

Transition into Liminal Legality: DACA's Mixed Impacts on Education and Employment among Young Adult Immigrants in California

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ABSTRACT

The Deferred Action for Childhood Arrivals (DACA) program, implemented by executive order in 2012, granted a subset of undocumented youth temporary relief from deportation, work authorization, and other benefits. While theories of immigrant integration predict that legalization will enable immigrant socioeconomic mobility, past research on DACA's effects on education and employment reaches mixed conclusions, possibly reflecting the limitations of different methodological approaches to the question. Using multiple data sources and mixed methods, we analyzed both whether and how DACA impacted education and employment among undocumented immigrants in California. Our difference-in-differences analysis of the 2007-2017 waves of the California Health Interview Study employs a more precise definition of the DACA-eligible population than previous studies, yet we also find mixed effects. Our analysis of surveys and in-depth interviews collected with DACA recipients in California provides context for this finding. DACA enabled college for some, but discouraged it for others. DACA recipients perceived substantial occupational mobility, but this was not reflected in movement out of the secondary labor market for many. Our findings suggest that without access to permanent legal status, DACA recipients will experience liminal legality with limited and contingent impacts on socioeconomic integration.

Key words: immigrants, legal status, undocumented, education, employment, DACA, California

Interviewer: How has DACA changed things for you?

Respondent: So definitely, you know, I would say in very small ways [life after DACA] has changed. But at the same time those small things are big things because before we did not have anything. And just something is a lot. But at the same time this something is very little. So, why not [comprehensive] immigration reform, right?

President Obama created the Deferred Action for Childhood Arrivals (DACA) program in 2012, following two decades of growth in apprehensions, detentions, and deportations of immigrants, and in response to years of activism by undocumented immigrants for more permanent inclusion in the United States. DACA granted temporary reprieve from deportation, work authorization, and other benefits under existing laws to a subset of undocumented immigrant youth who arrived to the United States as children. By September 2018, U.S. Citizenship and Immigration Services had approved over 900,000 initial DACA applications, representing 70% of the 1.3 million people estimated to be eligible for the program (Migration Policy Institute 2017; USCIS 2018). The 2016 presidential election ushered in an increasingly hostile political terrain for immigrants in the United States, and, in September 2017, President Trump announced plans for DACA's termination, a decision currently challenged in several circuit courts. Whether the program will be terminated, maintained, or replaced is presently unknown.

In this article, we address whether and how DACA has changed employment and educational outcomes for immigrants who participate in the program. Theories of immigrant integration argue that legal status is a key determinant of immigrant incorporation and therefore predict that legalization will enable economic integration (Bean, Brown, and Bachmeier 2015; Portes and Zhou 1993). Yet it is unclear whether and to what extent DACA, as a temporary legal status targeted at young, 1.5-generation immigrants, will impact economic mobility. DACA may be better described as liminal legality, a status "in between" documented and undocumented,

with uncertain and contingent impacts on economic integration (Cebulko 2014; Menjivar 2006; Roth 2018).

The existing research on DACA's impacts on education and employment reaches inconsistent conclusions, which may reflect the limitations of different approaches to the question. Studies using large, secondary data sets with proxies for DACA eligibility find that DACA increased labor force participation and employment but had little or no impact on hours worked, full-time work, wages, and occupation, and negative impacts on schooling (Amuedo-Dorantes and Antman 2016; Hsin and Ortega 2018; Pope 2016). However, these studies may under-estimate DACA's impact because they imprecisely identify DACA eligibility, grouping eligible, undocumented immigrants with ineligible, undocumented immigrants (Hsin and Ortega 2018) or with documented immigrants (Amuedo-Dorantes and Antman 2016; Pope 2016). Studies using primary, non-representative data with direct measurement of DACA receipt reach more positive conclusions—that DACA facilitated both post-secondary schooling and occupational mobility (Gonzales et al. 2018; Gonzales, Terriquez, and Ruszczyk 2014; Patler and Cabrera 2015; Wong 2016, 2017). However, these studies use subjective indicators of change and may over-estimate DACA's impact by sampling among more privileged – largely activist, college-going – youth. It is also possible that both accounts are true and that DACA's impacts are mixed and vary across different groups of recipients.

We contribute to this debate by examining *both whether and how* DACA affected the employment and educational outcomes of young adult immigrants in California, which is home to more than a quarter of DACA recipients (USCIS 2018). We utilize two sources of complementary data from California in order to overcome some of the limitations of previous research. First, we use survey data from 2007-2017 waves of the California Health Interview

Study (CHIS) to estimate the average effect of DACA on educational and employment outcomes. A key advantage of the CHIS data is that they allow us to more precisely identify the DACA-eligible population than has been possible in previous research using large, secondary data sources. We then zero in on the mechanisms through which DACA affected work and school outcomes by drawing on original data from the DACA Study, which includes surveys and in-depth interviews with DACA recipients in California. The DACA Study represents an improvement over other primary data sources by sampling more broadly within the undocumented, DACA-eligible population.

Understanding how DACA has impacted recipients is fundamental to generating policy solutions to a critical and perennial social problem: inequality based on legal status. Undocumented status undermines immigrant wellbeing through a variety of mechanisms, including the denial of rights, exclusion from formal institutions, and the threat of detention and deportation (Waters and Pineau 2016). To be sure, undocumented status is linked to higher rates of poverty, lower rates of education, and increased incidence of mental health problems (Bean et al. 2011; Berk and Schur 2001; Dreby 2015; Gonzales, Suárez-Orozco, and Dedios-Sanguinetti 2013; Hall and Greenman 2015; Hall, Greenman, and Farkas 2010). Therefore, assessing the impacts of policies that broaden the rights of undocumented immigrants is fundamental to new policy efforts to mitigate social inequality. This is especially crucial in the current political climate, as the future of nearly one million young immigrants hangs in limbo.

BACKGROUND

A large body of sociological theory and research views immigration policy as a key determinant of immigrant integration (Bean et al. 2015; Menjivar 2006; Portes and Zhou 1993; Waters and

Pineau 2016). The “membership exclusion” approach provides the most direct account of how immigration policy—and legal status in particular—affects immigrant integration (Bean et al. 2015). According to this view, immigration laws create undocumented status, which hinders immigrants’ integration and mobility by denying rights, putting individuals at risk of detention and deportation, excluding immigrants from social services and institutions, provoking discrimination and stigma, and generating substantial uncertainty. Numerous studies show that undocumented immigrants and their children have worse self-rated health, poorer developmental and educational outcomes, lower earnings, and higher rates of poverty than documented immigrants and their children (Bean et al. 2011; Berk and Schur 2001; Dreby 2015; Gonzales, Suárez-Orozco, and Dedios-Sanguineti 2013; Hall and Greenman 2015; Hall, Greenman, and Farkas 2010; Patler 2018).

Membership exclusion predicts that legalization will be “a life-course turning point, the attainment of which may mark the weakening, if not the end, of the inhibiting mechanisms of unauthorized status” (Bean et al. 2015: 14). The experience of immigrants who gained legal status following Congress’s last major immigration reform, the 1986 Immigration Reform and Control Act (IRCA), supports this hypothesis. Studies of IRCA’s impacts find evidence consistent with the membership exclusion approach, including increases in the labor force participation, employment, wages, occupational mobility, post-secondary school enrollment, and English language ability among the more than three million immigrants who adjusted status under the law (Amuedo-Dorantes, Bansak, and Raphael 2007; Cortes 2013; Kossoudji and Cobb-Clark 2000; Pan 2012; Rivera-Batiz 1999). Using a different approach to the question, Bean, Brown, and Bachmeier (2015) also found support for the theory, namely that children whose parents legalized their status completed as many years of schooling as children whose parents

were always legal, whereas children whose parents were always undocumented showed a major schooling deficit.

While membership exclusion theory predicts legalization will lead to socioeconomic mobility, DACA may be different. Unlike the permanent adjustment of status available under IRCA, DACA status is temporary, and the program's future is uncertain. Recipients in the DACA program receive a two-year deferral from deportation and work authorization that has to be renewed; furthermore, the program can be terminated by the president. Thus, DACA may be more akin to other non-permanent statuses such as Temporary Protective Status (TPS), a program created to grant some groups of immigrants fleeing crises in their home countries protection from deportation and access to work authorization on a short-term basis. Cecilia Menjivar (2006: 1000, 1008) defined the legal status of recipients in the TPS program as "liminal legality," "a gray area between [documented and undocumented]," "a status characterized by its ambiguity, as it is neither an undocumented status nor a documented one, but may have the characteristics of both." Insofar as it is an improvement over *illegality*, liminal legality may be empowering in the short term, but experienced over longer durations, liminal legality can be dysfunctional in multiple ways, most importantly because its inherent uncertainty undermines the ability to plan and make investments in the future (Menjivar 2006, 2008). Cebulko (2014) and Roth (2018) have argued that DACA should be conceived as liminal legality, as the immigrant youth they interviewed in Boston and South Carolina described some hardships associated with an incremental and uncertain gain in legal inclusion.

