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Anti-Immigration Policy and Mental Health: Risk of Distress and Trauma Among Deferred Action for Childhood Arrivals **Recipients in the United States**

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Abstract

Objective: This study examined the association between immigration legal status and distress from the announcement of the termination of the Deferred Action for Childhood Arrivals (DACA) program among individuals affected by this potentially traumatic event (PTE), along with identifying relevant risk factors.

Method: Participants (N=233) affected by the termination announcement provided crosssectional self-reports on distress from the announcement that was measured using the Impact of Events Scale-Revised.

Results: Of the participants, 40.7% met the clinical cutoff for distress from the PTE indicative of posttraumatic stress disorder. DACA recipients had significantly higher levels of distress from the PTE compared with non-DACA undocumented immigrants and documented counterparts, $\chi^2(2, N)$ = 233) = 23.25, p < .001. After controlling for covariates, being a DACA recipient (OR = 4.11, 95% confidence interval [1.99, 8.50], p < .001), being male (QR = 2.06, [1.05, 4.03], p = .035), and having lower financial security (OR = .54, [.38, .75], p < .001) were significantly associated with distress.

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Conclusion: The future of DACA recipients is uncertain, which can be trauma inducing. The field of psychology needs to make space for this kind of experience as potentially traumatic. Advocacy efforts to shift immigration policies can be strengthened to alter the negative effects of the potential termination of DACA on those affected by it.

Keywords

trauma; distress; immigrant; Latino; health

On September 5, 2017, the Trump administration announced the rescission of the Deferred Action for Childhood Arrivals (DACA) program, which has allowed undocumented immigrants who were brought to the United States as children (under the age of 16) and who met a set of strict vetting criteria to become eligible for a temporary work and education permit, renewable every 2 years (Gonzales et al., 2014). This announcement was another escalation following months of anti-immigrant remarks and actions that increased trauma-related distress and fear among undocumented communities (Uwemedimo et al., 2017). The recent Supreme Court ruling in Department of Homeland Security et al. v. Regents of the University of California et al. (2020) blocked the Trump administration's efforts to dismantle the program, yet the relief for DACA recipients was tempered by the administration's announcement of efforts to appeal the decision (Shalal & Chiacu, 2020). Compounding that stress, the U.S. Citizenship and Immigration Services (2020) released a statement indicating their intention to support the termination of the DACA program. While the climate during President Trump's quadrennium was particularly hostile to DACA recipients and immigrants in general, a recent Latinx Immigrant Health Alliance (2021) report showed that the levels of distress across two samples of primarily DACA recipients were equally high before the elections and during the first few months of President Biden's term.

The DACA policy was born of the failure of the Development, Relief, and Education for Alien Minors Act to pass both houses in Congress and provide a path to citizenship. In the absence of such a path, then-President Barack Obama provided temporary protections through DACA that would allow recipients to work lawfully and be protected from deportation. The U.S. Citizenship and Immigration Services (2019) reported that between 2012 and 2019, there were 825,258 first-time applications approved for DACA. The Migration Policy Institute (2020) estimated that more than 1.3 million people qualified for DACA.

As previously mentioned, DACA recipients are, by definition, people who entered in the United States prior to their 16th birthday and continuously resided in the United States since their arrival. The early migration to the United States combined with ongoing residence leads to significant cultural and identity shifts that are shaped by the local context. Assimilation is rapid during childhood, especially up until age 15 (Cheung et al., 2011). Data show that first-generation immigrants that arrive as children speak English well, and their preference for English language is evident in the dramatic linguistic and cultural assimilation of the third generation (Migration Policy Institute, 2005; Pew Research Center, 2013). DACA recipients are young and have limited contact with their culture of

origin. Their lived experiences point to primary familiarity to and ease with U.S. customs, culture, and geography, yet they are not recognized as part of the culture by the United States. DACA recipients live under constant threat of losing their protected immigration legal status to be deported to another country that they hardly know while also fearing forced separation from their family and the loss of their social networks. Moreno and colleagues (2021) identified frequent themes of sustained stress, fear, and anxiety among Latinx DACA recipients describing their reactions to the DACA policy debates of 2017–2019. The aforementioned circumstances can be traumatic because they are often endured for a long time and with limited resources (Latinx Immigrant Health Alliance, 2021).

The rescission of DACA affects hundreds of thousands of youths but also their family and social systems due to the threat of family separation as a result of deportation and the disruption of social support networks (Garcini, Peña, Galvan, Fagundes, & Klonoff, 2017). In this article, we mark the announcement of the termination of DACA as a potentially traumatic event (PTE) leading to distress. However, this is not the only stressor that was impacting the undocumented community. Prior to the relief that accompanied the June 2020 Supreme Court decision, another event exacerbated and intensified fear among the DACA recipients, their families, and their communities. On April 21, 2020, reports from an internal investigation revealed that Immigration and Customs Enforcement had access to DACA recipients' personal and family information, which placed these young immigrants and their families at an increased risk of sudden deportation (Lind, 2020). This shocking revelation was another example of anti-immigration action that bestowed unprecedented levels of fear to an already vulnerable community. These threat of deportation and the disruption of work, education, and relationships can be characterized as PTEs.

The definition of trauma has been elusive (Pai et al., 2017). Krupnik (2019) noted that "there's an inherent difficulty in setting conceptual brackets on trauma, as it attempts to integrate criteria for subjective experience with ones for an objective event" (p. 257). In this article, we follow the American Psychological Association conceptualization: "Trauma involves events that pose significant threat (physical, emotional, or psychological) to the safety of the victim or loved ones/friends and are overwhelming and shocking" (American Psychological Association, 2016, p. 12). Common PTEs experienced by undocumented immigrants and their families include threat or actual separation from their family or loved ones; the experience of separation from family and loved ones who have been deported; limited or no access to health services, which could place their lives at risk; and exposure to marginalization, discrimination, stigmatization, exploitation, and victimization (Muñoz et al., 2018). In addition, undocumented immigrants often faced the aforementioned PTEs in the face of compounded stressors including acculturative stress, identity confusion, loss of rights, and limited educational and work opportunities (Cadenas et al., 2020; Garcini et al., 2016). Under the DACA program, recipients have a time-limited conditional permit to remain in the United States and pursue work and an education, with the caveat of facing constant institutional and societal exclusion and rejection due to their undocumented status (Abrego, 2006; Ellis & Chen, 2013).

