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From undocumented to lawfully present: Do changes to legal status impact psychological wellbeing among latino immigrant young adults?

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ABSTRACT

Exclusionary immigration policies, as a form of structural racism, have led to a sizeable undocumented population that is largely barred from access to resources in the United States. Existing research suggests that undocumented immigration status detrimentally impacts mobility, yet few studies have tested the impacts of legal status on psychological wellbeing. Most importantly, we know little about how *changes* to legal status impact wellbeing. Announced in 2012, the Deferred Action for Childhood Arrivals (DACA) program allows eligible undocumented youth to apply for temporary lawful status. Drawing on cross-sectional survey data from 487 Latino immigrant young adults in California collected in 2014 and 2015, we analyze the predictors of three specialized outcomes related to immigrants' psychological wellbeing—distress, negative emotions, and deportation worry before and after a transition from undocumented to lawfully present status. Results show that retrospective reports of past psychological wellness, when all respondents were undocumented, are predicted primarily by socioeconomic status. However, reports of current psychological wellness are predicted by DACA status. Our results demonstrate, for the first time, the positive emotional consequences of transitioning out of undocumented status for immigrant young adults.

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Gee and Ford argue that U.S. “immigration policy is a form of structural racism: exclusionary policies provide the most permanent and broad-scale type of segregation by prohibiting groups from entering the country [legally], deporting those already here, and limiting the rights of those deemed to be threats” (Gee and Ford, 2011, 122). One of the consequences of exclusionary immigration policies is the unprecedented growth of the undocumented population (Ngai, 2004). The United States is now home to 11 million undocumented immigrants, including nearly five million undocumented children and young adults under the age of 30, the vast majority (78%) of whom are from Latin America (Fortuny et al., 2007; Center for American Progress, 2014; Batalova and Zong, 2015). Increasingly, scholars are conceptualizing immigrant legal status as a critical axis of stratification (Menjívar, 2006; Dreby, 2015; Cebulko, 2014). Undocumented youth and young adults face severe barriers to higher education, good jobs, and full political

incorporation (Abrego, 2006; Gonzales, 2011; Greenman and Hall, 2013). Though much less is known about the impacts of legal status on health outcomes for young immigrants, emerging research suggests that undocumented immigration status may negatively impact psychological wellbeing as well (Potochnick and Perreira, 2010; Abrego, 2011; Dozier, 1993; Hacker et al., 2011; Gonzales et al., 2013).

Research on undocumented immigrant health remains underdeveloped in two important ways. First, we know little about how outcomes related to psychological wellbeing vary *within* undocumented communities. Second, we know little of what, if anything, will *change* for undocumented young peoples' psychological wellbeing if their legal status changes. The present study contributes by analyzing the ways in which Latino immigrant young adults recall their psychological wellness before and after a transition from undocumented to lawfully present status.

Our analysis emerges out of a unique political context that provides a rare opportunity to examine the impacts of transitions in legal status in a hard-to-reach population. In June 2012, President Obama announced the Deferred Action for Childhood Arrivals

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(DACA) program for undocumented youth who meet the following criteria: came to the U.S. before age 16; were younger than 31 in June 2012; have continuously resided in the U.S. from June 2007 to the present; are current students or high school/GED graduates, or honorably discharged veterans; and have no criminal record. Under this program, youth can apply for temporary (and revocable) lawful presence that includes work authorization, a social security number, and other related benefits, renewable every two years. As of the first quarter of 2015, when this study was completed, 750,000 individuals had applied for DACA, with 28% of applications coming from California and the vast majority of applicants originating from Latin America (United States Citizenship and Immigration Services, 2015). DACA provides an unprecedented and unique opportunity to analyze the experiences of program participants.

This study provides the first statistical analysis of differences in psychological wellbeing between immigrant young adults, retrospectively measured before and after a transition in legal status. We draw from original, cross-sectional telephone survey data from 487 Latino immigrant young adults in California, comparing currently undocumented young adults with formerly undocumented young adults who have transitioned into lawful presence via the DACA program. We analyze the predictors of three specialized outcomes related to immigrants' psychological wellbeing: distress (as encompassed by reports of stress, nervousness or anxiety); negative emotions (anger, fear, sadness, shame, and embarrassment); and worry about deportation of self or family. Specifically, we ask: What factors predict psychological wellbeing among Latino undocumented immigrant young adults? And, how and to what extent does psychological wellbeing change with changes to legal status? In answering these questions, we offer, for the first time, empirical evidence not just of differentiations between undocumented youth, but also of the potential emotional health advantages of moving from undocumented to lawful immigration status.

Our analyses reveal several key findings. Prior to DACA, when all respondents were undocumented, psychological wellbeing was predicted almost exclusively by socioeconomic status. However, current psychological wellbeing is most strongly predicted by DACA status. Our results suggest that the change from undocumented to lawfully present is associated with positive health outcomes. However, DACA status does not significantly reduce worry about the deportation of family members, suggesting that programs that target individuals may not go far enough in addressing the overall wellbeing and needs of immigrant families. In the current era of increasing anti-immigrant sentiment and the unprecedented intersection of immigration and criminal laws (Chavez, 2008; Coutin, 2011), our findings underscore the critical importance of formal legal recognition for immigrants.

1. Background

Structural racism is racism that is embedded in structures and operates to disadvantage those in marginalized racial and ethnic positions without direct action by individuals (Bonilla-Silva, 1997). Because structural racism affects institutions, ideologies, and laws, it is associated with the distribution of resources and is therefore a fundamental cause of disease (Gee and Ford, 2011; Link and Phelan, 1995). For instance, exclusionary immigration policies can hinder immigrants' access to health services and contribute to a discriminatory climate (Gee and Ford, 2011). Yet the relationship between legal status and health has gone underexplored in empirical research of immigrant health and wellbeing.

For instance, research informed by the stress process model, which links increased exposure to stressful experiences to increased health problems (Aneshensel, 1992; Turner et al., 1995; Pearlin, 1989), shows that Latino immigrants face a unique set of

stressors due to their stigmatized minority status (e.g. Finch et al., 2000; Umaña-Taylor and Updegraff, 2007). The immigrant experience can be a unique stressor for Latino migrants that produces significant life events (e.g., separation from family, traumatic migration experiences) and chronic stressors (e.g., dealing with the unknowns of a new place) (Vega et al., 1987). Social stress research, however, has generally neglected the ways in which laws such as immigration policies might be stressors for disadvantaged groups.

Likewise, research on the healthy immigrant paradox (Abraído-Lanza et al., 2006; Alegría et al., 2008; Burnam et al., 1987; Grant et al., 2004; Franzini et al., 2002), often draws upon theories of acculturation to explain why Latino immigrants' health worsens over time in the U.S. Such studies argue that acculturation processes (e.g. the altering of behaviors and norms, isolation from former networks, and learning new modes of economic survival) can be stressful for migrants (Rogler et al., 1991). Acculturation is therefore associated with the adoption of unhealthy behaviors or increased exposure to discrimination, both of which can lead to poorer health (Creighton et al., 2012; Lara et al., 2005; Hovey and King, 1996; Saldana, 1995; Finch et al., 2000). Generally speaking, however, extant frameworks on Latino immigrant health would benefit from a more careful consideration of legal status as a structural constraint that can impact health and wellbeing.