If DACA is a form of liminal legality, we may expect the program's impacts on socioeconomic status to be less positive than the impact of legalization with a route to citizenship. In this instance, the uncertainty and temporariness of the DACA program may alter

the choices recipients make regarding school and work. However, how these choices change is not clear. Several hypotheses are possible. First, because the work authorization granted through the DACA program allows recipients to search openly on the labor market, some recipients may seek employment rather than remain unemployed, or find better-paid or better-fitting jobs than they would without DACA. On the other hand, some DACA recipients may accept a less-than-ideal job if they worry that searching for an ideal job will waste the limited time allotted under their temporary work permits. Third, given the short-term nature of the program, some recipients may prioritize work over schooling in order to take advantage of the opportunity to work, thereby undermining longer-term occupational mobility. Alternatively, because DACA increases the possible labor market returns to schooling, some DACA recipients may seek a post-secondary degree. DACA may also facilitate post-secondary schooling by helping students pay for tuition through work.

Prior studies using secondary data to observe the outcomes of potential DACA recipients largely support the hypothesis that DACA led recipients to prioritize short-term work opportunities over longer-term investments in occupational mobility such as post-secondary schooling. Two studies analyzing DACA's impact on employment outcomes in national data found that DACA increased labor force participation and employment but had little or no impact on hours worked, full-time work, wages, occupation, or school enrollment (Amuedo-Dorantes and Antman 2017; Pope 2016). A third study, of students in a large, public university system, found that DACA led to increases in drop-outs at four-year colleges and decreases in full-time enrollment at two-year colleges, findings the authors interpreted to mean that college students who received DACA adjusted their school enrollment in order to prioritize the opportunity to work (Hsin and Ortega 2018).

Prior studies using primary data reach more positive conclusions. Findings from a 2013 online survey and follow-up interviews of DACA recipients recruited from undocumented immigrants' rights organizations suggest that DACA led to short-term improvements in occupational outcomes, with 59% of respondents reporting that they obtained a new job following DACA and 49% reporting that their earnings increased (Gonzales et al. 2014). In-depth interviews generated a similar conclusion: the program facilitated the college-bound trajectories of young recipients and enabled older recipients to return to school or, as the authors put it, "revive previously abandoned aims" (Gonzales et al. 2018: 7). Another online survey of DACA recipients, also recruited through immigrants' rights organizations, found even more positive results, namely that 91% of respondents in 2017 were currently employed, 69% of respondents reported obtaining a job with better pay after receiving DACA, 54% reported finding a job that better fit their education and career goals, and that hourly earnings increased by 69% (Wong 2016, 2017).

We build on this mixed body of literature using two complementary data sources from California. First, we use a similar design as prior studies of secondary data—a difference-in-differences analysis—to estimate the average impact of DACA on educational and employment outcomes, but the data we use (the CHIS) allow for a more accurate definition of the DACA-eligible population. We then compare this group to both documented immigrants who meet the DACA eligibility criteria and to likely undocumented immigrants who do not, allowing us to achieve a more precise estimate of DACA's "intent-to-treat" effect than prior studies using secondary data. We are thereby better able to address whether prior, less positive conclusions emerging from research using secondary data sources and proxies for DACA eligibility underestimate DACA's impacts.

Our second contribution is to clarify the mechanisms through which DACA affects employment and educational outcomes by analyzing original survey and in-depth interview data collected from DACA recipients in California in the DACA Study. The DACA Study includes surveys and in-depth interviews with DACA recipients and similarly aged non-recipients (i.e. those who remained undocumented) in California. The main advantages of our primary data collection are that DACA eligibility and receipt are directly observed (i.e., asked of respondents). Recruited from DACA information sessions held shortly after the program was announced, the DACA Study provides a more diverse sample of DACA recipients than prior primary data collection efforts. We use these data to explore why and for whom DACA enables or discourages post-secondary schooling, as well as to understand occupational mobility in the context of DACA. Our combined analysis of the CHIS and the DACA Study provides strong support for the liminal legality perspective of DACA: the program's impacts are highly contingent as a result of the program's temporariness and uncertainty.

DATA AND METHODS

Our study draws on two sources of data from California. We describe the two main data sources and the corresponding methods of analysis of each in turn.

California Health Interview Survey

We use data from the 2007-2017 waves of the California Health Interview Survey (CHIS), a population-based telephone survey of California's residential, non-institutionalized population collected biannually from 2001-2011 and annually thereafter by UCLA's Center for Health Policy Research (CHPR) in collaboration with the California Department of Public Health and

the Department of Health Care Services. The CHIS uses a dual-frame, multi-stage sampling design that draws from landline and cell phone numbers across the state. One adult (age 18 and older) was randomly selected within each household. We restricted our analysis to the 2,585 Latino-origin immigrants who were under 31, at least 18 years old, and were observed in the 2007, 2009, 2011, 2012, 2013, 2014, 2015, 2016, and 2017 waves.¹ In other analyses, we restricted to Mexican-born immigrants, who make up 84% of Latino immigrants in the sample. We cannot separately analyze Asian immigrants or immigrants of other origins due to small sample sizes. We used survey weights to adjust for the complex sample design. Missing values were imputed by the CHPR Data Access Center.

The key advantage of the CHIS data over other repeated cross-sectional data sets is the CHIS's more detailed module on legal status among immigrants. The CHIS asks all foreign-born respondents if they are a citizen, and then, among noncitizens, it asks if the respondent is a legal permanent resident with a green card (i.e., LPR). In contrast, prior studies have used data which do not differentiate among noncitizen immigrants by LPR status (Amuedo-Dorantes and Antman 2016; Pope 2016). As a result, the DACA-eligible group in prior studies includes LPRs and temporary visa holders, who make up a substantial portion of noncitizens (e.g., an estimated 40% of noncitizens under age 35 are LPRs; Acosta, Larsen, and Grieco 2014; Rytina 2013). In the

¹ The use of repeated cross-sectional data means that we do not observe changes in educational and employment outcomes among the same individuals over time; rather, we observe population-level changes. This means that we cannot see whether a person who was previously unemployed became employed after DACA; what we observe is whether the overall employment rate among DACA-eligible individuals changes over time. Longitudinal data, such as that used by Hsin and Ortega (2018), allow for within-individual changes to be observed. The use of repeated cross-sectional data introduces the possibility of sampling or response error that could be correlated with the DID design (e.g., increased response rates of DACA eligible following DACA), but it avoids challenges specific to longitudinal data, such as selective attrition (e.g., increased drop-out of undocumented ineligible students following DACA).

CHIS data, the DACA-eligible group excludes LPRs but may include temporary visa holders, who are estimated to make up a much smaller portion of noncitizens—only 7% of Latino noncitizen, non-LPRs in California (Vargas Bustamante et al. 2012). Studies using these data sources will under-estimate DACA’s impact by virtue of including immigrants who are ineligible for the program in the eligible group, but the error will be smaller using the CHIS than using national data.

We use the CHIS data to estimate difference-in-difference (DID) models, which compare the impacts of a “treatment” on a “treatment group” compared to a “control group” before and after the treatment is introduced (Morgan and Winship 2014). The DID estimates the change in outcomes that is attributable to the treatment net of the over-time changes experienced by all groups and net of time-constant differences between treatment and control groups. Equation 1 shows the basic DID regression equation.

$$Y = \beta_0 + \beta_1 Treat + \beta_2 post + \beta_3 (Treat \cdot post) + \beta_4 (covariates) + \varepsilon \quad (\text{Equation 1})$$

In Equation 1, β_1 is the difference in Y between the treatment and the control groups in the pre-period, β_2 is the change in Y from the pre- to the post- period for the control group, and β_3 is the unique difference in Y that emerges in the post-period for the treatment group, or the treatment effect. The treatment effect is also net of controls represented in the equation by β_4 . In our case, the treatment is the DACA program, the treatment group is the DACA eligible, and the date when DACA permits began to be issued (October 1, 2012) demarks the before and after periods.