Heightened uncertainty is tied to PTEs (Oglesby et al., 2017). While all undocumented persons experience uncertainty, DACA recipients have been experiencing heightened

uncertainty from a documentation status that varies; on one hand, they feel protected, but on the other, they remain vulnerable because they have little, if any, control as to when their protected status may end. Research shows that the aforementioned "double standard" of living contributes to distress in this younger immigrant subgroup (Garcini, Peña, Galvan, Fagundes, Malcarne, & Klonoff, 2017; Pérez et al., 2010). In a previous population-based study, results showed that younger undocumented immigrants (ages 18-25 years), most of whom were DACA recipients, were more likely to meet criteria for a mental health disorder when compared to older undocumented immigrants (ages 26 to 46 years; Garcini, Peña, Galvan, Fagundes, & Klonoff, 2017). Moreover, accumulation of the aforementioned stressors among DACA recipients increases their likelihood to develop symptoms of posttraumatic stress disorder (PTSD), making PTEs part of the undocumented experience (Rasmussen et al., 2007). Unfortunately, research to inform the well-being of DACA recipients and mixed-status families, in which at least one member is undocumented, is limited, and there is little understanding of factors that can help mitigate the effects of PTEs on these at-risk immigrants in the face of compounded adversity (Garcini et al., 2016; Yoshikawa et al., 2017).

Conceptual Framework

Informed by a biobehavioral model of adversity (Miller et al., 2011), the central tenet guiding this study was that DACA recipients and their families, who may hold various immigration statuses, face many PTEs and complex stressors that can negatively impact their physical and mental health. These PTEs and compounded stressors are imposed by social, political, economic, and cultural structures that require them to utilize greater effort to cope with stress, which in turn increases vulnerability for diminished health. Indeed, exposure to PTEs over time can have a negative impact on the functioning of stress reactivity systems and compromise physical and mental health (Chen et al., 2018; Cohen et al., 2007). Among DACA recipients, their daily environment is a constant source of unpredictability that threatens their overall physical, emotional, and psychological safety. For the purposes of this study, we propose broadening the understanding of early childhood adversity and stress to include the reality of chronic social and economic uncertainty experienced by many DACA recipients and their families as posing vulnerability to diminished health, including the development of trauma- and stress-related disorders, such as PTSD.

Purpose of the Study

This study examined the association between immigration legal status and distress from the announcement of the termination of the DACA program among individuals affected by the possible rescission. We hypothesized that undocumented immigrants, including those that are DACA recipients, would report higher levels of distress from the PTE when compared to their documented counterparts. In addition, we also identified relevant risk factors, including sociodemographic, economic, and immigration characteristics associated with the PTE in this population. This information is needed to propel scientific knowledge about how immigration legal status is associated with distress from anti-immigrant policies.

Method

Participants

Initially, 331 people attempted to complete the online survey. Of these, eight people did not meet the inclusion criteria and 79 exited the survey prior to completion. Among the 264 participants that completed the survey, 11 people were missing data on the outcome of interest. Thus, there were 233 participants included in this study. Inclusion criteria for participation was being 18 years of age or older, able to read English or Spanish, and affected by the announcement of the rescission of the DACA program. Participants were either DACA recipients themselves or family members or friends of a DACA recipient. Participants who did not meet the inclusion criteria or did not provide full data were excluded. More than half of the participants were of Hispanic/Latinx origin (59.9%). Other participants were Asian (15.9%), Black (10.3%), and White European (9.9%). The remaining (3.9%) reported other ethnic/racial backgrounds. The majority of respondents lived in the southern part of the United States (80.0%). Participants were 18 to 50 years of age (M = 22.99, SD = 5.06). Most were women (74.0%) and were currently in college or had completed college (83.3%). Approximately 21.0% indicated being financially insecure.

A significant portion of the sample (44.6%) were living in mixed-status families, and on average, participants lived in the United States for 19.99 years (SD = 6.13). A little more than half of the sample was undocumented (52.4%), with 31.8% of the undocumented being DACA recipients and 20.6% not having DACA. The rest of the sample was documented (47.6%). Participants with different immigration legal statuses differed significantly in binary gender, $\chi^2(2, N = 231) = 8.87$, p = .012. Specifically, the gender imbalance was highest among non-DACA undocumented (87.5% were women) and documented (75.2% were women) respondents, compared to undocumented DACA recipients (63.5% were women). Likewise, there were differences in years living in the United States by immigration legal status. Specifically, DACA recipients had lived less time in the United States when compared to their non-DACA undocumented and documented participants, R(2, 85) = 8.48, p < .001. There were also significant differences in immigration legal status by mixed family status, with a greater number of DACA recipients living in mixed-status families when compared to non-DACA undocumented and documented participants, $\chi^2(2, N = 233) = 38.68$, p < .001 (see Table 1).

Procedure

A cross-sectional online survey was conducted from October 2017 to February 2018, soon after the initial announcement of the revocation of the DACA program. Participants were recruited in collaboration with community and academic partners located primarily in Texas. Our team has a long history of collaborative efforts working with community partners, including faith-based and grassroots organizations at the local, state, and national level. Collaboration with our community partners takes place across all the different stages of the research process, which is preceded by extensive formative research. Specific recruitment strategies used in this study included active (i.e., electronic mailing lists, social networks) as well as passive (i.e., newsletters) approaches explaining that this study aimed to assess the health and social needs of people affected by the announcement of the possible

termination of the DACA program, including DACA recipients and their undocumented or documented family and/or friends. Participants completed a brief screener to determine eligibility based on age and immigration legal status and provided informed consent prior to the start of the survey. This study was approved by the Rice University Institutional Review Board. The online survey took approximately 45 min to complete, and participants had the option of taking the survey in English or Spanish. Data were collected using Qualtrics to protect data security while minimizing data entry errors. Participants did not receive monetary compensation for their participation; however, they were provided with practical and convenient educational resources relevant to the mental health of the target population. At the end of the survey, participants were asked if they were experiencing emotional discomfort from participation. Those that reported "yes" received a list of resources to accessible and low-cost mental health services at convenient nearby locations.