Indeed, Viruell-Fuentes et al. (2012, 2007) have encouraged a reconceptualization of immigrant health and acculturation models that instead delineates how macro-social conditions (e.g., pathways to citizenship) contribute to experiences of racism, discrimination, and othering, which are then linked to proximate risk factors (e.g., health practices, medical care) that pattern health outcomes. Situating health disparities as direct and indirect consequences of structural forces is a relatively recent improvement in the immigrant health framing, but empirical examinations of these relationships remain underdeveloped. Importantly, much of the literature continues to lack a critical consideration as to how transitions in legal status may impact emotional health trajectories over time, especially in young adult populations.

1.1. Theorizing transitions in legal status among latino immigrant youth

To theorize transitions in legal status, we draw on the framework of contexts of reception from immigrant integration literature, which argues that young peoples' incorporation trajectories depend in part on the level of receptiveness of laws and policies of the host country (see, e.g., Portes and Zhou, 1993; Portes and Rumbaut, 2001). According to this theory, we would expect incorporation and lived experiences to be structured by immigration laws (and thereby, legal status) not just at arrival, but also over the long-term, and as laws and policies change or stay the same and interact with structural (e.g. socioeconomic) and institutional (e.g. schools) factors. Synthesizing the contexts of reception framework with the structural racism and health model, we hypothesize that changes to legal status will influence integration outcomes, including psychological wellbeing. This allows us to predict improved outcomes in policy contexts such as DACA that provide increased protection and access.

Our examination of the impact of legal status on the psychological wellbeing of undocumented immigrants focuses on youth, which is analytically and theoretically important for several reasons. First, undocumented young adults experience emotional consequences due to their parents' legal status (Yoshikawa, 2011; Dreby, 2015; Landale et al., 2015). Yet they may also enter adolescence facing disadvantage due to their own legal status, characterized by worries about blocked mobility, reduced motivation, anger, hopelessness, shame and self-blame, anxiety, and fear of

deportation (Gonzales et al., 2013; Abrego, 2006; Gonzales, 2011). In addition, many undocumented youth have spent most of their lives in the United States and are extensively embedded in educational institutions; their legal status can therefore become an additional source of perceived or experienced stigmatization and/or discrimination within schools (Abrego, 2011; Patler, 2014).

Although existing studies have explored variation between immigrant groups with different legal statuses, these studies generally compare across groups, and are unable to measure the degree of change within individuals who experience a change in status. For example, Cebulko (2014) documents a hierarchy of perceived social acceptance, with undocumented immigrants reporting (and being reported as) the least accepted, followed by those with DACA and then lawful permanent residents and U.S. citizens. We build on such research by analyzing how and to what extent individual outcomes related to psychological wellbeing change for young adults who receive DACA, as compared to their peers who remain undocumented.

2. Data and methods

2.1. Data

This paper draws from the Deferred Action for Childhood Arrivals Study (DACA Study). This cross-sectional study includes immigrant youth who applied or considered applying for DACA. This work is timely, given DACA's recent implementation, and how very little we know about its impacts. Fielded between November 2014 and February 2015, the study aimed to survey DACA recipients two-to-three years after the rollout of the program, comparing them with those who do not have DACA status. The study included modules on educational and socioeconomic trajectories, community involvement, and health and wellbeing of immigrant young adults in California. As one of the largest immigrant destinations in the nation, California is home to 2.6 million undocumented immigrants, (Pew Hispanic Center, 2013) and 28 percent of all DACA applications were filed in California (United States Citizenship and Immigration Services, 2015).

The DACA Study includes 502 telephone surveys of cell phones and landlines across California. All study procedures were approved by the University of California, Los Angeles Institutional Review Board. Respondents were drawn from a pool of individuals who attended one or more DACA workshops between 2012 and 2014. Workshops were hosted in libraries, schools, and convention centers by legal service providers, immigrants' rights organizations, and consular offices and were open to anyone who wanted information about DACA. Lawyers were on hand to review applications. 1102 participants were over 18, provided contact information, and spoke English; calls were attempted with each of these individuals. The overall response rate was 67%, with a cooperation rate of 91%. Nearly all respondents (97%) identified as Latino, with 93% from Mexico and 7% from Central or South America. After excluding non-Latinos (given the varied contexts of reception faced by different ethnic and nation-origins groups; see, e.g. Portes and Zhou, 1993), the effective sample size is 487.

The DACA program is very new, so researchers have only begun to explore its impacts. The government does not release individual-level data on DACA applicants; as a result, no current data set allows for representative sampling of individual-level characteristics of DACA applicants. Though our sampling method does not allow for the development of population estimates, we are able control for DACA status in our analysis. We therefore provide an important starting point for understanding the impacts of the program, with theoretical and empirical implications for other transitions in legal status. Beyond this methodological contribution, the DACA Study is

unique in that it does not primarily sample college and university students: only 14% of respondents had a college degree and 51% had never attended any post-secondary education (for further work drawn from samples of mostly or entirely undocumented college students, see Teranishi et al., 2015, Gonzales et al., 2014).

2.2. Measures

Psychological Wellbeing – Our outcome measures fall under the broad category of psychological distress (Mirowsky and Ross, 1989), but also consider particular health experiences that can affect disadvantaged racial/ethnic groups (Brown et al., 2013; Rogler et al., 1991; Vega and Rumbaut, 1991). We are not attempting to clinically measure psychological conditions; rather, our measures capture more specified health concerns that Latino undocumented immigrants might face. To that end, the DACA Study examined self-reported psychological wellbeing that Latino immigrant youth perceived to be directly impacted by their legal status. Questions were developed and revised in consultation with undocumented youth organizations and tested in a series of focus groups with individuals who attended the DACA workshops. Specially, to capture psychological wellbeing, respondents were asked: “because of your legal status, did you experience: 1) increased stress, nervousness or anxiety; 2) increased anger; 3) increased fearfulness; 4) increased sadness; 5) increased embarrassment or shame; 6) regular worry about getting arrested or deported; 7) regular worry about your family getting arrested or deported.” Respondents could elaborate on these outcomes in an open-ended question about what has changed most since receiving DACA.

Respondents were asked to recall their experiences, as impacted by legal status, in regards to two different time periods: first, during a time in which all respondents were undocumented, and second, in the current time period, in which many respondents had transitioned from undocumented to lawfully present status. Given that we could not know in advance how long individuals had lawful status via DACA, respondents were asked whether or not they experienced those indicators either during the past year (for those who had not received DACA) or during the one-year period prior to receiving DACA (for DACA recipients). The average time a recipient had DACA at the time of the survey was about 1.5 years. Next, all respondents were asked to think about the last 30 days only, and report whether or not they had experienced those same indicators. Though Brewin et al. (1992) have concluded that current psychological mood does not impact recall of earlier events and psychological states, our reliance on recall is an important limitation of our study (discussed in greater detail below).

