for second generation participants. Only Xochitl mentioned legal status of a partner, saying it would not matter to her, but she would feel scared and sad if that partner was deported.

# 3.4.3. Uncertainty of attaining life aspirations

The 1.5 generation described more uncertainty about achieving life aspirations than the second. Only two 1.5 generation participants, Carla and Brenda, were confident they could "put their minds and their efforts into what they wanna do." They hoped to complete associate's degrees; one was pregnant and the other parenting. The other participants felt their legal status made achieving goals less certain. Erika felt achieving her goals is "out of my control" and further explained, "somebody else has the power in my life and my decisions." Although Jennifer met her educational goals and has her "dream job," her main aspiration is to "fix" her legal status so it does not jeopardize her career and financial stability.

Unlike most 1.5 generation participants, almost all second generation participants were confident they would achieve their aspirations and described positive thinking, being "goal-oriented," or "hard work" as reasons they will achieve their goals. Noemi said: "I want to believe there's no barriers. So that then I don't have any barriers. I believe in power of mind and positive thinking." Echoing Noemi, Alicia said, "I just feel like being you know goal-orientated and like keeping yourself motivated to what you really want and not getting distracted by other stuff." Three second generation participants had more uncertainty; yet Bertha and Xochitl clung to immigrant optimism, even in their uncertainty. Bertha said: "I think there's a lot of fear, and a lot of anxiety, surrounding [goals]. But if my parents have taught me anything, it's that failure isn't an option (laughs)." In sum, 1.5 generation participants described greater uncertainty than second generation participants in achieving the life aspirations on which their reproductive aspirations are contingent.

#### 4. Discussion

In this exploratory qualitative study, we make a theoretical

contribution by creating a conceptual framework that identifies mechanisms through which uncertainty related to legal status, or liminal legality, shapes reproductive aspirations of immigrant young women. Supporting the immigrant optimism and bargain hypotheses, we found that although participants experienced structural inequity, they aspired to a middle-class ordering of life events and their reproductive aspirations were contingent on education, financial stability, and social support. Using an innovative comparison between the 1.5 and second generations, we found that legal status shapes reproductive aspirations through two pathways: (1) liminal legality made the possibility of pregnancy frigthening and (2) liminal legality made achieving the stability on which their reproductive aspirations are contingent logistically more difficult and uncertain. Thus, legal status constrains how the undocumented 1.5 generation develop their reproductive aspirations, and in a different way, constrains the second generation in mixed-status families.

Our finding that participants desired to delay childbearing until after they attained stability differs from research that suggests that pregnancy planning and a socially normative ordering of life events do not resonate with some low-income young adults (Arteaga et al., 2019; Borrero et al., 2015; Edin and Kefalas, 2005). Indeed, some young adults may choose to become pregnant, welcome pregnancy, or find a pregnancy acceptable because they may never attain educational, financial, or relationship stability due to structural inequities they face (Edin and Kefalas, 2005; Gomez et al., 2021). Selection could account for our different results as our sample was highly educated with a access to financial and educational resources. However, there are several other reasons our findings may differ from these studies.

First, unlike prior research (Borrero et al., 2015; Edin and Kefalas, 2005; Gomez et al., 2021), our study specifically focused on *immigrant* families. Despite also experiencing structural inequities and racism, immigrant families differ from low-income U.S.-born parents who may feel that they and their children are prohibited from attaining middle-class success due to structural barriers and racism. Immigrant parents are optimistic about their children's chances of success, despite structural inequity (Kao and Tienda, 1995; Smith, 2008). Indeed, our second generation participants were highly optimistic about achieving their goals and participants in both generations described how their parents pushed them to succeed in school.