Measures

All measures had been previously translated into Spanish using translation-back translation methodology (Sidani et al., 2010). The measures had also been evaluated for appropriateness, contextual relevance, and clinical significance in previous studies (Sidani et al., 2010).

Sociodemographic and Immigration Characteristics—Questions from the 2009 San Diego Prevention Research Center and the San Diego Labor Trafficking Survey Questionnaire were used to assess sociodemographic, economic, and immigration characteristics (Zang, 2012). Categorical questions included binary gender (0 = male, 1 = female) and living in a mixed-status family where at least one person is undocumented (0 = no, 1 = yes). Financial strain was used as a proxy for socioeconomic status and was assessed using the question "How sure do you feel that in the next month you will be able to pay for your house, rent, food, and needed services (e.g., water, electricity, gas)?" A continuous score was calculated using responses from 0 = very insecure to 3 = very secure, with higher scores denoting less financial strain. Age, education, and years living in the United States were assessed using continuous variables.

Immigration Legal Status—We asked participants (a) "Do you have a legal permit to live, work, or study in United States?" and (b) "Are you a DACA recipient?" Participants responded with "yes" or "no." We then created a categorical variable from the combination of these responses: non-DACA undocumented, undocumented DACA, and documented. Participants answering "no" to both questions were coded as non-DACA undocumented. Participants answering "yes" to both questions were coded as undocumented DACA recipients. Participants who answered "yes" to the first question and "no" to the second question were coded as documented.

Distress From the Announcement of the Potential Termination of the DACA Program—Distress from the PTE was assessed using the Impact of Event Scale—Revised (IES-R; Weiss & Marmar, 1997). At the time of data collection, the IES-R was a widely used 22-item measure of distress associated to PTEs. The PTE in this study was the announcement of the potential termination of DACA. Our instructions for the IES-R

specified, "Please indicate with respect to announcement of the possible termination of DACA, how much are you distressed or bothered by these difficulties?" Responses were provided on a scale ranging from 0 (*not at all*) to 4 (*extremely*), with higher scores denoting higher distress from the PTE. The IES-R renders a total score, as well as scores along three main clusters of trauma-related symptoms: (a) intrusion (i.e., intrusive thoughts, nightmares, dissociative reexperiencing), (b) avoidance (i.e., avoidance of feelings and/or situations, numbing), and (c) hyperarousal (i.e., anger, irritability, hypervigilance, difficulty concentrating).

We used continuous scale scores to examine the prevalent symptoms of distress from the PTE and their variations by immigration legal status. For clinical significance of distress related to the PTE, or the degree to which distress from the PTE is elevated enough to suggest impairment or to warrant treatment, we dichotomized the total IES-R into those below 33 (0 = nonclinical) or at or above 33 (1 = clinical). The cutoff score of 33 indicates a probable diagnosis of stress-related disorders (i.e., PTSD) and their associated health consequences. Previous research shows that IES cutoff scores 37 are high enough to suppress the functioning of the immune system even 10 years after the traumatic event (Kawamura et al., 2001). We retained both scores in the analyses to provide data on the intensity of participants' distress. The IES-R has good psychometric properties (Sundin & Horowitz, 2002). In our study, its reliability was high (α = .97). Also, the IES-R has been demonstrated to have good measurement invariance for Latinxs and non-Latinxs (Tiemensma et al., 2018).

Data Analysis

Data was analyzed using SPSS Version 26 to generate descriptive and inferential results. We explored differences in distress from the PTE across immigration legal status categories of undocumented DACA, non-DACA undocumented, and documented. First, we used chisquare tests to examine possible differences in the prevalence of clinical levels of distress from the PTE across immigration legal status groups. Second, we ran a one-way multivariate analysis of variance (MANOVA) to assess differences across domains of symptoms (i.e., intrusion, avoidance, and hyperarousal) by legal status categories. Level of significance was determined at p .05. Finally, we conducted a multivariate logistic regression analysis to identify factors associated with severity of distress from the PTE across immigration legal status categories. The categorical outcome was the dichotomized IES total score, clinical or nonclinical. In preliminary bivariate analyses, three covariates (i.e., binary gender, financial strain, living in a mixed-status family) were significantly associated with distress from the PTE (total IES score). These variables may suggest an accumulation of risk experiences based on binary gender, financial concerns, and immigration stressors and thus were included as covariates. Race/ethnicity and age were not significantly associated with distress from the PTE; thus, these variables were not included in the regression analyses.

Post hoc analyses using dummy variables were conducted to assess for the potential moderating effect of binary gender and financial strain on the association between immigration legal status and clinical levels of distress from the PTE given their significant effects in the multivariate logistic regression analyses. A post hoc power analysis suggested

that the sample provided sufficient power to conduct the MANOVA analysis. Similarly, our power analysis for the multivariate logistic regression (two-tailed, error set to .05 and power to .95) revealed that we could detect an odds ratio as small as 2.22 with a sample of 233 with the estimate of 9%, based on the upper-end population estimates for PTSD. With a 40% prevalence, we would expect to be able to detect odds ratios smaller than 2.

Results

Distress From the Announcement of the Potential Termination of the DACA Program and Immigration Legal Status

Overall, approximately 40.7% of the sample met the clinical cutoff for distress from the PTE that is likely indicative of a PTSD diagnosis and related health consequences. Chi-square analyses revealed significant differences in distress from the PTE among participants by immigration legal status, $\chi^2(2, N=233)=23.25$, p<.001. The effect size for this finding was moderate ($\varphi=.31$; Cohen, 1988). Specifically, a greater number of DACA recipients met criteria for clinical level of distress from the PTE (63.5%), when compared to non-DACA undocumented (29.2%) and documented participants (30.6%). There were no significant differences in distress from the PTE between non-DACA undocumented participants and those reporting being documented (p=.854). Of concern, about a third of the sample reported extremely high levels of distress from the PTE (35.6% at or above IES cutoff of 37), with variations found across immigration legal status subgroups, $\chi^2(2, N=233)=24.02$, p<.001. The effect size for this finding was moderate ($\varphi=.30$; Cohen, 1988). Specifically, a greater number of DACA recipients (58.1%) reported IES scores 37 when compared to non-DACA undocumented (27.1%) and documented participants (24.3%; see Table 2).