For the purpose of this analysis, we created four binary dependent variables for each of the two retrospective time periods: 1) in the past year/year prior to receiving DACA (hereafter “the past”) and 2) in the last 30 days (“current”). *Distress* captured whether respondents experienced stress, nervousness or anxiety, as asked in the survey instrument (1 = Yes), as research confirms a strong correlation between stressful experiences and adverse mental health, especially for marginalized groups (e.g. Aneshensel, 1992; Turner et al., 1995; Pearlin, 1989). We then created a binary variable for *negative emotions* to reflect whether the respondent had experienced any of the following: anger, fear, sadness, embarrassment or shame (1 = Yes). These specific emotions have been identified in qualitative research on undocumented young adults' mental health (e.g. Gonzales et al., 2013). Respondents were asked about each emotion independently, and item responses were combined for analysis to capture orientations and expressions of emotions consistent with the construct of negative affect (Watson et al., 1988). Results from sensitivity analysis confirmed that this operationalization did not mask variation among individual

measures. Finally, because prior research on undocumented immigrants demonstrates extensive fear of deportation, which can affect overall psychological wellbeing (e.g. Brabeck and Xu, 2010), we included two variables about deportation worry: *worry about self-deportation* and *worry about the deportation of family members* (1 = Yes).

DACA Status – The primary independent variable was a binary measure of DACA status. Individuals who had been approved were coded as 1 (n = 452); those who never applied, had been denied, or had not yet received a decision were coded as 0 (n = 50). This distribution aligns with reports that 94% of initial DACA applications have been approved nationwide (United States Citizenship and Immigration Services, 2015).

Social Demographics – We included a series of individual and family demographic characteristics as control variables. *Gender*, measured by respondents self-identification as male or female, accounted for differential experiences and reporting of mental health problems across men and women (Rosenfield and Mouzon, 2012; McDonough and Walters, 2001). *Age* allowed us to control for the potential variation in DACA's impact as the respondent moves into adulthood. Because research on acculturation and the healthy immigrant paradox suggests that health deteriorates over time (Creighton et al., 2012; Rogler et al., 1991), we also controlled for years in the United States. To control for socioeconomic (or "low income") status, we include *trouble paying utility bills* in the past year (or in the year prior to receiving DACA, for DACA recipients). We also include a variable for *highest degree* (1 = high school/GED only, 2 = Vocational/Trade/Associate's Degree, and 3 = Bachelor's degree or higher). Finally, existing literature shows that having an undocumented mother can impact children's behavioral outcomes (Landale et al., 2015) as well as educational attainment (Bean et al., 2011); thus, we included binary measures for whether the *mother is undocumented* and whether the *mother had less than a high school degree*.

2.3. Analytic strategy

Prior to model estimation, we investigated missing data and found that no variable featured more than 5% missing observations. Using Stata 14, we preserved cases with missing data using multiple imputation by chained equations (the MICE method) and estimating twenty imputed data sets (Rubin, 1987; White et al., 2011; Graham et al., 2007). Our analyses then proceeded in three steps. We first ran logistic regression models of recollections of past psychological wellbeing, controlling for DACA status and social demographics. Second, we ran logistic regression models of reports of current psychological wellbeing with the same covariates. Finally, to assess change over time (measured retrospectively), we estimated each outcome in a logistic regression model and included an interaction between time and DACA status. Analyzing these models in long form, we used cluster-robust standard errors to account for within-person correlations. We then used Klein's `-mimrgns-` command for Stata to compute predicted changes in psychological wellbeing for the DACA and non-DACA subsamples, holding all other variables at their observed values.

3. Results

Table 1 reports univariate and bivariate analysis of all study variables. The average respondent was 24 years old and had lived in the United States for 18 years. Nearly 90% had undocumented mothers and over 60% had mothers with less than a high school degree. Forty-six percent of the sample reported having trouble paying utility bills in the past year/year before DACA. Respondents did not differ significantly by DACA status on the majority of social

demographics. However, significant differences emerged in education levels, with DACA recipients more likely to have completed vocational or bachelor's degrees. We also observed significant differences across gender: whereas 43% of the total sample was male, (58%) of those without DACA status were males.

The vast majority of respondents reported having experienced psychological distress. Importantly, however, bivariate analyses revealed no significant differences in the proportions of respondents recalling past distress, negative emotions, and deportation worry due to their legal status during the time when all were undocumented. However, reports of current adverse psychological wellbeing (in the last 30 days) varied significantly and consistently across DACA status, with significantly fewer DACA recipients reporting psychological distress. The only outcome that did not significantly differ across DACA status was current worry about the deportation of a family member.

We now turn to results from logistic regression analysis of past and current psychological wellbeing outcomes. Table 2 displays odds ratios for measures of retrospective past psychological wellbeing, controlling for relevant background characteristics. Compared to females, males had significantly lower odds of both negative emotions and worry about family deportation. In addition, having a mother who was undocumented was a significant predictor of past worry about a family members' deportation. There were no differences in past psychological wellbeing by DACA status.

Socioeconomic factors were the largest and most consistent predictor of past psychological wellbeing. Low-income respondents reported odds of distress, negative emotions, and worry that were, on average, twice as large as those with higher income, controlling for all other predictors. Those with a Bachelor's degree or higher also reported higher odds of distress, negative emotions, and worry about self-deportation compared to those with a high school degree.

Table 3 displays odds ratios for measures of psychological wellbeing in the last 30 days. As with past outcomes, males had lower odds of distress and negative emotions, and having an undocumented mother increased the odds of worry about family deportation. However, the previously observed relationship between socioeconomic status and psychological wellbeing was less consistent: Low-income status significantly increased odds only in models predicting distress and worry about family deportation. Overall, the likelihood of psychological distress was lower for those with DACA compared to those without DACA. The only outcome that DACA status did not significantly predict is worry about family deportation, demonstrating that even after obtaining lawful presence, respondents continue to worry about undocumented family members.

Our final task was to calculate the magnitude of change in psychological wellbeing by DACA status. Fig. 1a plots the predicted probabilities of distress and negative emotions. Although the lines overlap when predicting past outcomes (with probabilities hovering around 70%), the predicted probability of current outcomes decreased significantly and with far greater magnitude for DACA recipients. For example, the predicted probability of distress and negative emotions in the past 30 days for DACA recipients dropped to under 20%, whereas the probabilities were 40% or greater for those without DACA ($p = 0.000$).

Fig. 1b plots predicted probabilities of worry about self and family deportation, which were all above 60%. However, DACA recipients were much less likely to report worry about self-deportation in the last 30 days (15% for DACA recipients, compared to above 40% for those without DACA ($p = 0.002$)). Probabilities of worry about family deportation remained high for both groups, but DACA recipients reported slightly lower probabilities of worry in the last 30 days when compared to the past.

Table 1
Descriptive and bivariate statistics for variable used in the analysis of psychological wellbeing.