DACA eligibility was limited to undocumented immigrants who were 15 years old in 2012 or later, were under 31 in 2012, arrived prior to 2007, arrived at age 15 or younger, have a high school degree or were enrolled in school or have military service, and have no criminal

record. In the CHIS data, we identify the DACA eligible as noncitizen, non-LPRs meeting the age, age at arrival, and year of arrival criteria of the DACA program.

The choice of control group(s) is not *a priori* clear, and existing studies make different choices.² In an ideal DID design, the treatment and control group should be as similar as possible, except for the treatment. We used two control groups that differ in how they are similar to the DACA eligible. As mentioned previously, we limited the entire sample to those who are eligible for the program based on age; this ensures that all groups age similarly over the time period analyzed. The first control group is likely undocumented immigrants who are ineligible for DACA (hereafter referred to as “undocumented ineligible”); that is, noncitizen, non-LPRs who arrived after 2007 or arrived at age 16 or older. The second control group is documented immigrants who meet the DACA criteria for age and year of arrival; that is, LPRs or naturalized citizens who immigrated prior to age 16 before 2007.³

We analyzed current employment status and educational attainment. For employment outcomes, we began with an analysis of labor force participation (in the labor force, versus not). Then, among those in the labor force, we analyzed current employment (employed or looking for work, versus not). Then among those who are working, we analyzed full-time (usually works ≥ 35 hours per week) versus part-time, and logged hourly earnings. We also examined

² Amuedo-Dorantes and Antman (2016) and Pope (2016) restricted to similarly aged noncitizens and identified eligibility by age and year of arrival. Pope (2016) additionally restricted to similarly aged immigrants and identified eligibility by citizenship. Hsin and Ortega (2018) analyzed incoming cohorts of freshmen at a major public university system and compared undocumented to documented immigrants.

³ For the DID analysis to be accurate, the treatment and control groups should follow parallel trends absent the treatment. This can be empirically assessed by examining the pre-policy outcome trend lines of the treatment and comparison groups. To do so, we estimated the interactions between each pre-period year and each comparison group. Significant interactions indicate a differential pre-trend. The results are presented in Appendix Table 1 and indicate that there are not clear pre-trends.

educational attainment using the respondent's highest level of education. We first analyzed high school or GED completion. Then, among those with a high school degree or GED, we analyzed post-secondary educational attainment. All models control for age in years, gender, married versus not, and year of migration. We used linear probability models for all outcomes.

The DACA Study

In addition to the DID analysis of the CHIS data, we also analyzed survey and in-depth interview data from the DACA Study, which was collected in 2014-15 and includes 502 telephone surveys with potential DACA applicants and 62 in-depth interviews with a subset of survey recipients. Respondents were drawn from a pool of individuals who attended at least one of six workshops in Los Angeles County between 2012-2014.⁴ The DACA Study is unique in that it does not primarily sample activists or university students. Indeed, in the DACA Study, only 27 percent of respondents were affiliated with immigrant rights organizations, and only 16 percent had a college degree. The survey was conducted using Computer-Assisted Telephone Interviewing (CATI) software. The mean length of the survey was 32 minutes. All respondents received a \$15 gift card and know-your-rights information to thank them for participating.

We conducted in-depth interviews with 62 survey participants approximately one year after the telephone surveys. Interviewees were selected from the telephone survey sample via quota sampling to include male- and female-identifying individuals of diverse ages. Interviewees

⁴ Workshops were held at schools, libraries, and convention centers and were co-hosted by civil rights and labor organizations, as well as the Los Angeles Unified School District and the Los Angeles Mayor's Office. The workshops were advertised widely in English- and Spanish-language media. See Patler and Cabrera (2015) for more information on the DACA Study.

include individuals with and without DACA, with and without a post-secondary education, who are involved and not involved in community organizations, and who are of Mexican and other origins. Interviews took place in person or on the phone and lasted between 45 minutes to over two hours. Respondents received a \$20 gift card to thank them for their time. Table 1 shows the demographic characteristics and DACA status of the survey and interview samples.

[Table 1 about here]

In-depth interviews were transcribed and analyzed using Dedoose software. We coded the data into broad categories related to work and school and then recoded inductively based on emerging themes. To ensure inter-coder reliability, we completed a three-step process. First, each member of our research team coded the same interview. We then used Dedoose's inter-coder reliability check feature to score the codes across interviewers and make any necessary corrections. Finally, to continue to ensure inter-coder reliability, each interview was coded by at least two research team members and discussed at a weekly team meeting.

We also used the DACA Study survey data to provide more detailed information about the occupational status of DACA recipients. We analyzed their responses to the question "What is your occupation at your main job? In other words, what do you do there?" We coded seven occupation groups: low-skilled workers, clerical workers, para-professionals, skilled laborers and technicians, professionals, and self-employed.⁵

⁵ *Low skilled workers* are workers in any industry whose position requires minimal skills or training. This category includes cashiers, cooks, and servers in the food industry; gardeners, cleaners, and caretakers in individual homes; sales associates and cashiers in retail; laborers in agriculture or construction; and shipping and warehouse workers. *Clerical workers* are workers whose positions require basic training in computers and/or database management; this category includes mostly administrative assistants and billing assistants. *Para-professionals* are workers who assist or train under professionals, or otherwise perform work related to professional work, but who are not themselves licensed to do professional work. This category includes medical,

RESULTS

Average Effects of DACA on Education and Employment

As Table 2 shows, the average DACA-eligible immigrant in the CHIS sample is 23 years old and migrated at age 8 in 1998. Undocumented-ineligible immigrants are older (26 years old on average), and they migrated at older ages in later years. Documented immigrants are more similar to the DACA-eligible group on these characteristics: they migrated on average at age 6 in 1995. The three groups differ in their educational and employment profiles. DACA-eligible immigrants fall between the other two groups on education. Undocumented-ineligible immigrants are the least likely to have finished high school, while documented immigrants are the most likely to have gone to post-secondary school. DACA-eligible immigrants are least likely to be in the labor force and least likely to be employed among those in the labor force, while undocumented-ineligible immigrants are most likely to be in the labor force and most likely to be employed among those in the labor force. However, undocumented-ineligible immigrants earn the lowest hourly wages.

[Table 2 about here]

dental, and nursing assistants; research assistants; library aids, tutors, and teaching assistants; and interns. *Management* includes workers in any industry who manage others; in the DACA Study, most managers are in the food and retail industries. *Skilled laborers and technicians* are workers mostly in utilities and construction whose job requires substantial training and expertise and who are licensed. This category includes electricians, contractors, and mechanics. *Professionals* are workers whose job requires a high level of skill and specialized training and who are frequently licensed. This category includes engineers, teachers, nurses, and accountants. *Self-employed* includes musicians, photographers, and independent contractors whose work was not specified in more detail.

Table 3 shows the results of the difference-in-differences analysis of the impact of DACA on education from sequential linear probability models of (1) high school or GED completion and (2) any post-secondary education among those with a high school degree or GED. The key finding—the interaction term between DACA eligibility and the post-period—is highlighted in gray. The results show that DACA led to significant increases in high school completion. In contrast, there was no significant effect of DACA on post-secondary education.⁶ The results are similar for Mexican and Latino immigrants.

[Table 3 about here]

Figure 1 shows the predicted probability of high school/GED completion and post-secondary educational attainment (among those with a high school degree), comparing each immigrant group in the pre- and post-DACA periods. The figure shows a significant increase in the probability of high school completion—from .54 to .80 from the pre- to the post-period—for the DACA eligible, a substantially larger change than for the two other groups. While the predicted probability of obtaining some post-secondary education also increased across the periods for the DACA eligible, from .31 to .35, this change was not statistically different from the change observed for the other two groups, meaning that DACA did not have a discernable, average impact on post-secondary schooling in California.

[Figure 1 about here]

⁶ The close coinciding of the creation of DACA in 2012 and the passage of the CA DREAM Act in 2011, which granted undocumented students who attended three years of school in California access to state-funded financial aid for college, may confound our analysis of DACA's impact on education in California. If the CA DREAM Act raised the likelihood of college-going among the DACA eligible but not the control groups in our analysis, then our estimate will be upwardly biased. If that's the case, then the true average effect of DACA on post-secondary schooling is more negative than what we find.

Table 4 shows the results of the difference-in-differences analysis of the impact of DACA on employment from sequential linear probability models of (1) labor force participation, (2) employment among those in the labor force, (3) full-time employment among those employed, and (4) logged hourly earnings among those employed. The results show that DACA led to significant increases in labor force participation but decreases in full-time employment. DACA had no significant effect on employment among those in the labor force or on wages among those employed.