There was a statistically significant difference in symptoms of distress from the PTE across immigration legal status categories based on the three subscales of the IES (i.e., intrusion, avoidance, hyperarousal), F(6, 456) = 9.67, p < .001; Wilk's $\Lambda = .787$, $\eta_p^2 = .11$. DACA recipients reported a significantly greater number of intrusion symptoms (M = 2.01, SD = .12) when compared to non-DACA undocumented (M = 1.07, SD = .14) and documented participants (M = 1.13, SD = .09, p < .001). No significant differences in intrusion symptoms were reported between non-DACA undocumented and documented participants (p = .942). DACA recipients reported a significantly greater number of avoidance symptoms (M = 1.94, SD = .11) when compared to non-DACA undocumented (M = 1.09, SD = .14) and documented participants (M = 1.21, SD = .09, p < .001). Finally, DACA recipients reported a significantly greater number of hyperarousal symptoms (M = 1.56, SD = .12) when compared to non-DACA undocumented (M = .92, SD = .15) and documented participants (M = .97, SD = .10, p = .002). No significant differences in avoidance (p = .772) or hyperarousal (p = .959) symptoms were reported between non-DACA undocumented and documented participants (see Table 2).

Factors Associated With Clinically Significant Distress From the PTE

After controlling for binary gender, financial strain, and mixed-status family, the full regression model to assess for the association of immigration legal status and severity of

distress from the PTE was statistically significant, $\chi^2(5, N=233)=46.77$, p<.001. The regression model explained between 18.3% (Cox and Snell R^2) and 24.8% (Nagelkerke R^2) of the variance in clinically significant distress from the PTE and correctly classified 59.7% of cases. The strongest predictor of clinically significant distress from the PTE was being a DACA recipient (OR = 4.11, 95% confidence interval [1.99, 8.50], p<.001), followed by being male (OR = 2.06, [1.05, 4.03], p=.035) and having lower financial security (OR = .54, [.38, .75], p<.001). DACA recipients had 4.11 times greater odds than documented participants of meeting criteria for clinical levels of distress from the PTE after controlling for binary gender, financial strain, and living in a mixed-status family (see Table 3).

Post hoc analyses to assess for the potential moderating effect of binary gender showed that in the logistic regression model, the interaction of binary gender and immigration legal status to predict clinical levels of distress from the PTE was not significant (p= .636). Similarly, the interaction of financial strain and immigration legal status was not significant in predicting clinical levels of distress from the PTE (b= .173, SE= .211, p= .412). In short, we did not detect a statistically significant association between immigration legal status and clinical level of distress from the PTE by binary gender nor by financial strain.

Discussion

This study assessed the association between immigration legal status and distress among individuals affected by news of the U.S. Department of Homeland Security's "orderly phase out," or rescission, of DACA (Duke, 2017, p. 1). We found high clinical levels of distress from the PTE across the sample and a particularly high prevalence for DACA recipients. Estimates from a nationally representative study demonstrate that the prevalence of PTSD symptoms in the U.S. population ranges from 6.1% to 9.2% (Sareen, 2020). Comparable rates of PTSD have also been demonstrated in the broader Latinx population (Alegría et al., 2013). However, over 40% of participants in this study showed distress from the PTE consistent with a probable PTSD diagnosis. Our findings are congruent with previous studies highlighting highest risk for psychological distress due to trauma and discrimination related to anti-immigrant sentiment, including the current political climate in the United States, its anti-immigration policies, and the continued efforts to rescind DACA, among undocumented young adults (Ayón, 2015; Cadenas et al., 2020; Suárez-Orozco et al., 2011; Zong et al., 2017). Immigrants may live in constant fear of deportation or that of a family member and are faced with an uncertain future due to the lack of a permanent solution for DACA recipients and comprehensive immigration reform (Batalova et al., 2014; Siemons et al., 2017).

The overall prevalence of distress from the PTE is concerning in itself, and the differences across subgroups also provide further insights. Nearly two thirds of DACA recipients reported clinical levels of distress from the PTE compared to around a third of non-DACA undocumented and documented immigrants. The most obvious difference between these groups is the stability that undocumented and documented immigrants have compared to DACA recipients. At the time of data collection, President Trump had been elected and had taken office. He had been vocal about his agenda to restrict immigration and had not only engaged in anti-immigrant rhetoric but also had taken steps to dismantle DACA, Temporary

Protected Status (TPS), Deferred Action for Parents of Americans (DAPA), and Expanded Deferred Action for Childhood Arrivals Program (DACA+). It may be that our unusually elevated levels of distress were a result of a number of anti-immigrant policies like the Buy American, Hire American Executive Order (2017) and the Executive Order on Refugee Admissions and Immigration Bans (2017).

The levels of distress among DACA recipients may have been highest for the specificity of the assaults directed at the DACA program combined with the unique characteristics of DACA recipients and the role that they have in mixed-status families. DACA recipients provide an important social and economic nexus for families. They have high rates of participation in the workforce and make important financial contributions to their families (Perez, 2015). DACA recipients also provide instrumental support such as access to bank accounts and credit cards, providing a lifeline to important resources tied to subsistence (Perez, 2015). While prior research showed positive health and mental health benefits when DACA recipients obtained temporary protections (Perez, 2015; Siemons et al., 2017; Venkataramani et al., 2017), the threats to the stability and continuation of the DACA program are possibly resulting in traumatic threats to livelihood for both DACA recipients and their families. Indeed, this hypothesis is supported by extant research that has shown more permanent protections and stability in immigration status as associated with higher health outcomes and well-being (Patler et al., 2019). Since our data collection, the instability and threats have continued. For example, press investigations have revealed that the federal government possesses personal information and can possibly target DACA recipients for detention and deportation (Lind, 2020). These kinds of unexpected and impactful revelations may be placing DACA recipients in a much more vulnerable position than that of undocumented people that do not have DACA. More current research on the prevalence of trauma-related distress could support and extend these findings.