	Total	No DACA	Has DACA	Comparison of has DACA vs. no DACA
Social Demographics				
Male (1 = Yes)	42.45% (0.022)	58.33% (0.072)	40.67% (0.023)	*
Age (Range: 18–34 years)	24.151 (0.165)	24.452 (0.566)	24.118 (0.173)	
Years in the U.S. (Range: 5–31 years)	18.158 (0.228)	18.295 (0.831)	18.143 (0.237)	
Trouble Paying Utility Bills (1 = Yes)	46.10% (0.023)	46.77% (0.074)	46.03% (0.024)	
High School Degree/GED or less (1 = Yes)	64.38% (0.028)	83.33% (0.054)	62.31% (0.023)	
Trade/Vocation (1 = Yes) ^a	22.04% (0.019)	10.42% (0.045)	23.31% (0.020)	*
Bachelors Degree or Greater (1 = Yes) ^a	13.57% (0.016)	6.25% (0.035)	14.37% (0.017)	+
Mother Less than High School Degree (1 = Yes)	61.19% (0.022)	60.42% (0.071)	61.28% (0.023)	
Mother Undocumented (1 = Yes)	88.94% (0.015)	85.31% (0.052)	89.34% (0.016)	
Psychological Wellbeing: Past Year/Year Prior to DACA				
Stress (1 = Yes)	70.68% (0.021)	70.83% (0.066)	70.66% (0.022)	
Negative Emotions (1 = Yes)	71.66% (0.022)	64.58% (0.070)	72.44% (0.021)	
Worry about Self Deportation (1 = Yes)	64.68% (0.022)	60.42% (0.071)	65.15% (0.023)	
Worry about Family Deportation (1 = Yes)	78.10% (0.019)	68.75% (0.068)	79.12% (0.019)	
Psychological Wellbeing: Last 30 Days				
Stress (1 = Yes)	15.81% (0.017)	37.50% (0.071)	13.44% (0.016)	***
Negative Emotions (1 = Yes)	16.84% (0.017)	41.67% (0.072)	14.12% (0.017)	***
Worry about Self Deportation (1 = Yes)	11.91% (0.015)	41.67% (0.072)	8.66% (0.013)	***
Worry about Family Deportation (1 = Yes)	52.62% (0.023)	58.33% (0.072)	52.00% (0.024)	
N	487	48	439	

Note: Standard Errors in parentheses.

+p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001 (two-tailed test).

^a High School Degree/GED or less is omitted category for significance test.

Table 2
Odds ratios from logistic regression analysis of psychological wellbeing in the past year/year prior to DACA.

	Stress/Nervousness/Anxiety	Negative Emotions	Worry about Self Deportation	Worry about Family Deportation
Male (1 = Yes)	0.758 (0.161)	0.509** (0.111)	0.823 (0.164)	0.580* (0.135)
Age	1.016 (0.027)	1.018+ (0.028)	1.010 (0.025)	0.997 (0.028)
Years in the U.S.	1.056 (0.039)	1.067 (0.040)	1.030 (0.035)	0.976 (0.038)
Trouble Paying Utility Bills (1 = Yes)	2.525*** (0.549)	2.535*** (0.565)	1.861** (0.370)	2.514*** (0.612)
Trade/Vocation (1 = Yes)	1.232 (0.337)	1.007 (0.277)	1.086 (0.274)	0.981 (0.285)
Bachelors Degree or Greater (1 = Yes) ^a	3.387** (1.407)	6.533*** (3.577)	2.262* (0.771)	1.967+ (0.776)
Mother Less than High School Degree (1 = Yes) ^a	0.932 (0.203)	0.986 (0.220)	1.309 (0.262)	1.261 (0.293)
Mother Undocumented (1 = Yes)	0.843 (0.323)	1.156 (0.428)	1.278 (0.416)	2.262* (0.780)
Has DACA	0.883 (0.312)	1.238 (0.428)	1.121 (0.364)	1.500 (0.529)
F-stat	4.08***	5.27***	2.46**	3.40***
N	487	487	487	487

Notes: Standard errors in parentheses.

+p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001 (two-tailed test).

^a High School Degree/GED or less is omitted category.

Table 3
Odds ratios from logistic regression analysis of psychological wellbeing in the past 30 days.

	Stress/Nervousness/Anxiety	Negative Emotions	Worry about Self Deportation	Worry about Family Deportation
Male (1 = Yes)	0.560* (0.155)	0.347*** (0.101)	0.737 (0.232)	0.708+ (0.137)
Age	0.978 (0.031)	0.977+ (0.030)	0.986 (0.035)	0.984 (0.023)
Years in the U.S.	1.024 (0.045)	1.078 (0.046)	1.059 (0.053)	0.976 (0.032)
Trouble Paying Utility Bills (1 = Yes)	1.708* (0.449)	1.316 (0.339)	1.762+ (0.536)	1.480* (0.283)
Trade/Vocation (1 = Yes)	0.393* (0.164)	0.860 (0.292)	0.750 (0.308)	1.244 (0.308)
Bachelors Degree or Greater (1 = Yes) ^a	1.217 (0.467)	1.221 (0.461)	0.793 (0.399)	1.540 (0.464)
Mother Less than High School Degree (1 = Yes) ^a	0.922 (0.247)	0.959 (0.254)	1.503 (0.486)	0.972 (0.190)
Mother Undocumented (1 = Yes)	1.931 (0.995)	1.417 (0.619)	0.824 (0.396)	4.163*** (1.459)
Has DACA	0.236*** (0.083)	0.176*** (0.063)	0.129*** (0.047)	0.628 (0.205)
F-stat	3.29***	3.85***	4.41***	3.00**
N	487	487	487	487

Notes: Standard errors in parentheses.

+p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001 (two-tailed test).

^a High School Degree/GED or less is omitted category.

4. Discussion

Preexisting research finds that immigration status detrimentally impacts mobility among undocumented immigrants, yet few studies have tested the impacts of immigration status on psychological wellbeing. Most importantly, we know very little about how changes to legal status impact psychological wellbeing. This investigation set out with two goals: 1) to examine internal variation within the predictors of Latino immigrant youth's psychological wellbeing and then 2) to assess the impacts of transitions in legal status on these outcomes.

Regarding the first aim, we find that socioeconomic status and gender are predictors of past psychological wellbeing, measured retrospectively at a time when all respondents were undocumented. Low-income respondents, captured here as those who had trouble paying utility bills, were much more likely to report increased distress, negative emotions, and worry, compared to those who were not low-income. This finding is consistent with relationships delineated by the stress process model, that suggests individuals from disadvantaged social status groups (i.e., low socioeconomic status) have greater exposure to stress (i.e., worrying about how bills will get paid), are limited in their resources to deal with the stress, and therefore may have increased health problems (e.g. Aneshensel, 1992; Mirowsky and Ross, 1989; Turner et al., 1995; Adler et al., 1994; Pearlin et al., 1981). Although stress process theory would predict such a result, previous research had not explicitly taken up the case of immigration status.

