Trump-induced anxiety among Latina/os

March 27, 2019

Supplemental Appendix

This supplemental appendix provides more details on the Spanish-language translation process, as well as the Spanish-language Trump treatment stimulus and the Spanish-language deportation items. Also, we report balance statistics from Studies 1-3. Additionally, robustness checks are reported for models excluding bilingual respondents.

Spanish Translation Protocol

The survey protocol was first written in English and then translated into Spanish. The translation was done by six Spanish-fluent speakers (of Mexican origin), two of whom were born in Mexico. Four of the translators were paid undergraduate students from a large Northern California University. In advance of the training, the undergrad students were informed as to the purpose of the study and the need to produce high-quality translations. The translators were each asked to translate a small portion of the survey protocol independently. Once the translations were complete, the translators collectively met with a senior graduate student (a first generation Mexican American) who went through each survey item individually, comparing it to the English language version. Adjustments and/or corrections were made to the protocol. The translation team met on seven different occasions to work through the full protocol. The Spanish language items were then programmed into Qualtrics and each of the translators, the graduate student supervisor, and a colleague with a Ph.D. in Political Science who has a background in conducting Spanish-language surveys and is a Mexican citizen, reviewed the protocol, checking for grammatical or punctuation errors. Any errors found were corrected.

After completing the translation and programming, we pretested the survey on 33 self-identified Latina/os residing in California. These pre-testers were asked to take the survey multiple times so they would get exposure to all conditions in both Spanish and English. Pre-testers were told to pay attention to the question wording and its comparability to the English-language version. After receiving feedback, some changes were made to some survey

items. The RDS went into the field on January 23, 2017 and the OPS on February 8, 2017.

At the end of the survey, all respondents were given [name omitted] email and were told they could email and provide feedback or request any survey results (once the study was completed). Of the approximately 3,500 Latina/os who completed the survey, only three emails were received registering concerns/complaints about the Spanish translation. In contrast, we received about 100 emails asking for us to provide them with any papers or results. After receiving these emails, a question was added to the survey at the very end of the protocol (so it could not affect recorded responses) asking about the quality of the Spanish language used in the study. The question was: "En términos generales, ¿cómo evaluaría la calidad del español en esta encuesta?"with the response options "mala" (bad), "regular" (fair), "buena," (good) and "excelente" (excellent). A little over 95% of the 436 who answered this question indicated the translation was fair, good, or excellent and about 80% indicated the translation was good or excellent.

Spanish Language Treatments and Dependent Measures

Below we give the treatment conditions. The image selected in the treatment condition is the image Trump uses for his personal Twitter account. We opted for this image because it is neutral in terms of facial expression and is publicly available. The English- and Spanish-language versions of the Trump exposure treatment are shown below.

Respondents in the Spanish-language were told prior to exposure: "Por favor ponga mucha atención a la información en la próxima página ya que le haremos preguntas sobre ella." This text indicated the respondent should pay attention to the information on the next screen (Trump treatment) as they would be asked questions about it. The deportation items (dependent measures) in Spanish are:

- Personal Deportation: Independientemente de su estatus migratorio o de ciudadanía, ¿cuánto, si en algo, le preocupa ser deportado?

- Family Deportation: ¿Cuánto, si en algo, le preocupa que un familiar podría ser de-

Figure 1: Trump Exposure Condition, English

- **President Donald Trump has pledged**
  - Eliminate Deferred Action for Childhood Arrivals (DACA), a program to prevent deportation of qualified young people.
  - Eliminate Deferred Action for Parents of Americans (DAPA), a program to prevent deportation of qualified parents.
  - End Sanctuary City status
  - Build a 2000 mile wall along the border
  - Triple the number of Immigration and Customs Enforcement (ICE) officers
  - Extreme vetting of potential immigrants to ensure they support American values
  - Eliminate birthright citizenship for children whose parents are undocumented immigrants

portado?

- Friend Deportation: ¿Cuánto, si en algo, le preocupa que un amigo cercano podría ser deportado?

  The response options were: "Muchísimo," "Mucho," "Cantidad moderada," "Poco," and "Nada." The responses were reverse-coded for analysis such that "nada" was the lowest score (i.e. 1).