Our findings document a public health crisis. To further complicate this crisis, since data were collected, the United States and the world have experienced a major pandemic. In the United States, the pandemic has led to an economic crisis that has unequally burdened Latinx immigrants (Joint Economic Committee, 2020) and a health crisis that has also unequally burdened undocumented and documented immigrants (Garcini et al., 2020). During the pandemic, the essential nature of many undocumented workers and their exclusion from support programs, such as the Coronavirus Aid, Relief, and Economic Security Act, should give health providers and policy makers cause for great concern (Garcini et al., 2020; Joint Economic Committee, 2020). Research is needed to understand how the pandemic and its consequences have changed the prevalence of distress in this population. While further research is needed to understand how to best provide support and relief from trauma for this population, and there is a demand for resources to train the health provider workforce that will be providing these services, data from DACA recipients themselves offer promising directions. Qualitative findings from interviews with DACA recipients and their reflections on the 2017-2019 DACA policy debates suggest that social and family supports, faith-based communities, and opportunities for social advocacy can represent significant protective factors in helping youth cope with adversity (Moreno et al., 2021). Promoting natural networks of instrumental and emotional support among family members and trusted community members (i.e., teachers, church groups) could be an easily

accessible and culturally congruent source of aid in times of uncertainty. Additionally, offering youth opportunities to educate others and advocate through their lived experiences can prove empowering as they choose to redefine their identity as a source of strength, resilience, and cultural pride.

Limitations

Most participants in this study lived in the southern United States, which limits the generalizability of our findings. However, the variety in ethnic/racial background of participants provided accurate representation of undocumented and documented immigrants. It is possible that trauma-related distress among immigrants living in other U.S. states may be different to that reported by participants in our survey. Also, most participants were women, and binary gender differences were observed among subgroups. While this overrepresentation of women is consistent with other research with undocumented groups (e.g., Perez, 2015), it is problematic because other research has shown relatively equal numbers of men and women among undocumented groups. In our own sample, we found that men had 2.06 times higher odds of scoring in the clinical range for distress, but, unfortunately, our numbers of men were too low to detect interactions in the multivariate logistic regression analyses. Future research would be improved by improving recruitment of men into research. Despite these limitations, our results provide valuable data to inform future studies, facilitate comparisons, motivate the development of targeted interventions, and attract attention for needed research and advocacy with this population.

The sample size was relatively small. However, this is a hidden/hard-to-reach population that is difficult to recruit, particularly in the context of the current anti-immigrant climate. Nonetheless, our high prevalence estimates gave us more than sufficient power to detect differences. Also, the small representation of men did present a challenge to statistical analyses at the point of examining interactions. Moreover, given that this was an online survey, we were unable to capture information as to how participants were biologically or socially related to other participants in the survey; thus, we were unable to assess for the effects of nested data. In addition, in any retrospective report, there are limitations and a threat to information bias. However, our survey was conducted soon after the 2017 announcement of the rescission of DACA, providing a noteworthy and impactful event to ground participants' reports. Additionally, retrospective reporting may result in lower estimates of events and distress than contemporaneous reporting (Brewin et al., 1993). Thus, it is possible that underreporting occurred and that the estimates of distress provided in this study may be even higher than the already concerning numbers.

The primary outcome used in this study provided a generalized measure of distress and does not guarantee a diagnosis of PTSD. Also, no measure of previous trauma history was included; thus, we cannot be certain about how, if at all, prior trauma may have influenced the results of our study. It is important to note that the IES-R was retired from distribution in 2019 (after the data for this study were collected) because of changes in the PTSD criteria (Umberger, 2019). The measure was not a tool to diagnose PTSD, but it provides guidance on likely diagnosis. Interestingly, the use of the measure continued well beyond the publication of the updated *Diagnostic and Statistical Manual of Mental Disorders* in

2013, and much research continues using the IES-R to this day. This is likely due to the fact that the measure is considered to have continued clinical utility (Hosey et al., 2019). Additionally, the measure captures distress from trauma or PTEs, which was also the case in our research. Finally, this study was cross-sectional; thus, causation cannot be inferred.

Conclusion

Our findings document the elevated levels of prevalence and severity of distress from the announcement of the potential termination of DACA, especially among DACA recipients. While we cannot infer that DACA status causes trauma and associated negative health consequences, the findings raise this as an important hypothesis to examine. Regardless of causality, distress levels are high in this population and demand attention. Social determinants of health are critical to individuals' health, and structural factors shape these social determinants (Braveman & Gottlieb, 2014). Undocumented, DACA recipient, and documented immigrants all share exposure to anti-immigrant sentiments. Undocumented and DACA recipient immigrants share the threat of deportation with all the consequences this implies (e.g., family separation, financial and social disruptions, severe trauma-related distress, diminished health and quality of life). DACA recipients are unique in that they trusted the government with their identifying information in exchange for protection, which may still disappear. Their participation in DACA will have effectively put them at high risk for immediate deportation. Over 800,000 individuals have lived most of their childhood and all of their adult lives in the United States and hope to earn a legal opportunity to be part of the American dream and earn a higher education, work, and be productive members of society aiding the U.S. economy. Nonetheless, the future of DACA recipients and their families is uncertain and of concern amid a global pandemic with severe economic and health consequences. DACA recipients, by the qualifications of the program, are particularly attached to the United States and detached from their countries of origin, elevating the consequences of deportation. These realities can be trauma inducing and could seriously compromise the physical and mental health of these immigrants.