Health research has shown that components of socioeconomic status have different effects on health (Shavers, 2007), which may also be the case here. Interestingly, respondents with a college degree were more likely to report past distress, negative emotions, and worry about self-deportation, compared to those with a high school degree or less. This finding may seem paradoxical at first, as we may think of college graduates as a privileged population with access to resources and social networks that are often unavailable in less educated communities. However, college-educated undocumented individuals have a great deal to lose from their unauthorized status: they graduate with degrees that should prepare them to enter the white-collar labor market, yet face legal barriers to accessing commensurate employment opportunities (Gonzales,

2011). Our seemingly paradoxical finding may therefore be the result of the disjoint between increased educational achievement and continued barriers to mobility for these highly educated individuals (see also Teranishi et al., 2015).

We also observed that gender influenced past psychological wellbeing: Males were less likely than females to report negative emotions and worry about deportation. This finding aligns with sociology of health research documenting different experiences of mental health outcomes for men and women. For instance, females are more likely than males to experience anxiety and/or depression (Rosenfield and Mouzon, 2012). Furthermore, our findings are consistent with migration research demonstrating that female children of immigrants are more likely to experience mental health problems (Portes and Rumbaut, 2001). In light of these findings, future research would do well to underscore the variety of background factors shaping the undocumented experience, highlighting the multilayered realities of individuals' identities and marginalities.

Interestingly, neither age nor length of time in the U.S. was significantly related to psychological wellbeing in our analyses. These results do not lend support for the healthy immigrant paradox, which suggests that immigrants' health often deteriorates over time (Abraído-Lanza et al., 2006; Alegría et al., 2008; Burnam et al., 1987; Grant et al., 2004; Franzini et al., 2002). Instead, our findings show that immigrants report better health after a transition to lawful presence. These results are in line with the argument that structural forces like immigration laws exert a significant impact on health outcomes, perhaps more so than the acculturation measures traditionally used in research on the healthy immigrant paradox (Viruell-Fuentes, 2007). Indeed, we found a strong, positive, and significant effect of legal status on psychological wellbeing. Receiving DACA reduced the odds of distress, negative emotions, and worry about self-deportation by 76–87%, compared to respondents without DACA.

What might explain this change? Survey participants responded to an open-ended question at the end of the survey: "What do you think has most changed for you since receiving DACA?" Overall, DACA recipients seem optimistic about changes, citing financial stability, access to education and resources like drivers' licenses, and reduced fear/greater freedom. For example, respondents shared the

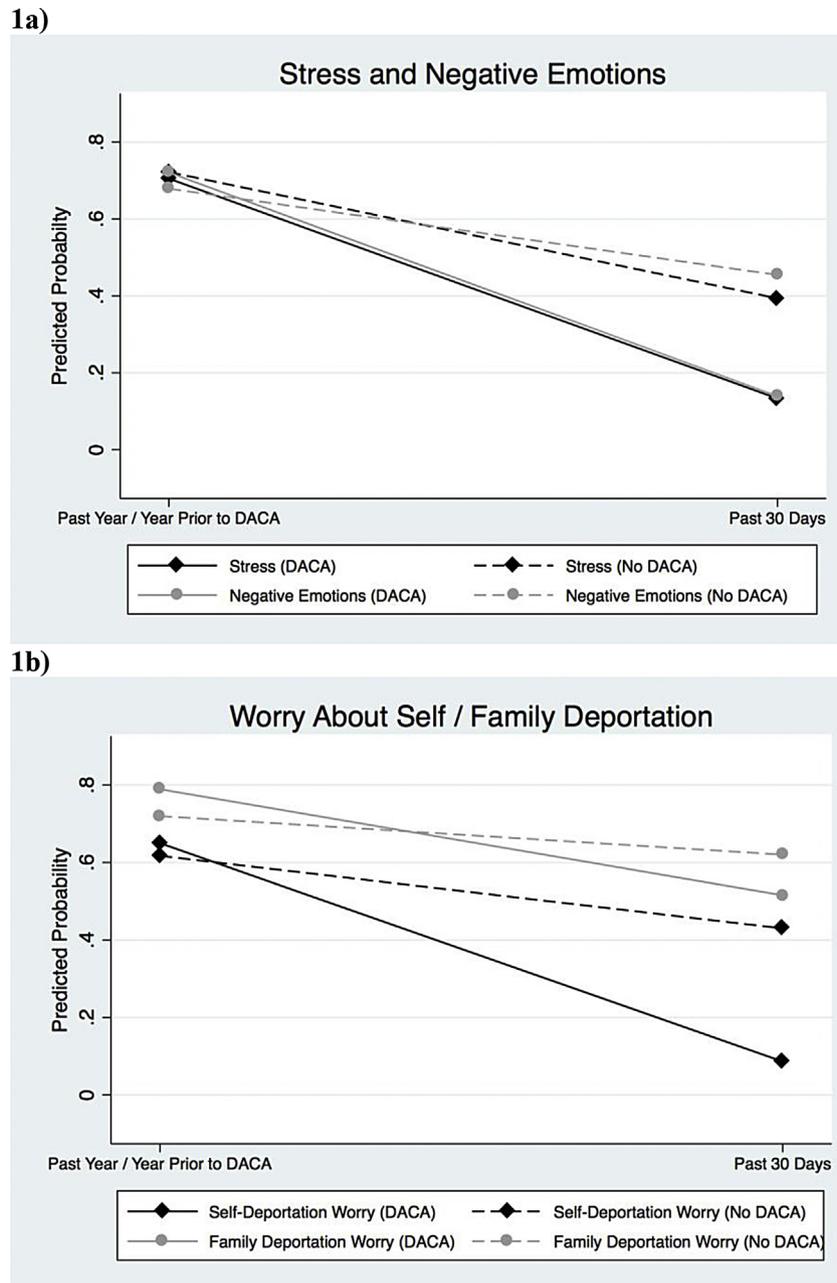


Fig. 1. Predicted Probability of Psychological Wellbeing, by DACA Status. Note: Predicted probabilities computed after regressing psychological wellbeing outcomes on an interaction between time and DACA status; all other control variables are held at their observed values.

following sentiments:

"I have a better job, I am more stable, and not afraid to drive around. I have an ID now and I am more capable to do what I want. I feel better emotionally, physically, and psychologically."

"Peace. [I can] breathe better. Hope. And knowing I exist. I feel like I belong and other people know I exist."

Such sentiments indicate that DACA has had a legitimizing effect (Abrego, 2008) on recipients, in which access to lawful presence and new opportunities has improved their sense of security in their future. These results are consistent with other studies showing that immigrants associate undocumented status with belonging to a disadvantaged social status that is "othered" (Viruell-Fuentes, 2007,

1525) and that the process of legalization has a transformative impact on their sense of self (Menjívar and Lakhani, 2016; Cebulko, 2014; Gee et al., 2016). Our results demonstrate some of the first empirical evidence that legal status transformations can impact their psychological wellbeing as well.