These results are illustrated in Figure 2. The figure shows that the predicted probability of labor force participation rose 9 points, from .76 to .85, from the pre- to the post-DACA period for DACA eligible immigrants, compared to no change for undocumented ineligible immigrant and a slight decline among documented immigrants. The predicted probability of employment rose similarly for all three groups, meaning that DACA did not have a uniquely positive impact on employment. And perhaps surprisingly, the predicted probability of full-time employment declined for DACA eligible immigrants, from .68 in the pre-period to .55 in the post-period, while it rose for the other two groups. We discuss these findings in light of our qualitative results, which we turn to next.

[Table 4, Figure 2 about here]

Understanding Education after DACA

In spite of the better identification of DACA-eligible immigrants in the CHIS than in previous studies of large datasets, the DID analysis showed no impact of DACA on post-secondary schooling. While we have greater confidence that this null result does not arise from the misidentification of the DACA-eligible population in survey data, the survey data cannot explain

why the null result arises. Does DACA truly have no effect on post-secondary education? Or does it have mixed effects, raising the likelihood of post-secondary schooling for some, but lowering it for others, producing a null effect on average?

Our analysis of interview data from the DACA Study provides strong evidence of the latter. We identified four patterns of DACA's effects on education in the interview data. For one group, DACA made college possible. For a second, college-going group, DACA made college easier. For a third group, DACA led recipients to prioritize work over school. Finally, a fourth group described college as out of reach or no longer an option by the time DACA was created. For the first and third groups, DACA had a direct effect on schooling: it either encouraged it (by making it possible) or discouraged it (by leading recipients to prioritize work). For the second and fourth groups, DACA had small or no effects on college-going because those respondents' post-secondary pathways were already in place by the time that DACA was created. We describe each group in turn.

Respondents in the first group described how DACA made college possible, both materially and symbolically. Some mentioned that college would have been too expensive without the possibility of working at the same time; DACA therefore helped make college financially possible for them. Others described how DACA changed the way they thought about the future. For example, Joshua said that he was able to "imagine myself moving forward in a professional career where two years ago I didn't think that it was possible."⁷

For many, the sense that DACA opened doors reflected the perception that, prior to DACA, schooling would not pay off on the job market. Stephanie said, "When I was going to high school I didn't know what I was going to do with my life, because I didn't know if I was

⁷ Pseudonyms are used for all respondents.

even gonna be able to work here [in the United States]...so what was the point of going to college?" Marlana further described her thought process: "I go to school right, I'm able to finish, get my BA, get a Masters, but I don't have a social [security number], I can't apply to jobs. So I have all this knowledge, and all this experience, and all these things, but I can't apply because I don't have I don't have a social security." For individuals like Marlana, because DACA provided a work permit, the returns to schooling could be materialized, making college seem like a reasonable investment.

Other respondents were already on a trajectory that included college; these students were therefore in a different, "DACA made college easier" trajectory. Students in this group reflected that they would have likely completed college even without DACA. Janet said this explicitly:

I don't think it affected me, having or not having DACA, because I was still gonna do it [go to college]. Like, there's not... there's not another option. How're you gonna live if you don't have an education? Like, I don't wanna be like... breaking [my back] at my current job for the rest of my life.

Many other college-bound high schoolers and students already in college described how DACA made college-going easier by reducing financial and other stressors. College students discussed being able to get a job to pay for books, tuition, housing, and other costs related to college. Jonathan described the change as follows:

Before [DACA], I just have to be worried about whether or not I was gonna get money to pay for my classes, and then to get my books, and then maybe for transportation, and then for food... And now I know that at the very least, I have a job. And financially, I can have a peace of mind that if there's anything that I need, I can get [it]...I don't have to be thinking too much about whether or not I will be able to fund my education.

Vanessa commented that the financial security that DACA provided allowed her to focus on school in way that she couldn't before:

[DACA] has helped me a lot. The fact that I can work better jobs that pay better, that are more flexible with hours, has helped me a lot because I have more time to study, more time to put into school, versus before I had to work a lot more to be able to just make it through.

Students like Jonathan and Vanessa were already on the college trajectory and DACA improved their college experiences by lessening financial burdens and stress.

For the third group of respondents, financial constraints led them to prioritize work rather than go to college, and they continued to do so after acquiring DACA. Some respondents mentioned having to help family members, like Jared, who said he did not continue his schooling after high school because he had to “help around the house to bring money.”

Others worked to save up money to eventually go to school, but had not made the transition yet. For instance, Eunice said that she took a year off to “get a job so I can save up money for college since it is a lot of money.” Others postponed schooling to work because they found that going to school and work at the same time was not possible because their work schedules were too hectic, or because they could not or did not want to cut back on hours to make time for school. For instance, TJ wanted to go to college, but DACA had made his job as a sound engineer for a band much more lucrative because he could now travel with the band. He said that going to college “interests me a lot. But right now with work it is really complicated. What I want is to go to school full time, but with my work, I can’t do it. But it does interest me.”

A final group of respondents felt that they might have made a different decision if DACA had been available when they were just out of high school; for these respondents, college no longer seemed to be an option. Darlene expressed that she wanted to go to college right out of high school, but when DACA was created 10 years later, she no longer felt that college was an option. As she put it:

At first [after getting DACA], I couldn't even believe that I was actually working in an office after years of manual labor type jobs...for me it was 10 years ... it's like a tug-of-war to see who you're morphing to be. Because you wanna cling that 18 year old who wanted to go to college, but you're also the adult who's kinda at war with how old you are and how much you can get done in that amount of time while still trying to enjoy your life. So it gets a little more complicated the longer you had to wait. Um, but for people who just graduated high school and are able to qualify for DACA, my god, I'm so happy for them. Because they get to enjoy their actual age and they get the opportunity to reach that potential early on.

Like Darlene, many respondents commented that working created a barrier to returning to school. For instance, Sylvia worked after high school in order to pay for college, but after working for years felt that returning to school would be too difficult and would cost too much in lost wages.

Interviewer: Did you ever take time off from school for any reason?

Sylvia: Yes, for lack of funds.

Interviewer: Okay. Did having DACA help with that?

Sylvia: Not really, no, because already I had a lot of time out of school after high school.... I was working full-time. To go back would mean cutting back from full-time, and to go back, to start over at the beginning, having been out of school for more than ten years, that would be too difficult.

For these recipients, DACA came too late to enable college-going.

Understanding Employment after DACA

Undoubtedly, access to a work permit was the single most important material benefit of the DACA program; this was repeated by nearly every respondent in our in-depth interviews.

Maria's response to a question asking what the single biggest change was after DACA is a simple example: "The biggest thing was just like being able to work... that was probably the biggest thing." With only a few exceptions, such as a respondent who was ineligible for a

federally-funded research position limited to U.S. citizens, respondents perceived that the work permit improved their labor market outlook.

At the same time, our analysis of the CHIS data showed that, on average, DACA did not lead to increases in employment or wages and actually led to declines in full-time employment. Other studies have found that DACA had no effect on occupational prestige (Amuedo-Dorantes and Antman 2016). Nevertheless, our interviews show that DACA nearly universally and unconditionally improved the labor market outlook of DACA recipients. We turn to two distinct sources of data from the DACA Study to explain this result. First, we analyze the occupations of telephone survey respondents to describe the types of jobs that DACA recipients held in the two-to-three years following the passage of the program; next we turn to the in-depth interview data to describe what occupational mobility looks like for DACA recipients.

[Table 5 about here]

Table 5 shows the occupational breakdown of the 84% of DACA recipients ($n=378$) who reported that they were working for pay at the time of the DACA Study telephone survey in 2014-2015, as well as the average age, educational attainment and enrollment, part-time employment, and median wages by occupation. Three important conclusions can be drawn from the table. First, in 2014-2015, DACA recipients in the DACA Study mostly worked in low-skilled positions; the largest category, low-skilled workers, comprises 44.3% of DACA workers in the data. Fewer than one in five respondents (18.7%) worked in professional or skilled labor positions. Second, at the time of the survey, many DACA workers (42%) worked part-time and earned low wages. The median wage among DACA workers was \$10 an hour, and even professional workers earned a low median hourly wage, of \$14.20. Third, these work characteristics reflect the characteristics of the DACA population: DACA recipients were young

(on average 24 years old in 2014); the majority (57.4%) was enrolled in school; and fewer than one in five (17.8%) had completed a college degree. Three quarters of respondents in lower-paid, less skilled occupations were enrolled in school, suggesting they may have mobility out of those occupations once/if they finish.