References

- Abrego LJ (2006). "I can't go to college because I don't have papers": Incorporation patterns of Latino undocumented youth. Latino Studies, 4(3), 212–231. 10.1057/palgrave.lst.8600200
- Alegría M, Fortuna LR, Lin JY, Norris FH, Gao S, Takeuchi DT, Jackson JS, Shrout PE, & Valentine A (2013). Prevalence, risk, and correlates of posttraumatic stress disorder across ethnic and racial minority groups in the United States. Medical Care, 51(12), 1114–1123. 10.1097/MLR.0000000000000000007 [PubMed: 24226308]
- American Psychological Association. (2016). Clinical practice guideline for treatment of posttraumatic stress disorder (PTSD) in adults. https://www.apa.org/ptsd-guideline/ptsd.pdf
- Ayón C (2015, September). Economic, social and health effects of discrimination on Latino immigrant families. Migration Policy Institute. https://www.migrationpolicy.org/research/economic-social-and-health-effects-discrimination-latino-immigrant-families
- Batalova J, Capps R, & Hooker S (2014, August). DACA at the two-year mark: A national and state profile of youth eligible and applying for deferred action. Migration Policy Institute. http://www.migrationpolicy.org/research/daca-two-year-mark-national-and-state-profile-youth-eligible-and-applying-deferred-action
- Braveman P, & Gottlieb L (2014). The social determinants of health: It's time to consider the causes of the causes. Public Health Reports, 129(1_Suppl. 2), 19–31. 10.1177/00333549141291S206

Brewin CR, Andrews B, & Gotlib IH (1993). Psychopathology and early experience: A reappraisal of retrospective reports. Psychological Bulletin, 113(1), 82–98. 10.1037/0033-2909.113.1.82 [PubMed: 8426875]

- Cadenas GA, Peña D, Minero-Meza L, Rojas-Arauz B, & Lynn N (2020). Undocumented Latinx immigrant students coping: Critical agency and vocational outcome expectations. Journal of Latinx Psychology, 9(2), 92–108. 10.1037/lat0000178
- Chen CV, Chaby LE, Nazeer S, & Liberzon I (2018). Effects of trauma in adulthood and adolescence on fear extinction and extinction retention: Advancing animal models of posttraumatic stress disorder. Frontiers in Behavioral Neuroscience, 12, Article 247. 10.3389/fnbeh.2018.00247 [PubMed: 30429779]
- Cheung BY, Chudek M, & Heine SJ (2011). Evidence for a sensitive period for acculturation: Younger immigrants report acculturating at a faster rate. Psychological Science, 22(2), 147–152. 10.1177/0956797610394661 [PubMed: 21189354]
- Cohen J (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Erlbaum.
- Cohen S, Janicki-Deverts D, & Miller GE (2007). Psychological stress and disease. JAMA: Journal of the American Medical Association, 298(14), 1685–1687. 10.1001/jama.298.14.1685 [PubMed: 17925521]
- Department of Homeland Security et al. v. Regents of the University of California et al., 591 U.S. ____ (2020). https://www.supremecourt.gov/opinions/19pdf/18-587_5ifl.pdf
- Duke EC (2017, September 5). Memorandum of rescission of Deferred Action for Childhood Arrivals (DACA). U.S. Department of Homeland Security. https://www.dhs.gov/news/2017/09/05/memorandum-rescission-daca
- Ellis LM, & Chen EC (2013). Negotiating identity development among undocumented immigrant college students: A grounded theory study. Journal of Counseling Psychology, 60(2), 251–264. 10.1037/a0031350 [PubMed: 23421773]
- Garcini LM, Domenech Rodríguez MM, Mercado A, & Paris M (2020). A tale of two crises: The compounded effect of COVID-19 and anti-immigration policy in the United States. Psychological Trauma: Theory, Research, Practice and Policy, 12(S1), S230–S232. 10.1037/tra0000775 [PubMed: 32538655]
- Garcini LM, Murray KE, Zhou A, Klonoff EA, Myers MG, & Elder JP (2016). Mental health of undocumented immigrant adults in the United States: A systematic review of methodology and findings. Journal of Immigrant & Refugee Studies, 14(1), 1–25. 10.1080/15562948.2014.998849
- Garcini LM, Peña JM, Galvan T, Fagundes CP, & Klonoff EA (2017). Dreamers living in the United States: A contextual perspective and clinical implications. The American Journal of Psychiatry, 174(7), 623–625. 10.1176/appi.ajp.2017.17040395 [PubMed: 28669208]
- Garcini LM, Peña JM, Galvan T, Fagundes CP, Malcarne V, & Klonoff EA (2017). Mental disorders among undocumented Mexican immigrants in high-risk neighborhoods: Prevalence, comorbidity, and vulnerabilities. Journal of Consulting and Clinical Psychology, 85(10), 927–936. 10.1037/ccp0000237 [PubMed: 28956948]
- Gonzales RG, Terriquez V, & Ruszczyk SP (2014). Becoming DACAmented: Assessing the short-term benefits of Deferred Action for Childhood Arrivals (DACA). American Behavioral Scientist, 58(14), 1852–1872. 10.1177/0002764214550288
- Hosey MM, Bienvenu OJ, Dinglas VD, Turnbull AE, Parker AM, Hopkins RO, Neufeld KJ, & Needham DM (2019). The IES-R remains a core outcome measure for PTSD in critical illness survivorship research. Critical Care, 23(1), Article 362. 10.1186/s13054-019-2630-3
- Joint Economic Committee. (2020). Immigrants, the economy, and the COVID-19 outbreak.