Despite the positive nature of our findings, we remain cautious about whether DACA can offer permanent transformative effects on wellbeing. First, DACA provides individual relief from deportation but does not apply to family members. Indeed, DACA recipients in our study were no less likely than non-recipients to report ongoing worry that a family member will be deported. This finding is consistent with research documenting pervasive fear of law enforcement and family separation among the children of undocumented immigrants (Dreby, 2015). Second, emerging qualitative

research indicates that some DACA recipients face increased responsibility within their families, especially when other family members remain undocumented, which can lead to conflicts and frustration with the program (Sousa-Rodriguez et al., 2015). Perhaps most importantly, because DACA is a temporary program and does not offer permanent legal status, it is possible that the emotional health benefits of the program could decrease over time if access to permanent status and citizenship remains elusive or if DACA is discontinued.

We note one additional finding that may seem perplexing at first glance. We showed that DACA status significantly reduces the likelihood of distress, negative emotions and deportation worry, yet we also observed a reduction (albeit much less drastic) in these concerns among respondents who remain undocumented. This could be an effect of applying for DACA vs. receiving DACA, yet the sample of those who had applied for DACA and were still awaiting a response was too small to test this hypothesis. Future research with larger sample sizes could help tease out this effect. However, another hypothesis is that the overall improvements to psychological wellbeing may be partially explained by the timing of the DACA study in relation to the political context. The survey went into the field in November 2014, which coincidentally aligned with the Obama administration's announcement of two major policy changes related to undocumented immigrants: 1) an expansion of the DACA program, and 2) the Deferred Action for Parents of Americans and Lawful Permanent Residents (DAPA), a program that would extend temporary lawful presence to eligible parents of U.S. Citizens and Lawful Permanent Residents. Though expanded DACA and DAPA did not go into effect, the lawsuit challenging these programs was not filed until after the survey's completion in February 2015. It is therefore possible that survey respondents were positively impacted by the initial announcement of these programs. Likewise, it is entirely possible that improvements to psychological wellbeing will not hold in the current political context in which anti-immigrant sentiment continues to grow and the DACA program may face elimination.

5. Conclusion

This study sought to understand the influence of a transition from unlawful to lawful status on the psychological wellbeing of Latino immigrant young adults. To do so, we build upon and contribute to several bodies of literature, which have developed in relative isolation of one another. Specifically, our aim was to underscore the critical importance of linking research in the sociology of health and illness (in particular studies of social stress and Latino health disparities) and the sociology of international migration (in particular studies of immigrant legal status). Our results suggest that literature both on immigrant integration and Latino immigrant health should do much more to account for immigrants' evolving and complex legal statuses and how these may influence mobility over time and as policies (and legal statuses) change or stay the same. Our research provides empirical support for frameworks laid out by Gee and Ford (2011) and Viruell-Fuentes (2007) that encourage critical consideration of macro-level factors, such as structural racism, in shaping the health of racial and ethnic minorities. Inasmuch as good health is linked to positive and complete social integration, our results are timely and instructive. Our research also adds nuance to a growing body of work on the experiences of undocumented youth that has largely grouped undocumented individuals as a way of comparing them to those with legal status (e.g. Greenman and Hall, 2013). We build on this groundbreaking work by showing that there are also important differences between undocumented young people; specifically,

that their psychological wellbeing is influenced by gender and socioeconomic status.

This study also has some important limitations; we therefore provide suggestions for future research that could expand upon and confirm our findings. First, we relied on a non-representative area survey, which limits the generalizations we can make to other parts of the country and other immigrant groups. Additional research beyond California would provide an important comparison (e.g. Cebulko, 2014; Jefferies, 2014), given the size of California's immigrant population and its political context of reception. Indeed, California has one of the most inclusive policy climates for undocumented immigrants in the country (Rodríguez et al., 2015): The Golden State has passed laws expanding access to healthcare and higher education for undocumented immigrants which may provide a more positive context for DACA's implementation than other states—if the program remains in place. In addition, future research that can expand beyond Latino racial groups (e.g. Cebulko, 2014; Patler, 2014) and take place in languages other than English would also be a valuable contribution. In the absence of representative samples, scholars should endeavor to investigate, as we have done, the experiences of immigrant youth who do not belong to highly selective categories such as activists or university students.

Second, our measures rely on retrospective responses, which increases the potential for recall bias. For instance, DACA recipients might have been more likely than those who did not obtain DACA to recall past psychological states as poor. However, major concerns regarding the impact of recall bias on our results may be tempered when considering that all respondents in our sample recalled their prior psychological wellbeing more poorly than current wellbeing (as shown in Table 1 and Fig. 1). In other words, DACA recipients and non-recipients did not differentially report their past wellbeing. Nonetheless, future longitudinal studies of DACA recipients would be particularly relevant in assessing changes over time and establishing causal effects.

An additional limitation pertains to the wording of the DACA survey's questionnaire, which asked respondents to report their psychological experiences as impacted by their legal status. Respondents who attended workshops on the DACA application process and the benefits of DACA could be motivated to provide answers that support the idea that DACA is beneficial, which would overestimate its effects. Alternatively, some participants might not recognize that their wellbeing is harmed by lack of legal status, which would then underestimate the effect of DACA. An alternative study design that does not anchor the dependent variable with legal status but includes DACA status as an independent variable would help confirm the novel findings we present here. Using standard measures of psychological wellbeing, such as the Center for Epidemiologic Studies Depression (CES-D) scale for depressive symptoms, would also be fruitful in allowing for comparisons to other populations. Finally, while our research examines a unidirectional change (from undocumented to lawfully present), future research could explore the psychological health impacts of other types of changes; for example, transitioning from some kind of legally recognized status to undocumented status.

In the absence of any large-scale legalization program since the mid-1980s, an entire generation of children has grown up without legal status. We know that a lack of legal status impacts multiple aspects of immigrants' lives, including health and wellbeing, and we also know that communities do not benefit when individuals are unhealthy. We have shown that changes to immigrant legal status can directly improve psychological wellbeing. Inasmuch as individual wellbeing is linked to overall community health, then our findings are of critical importance as the country continues to debate policy solutions for undocumented communities.