Results suggest the "bargain" (Smith, 2008) immigrant parents make with their children by using their migration-related sacrifices to motivate their children's success in school may be an important reason for why our participants strived to delay parenting until their educational and career goals were attained. Coleman-Minahan and Samari (2020) found one component of a "good" father-daughter relationship was that fathers used their migration-related sacrifices to push their daughters to succeed in school, which in turn was associated with delayed sexual activity. And similar to Hernandez et al. (2020), anticipated parental reactions to a pregnancy shaped several of our participants' feelings about a hypothetical pregnancy. Indeed, one reason the three participants who did not desire but would find a hypothetical pregnancy acceptable was because their parents would not be disappointed. A pregnancy occurring prior to attainment of life goals would not fulfill the immigrant bargain and may result in parental disappointment. Future research should further explore immigrant optimism and the immigrant bargain in the reproductive aspirations and actions among immigrant young adults.

Second, we captured participants' lives at one point and aspirations change over time and in response to continued barriers. The desire to avoid pregnancy may decrease and pregnancy acceptability may increase as aspirations, such as completing a degree, become more challenging to attain. The only two 1.5 generation participants who felt certain they could achieve their goals both experienced pregnancies they did not expect and were the only two to desire an associate's rather than four-year degree. Their earlier childbearing, or perhaps differences in structural inequity we did not identify, may have led to developing

more attainable goals.

Liminal legality constrains reproductive aspirations by making the life that young women desire prior to parenting logistically difficult and uncertain. Research suggests that participants' fears about their ability to provide for a child is founded (Abrego and Gonzales, 2010; Gonzales, 2016). The ability of 1.5 generation parents to provide for their children is constrained by their legal status and many feel their legal status prevents them from giving their children the childhood that they hoped (Enriquez, 2020). Consistent with prior literature (Cebulko and Silver, 2016; Gonzales and Burciaga, 2018), we found DACA and inclusive state-level policies, such as Colorado ASSET, reduce barriers to education. This may be one mechanism through which DACA reduces risk of adolescent childbearing (Kuka et al., 2019). However, the temporary nature of DACA limits these benefits.

Liminal legality also constrains reproductive aspirations through social support. The thought of parenting felt scary due to the threat of separation from parents or a partner. Consistent with Enriquez (2020), participants were concerned about what their deportability would mean for their children or that an undocumented romantic partner could be deported, leaving them a single parent. Being undocumented may make women more dependent on romantic partners because they are vulnerable to financial insecurity (Coleman-Minahan, 2017; Enriquez, 2020).

Although the second generation are U.S. citizens, they are not spared from the consequences of restrictive immigration policy. Illustrating multi-generational punishment (Enriquez, 2015), some second generation participant's reproductive aspirations were shaped by fearing separation from a parent who would provide needed support.

Our study is exploratory and is limited by both sample size and wide variation in relationship status, age at migration, and age. Although there was diversity in sexual orientation, not all participants were in a romantic relationship that could result in pregnancy, making it challenging to answer the DAP questions, including how they would feel if they became pregnant in the next three months. Variation in age at migration and the wide age range of participants may limit interpretation of findings as adolescent outcomes are related to age at migration (Rumbaut, 2004) and aspirations change throughout the transition to adulthood. Finally, the sample was highly educated and we may be missing young women with the fewest resources. Future research with larger samples are needed to further develop these exploratory findings.

Despite these limitations, this study makes several important contributions. We created a novel conceptual framework on the role of legal status and uncertainty in young women's reproductive aspirations, which has not yet been explored. Comparing 1.5 and second generation young women allowed us to isolate and comprehensively explore the role of legal status. By exploring aspirations, rather than reproductive events or behaviors, we identified ways in which legal status and uncertainty constrain young women's ability to build their aspirations, which are essential to self-determination and reproductive justice.

# 5. Conclusions

Exploratory findings identify several ways that legal status and uncertainty constrain immigrant young women's formation of reproductive and life aspirations, ultimately diminishing their self-determination. Although the second generation is impacted by their loved ones' legal status, liminal legality directly constrains 1.5 generation young women's ability to develop and achieve their aspirations. These data help inform immigration policy by providing evidence that DACA's temporary legal protection restricts access to education, financial stability, and social support, creating uncertainty and constraining young women's reproductive aspirations. Immigration reform that provides a pathway to citizenship and family unification is essential to achieving reproductive justice.