With respect to study 4, the Spanish language translation of the item of language preference is "¿En qué idioma se siente usted más comoda(o) leyendo?" The response options

Figure 2: Trump Exposure Condition, Spanish

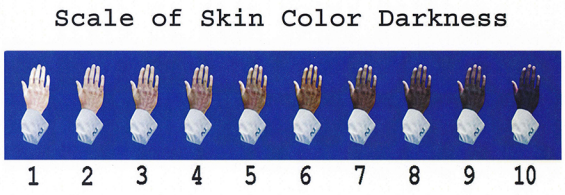
- **El presidente Donald Trump ha prometido hacer lo siguiente**
  - Eliminar el programa "Consideración de acción deferida para los llegados en la infancia" (DACA), un programa para evitar la deportación de jóvenes calificados
  - Eliminar el programa "Programa de acción diferida para padres de ciudadanos estadounidenses y residentes permanentes legales" (DAPA), un programa para evitar la deportación de padres calificados
  - Eliminar el estatus de ciudad santuario
  - Construir un muro de 2,000 millas a lo largo de la frontera de los Estados Unidos y México
  - Incrementar por lo triple el número de oficiales del Servicio de Inmigración y Control de Aduanas (ICE)
  - Investigación de antecedentes extrema de inmigrantes potenciales para asegurar que ellos apoyan valores americanos
  - Eliminar el derecho de ciudadanía por nacer en los Estados Unidos para niños cuyos padres son inmigrantes indocumentados

were: 1) Ingles, 2) Español, and 3) Me siento cómodo(a) ya sea usando inglés o español. Respondents who chose the third option were then randomly assigned into English- or Spanish-language conditions.

NIS Skin Color Scale

The scale shown in Figure 2 was embedded in the survey (a Spanish-language version was embedded in the Spanish-language survey). Respondents were asked to select the scale point the best reflected their phenotype.

Figure 3: Massey-Martin NIS Skin Color Scale



Marín and Gamba Bidimensional Acculturation Scale (BAS) items used

To assess language proficiency, we used a three-item version of the Marín and Gamba Bidimensional Acculturation Scale (BAS). English-language version of the items used were: "How well do you speak English?" "How well do you read in English?" "How well do you write in English?" To create a scale of English-language proficiency (ELP) , we used the three items in an additive scale ($\alpha = .91$).

Balance Statistics for Studies 1, 2

For Study 1, the RDS exhibits covariate balance across the attributes measures, with some exceptions. The means/proportions for several covariates are shown in Table 1. There are slightly more third-plus generation participants in the non-exposure condition and slightly more second generation participants in the exposure condition (although proportional differences in U.S. citizens of any generation are identical across treatment and control [73% in exposure; 74% in non-exposure [p=.81]).

Assessed ELP (which ranged from .2 [highest proficiency] to 1 [lowest proficiency]) is slightly higher in the exposure condition compared to the non-exposure condition; however, the larger takeaway point is that most research participants report relatively high English proficiency in either condition. With respect to skin color assessment (scaled .1=lightest to 1=darkest), there are no differences across conditions. About 80% of the research participants report their phenotype to be in the range of 3-5 on the NIS scale shown in Figure 2 (or .3 to .5 on the rescaled measure).

Additionally, there are no significant differences with respect to language choice/survey language, gender, Republican identification, political knowledge (scaled 0=lowest; 1=highest), or Spanish-language news acquisition (scaled as .2=no information from Spanish media; 1=all information from Spanish media). Finally, with respect to geographic dispersion, most research participants indicated they resided in California (81%); however, Latina/os from a total of 29 states completed the survey.

Table 1: RDS Subject Characteristics

Variable	Exposure	Non-Exposure	p
English	65.0	63.9	0.75
Bilingual	30.0	32.3	0.50
Spanish	5.0	3.8	0.45
Noncitzen	13.1	11.5	0.50
Naturalized Citizen	13.7	14.5	0.75
Second Generation	57.7	51.0	0.06
Third+ Generation	15.5	23	0.06
Skin Color Assessment	0.35	0.34	0.78
ELP	0.28	0.26	0.05
Spanish Survey	18.5	16.5	0.47
Female	69.8	67.8	0.56
Age	30.3	29.3	0.29
Republican	6.1	7.4	0.50
Political Knowledge	0.88	0.88	0.95
Spanish News	0.42	0.41	0.40

Characteristics of attribute measures as well as other covariates from the RDS Trump exposure survey experiment. The p-values are from difference-in-means/proportions tests.