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References

- Abraído-Lanza, Ana F., Armbrister, Adria N., Flórez, Karen R., Aguirre, Alejandra N., 2006. Toward a theory-driven model of acculturation in public health research. *Am. J. Public Health* 96 (8), 1342–1346.
- Abrego, Leisy, 2008. Legitimacy, social identity, and the mobilization of law: the effects of assembly bill 540 on undocumented students in California. *Law Soc. Inq.* 33 (3), 709–734.
- Abrego, Leisy J., 2006. I Can't go to college because I Don't have papers: incorporation patterns of Latino undocumented youth. *Lat. Stud.* 4 (3), 212–231.
- Abrego, Leisy J., 2011. Legal consciousness of undocumented latinos: fear and stigma as barriers to claims-making for first- and 1.5-generation immigrants. *Law Soc. Rev.* 45 (2), 337–369.
- Adler, Nancy E., Boyce, Thomas, Chesney, Margaret A., Cohen, Sheldon, Folkman, Susan, Kahn, Robert L., Leonard Syme, S., 1994. Socioeconomic status and health: the challenge of the gradient. *Am. Psychol.* 49 (1), 15–24.
- Alegria, Margarita, Canino, Glorisa, Shrout, Patrick E., Woo, Meghan, Duan, Naihua, Vila, Doryliz, Torres, Maria, Chen, Chih-nan, Meng, Xiao-Li, 2008. Prevalence of mental illness in immigrant and non-immigrant US Latino groups. *Am. J. Psychiatry* 165 (3), 359–369.
- Aneshensel, Carol S., 1992. Social stress: theory and research. *Annu. Rev. Sociol.* 18, 15–38.
- Batalova, Jeanne, Zong, Jie, 2015. Frequently Requested Statistics on Immigrants and Immigration in the United States. D.C.: Migration Policy Institute, Washington.
- Bean, Frank D., Leach, Mark A., Brown, Susan K., Bachmeier, James D., Hipp, John R., 2011. The educational legacy of unauthorized migration: comparisons across US-immigrant groups in how parents' status affects their offspring. *Int. Migr. Rev.* 45 (2), 348–385.
- Bonilla-Silva, Eduardo, 1997. Rethinking racism: toward a structural interpretation. *Am. Sociol. Rev.* 62 (3), 465–480.
- Brabeck, Kalina, Xu, Qingwen, 2010. The impact of detention and deportation on Latino immigrant children and families: a quantitative exploration. *Hispanic J. Behav. Sci.* 32 (3), 341–361.
- Brewin, Chris R., Andrews, Bernice, Gotlib, Ian H., 1992. Psychopathology and early experience: a reappraisal of retrospective reports. *Psychol. Bull.* 113 (1), 82–98.
- Brown, Tony N., Donato, Katharine M., Therese Laske, Mary, Duncan, Ebony M., 2013. Race, nativity, ethnicity, and cultural influences in the sociology of mental health. In: Aneshensel, Carol S., Phelan, Jo C., Bierman, Alex (Eds.), *Handbook of the Sociology of Mental Health*. Springer Netherlands, Rotterdam.
- Burnam, M. Audrey, Hough, Richard L., Karno, Marvin, Escobar, Javier I., Telles, Cynthia A., 1987. Acculturation and lifetime prevalence of psychiatric disorders among Mexican Americans in Los Angeles. *J. Health Soc. Behav.* 28 (1), 89–102.
- Cebulko, Kara, 2014. Documented, undocumented, and liminally legal: legal status during the transition to adulthood for 1.5-generation Brazilian immigrants. *Sociol. Q.* 55 (1), 143–167.
- Center for American Progress, 2014. The Facts on Immigration Today (Washington, D.C.).
- Chavez, Leo R., 2008. *The Latino Threat: Constructing Immigrants, Citizens, and the Nation*. Stanford University Press, Stanford.
- Coutin, Susan Bibler, 2011. The rights of noncitizens in the United States. *Annu. Rev. Law Soc. Sci.* 7, 289–308.
- Creighton, Mathew J., Goldman, Noreen, Pebley, Anne R., Chung, Chang Y., 2012. Durational and generational differences in Mexican immigrant obesity: is acculturation the explanation? *Soc. Sci. Med.* 75 (2), 300–310.
- Dozier, Sandra Bygrave, 1993. Emotional concerns of undocumented and out-of-status foreign students. *Community Rev.* 13 (2), 33–38.
- Dreby, Joanna, 2015. *Everyday Illegal: when Policies Undermine Immigrant Families*. University of California Press, Oakland.
- Finch, Brian Karl, Kolody, Bohdan, Vega, William A., 2000. Perceived discrimination and depression among Mexican-origin adults in California. *J. Health Soc. Behav.* 41 (3), 295–313.
- Fortuny, Karina, Capps, Randolph, Passel, Jeffrey S., 2007. *The Characteristics of Unauthorized Immigrants in California, Los Angeles County, and the United States*. The Urban Institute, Washington, D.C.
- Franzini, Luisa, Ribble, John, Keddie, Arlene, 2002. Understanding the hispanic paradox. *Ethn. Dis.* 1 (3), 496–518.
- Gee, Gilbert C., Ford, Chandra L., 2011. Structural racism and health inequities. *Du Bois Rev. Soc. Sci. Res. Race* 8 (1), 115–132.
- Gee, Gilbert C., Morey, Brittany N., Walsemann, Katrina M., Ro, Annie, Takeuchi, David T., 2016. Citizenship as privilege and social identity: implications for psychological distress. *Am. Behav. Sci.* 60 (5), 680–704.
- Gonzales, Roberto G., 2011. Learning to be illegal: undocumented youth and shifting legal contexts in the transition to adulthood. *Am. Sociol. Rev.* 76 (4), 602–619.
- Gonzales, Roberto G., Suárez-Orozco, Carola, Dedios-Sanguinetti, Maria Cecilia, 2013. No place to belong: contextualizing concepts of mental health among undocumented immigrant youth in the United States. *Am. Behav. Sci.* 57 (9), 1–26.
- Gonzales, Roberto G., Terriquez, Veronica, Rusczyk, Stephen P., 2014. Becoming DACAmented: assessing the short-term benefits of deferred action for childhood arrivals (DACA). *Am. Behav. Sci.* 58 (14), 1852–1872.
- Graham, John W., Olchowski, Allison E., Gilreath, Tamika D., 2007. How many imputations are really needed? Some practical clarifications of multiple imputation theory. *Prev. Sci.* 8 (3), 206–213.
- Grant, Bridget F., Stinson, Frederick S., Hasin, Deborah S., Dawson, Deborah A., Patricia Chou, S., Anderson, Karyn, 2004. Immigrant and lifetime prevalence of DSM-IV psychiatric disorders among Mexican Americans and non-Hispanic whites in the United States: results from the national epidemiological survey on alcohol and related conditions. *Arch. Gen. Psychiatry* 61 (12), 1226–1233.
- Greenman, Emily, Hall, Matthew, 2013. Legal status and educational transitions for Mexican and central American immigrant youth. *Soc. Forces* 91 (4), 1475–1498.
- Hacker, Karen, Chu, Jocelyn, Leung, Carolyn, Marra, Robert, Pirie, Alex, Brahim, Mohamed, English, Margaret, Beckmann, Joshua, Acevedo-Garcia, Dolores, Marlin, Robert P., 2011. The impact of immigration and customs enforcement on immigrant health: perceptions of immigrants in Everett, Massachusetts, USA. *Soc. Sci. Med.* 74 (4), 586–594.
- Hovey, Joseph D., King, Cheryl A., 1996. Acculturative stress, depression, and suicidal ideation among immigrant and second-generation Latino adolescents. *J. Am. Acad. Child Adolesc. Psychiatry* 35 (9), 1183–1192.
- Jefferies, Julian, 2014. The production of "illegal" subjects in Massachusetts and high school enrollment for undocumented youth. *Lat. Stud.* 12 (1), 65–87. <http://dx.doi.org/10.1057/lst.2014.5>.
- Landale, Nancy S., Halliday Hardie, Jessica, Oropesa, R.S., Hillemeier, Marianne M., 2015. Behavioral functioning among Mexican-origin children: does parental legal status matter? *J. Health Soc. Behav.* 56 (1), 2–18.
- Lara, Marielena, Gamboa, Cristina, Iya Kahramanian, M., Morales, Leo S., Hayes Bautista, David E., 2005. Acculturation and Latino health in the United States: a review of the literature and its sociopolitical context. *Annu. Rev. Public Health* 26, 367–397.
- Link, Bruce G., Phelan, Jo, 1995. Social conditions as fundamental causes of disease. *J. Health Soc. Behav.* 35, 80–94.
- McDonough, Peggy, Walters, Vivienne, 2001. Gender and health: reassessing patterns and explanations. *Soc. Sci. Med.* 52 (4), 547–559.
- Menjívar, Cecilia, 2006. Liminal legality: Salvadoran and Guatemalan immigrants' lives in the United States. *Am. J. Sociol.* 111 (4), 999–1037.
- Menjívar, Cecilia, Lakhani, Sarah M., 2016. Transformative effects of immigration law: migrants' personal and social metamorphoses through regularization. *Am. J. Sociol.* 121 (6), 1818–1855.
- Mirowsky, John, Ross, Catherine, 1989. *Social Causes of Psychological Distress*. Aldine Transactions, Piscataway.
- Ngai, Mae M., 2004. *Impossible Subjects: Illegal Aliens and the Making of Modern America*. Princeton University Press, Princeton, NJ.
- Patler, Caitlin, 2014. Racialized "illegality": the convergence of race and legal status among black, Latino, and Asian American undocumented young adults. In: Carty, Victoria, Luévano, Rafael, Woldekimale, Tekle (Eds.), *Scholars and Southern Californian Immigrants in Dialogue: New Conversations in Public Sociology*. Lexington Books, pp. 93–113.
- Pearlin, Leonard I., 1989. The sociological study of stress. *J. Health Soc. Behav.* 30 (3), 241–256.
- Pearlin, Leonard I., Menaghan, Elizabeth G., Lieberman, Morton A., Mullan, Joseph T., 1981. The stress process. *J. Health Soc. Behav.* 22 (4), 337–356.
- Pew Hispanic Center, 2013. *A Nation of Immigrants: A Portrait of the 40 Million, Including 11 Million Unauthorized*. Washington, D.C.
- Portes, Alejandro, Rumbaut, Rubén G., 2001. *Legacies: The Story of the Immigrant Second Generation*. University of California Press, Berkeley and Los Angeles.
- Portes, Alejandro, Zhou, Min, 1993. The new second generation: segmented assimilation and its variants. *Ann. Am. Acad. Political Soc. Sci.* 530 (November), 74–96.
- Potochnick, Stephanie R., Perreira, Krista M., 2010. Depression and anxiety among first-generation immigrant Latino youth: key correlates and implications for future research. *J. Nerv. Ment. Dis.* 198 (7), 470.
- Rodríguez, Michael A., Young, Maria-Elena, Wallace, Steven P., 2015. *Creating Conditions to Support Healthy People: State Policies that Affect the Health of Undocumented Immigrants and Their Families*. University of California Global