#### **Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Acknowledgments

We thank the young women who shared their stories and the community organizations that assisted with recruitment. We thank Corinne Rocca for sharing the Desire to Avoid Pregnancy Scale and Edelina Burciaga for comments on earlier drafts.

#### Funding

Pilot funding and administrative support were provided by The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) funded University of Colorado Population Center (P2C grant PHD066613C). Dr. Samari is supported by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (K01HD103879) and the William T. Grant Foundation Scholars Program (200989). Publication of this article was funded by the University of Colorado Boulder Libraries Open Access Fund.

#### References

- Abrego, L.J., Gonzales, R.G., 2010. Blocked paths, uncertain futures: the postsecondary education and labor market prospects of undocumented Latino youth. J. Educ. Stud. Placed Risk 15 (1–2), 144–157. https://doi.org/10.1080/10824661003635168.
- Abrego, L.J., 2019. Relational legal consciousness of U.S. Citizenship: privilege, responsibility, guilt, and love in latino mixed-status families. Law Soc. Rev. 53 (3), 641–670. https://doi.org/10.1111/lasr.12414.
- Aiken, A.R.A., Dillaway, C., Mevs-Korff, N., 2015. A blessing I can't afford: factors underlying the paradox of happiness about unintended pregnancy. Soc. Sci. Med. 132, 149–155. https://doi.org/10.1016/j.socscimed.2015.03.038.
- Alvarez, S., 2015. Brokering the immigrant bargain: second-generation immigrant youth negotiating transnational orientations to literacy. Lit. Compos. Stud. 3 (3), 25–47. https://doi.org/10.21623/1.3.3.3.
- Arteaga, S., Catan, L., Gomez, A.M., 2019. Planned, unplanned, and in-between: the meaning and context of pregnancy planning for young people. Contraception 99 (1), 16–21. https://doi.org/10.1016/j.contraception.2018.08.012.
- Bachmeier, J., Hammar, C., Van Hook, J., 2022. Deferred Action for Childhood Arrivals (DACA) Data Tools. March 31. Migration Policy Institute. https://www.migrationpolicy.org/programs/data-hub/deferred-action-childhood-arrivals-daca-profiles.
- Batalova, J., Hanna, M., Levesque, C., 2021. Frequently Requested Statistics on Immigrants and Immigration in the United States. Migration Policy Institute. https:// www.migrationpolicy.org/article/frequently-requested-statistics-immigrants-and-i mmigration-united-states-2020.
- Borrero, S., Nikolajski, C., Steinberg, J.R., Freedman, L., Akers, A.Y., Ibrahim, S., Schwarz, E.B., 2015. It just happens": a qualitative study exploring low-income women's perspectives on pregnancy intention and planning. Contraception 91 (2), 150–156. https://doi.org/10.1016/j.contraception.2014.09.014.
- Burciaga, E.M., Malone, A., 2021. Intensified liminal legality: the impact of the DACA rescission for undocumented young adults in Colorado. Law Soc.Inq. 1–23. https://doi.org/10.1017/lsi.2021.8.
- Castañeda, H., Holmes, S.M., Madrigal, D.S., Young, M.-E.D., Beyeler, N., Quesada, J., 2015. Immigration as a social determinant of health. Annu. Rev. Public Health 36 (1), 375–392. https://doi.org/10.1146/annurev-publhealth-032013-182419.
- Cebolla-Boado, H., González Ferrer, A., Nuhoğlu Soysal, Y., 2021. It is all about "Hope": evidence on the immigrant optimism paradox. Ethn. Racial Stud. 44 (2), 252–271. https://doi.org/10.1080/01419870.2020.1745254.
- Cebulko, K., Silver, A., 2016. Navigating DACA in hospitable and hostile states: state responses and access to membership in the wake of deferred action for childhood arrivals. Am. Behav. Sci. 60 (13), 1553–1574. https://doi.org/10.1177/ 0002764216664942.
- Coleman-Minahan, K., 2017. The socio-political context of migration and reproductive health disparities: the case of early sexual initiation among Mexican-origin immigrant young women. Soc. Sci. Med. 180, 85–93. https://doi.org/10.1016/j. socscimed.2017.03.011.
- Coleman-Minahan, K., Samari, G., 2020. 'He supported me 100%': mexican-immigrant fathers, daughters, and adolescent sexual health. Ethn. Health 25 (4), 560–579. https://doi.org/10.1080/13557858.2018.1439897.
- Darney, B.G., Boniface, E., Jacobson, L.E., Fuentes-Rivera, E., Saavedra-Avendaño, B., Coleman-Minahan, K., Riosmena, F., 2022. Adolescent reproductive health outcomes among Mexican-origin women on both sides of the U.S.-Mexico border. J. Adolesc. Health. https://doi.org/10.1016/j.jadohealth.2022.06.021.
- Edin, K., Kefalas, M.J., 2005. *Promises I Can* Keep: Why Poor Women Put Motherhood Before Marriage, 1st ed. University of California Press.