 United States Congress. https://www.jec.senate.gov/public/_cache/files/9e9c9042-6ff9-4f6c-8d65-fbe2625d2143/immigrants-the-economy-and-the-covid19-outbreak-final1.pdf
- Kawamura N, Kim Y, & Asukai N (2001). Suppression of cellular immunity in men with a past history of posttraumatic stress disorder. The American Journal of Psychiatry, 158(3), 484–486. 10.1176/appi.ajp.158.3.484 [PubMed: 11229994]
- Krupnik V (2019). Trauma or adversity? Traumatology, 25(4), 256-261. 10.1037/trm0000169
- Latinx Immigrant Health Alliance. (2021, June 18). Two pandemic snapshots: Immigrant health in the time of COVID. Open Science Framework. https://osf.io/w2zmx/

Lind D (2020, April). ICE has access to DACA recipient's personal information despite promise suggesting otherwise internal emails show. ProRepublica. https://www.propublica.org/article/ice-has-access-to-daca-recipients-personal-information-despite-promises-suggesting-otherwise-internal-emails-show

- Migration Policy Institute. (2005, February 1). Bilingualism persists but English still dominates. https://www.migrationpolicy.org/article/bilingualism-persists-english-still-dominates
- Migration Policy Institute. (2020). National and state estimates of immigrant populations eligible for the Deferred Action for Childhood Arrivals (DACA) program, December 2020. https://www.migrationpolicy.org/sites/default/files/datahub/State%20Estimates%20of%20DACA-Eligible%20Population_Dec%202020.xlsx
- Miller GE, Chen E, & Parker KJ (2011). Psychological stress in childhood and susceptibility to the chronic diseases of aging: Moving toward a model of behavioral and biological mechanisms. Psychological Bulletin, 137(6), 959–997. 10.1037/a0024768 [PubMed: 21787044]
- Moreno O, Fuentes L, Garcia-Rodriguez I, Corona R, & Cadenas GA (2021). Psychological impact, strengths, and handling the uncertainty among Latinx DACA recipients. The Counseling Psychologist, 49(5), 728–753. 10.1177/00110000211006198
- Muñoz SM, Vigil D, Jach E, & Rodriguez-Gutierrez M (2018). Unpacking resilience and trauma: Examining the "Trump effect" in higher education for undocumented Latinx college students. Latinx Education Policy and Resistance in the Trump Era, 12(3), 33–52. 10.24974/amae.12.3.405
- Oglesby ME, Gibby BA, Mathes BM, Short NA, & Schmidt NB (2017). Intolerance of uncertainty and post-traumatic stress symptoms: An investigation within a treatment seeking trauma-exposed sample. Comprehensive Psychiatry, 72, 34–40. 10.1016/j.comppsych.2016.08.011 [PubMed: 27710835]
- Pai A, Suris AM, & North CS (2017). Posttraumatic stress disorder in the DSM-5: Controversy, change, and conceptual considerations. Behavioral Sciences, 7(1), Article 7. 10.3390/bs7010007
- Patler C, Hamilton E, Meagher K, & Savinar R (2019). Uncertainty about DACA may undermine its positive impact on health for recipients and their children. Health Affairs, 38(5), 738–745. 10.1377/hlthaff.2018.05495 [PubMed: 31059360]
- Pérez W, Cortés RD, Ramos K, & Coronado H (2010). "Cursed and blessed": Examining the socioemotional and academic experiences of undocumented Latina and Latino college students. New Directions for Student Services, 2010(131), 35–51. 10.1002/ss.366
- Perez ZJ (2015). A portrait of Deferred Action for Childhood Arrivals recipients: Challenges and opportunities three years later. United We Dream. https://unitedwedream.org/2015/10/report-portrait-deferred-action-childhood-arrivals-daca-recipients/
- Pew Research Center. (2013). Second-generation Americans: A portrait of the adult children of immigrants. https://www.pewresearch.org/social-trends/2013/02/07/second-generation-americans/
- Rasmussen A, Rosenfeld B, Reeves K, & Keller AS (2007). The subjective experience of trauma and subsequent PTSD in a sample of undocumented immigrants. Journal of Nervous and Mental Disease, 195(2), 137–143. 10.1097/01.nmd.0000254748.38784.2f [PubMed: 17299301]
- Sareen J (2020). Posttraumatic stress disorder in adults: Epidemiology, pathophysiology, clinical manifestations, course, assessment, and diagnosis. UpToDate. https://www.uptodate.com/contents/posttraumatic-stress-disorder-in-adults-epidemiology-pathophysiology-clinical-manifestations-course-assessment-and-diagnosis
- Shalal A, & Chiacu D (2020, June 21). Trump administration aims to end
 Dreamers immigration program in six months. Reuters. Retrieved March 14,
 2022 fromhttps://www.reuters.com/article/us-usa-court-immigration-wolf/trump-administration-aims-to-end-dreamers-immigration-program-in-six-months-idUSKBN23S0QI
- Sidani S, Guruge S, Miranda J, Ford-Gilboe M, & Varcoe C (2010). Cultural adaptation and translation of measures: An integrated method. Research in Nursing & Health, 33(2), 133–143. 10.1002/nur.20364 [PubMed: 20069612]
- Siemons R, Raymond-Flesch M, Auerswald CL, & Brindis CD (2017). Coming of age on the margins: Mental health and wellbeing among Latino immigrant young adults eligible for Deferred Action for Childhood Arrivals (DACA). Journal of Immigrant and Minority Health, 19(3), 543–551. 10.1007/s10903-016-0354-x [PubMed: 26852235]

Suárez-Orozco C, Yoshikawa H, Teranishi R, & Suárez-Orozco M (2011). Growing up in the shadows: The developmental implications of unauthorized status. Harvard Educational Review, 81(3), 438–473. 10.17763/haer.81.3.g23x203763783m75