- Health Institute, Los Angeles, CA.
- Rogler, Lloyd H., Cortes, Dharma E., Malgady, Robert G., 1991. Acculturation and mental health status among hispanics: convergence and new directions for research. *Am. Psychol.* 46 (6), 585–597.
- Rosenfield, Sarah, Mouzon, Dawne, 2012. Gender and mental health. In: Aneshensel, Carol S., Phelan, Jo C., Bierman, Alex (Eds.), *Handbook of the Sociology of Mental Health*, pp. 277–296.
- Rubin, Donald B., 1987. *Multiple Imputation for Nonresponse in Surveys*. John Wiley, New York.
- Saldana, Delia H., 1995. Acculturative Stress. In: Saldana, Delia H. (Ed.), *Hispanic Health Psychology: Critical Issues in Theory*. Sage, Beverly Hills, pp. 43–56.
- Shavers, Vickie L., 2007. Measurement of socioeconomic status in health disparities research. *J. Natl. Med. Assoc.* 99 (9), 1013–1023.
- Sousa-Rodriguez, Isabel, Aranda, Elizabeth, Vaquera, Elizabeth, October 2, 2015. The paradoxes of DACA: challenges for young undocumented immigrant identities and belonging. In: *Conference on Undocumented Immigration and the Experience of Illegality*. Russell Sage Foundation, New York, NY.
- Teranishi, Robert T., Suárez-Orozco, Carola, Suárez-Orozco, Marcelo, 2015. In the Shadows of the Ivory Tower: Undocumented Undergraduates and the Liminal State of Immigration Reform. *The Institute for Immigration, Globalization, and Education*: University of California, Los Angeles.
- Turner, R. Jay, Wheaton, Blair, Lloyd, Donald A., 1995. The epidemiology of social stress. *Am. Sociol. Rev.* 60 (1), 104–125.
- Umaña-Taylor, Adriana J., Updegraff, Kimberly A., 2007. Latino adolescents' mental health: exploring the interrelations among discrimination, ethnic identity, cultural orientation, self-esteem, and depressive symptoms. *J. Adolesc.* 30 (4), 549–567.
- United States Citizenship and Immigration Services, 2015. Number of I-821D, Consideration of Deferred Action for Childhood Arrivals by Fiscal Year, Quarter, Intake, Biometrics, and Case Status, 2012–2015 (March 31). Washington, D.C.
- Vega, William A., Kolody, Bohdan, Valle, Juan Ramon, 1987. Migration and mental health: an empirical test of depression risk factors among immigrant mexican women. *Int. Migr. Rev.* 21 (3), 512–530.
- Vega, William A., Rumbaut, Ruben G., 1991. Ethnic minorities and mental health. *Annu. Rev. Sociol.* 17, 351–383.
- Viruell-Fuentes, Edna A., 2007. Beyond acculturation: immigration, discrimination, and health research among mexicans in the United States. *Soc. Sci. Med.* 65 (7), 1524–1535.
- Viruell-Fuentes, Edna A., Miranda, Patricia Y., Abdulrahim, Sawsan, 2012. More than culture: structural racism, intersectionality theory, and immigrant health. *Soc. Sci. Med.* 75 (12), 2099–2106.
- Watson, David, Clark, Lee A., Tellegen, Auke, 1988. Development and validation of brief measures of positive and negative affect: the PANAS scales. *J. Personality Soc. Psychol.* 54 (6), 1063–1070.
- White, Ian R., Royston, Patrick, Wood, Angela M., 2011. Multiple imputation using chained equations: issues and guidance for practice. *Statistics Med.* 30, 377–399. <http://dx.doi.org/10.1002/sim.4067>.
- Yoshikawa, Hirokazu, 2011. *Immigrants Raising Citizens: Undocumented Parents and Their Young Children*. Russell Sage Foundation, New York.