For Study 2, Table 2 describes the composition of the OPS. In general, there are fewer second generation research participants compared to naturalized or 3rd+ generation citizens in the OPS; however, phenotype assessment and mean ELP are about identical to the RPS. Further, by design, there are substantially more Spanish-language survey takers in the OPS compared to the RPS. Additionally, there are fewer women in the OPS compared to the RPS and there are substantially more Republican identifiers in the OPS compared to the RPS. With respect to region, most participants indicated they resided in California (25%); however, regional variability was much higher in the OPS: Texas 15%; Florida 9%; New York

7%; Illinois 4%. Latina/os from all 50 states (and Washington D.C.) completed the survey.

Table 2: OPS Subject Characteristics

Variable	Exposure	Non-Exposure	p
English	30.5	29.9	0.83
Bilingual	53.0	55.1	0.51
Spanish	16.5	15.0	0.52
Noncitzen	9.9	11.7	0.33
Naturalized Citizen	23.3	21.9	0.60
Second Generation	46.8	42.5	0.15
Third+ Generation	20.1	23.5	0.36
Skin Color Assessment	0.35	0.33	0.11
ELP	0.28	0.29	0.28
Spanish Survey	39.2	39.7	0.88
Female	61.0	59.2	0.55
Age	30.9	31.1	0.69
Republican	22.2	21.3	0.73
Political Knowledge	0.62	0.60	0.42
Spanish News	0.60	0.62	0.16

Characteristics of attribute measures as well as other covariates from the OPS Trump exposure survey experiment. The p-values are from difference-in-means/proportions tests.

More information on the EB Procedure and Balance Statistics

Study 4 relies on a balancing adjustment procedure known as entropy balancing. The basic idea behind EB is straightforward. We "match" the treated respondents (Spanish language) with the control respondents (English language) using information on numerous pretreatment covariates. Identifying the treatment effect entails finding good matches on these covariates for treated and control cases. In this context, a "good" match means there is equivalency in potential confounding covariates (such as immigrant/citizen status) and what remains is the language effect.

Covariates included in the balancing algorithm were generational status (first, second, third-plus), immigration status (immigrant, naturalized citizen, native citizen), assessed phenotype, assessed English proficiency (using the ELP scale), assessed Spanish proficiency (using the Marín and Gamba questions referenced earlier), Republican party identification (1 if

Republican; 0 if other), border-state residence (1 if residing in a border state with Mexico; 0 otherwise), and a whether or not the respondent was in the RDS or OPS. As such, we are balancing on covariates related to stigmatized attributes, political preferences, region, and survey mode.

The EB algorithm searches for treated cases that are close matches to control cases. Controls exhibiting a good match receive greater weight in any subsequent analysis and controls not exhibiting a good match are given lesser weight in the outcome analysis. After processing the data, we trimmed the weights to minimize the impact of extremely large weights following the procedure outlined in Hainmueller (2012). We then used the weighted data to estimate the Spanish-language effect.

For Study 4, Table 3 gives the unadjusted and adjusted balance statistics for covariates used in the EB algorithm. The first column gives the proportion (or mean) in the Spanish-language condition; the second gives the proportion (or mean) for the covariates in the English-language condition. If balanced, the difference in values should be essentially zero (which is shown in the third column). It is clearly the case that among third-plus generation Latina/os assigned to the Spanish condition, noncompliance with the treatment was a real problem. There are nearly double the number of this group in the English condition compared to the Spanish (21 percent versus 11 percent). In general, the covariates exhibiting the greatest imbalance are the ones related to immigrant/citizen status.

The last two columns of Table 3 give, respectively, the mean/proportions for the covariates and the adjusted difference between treatment and control using the EB weights. As is clear, after applying the EB estimator, there is balance on all of the covariates.

Table 3: Assessment of Balance in Language Randomization Study

Variable	Spanish	English	Difference	English_{EB}	Difference_{EB}
Noncitizen	0.14	0.10	0.04	0.14	0.00
Natrualized	0.26	0.19	0.07	0.14	0.00
Second Gen.	0.48	0.50	−0.02	0.48	0.00
Third+ Gen.	0.11	0.21	−0.10	0.12	−0.01
Skincolor Assessment	0.35	0.34	0.01	0.35	0.00
ELP Scale	0.28	0.26	0.02	0.28	0.00
LSP Scale	0.85	0.83	0.02	0.85	0.00
Survey Sample	0.73	0.73	0.00	0.73	0.00
Republican	0.14	0.16	-0.02	0.14	0.00
Border State	0.54	0.52	0.02	0.54	0.00

Entries are proportions or means of various covariates for treatment and control conditions in Study 3. The subscript "EB" denotes entropy balanced estimates.