- Enriquez, L.E., 2015. Multigenerational punishment: shared experiences of undocumented immigration status within mixed-status families. J. Marriage Fam. 77 (4), 939–953. https://doi.org/10.1111/jomf.12196.
- Enriquez, L.E., 2020. Of Love and Papers: How Immigration Policy Affects Romance and Family. University of California Press.
- Fussell, E., 2011. The deportation threat dynamic and victimization of Latino migrants: wage theft and robbery. Sociol Q 52 (4), 593–615. https://doi.org/10.1111/j.1533-8525.2011.01221.x.
- Advancing Students for a Stronger Economy Tomorrow, 13–033, Colorado State Senate, 2013 (2013).
- Goldberg, R.E., 2018. Understanding generational differences in early fertility: proximate and social determinants. J. Marriage Fam. 80 (5), 1225–1243. https://doi. org/10.1111/jomf.12506
- Gomez, A.M., Arteaga, S., Freihart, B., 2021. Structural inequity and pregnancy desires in emerging adulthood. Arch. Sex. Behav. https://doi.org/10.1007/s10508-020-01854-0
- Gonzales, R.G., 2016. Lives in Limbo: Undocumented and Coming of Age in America. Univ of California Press.
- Gonzales, R.G., Burciaga, E.M., 2018. Segmented pathways of illegality: reconciling the coexistence of master and auxiliary statuses in the experiences of 1.5-generation undocumented young adults. Ethnicities 18 (2), 178–191. https://doi.org/10.1177/ 1468796818767176.
- Gonzales, R.G., Brant, K., Roth, B., 2020. DACAmented in the age of deportation: navigating spaces of belonging and vulnerability in social and personal lives. Ethn. Racial Stud. 43 (1), 60–79. https://doi.org/10.1080/01419870.2019.1667506.
- Hernandez, N.D., Chandler, R., Nava, N., Tamler, I., Daley, E.M., Baldwin, J.A., Buhi, E. R., O'Rourke, K., Romero-Daza, N., Grilo, S., 2020. Young adult US-born Latina women's thoughts, feelings and beliefs about unintended pregnancy. Cult. Health Sex. 22 (8), 920–936. https://doi.org/10.1080/13691058.2019.1642517.
- Hirschman, C., 2001. The educational enrollment of immigrant youth: a test of the segmented-assimilation hypothesis. Demography 38 (3), 317–336.
- Horton, S.B., 2016. They leave their kidneys in the fields. Injury, Illness, and "Illegality" Among U.S. Farmworkers. University of California Press.
- Immigrant Children. (2018). Child trends. https://www.childtrends.org/indicators/ immigrant-children.
- Johnson-Hanks, J., 2002. On the limits of life stages in ethnography: toward a theory of vital conjunctures. Am. Anthropol. 104 (3), 865–880. https://doi.org/10.1525/
- Johnson-Hanks, J., Bachrach, C.A., Morgan, S.P., Kohler, H.-P., Johnson-Hanks, J., Bachrach, C.A., Morgan, S.P., Kohler, H.P., 2011. Social class and the timing and context of childbearing. Understanding Family Change and Variation. Springer, Netherlands, pp. 87–110. https://doi.org/10.1007/978-94-007-1945-3\_4.
- Kao, G., Tienda, M., 1995. Optimism and achievement: the educational performance of immigrant youth. Soc Sci Q. 76 (1), 1–19.
- Kuka, E., Shenhav, N., Shih, K., 2019. A reason to wait: the effect of legal status on teen pregnancy. AEA Pap. Proc. 109, 213–217. https://doi.org/10.1257/ pandp.20191013.