With this profile in mind, we turn back to the interview data to understand what occupational mobility looks like for a population of young adult immigrants, most who have yet to complete their schooling. To focus our discussion, we highlight the work experiences of four DACA recipients, one from each of the trajectories we discussed previously. These four examples characterize the overall conclusion emerging from the conversations we had with DACA recipients about work: that the DACA work permit improved their labor market outlook. These improvements reflected DACA recipients' ability to seek out and choose better work, not measured by wages or hours worked (in many cases), but by fit with their interests, skills, and sense of the status of the work.

Monica is an example of a DACA recipient who perceived that DACA made college possible. At the time of our interview, Monica was a full-time student at a community college who was able to pay for her education as a result of state financial aid and earnings from her job as a cashier at a souvenir store in Los Angeles. She was 15 when DACA passed, which was, as she put it, "really emotional. I felt relieved... I was gonna get out of high school... so *it gave me like the whole world*, like I'm gonna find a job. And then like I was gonna be able to have like the chance to get an education" (emphasis added). DACA made college possible for Monica because it made it financially feasible and because it meant that she could eventually translate her education into higher earnings on the labor market. In the meantime, Monica was happy with her job as a cashier. Although she would have preferred a higher wage—she earned \$9.50 an

hour—the job was a clear improvement over the kinds of jobs she would have access to without DACA. As she put it, without DACA, “I’d be working cleaning houses right now. I mean, I did it for like a month.” In fact, she held several less-desirable jobs prior to DACA, and in the longest-lasting one, she assisted her father at the liquor store where he worked, doing odd jobs including managing inventory. At the end of her time at the liquor store, she earned \$11 an hour and taxes were not deducted, so her take-home earnings were higher than what she was earning at the souvenir store at the time of the interview. However, for Monica, the fact that she doesn’t have to lift heavy boxes is a symbol of mobility. She said, “they weighed like 100 pounds... I was like, ‘what is this? Rocks inside here?’” For Monica, no longer doing manual work—lifting boxes or cleaning houses—and instead working in the front of the shop as a cashier was an unequivocal upgrade in her work life, in spite of lower wages. Monica hopes that mobility out of low-skilled work is on the horizon when she finishes college.

Vanessa, a 22-year-old college student, was enrolled full-time at community college and working part-time for minimum wage at Taco Bell when DACA passed. Vanessa is an example of someone for whom DACA made college easier; she was quoted earlier in the article saying that working better-paying jobs with more flexible hours accommodated her school life. The work permit also enabled her to find work that better fit her skills, interests, and sense of self. At Taco Bell, she was “very unhappy... because people have all these misconceptions... like you’re a low life, like you don’t go to school.” She said that people would say that “this is why you go to school, so that you don’t end up” at Taco Bell, when in fact she worked at Taco Bell in order to pay her way through school. After receiving DACA, she transferred to a state university, left Taco Bell, and began work at two part-time jobs. She worked 4 hours a day during the week at an after-school program earning \$11/hour; on weekends she worked another 8 hours a day for

\$15/hour, planning and holding events for a small marketing company. Although neither position was her “dream job,” and she would have preferred higher pay, DACA improved her employment outlook because she was able to escape the stigmatized, fast-food industry and find work that better matched her skills.

Miguel is an example of someone who chose work over college because he felt he could not miss the opportunity to work full-time for higher wages. He went to one year of community college but dropped out in order to work and support his family. The uncertainty and temporariness of the program meant that Miguel prioritized the short-term ability to work:

You don't know what's going to happen. You don't know what president or what laws are gonna change to the point where it will affect you. Jobwise, you can't think long-term because you don't know if you're always gonna have the job permit. Short-term, for me at least, I have to see myself as with small deadlines... I just feel like I have three years to work. I have to make something happen now.

From Miguel's perspective, DACA facilitated clear upward mobility. When DACA was announced, he was working at the same fast food restaurant where his undocumented mother worked. With the work permit, he was able to move out of the food industry into marketing, insurance, and sales. As he put it, DACA completely changed his life because he was able “to hold a legal job. A legitimate job. I was able to apply anywhere and it just opened up so many doors.” Currently he works full-time in marketing for a medical office, where he earns \$14 an hour plus commission, which he feels is “an OK pay.” Although he likes his job, he eventually wants to be a business owner.

David is an example of someone for whom DACA had little impact on post-secondary schooling because college was out of reach by the time DACA was created. He had already graduated from high school when DACA passed and had no plans to go to college, although he may one day go back to vocational school to train to be a mechanic. David speculated that if he

had had legal status, he might have considered college if he had been tracked into different classes in high school. Prior to DACA, David worked at a fast food chain, and following DACA he worked part-time as a server in a restaurant. The rest of the time he dedicated to his own landscaping business. Although David remains in low-skilled work after obtaining DACA, the legal status of his work is important to him. As he put it, “I was able to go to court and make [my landscaping business] legal... make it more like a company,” and he is able to pay taxes on his earnings at the restaurant. David perceives moving his work above the table as an improvement to his work life, and he perceives greater opportunity in a legal business.

Monica, Vanessa, Miguel, and David reveal what occupational mobility looks like among DACA recipients. In each case, like nearly all respondents in our interview data, they described the various advantages of the DACA work permit: the ability to search openly on the labor market, find a better-paying or better-fitting job, work “above the table,” gain access to benefits, perceive opportunities for upward mobility, and feel empowered at the workplace to demand raises or make complaints. Miguel is an example of someone who turned the work permit into a short-term improvement in wages and occupational status. But not everyone accessed higher-paying or more prestigious jobs; in some cases, like Vanessa’s, the fact that their work was a better fit was more important than better pay, and in other cases, like David’s and Monica’s, pay and prestige didn’t improve, but there were qualitative improvements to the work. In some cases, like Monica’s, it is simply too soon to see whether the investment in post-secondary schooling will pay off on the labor market, which of course depends in large part on whether the DACA program, or another program enabling legal work, exists once they earn their degree.

CONCLUSION

DACA was the first major expansion of immigrant rights since 1986. However, unlike the Immigration Reform and Control Act, DACA did not provide a path to citizenship. It was, in the words of President Obama when he announced the program, a “temporary, stopgap measure that... gives a degree of relief and hope to talented, driven, patriotic young people” (Obama 2012). In this article we investigated whether and how DACA impacted the educational attainment and employment outcomes of DACA recipients in California in the five years following the program’s creation. The findings from our analysis of representative survey data on young Latino immigrants and original survey and in-depth interviews with DACA recipients in California resonate with President Obama’s words: while the program did indeed give a degree of relief and hope to young people, the temporary, stopgap nature of the program limited the extent to which recipients could make meaningful, long-term investments in education and in occupational mobility. In theoretical terms, our findings support the liminal legality perspective. We conclude that the temporariness and uncertainty of the DACA program has undermined the potential impacts of this expansion of immigrant rights (see also Cebulko 2014; Roth 2018).

Our analysis helps explain why previous studies have not found consistent impacts of the program on recipients’ work and school outcomes. Like previous studies, we also found mixed effects of DACA on employment and education, including a strong, positive effect on high school graduation and labor force participation, but no effect on post-secondary schooling, employment, or wages, and a negative effect on full-time employment. Because we were able to more closely identify the DACA-eligible population in the CHIS than prior studies using national data, we can conclude that the inclusion of ineligible individuals in the policy treatment group is likely not why prior studies have found small, weak, or mixed effects. While smaller

samples in our data may increase the risk of a Type 2 error – of a false negative, our results are generally consistent with studies using much larger samples.

Furthermore, our qualitative data provide substantial rationale for the mechanisms behind the mixed findings. Our analysis of original surveys and in-depth interviews with DACA recipients in California shows that the program had diverse, often counter-balancing impacts on the socioeconomic trajectories of recipients. While DACA made college possible and easier for some, the college plans—either to attend or not—were already set by a lifetime of inequality for many others. For a fourth group, DACA appears to have discouraged college attendance, as recipients prioritized the opportunity to work rather than attend college. This heterogeneity in post-secondary education outcomes may imply that the program’s impacts vary along a measurable characteristic, like age or background socioeconomic status.⁸ However, we did not find strong evidence of this in the DACA Study. Some college-bound DACA recipients came from extremely disadvantaged backgrounds, while some who eschewed college altogether did not. Rather, college plans established earlier in life –formed through parents’ expectations and supports, interactions and relationships with teachers and other mentors, and school-based resources—may have mattered more in determining these distinct patterns. Future research can help explain these pathways.