- Sundin EC, & Horowitz MJ (2002). Impact of Event Scale: Psychometric properties. The British Journal of Psychiatry, 180, 205–209. 10.1192/bjp.180.3.205 [PubMed: 11872511]
- Tiemensma J, Depaoli S, Winter SD, Felt JM, Rus HM, & Arroyo AC (2018). The performance of the IES-R for Latinos and non-Latinos: Assessing measurement invariance. PLoS ONE, 13(4), Article e0195229. 10.1371/journal.pone.0195229 [PubMed: 29614117]
- Umberger R (2019). What is the best core measure after critical illness when the IES-R is no longer accessible for new researchers? Critical Care, 23(1), Article 313. 10.1186/s13054-019-2595-2
- U.S. Citizenship and Immigration Services. (2019). Number of Form I-821D, consideration of Deferred Action for Childhood Arrivals, by fiscal year, quarter, intake and case status: Fiscal year 2012–2019. https://www.uscis.gov/sites/default/files/document/data/DACA_FY19_Q3_JUNE_FINAL.pdf
- U.S. Citizenship and Immigration Services. (2020). USCIS statement on Supreme Court's DACA decision. https://www.uscis.gov/news/news-releases/uscis-statement-on-supreme-courts-daca-decision
- Uwemedimo OT, Monterrey AC, & Linton JM (2017). A dream deferred: Ending DACA threatens children, families, and communities. Pediatrics, 140(6), Article e20173089. 10.1542/peds.2017-3089 [PubMed: 28993446]
- Venkataramani AS, Shah SJ, O'Brien R, Kawachi I, & Tsai AC (2017). Health consequences of the U.S. Deferred Action for Childhood Arrivals (DACA) immigration programme: A quasi-experimental study. The Lancet. Public Health, 2(4), e175–e181. 10.1016/S2468-2667(17)30047-6 [PubMed: 29253449]
- Weiss DS, & Marmar CR (1997). The Impact of Events Scale—Revised. In Wilson JP & Keany TM (Eds.), Assessing psychological trauma and PTSD: A practitioner's handbook (2nd ed., pp. 168–189). Guilford Press.
- Yoshikawa H, Suárez-Orozco C, & Gonzales RG (2017). Unauthorized status and youth development in the United States: Consensus statement of the Society for Research on Adolescence. Journal of Research on Adolescence, 27(1), 4–19. 10.1111/jora.12272 [PubMed: 28498536]
- Zang SX (2012). Looking for a hidden population: Trafficking of migrant laborers in San Diego County. San Diego State University. https://www.ncjrs.gov/pdffiles1/nij/grants/240223.pdf
- Zong J, Ruiz Soto GA, Batalova J, Gelatt J, & Capps R (2017, November).
 A profile of current DACA recipients by education, industry, and occupation.
 Migration Policy Institute. https://www.migrationpolicy.org/research/profile-current-daca-recipients-education-industry-and-occupation

Clinical Impact Statement

Deferred Action for Childhood Arrivals (DACA) recipients experience significant distress from the potential termination of the DACA program, which has allowed undocumented immigrants who were brought to the United States as children and who met a set of strict vetting criteria to become eligible for a temporary work and education permit, renewable every 2 years. The future of DACA recipients is uncertain, which can be trauma inducing. The field of psychology needs to make space for this kind of experience as potentially traumatic.

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Table 1

Participant Characteristics

		Total		Undo	Undocumented DACA	DACA	Undoc	Undocumented non-DACA	-DACA		Documented	p	
Factor	N	% or M	SD	и	% or M	as	u	% or M	as	u	% or M	SD	b
Sample size	233	100.0		74	31.8		48	20.6		111	47.6		
Binary gender													.012
Men	09	26.0		27	36.5		9	12.5		27	24.8		
Women	171	74.0		47	63.5		42	87.5		82	75.2		
Age	224	22.99	5.06	29	23.09	4.09	48	24.06	6.30	109	22.45	4.96	.181
Education	233	15.64	0.78	74	15.49	0.91	48	15.73	0.67	111	15.70	0.71	.119
Financial strain	233	2.21	0.92	74	2.31	0.91	48	2.29	0.94	1111	2.10	0.91	.238
Mixed-status family													<.001
Yes	104	44.6		55	74.3		15	31.3		34	30.6		
No	129	55.4		19	25.7		33	8.89		77	69.4		
Years in United States	209	19.99	6.13	57	17.55	4.75	47	22.28	3.79	105	20.29	7.13	<.001
				İ									

Note. DACA = Deferred Action for Childhood Arrivals.

Table 2

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Differences in Trauma-Related Distress and Symptoms by Immigration Legal Status

		Total		Undo	cumented I	<u>ACA</u>	Undoca	Undocumented DACA Undocumented non-DACA	-DACA	-	Documented	q	
Factor	N	% or M SD	as	u	% or M SD	as	u	% or M	as	u	% or M SD	as	b
Sample size	233	100.0		74	31.8		48	20.6		111	47.6		
Trauma-related distress													
Cutoff < 33	138	59.2		27	36.5		34	70.8		77	69.4		
Cutoff 33a	95	40.8		47	63.5		14	29.2		34	30.6		<.001
Cutoff 37b	83	35.6		43	58.1		13	27.1		27	24.3		<.001
Trauma-related symptoms													
Intrusion	233	1.40	1.08	74	2.01	0.12	48	1.07	0.14	1111	1.13	0.09	<.001
Avoidance 2	233	1.42	1.04	74	1.94	0.11	48	1.09	0.14	111	1.21	0.09	<.001
Hyperarousal 2	233	1.15	1.06 74	74	1.57	0.12	48	0.92	0.15	111	0.97	0.10	.002

Note. DACA = Deferred Action for Childhood Arrivals.

^aDenotes IES scores using a conservative cutoff 33 to denote clinically significant trauma-related symptoms.

benotes IES scores using a cutoff 37, which denotes trauma-related symptoms known to be associated with a high suppression of the immune system.

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Table 3

33) Summary of Adjusted and Unadjusted Regression Analyses Predicting Clinical Cutoff for Trauma-Related Distress (IES Scores

				Unadjusted 95% CI	12 %56 b					Adjusted	Adjusted 95% CI	
Variable	В	SE	OR	TT	Γ		В	SE OR	OR	TI OIT	nr n	d
Binary gender												
Men	0.91	0.31	2.48	1.36	4.52	.003	0.72	0.34	2.06	1.05	4.03	.035
Financial strain	-0.48	0.15	0.62	0.46	0.83	.001	-0.62	0.17	0.54	0.38	0.75	<.001
Mixed-status family	0.92	0.27	2.50	1.46	4.27	.001	0.52	0.32	1.68	0.89	3.15	.110
Immigration legal status a						<.001						<.001
Undocumented	-0.70	0.38	0.93	0.44	1.96	.854	0.18	0.41	1.20	0.54	2.67	.650
Undocumented DACA	1.37 0.32	0.32	3.94	2.12	7.34	<.001	<.001 1.41 0.37 4.11 1.99	0.37	4.11	1.99	8.50	<.001

Note. CI = confidence interval; LL = lower limit; UL = upper limit; DACA = Deferred Action for Childhood Arrivals.

 $^{^{\}it a}$ Documented is the reference category.