- López, G., Radford, J., 2017. Statistical portrait of the foreign-born population in the United States. Pew Res. Cent. Hisp. Trends Proj. http://www.pewhispanic.org/2 017/05/03/statistical-portrait-of-the-foreign-born-population-in-the-united-states-2 015-about-the-data/.
- Louie, V., 2012. Keeping the Immigrant Bargain: The Costs and Rewards of Success in America. Russell Sage Foundation.
- Menjívar, C., 2006. Liminal legality: salvadoran and guatemalan immigrants' lives in the United States. Am. J. Sociol. 111 (4), 999–1037. https://doi.org/10.1086/499509. ISTOR
- Potter, J.E., Coleman-Minahan, K., White, K., Powers, D.A., Dillaway, C., Stevenson, A.J., Hopkins, K., Grossman, D., 2017. Contraception after delivery among publicly insured women in texas: use compared with preference. Obstet. Gynecol. 130 (2), 393–402. https://doi.org/10.1097/AOG.000000000002136.
- Rocca, C.H., Ralph, L.J., Wilson, M., Gould, H., Foster, D.G., 2019. Psychometric evaluation of an instrument to measure prospective pregnancy preferences. Med. Care 57 (2), 152–158. https://doi.org/10.1097/MLR.0000000000001048.
- Rosenbaum, E., Rochford, J.A., 2008. Generational patterns in academic performance: the variable effects of attitudes and social capital. Soc. Sci. Res. 37 (1), 350–372. https://doi.org/10.1016/j.ssresearch.2007.03.003.
- Ross, L.J., Solinger, R., 2017. Reproductive justice: An introduction. University of California Press.
- Rumbaut, R.G., 2004. Ages, life stages, and generational cohorts: decomposing the immigrant first and second generations in the United States1. Int. Migr. Rev. 38 (3), 1160–1205.
- Samari, G., Coleman-Minahan, K., 2018. Parental gender expectations by socioeconomic status and nativity: implications for contraceptive use. Psychobiol. Sex Differ. Sex Roles 78 (9–10), 669–684. https://doi.org/10.1007/s11199-017-0820-5.
- Siemons, R., Raymond-Flecsh, M., Auerswald, C.L., Brindis, C.D., 2017. Coming of age on the margins: mental health and wellbeing among Latino immigrant young adults eligible for deferred action for childhood arrivals (DACA). J. Immigr. Minor Health 19 (3), 543–551. https://doi.org/10.1007/s10903-016-0354-x.
- Smith, R.C., 2008. Horatio alger lives in brooklyn: extrafamily support, intrafamily dynamics, and socially neutral operating identities in exceptional mobility among

- Tapales, A., Douglas-Hall, A., Whitehead, H., 2018. The sexual and reproductive health of foreign-born women in the United States. Contraception 98 (1), 47–51. https://doi.org/10.1016/j.contraception.2018.02.003.
- Wallace, S.P., Young, M.E.D.T., Rodríguez, M.A., Brindis, C.D., 2018. A social determinants framework identifying state-level immigrant policies and their influence on health. SSM Popul. Health 7. https://doi.org/10.1016/j. ssmph.2018.10.016.

Kate Coleman-Minahan reports financial support was provided by University of Colorado Boulder CU Population Center. Kate Coleman-Minahan reports administrative support was provided by National Institute of Child Health and Human Development. Goleen Samari reports financial support was provided by National Institute of Child Health and Human Development. Goleen Samari reports financial support was provided by William T Grant Foundation Inc. Editoral board of journal: Goleen Samari