Our interviews also help explain our finding in the CHIS that DACA did not affect employment or wages and led to declines in full-time employment. Many recipients took lower-paying jobs or jobs with fewer hours in order to work in positions that they felt were an improvement over their previous positions by virtue of being “above the table,” better-fitting

⁸ There were no measures of background socioeconomic status, such as parents’ education, for adults in the CHIS, and we did not have sufficient statistical power to estimate variation in impacts by age.

with their interests, and providing some avenue for future mobility. An implication of these findings is that standard survey measures of occupational mobility—employment, wages, hours worked, and occupational prestige—will not capture the experience of mobility for young people who immigrated as children, many of whom have yet to complete their schooling. Rather, occupational mobility is more of a subjective, “felt” experience for DACA recipients, reflecting the benefits of being able to search openly on the labor market and the legitimacy that comes from legal work. This is similar to the results from other studies that document subjective feelings of inclusion that come from access to legal documents such as work permits or drivers licenses (Cebulko and Silver 2016; Roth 2018). These subjective experiences could account for the positive responses to online surveys of individuals recruited through immigrants’ rights organizations regarding whether their work lives improved after DACA.

Underlying the diversity of DACA recipients’ experiences is something they all shared: the insecurity of the program’s temporariness and uncertainty. Respondents who felt DACA had opened up endless possibilities expressed worry about renewing their status. Respondents who described crying with relief when they received their DACA permits in the mail also described the fear they felt in anticipation of the 2016 presidential election. Nearly every single respondent said that it was difficult to plan for the future because they could not be sure what the future would hold for them in terms of their legal status. As Menjivar’s (2006) theory of liminal legality instructs us, insofar as it is an improvement over *il*legality, liminal legality is enabling in the short-run, but experienced indefinitely, it can undermine wellbeing in myriad ways. Our data suggest that, like TPS, DACA is a liminal legality, and the inherent uncertainty of liminal legality limits the ability of DACA recipients to plan and invest in their futures. In addition to its uncertainty and temporariness, other aspects of the DACA program limit its positive impacts,

including that for some undocumented youth, it arrived too late in life to impact schooling. For others, the need to support family who remain undocumented means that work takes priority over schooling.

Our findings are specific to the state of California, which is one of the most welcoming immigrant-receiving states—at least in the period we studied between 2007-2017, and as measured by legislative actions to provide services and benefits to undocumented immigrant residents of the state (De Trinidad Young and Wallace 2019; Rodríguez, Young, and Wallace 2015). California allows undocumented students who attended three years of high school in California to pay in-state tuition at public colleges, gives undocumented students access to state-funded financial aid to attend college, allows undocumented children and adolescents to enroll in state-funded health insurance plans, allows undocumented residents to obtain driver's licenses, and forbids state law enforcement agents from using state resources for federal immigration enforcement efforts. It is possible that employment and educational attainment outcomes would be different in other states. Indeed, Cebulko and Silver (2016) have argued that state law interacts with federal law to inform the experiences of DACA recipients. They found that immigrant youth were more optimistic about their futures in the more welcoming context of Massachusetts than in the hostile immigration climate of North Carolina. Roth (2017) found that many DACA recipients in South Carolina, which forbids undocumented immigrants from enrolling in state colleges but allows DACA recipients to do so, were unable to achieve their college-going dreams because the state climate affected their interactions with and the information they obtained from high school counselors. Our results—in a relatively welcoming state climate—were mixed, and would likely be different in other states or in the national

average. Future research should continue to examine and compare across different local policy climates.

In spite of state variation in DACA experiences, whether and to what degree DACA has long-term impacts on socioeconomic mobility depends more basically on whether the DACA is terminated, maintained, or replaced. The respondent whose quote introduced this article stated the problem of liminal legality well: “In very small ways, [life after DACA] has changed. But at the same time those small things are big things because before we did not have anything. And just something is a lot. But at the same time this something is very little. Why not [comprehensive] immigration reform, right?” Replacing DACA with a permanent program including a route to citizenship is the “big thing” that DACA recipients need in order to invest in and realize their potential.

REFERENCES

- Acosta, Yesenia D., Luke J. Larsen, and Elizabeth M. Grieco. 2014. *Noncitizens Under Age 35: 2010-2012*. U.S. Census Bureau.
- Amuedo-Dorantes, Catalina and Francisca Antman. 2016. "Can Authorization Reduce Poverty among Undocumented Immigrants? Evidence from the Deferred Action for Childhood Arrivals Program." *Economics Letters* 147:1–4.
- Amuedo-Dorantes, Catalina and Francisca Antman. 2017. "Schooling and Labor Market Effects of Temporary Authorization: Evidence from DACA." *Journal of Population Economics* 30(1):339–73.
- Amuedo-Dorantes, Catalina, Cynthia Bansak, and Steven Raphael. 2007. "Gender Differences in the Labor Market: Impact of IRCA's Amnesty Provisions." *American Economic Review* 97(2):412–16.
- Bean, Frank D., Susan K. Brown, and James D. Bachmeier. 2015. *Parents Without Papers: The Progress and Pitfalls of Mexican American Integration*. New York: Russell Sage Foundation.
- Bean, Frank D., Mark A. Leach, Susan K. Brown, James D. Bachmeier, and John R. Hipp. 2011. "The Educational Legacy of Unauthorized Migration: Comparisons across U.S.-Immigrant Groups in How Parents' Status Affects Their Offspring." *International Migration Review* 45(2):348–85.
- Berk, Marc L. and Claudia L. Schur. 2001. "The Effect of Fear on Access to Care among Undocumented Latino Immigrants." *Journal of Immigrant Health* 3(3):151–56.
- Cebulko, Kara. 2014. "Documented, Undocumented, and Liminality Legal: Legal Status During the Transition to Adulthood for 1.5-Generation Brazilian Immigrants." *The Sociological Quarterly* 55(1):143–67.
- Cebulko, Kara and Alexis Silver. 2016. "Navigating DACA in Hospitable and Hostile States: State Responses and Access to Membership in the Wake of Deferred Action for Childhood Arrivals." *American Behavioral Scientist* 60(13):1553–74.
- Cortes, Kalena E. 2013. "Achieving the DREAM: The Effect of IRCA on Immigrant Youth Postsecondary Educational Access." *American Economic Review* 103(3):428–32.
- De Trinidad Young, Maria-Elena and Steven P. Wallace. 2019. "Included, but Deportable: A New Public Health Approach to Policies That Criminalize and Integrate Immigrants." *American Journal of Public Health* 109(9):1171–76.
- Dreby, Joanna. 2015. *Everyday Illegal: When Policies Undermine Immigrant Families*. Berkeley: University of California Press.

- Gonzales, Roberto G., Basia Ellis, Sarah A. Rendón-García, and Kristina Brant. 2018. “(Un)Authorized Transitions: Illegality, DACA, and the Life Course.” *Research in Human Development* 1–15.
- Gonzales, Roberto G., Carola Suárez-Orozco, and Maria Cecilia Dedios-Sanguinetti. 2013. “No Place to Belong.” *American Behavioral Scientist* 57(8):1174–99.
- Gonzales, Roberto G., Veronica Terriquez, and Stephen P. Ruszczyk. 2014. “Becoming DACAmended: Assessing the Short-Term Benefits of Deferred Action for Childhood Arrivals (DACA).” *American Behavioral Scientist* 58(14):1852–72.
- Hall, Matthew and Emily Greenman. 2015. “The Occupational Cost of Being Illegal in the United States: Legal Status, Job Hazards, and Compensating Differentials.” *International Migration Review* 49(2):406–42.
- Hall, Matthew, Emily Greenman, and George Farkas. 2010. “Legal Status and Wage Disparities for Mexican Immigrants.” *Social Forces* 89(2):491–513.
- Hsin, Amy and Francesc Ortega. 2018. “The Effects of Deferred Action for Childhood Arrivals on the Educational Outcomes of Undocumented Students.” *Demography* 55(4):1487–1506.
- Kossoudji, Sherrie A. and Deborah A. Cobb-Clark. 2000. “IRCA’s Impact on the Occupational Concentration and Mobility of Newly-Legalized Mexican Men.” *Journal of Population Economics* 13:81–98.
- Menjívar, Cecilia. 2006. “Liminal Legality: Salvadoran and Guatemalan Immigrants’ Lives in the United States.” *American Journal of Sociology* 111(4):999–1037.
- Menjívar, Cecilia. 2008. “Educational Hopes, Documented Dreams: Guatemalan and Salvadoran Immigrants’ Legality and Educational Prospects.” *The ANNALS of the American Academy of Political and Social Science* 620(1):177–93.
- Migration Policy Institute. 2017. *A Profile of Current DACA Recipients by Education, Industry, and Occupation*.
- Morgan, Stephen L. and Christopher Winship. 2014. *Counterfactuals and Causal Inference: Methods and Principles for Social Research*. New York: Cambridge University Press.
- Obama, Barack. 2012. “Remarks by the President on Immigration,” June 15, White House Rose Garden.
- Pan, Ying. 2012. “The Impact of Legal Status on Immigrants’ Earnings and Human Capital: Evidence from the IRCA 1986.” *Journal of Labor Research* 33(2):119–42.
- Patler, Caitlin. 2018. “Citizen Advantage, Undocumented Disadvantage, or Both? The Comparative Educational Outcomes of Second and 1.5-Generation Latino Young Adults.” *International Migration Review* 52(4):1080–1110.

- Patler, Caitlin and Jorge Cabrera. 2015. *From Undocumented to DACAmented: Impacts of the Deferred Action for Childhood Arrivals (DACA) Program*. UCLA Institute for Research on Labor and Employment.
- Pope, Nolan G. 2016. "The Effects of DACAmentation: The Impact of Deferred Action for Childhood Arrivals on Unauthorized Immigrants." *Journal of Public Economics* 143:98–114.
- Portes, Alejandro and Min Zhou. 1993. "The New Second Generation: Segmented Assimilation and Its Variants." *Annals of the American Academy of Political and Social Science* 530:74–96.
- Rivera-Batiz, Francisco L. 1999. "Undocumented Workers in the Labor Market: An Analysis of the Earnings of Legal and Illegal Mexican Immigrants in the United States." *Journal of Population Economics* 12:91–116.
- Rodríguez, Michael A., Maria-Elena Young, and Steven P. Wallace. 2015. *Creating Conditions to Support Healthy People: State Policies That Affect the Health of Undocumented Immigrants and Their Families*. UC Global Health Institute.
- Roth, Benjamin J. 2017. "When College Is Illegal: Undocumented Latino/a Youth and Mobilizing Social Support for Educational Attainment in South Carolina." *Journal of the Society for Social Work and Research* 8(4):539–61.
- Roth, Benjamin J. 2018. "The Double Bind of DACA: Exploring the Legal Violence of Liminal Status for Undocumented Youth." *Ethnic and Racial Studies* 1–18.
- Rytina, Nancy. 2013. *Estimates of the Legal Permanent Resident Population in 2012*. Department of Homeland Security, Office of Immigration Statistics.
- U.S. Citizenship and Immigration Services. 2018. *Number of Form I-821D, Consideration of Deferred Action for Childhood Arrivals, by Fiscal Year, Quarter, Intake and Case Status Fiscal Year 2012-2018*.
- Vargas Bustamante, Arturo, Hai Fang, Jeremiah Garza, Olivia Carter-Pokras, Steven P. Wallace, John A. Rizzo, and Alexander N. Ortega. 2012. "Variations in Healthcare Access and Utilization among Mexican Immigrants: The Role of Documentation Status." *Journal of Immigrant and Minority Health* 14(1):146–55.
- Waters, Mary C. and Marisa G. Pineau. 2016. *The Integration of Immigrants into American Society*. Washington, DC: The National Academies Press.
- Wong, Tom K. 2016. *Results of Tom K. Wong, United We Dream, National Immigration Law Center, and Center for American Progress National Survey*.
- Wong, Tom K. 2017. *Results from Tom K. Wong et Al., 2017 National DACA Study*.

Table 1. Summary characteristics of DACA Study survey and interview respondents

	Survey Respondents	Interview Respondents
Female (%)	58	64
Age (mean years)	23	24
Latino (%)	97	100
Mexican (%)	90	95
Married (%)	12	10
Has DACA (%)	90	82
Sample	502	62

Source: DACA Study

Table 2. Summary characteristics of Mexican and Latino DACA-eligible, undocumented-ineligible, and documented immigrants ages 18-30 in California

	Mexican			Latino		
	DACA Eligible	Undoc. Ineligible	Documented	DACA Eligible	Undoc. Ineligible	Documented
Age (mean)	23.2	26.1*	24.1*	23.1	25.9*	24.2*
Age at migration (mean)	8.3	19.3*	6.7*	8.7	19.6*	6.7*
Year immigrated (mean)	1998	2006*	1995*	1998	2006*	1995*
Educational attainment (%)*						
<HS/GED	31.1	59.7*	15.8*	30.4	60.3*	14.8*
HS/GED	47.5	29.3*	34.8*	46.4	27.9*	32.3*
Some post-secondary or higher	21.4	11.0*	49.4*	23.2	11.8*	52.9*
In the labor force (%)	80.1	72.0*	87.2*	81.8	75.5	85.9
Employed (% of in the labor force)	80.1	91.5*	86.0	78.9	90.3*	84.5
Employed full- time (% of employed)	59.6	73.2*	68.7	60.5	74.8*	66.0
Hourly earnings (mean)	14.3	12.5	16.2	14.3	11.5*	16.1
Male (%)	47.5	48.2	51.0	48.1	52.5	49.2
Married (%)	18.9	35.0*	21.3	19.4	29.0*	21.0
Born in Mexico (%)	100	100	100	86.8	72.2*	78.5*
Observations	431	752	949	476	961	1,148

Source: 2007-2017 California Health Interview Survey

Note: DACA eligible are undocumented respondents who arrived before 2007 at the age of 15 or younger. Undocumented ineligible are undocumented respondents who arrived after 2007 OR at age 16 or older. Documented respondents are LPRs or naturalized citizens who would be eligible for DACA based on year of arrival (before 2007) and age (15 or younger).

*Significant (p<.05) difference from DACA eligible.

Table 3. Difference-in-difference estimates from sequential linear probability models of DACA's impact on educational outcomes among Mexican and Latino immigrants in California

	(1)		(2)	
	High school degree or GED		Post-secondary, among those with HS/GED	
	Coeff.	SE	Coeff.	SE
Mexican				
<i>Ref. Undoc. Inelig.</i>				
DACA Eligible	-0.01	0.08	0.21	0.12
Post-period	0.10	0.07	-0.14	0.09
DACA eligible*Post	0.18*	0.09	0.14	0.12
Observations	1,179		612	
<i>Ref. Documented</i>				
DACA Eligible	-0.27***	0.05	-0.23**	0.07
Post-period	0.06	0.04	0.07	0.06
DACA eligible*Post	0.23**	0.07	0.02	0.09
Observations	1,380		1,113	
Latino				
<i>Ref. Undoc. Inelig.</i>				
DACA Eligible	0.02	0.08	0.23*	0.11
Post-period	0.10	0.06	-0.19*	0.08
DACA eligible*Post	0.17*	0.08	0.14	0.10
Observations	1,430		735	
<i>Ref. Documented</i>				
DACA Eligible	-0.25***	0.05	-0.24***	0.06
Post-period	0.08	0.04	0.04	0.05
DACA eligible*Post	0.19**	0.07	0.03	0.09
Observations	1,624		1,323	

Source: 2007-2017 California Health Interview Survey

*** p<0.001, ** p<0.01, * p<0.05

Note: the sample is limited to foreign-born respondents 18-30 years old. The model controls for age, gender, married status, and year of migration.

Table 4. Difference-in-difference estimates from sequential linear probability models of DACA's impact on employment outcomes among Mexican and Latino immigrants in California

	(1) In the labor force		(2) Employed, among those in the labor force		(3) Works full time, among those employed		(4) Logged hourly earnings, among those employed	
	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Mexican								
<i>Ref. Undoc. Inelig.</i>								
DACA Eligible	-0.04	0.05	-0.19*	0.09	0.07	0.08	0.03	0.14
Post-period	0.05	0.05	0.11**	0.04	0.10	0.07	0.26*	0.12
DACA eligible*Post	0.05	0.07	-0.02	0.09	-0.27**	0.10	0.10	0.17
Observations	1,179		834		719		714	
<i>Ref. Documented</i>								
DACA Eligible	-0.12**	0.04	-0.03	0.09	0.11	0.06	0.16	0.08
Post-period	-0.01	0.03	0.10	0.06	0.09	0.05	0.05	0.09
DACA eligible*Post	0.12*	0.05	-0.03	0.11	-0.27**	0.09	0.33*	0.14
Observations	1,380	1,110			948		941	
Latino								
<i>Ref. Undoc. Inelig.</i>								
DACA Eligible	-0.00	0.05	-0.18*	0.08	0.02	0.08	0.09	0.14
Post-period	0.07	0.06	0.14***	0.04	0.06	0.06	0.31*	0.12
DACA eligible*Post	0.07	0.06	-0.08	0.08	-0.19*	0.09	0.09	0.16
Observations	1,430		1,041		896		891	
<i>Ref. Documented</i>								
DACA Eligible	-0.10**	0.04	0.01	0.08	0.10	0.06	-0.13	0.09
Post-period	-0.02	0.03	0.14*	0.05	0.07	0.05	0.08	0.10
DACA eligible*Post	0.13*	0.05	-0.10	0.10	-0.21*	0.08	0.30	0.15
Observations	1,624		1,313		1,114		1,107	

Source: 2007-2017 California Health Interview Survey

***p<0.001, ** p<0.01, *p<0.05

Note: the sample is limited to foreign-born respondents 18-30 years old. The model controls for age, gender, married status, and year of migration.

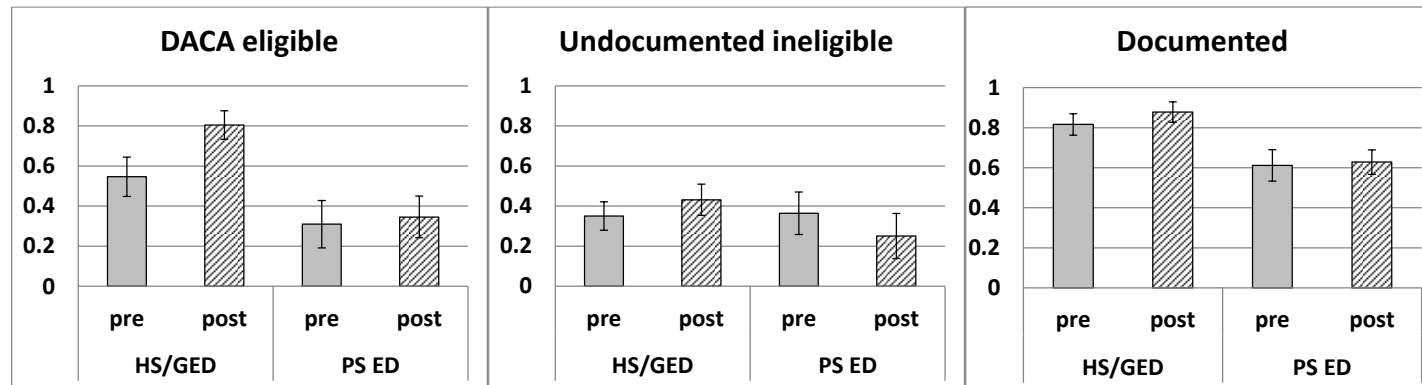
Table 5. Worker and work characteristics by occupation among DACA recipients in California, 2013-2014 (n=378)

Occupational Category	Sample dist. (col %)	Ave. age	Currently enrolled in school (row %)	HS/GED highest degree (row %)	College degree or higher (row %)	Works part-time (row %)	Med. wage
Low-skilled worker	44.3	23	72.6	64.7	3.7	54.8	9.00
Clerical worker	14.9	24	45.3	54.7	20.8	41.1	10.80
Para-professional	14.1	24	58.0	40.0	28.0	50.9	10.90
Management	6.9	25	58.3	79.2	8.3	30.8	11.30
Skilled worker	7.2	25	37.5	62.5	16.7	11.1	13.00
Professional	11.5	26	35.0	20.0	50.0	9.3	14.20
Self-employed	1.1	26	50.0	25.0	75.0	50.0	15.00
All	100	24	57.4	54.4	17.8	42.1	10.0

Source: DACA Study

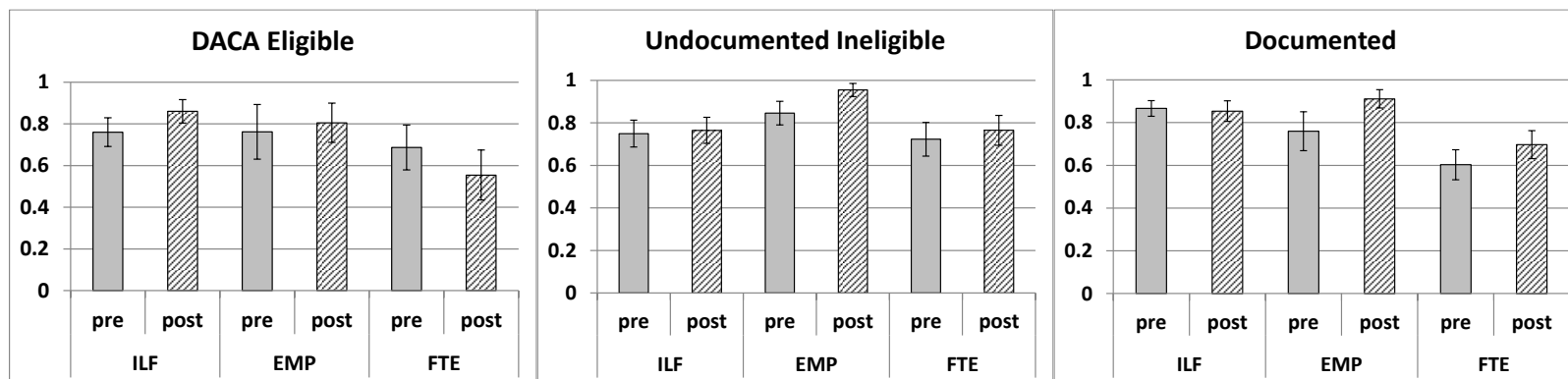
Note: the sample is limited to respondents working for pay at the time of the survey.

Figure 1. Predicted probability of educational outcomes by DACA group and pre- and post-DACA period, among Latino immigrants in California



Note: HS/GED is high school diploma or GED completion; PS ED is any post-secondary education, among those with a HS/GED. Pre-DACA is 1/1/2007-9/30/2012 and Post-DACA is 10/1/2012-12/31/2017.

Figure 2. Predicted probability of current employment status by DACA group and pre- and post-DACA period, among Latino immigrants in California



Note: ILF is in the labor force; EMP is employed, among those within the labor force; and FTE is full-time employment, among those employed. Pre-DACA is 1/1/2007-9/30/2012 and Post-DACA is 10/1/2012-12/31/2017.

Appendix Table 1. Pre-trend analysis of education and employment outcomes

	High school degree or GED		Post- secondary, among those with HS/GEG		In the labor force		Employed, among those in the labor force		Works full time, among those employed		Logged hourly earnings, among those employed	
	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Mexican												
Doc. x 2007-08	-0.04	(0.12)	0.01	(0.14)	-0.04	(0.09)	-0.10	(0.27)	-0.17	(0.15)	-0.04	(0.25)
Doc. x 2011-6/14/12	-0.22	(0.12)	-0.25	(0.15)	-0.03	(0.09)	-0.17	(0.26)	-0.15	(0.14)	-0.21	(0.22)
Undoc. Inelig. x 2007-08	0.00	(0.16)	-0.00	(0.14)	-0.05	(0.11)	-0.19	(0.21)	0.10	(0.15)	-0.14	(0.26)
Undoc. Inelig. x 2011-6/14/12	-0.10	(0.16)	-0.14	(0.17)	0.02	(0.11)	-0.43*	(0.21)	0.04	(0.15)	-0.08	(0.23)
Latino												
Doc. x 2007-08	-0.09	(0.12)	0.03	(0.15)	-0.10	(0.09)	-0.06	(0.25)	-0.06	(0.16)	-0.05	(0.23)
Doc. x 2011-6/14/12	-0.19	(0.12)	-0.15	(0.15)	-0.02	(0.08)	-0.19	(0.24)	-0.17	(0.14)	-0.29	(0.21)
Undoc. Inelig. x 2007-08	-0.06	(0.15)	-0.04	(0.15)	-0.13	(0.10)	-0.18	(0.20)	0.18	(0.15)	-0.15	(0.23)
Undoc. Inelig. x 2011-6/14/12	-0.11	(0.15)	-0.12	(0.16)	-0.01	(0.10)	-0.38	(0.20)	0.01	(0.15)	-0.33	(0.24)

Source: 2007-2017 California Health Interview Survey

*** p<0.001, ** p<0.01, * p<0.05

Notes: DACA-eligible*2009-10 is the omitted interaction term. The sample is limited to foreign-born respondents 18-30 years old. The models control for age, gender, married status, and year of migration.