Online Appendix for: Do Bilinguals Respond More Favorably to Candidate Advertisements in English or in Spanish?

Alejandro Flores

University of Chicago

Alexander Coppock

Yale University

November 29, 2017

Contents

A Interaction Regression Specifications

In this section, we will present estimates of the effects of treatment on all four dependent variables using a model that includes an interaction between the language of the advertisement and the language of the survey. As indicated by the small and statistically insignificant coefficients on the interaction terms, the effects of the advertisement treatment do not appear to be moderated by the language of the survey.

Table A.1: Effects of Treatments on General Election Support

	Bush: General Election	Vela: General Election	Coffman: General Election
	(1)	(2)	(3)
Spanish-language Ad	0.061*	0.075**	−0.039
	(0.032)	(0.033)	(0.033)
Spanish-language Survey	0.018	0.100***	−0.069**
	(0.033)	(0.034)	(0.033)
Ad X Survey	−0.024	−0.055	0.087*
	(0.046)	(0.048)	(0.047)
Constant (Control Mean)	0.443	0.522	0.404
	(0.023)	(0.024)	(0.023)
Sample	Bilingual	Bilingual	Bilingual
N	1,849	1,680	1,681

*p < .1; **p < .05; ***p < .01
HC2 robust standard errors are in parentheses.

Table A.2: Effects of Treatments on Perceptions of Candidate Caring

	Bush Cares	Vela Cares	Coffman Cares
	(1)	(2)	(3)
Spanish-language Ad	0.034	0.013	0.051*
	(0.028)	(0.022)	(0.029)
Spanish-language Survey	−0.038	−0.029	−0.028
	(0.030)	(0.024)	(0.030)
Ad X Survey	0.007	0.011	−0.034
	(0.041)	(0.034)	(0.043)
Constant (Control Mean)	0.736	0.867	0.736
	(0.021)	(0.016)	(0.021)
Sample	Bilingual	Bilingual	Bilingual
N	1,858	1,680	1,680

*p < .1; **p < .05; ***p < .01
HC2 robust standard errors are in parentheses.

Table A.3: Effects of Treatments on Confidence in Candidate to do the Right Thing on Immigration

	Confidence in Bush	Confidence in Vela	Confidence in Coffman
	(1)	(2)	(3)
Spanish-language Ad	0.135**	0.107**	−0.040
	(0.058)	(0.052)	(0.056)
Spanish-language Survey	0.043	0.016	−0.154***
	(0.058)	(0.054)	(0.057)
Ad X Survey	−0.121	−0.010	0.146*
	(0.083)	(0.076)	(0.082)
Constant (Control Mean)	1.738	1.913	1.848
	(0.041)	(0.037)	(0.038)
Sample	Bilingual	Bilingual	Bilingual
N	1,861	1,680	1,679

*p < .1; **p < .05; ***p < .01
HC2 robust standard errors are in parentheses.

Table A.4: Effects of Treatments on Liking Candidate (1-7)

	Like Bush	Like Vela	Like Coffman
	(1)	(2)	(3)
Spanish-language Ad	0.248**	0.166*	−0.089
	(0.101)	(0.093)	(0.104)
Spanish-language Survey	0.249**	0.250***	−0.016
	(0.107)	(0.092)	(0.111)
Ad X Survey	−0.166	−0.206	0.226
	(0.151)	(0.135)	(0.155)
Constant (Control Mean)	4.768	4.945	4.954
	(0.072)	(0.065)	(0.076)
Sample	Bilingual	Bilingual	Bilingual
N	1,862	1,680	1,680

*p < .1; **p < .05; ***p < .01
HC2 robust standard errors are in parentheses.

B Heterogeneous Effects by Partisanship

Table B.5: Effects of Treatments on General Election Support by Respondent Partisanship

	Vela: General Election				Coffman: General Election			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Spanish-language Ad	0.064**	−0.010	−0.044	−0.011	−0.003	0.022	−0.141***	−0.168***
	(0.026)	(0.050)	(0.040)	(0.031)	(0.027)	(0.045)	(0.033)	(0.040)
Constant (Control Mean)	0.744	0.292	0.648	0.138	0.248	0.771	0.281	0.816
	(0.019)	(0.035)	(0.029)	(0.022)	(0.019)	(0.032)	(0.026)	(0.024)
Sample	Bilingual	Bilingual	Monolingual	Monolingual	Bilingual	Bilingual	Monolingual	Monolingual
Party	Democrats	Republicans	Democrats	Republicans	Democrats	Republicans	Democrats	Republicans
N	1,029	335	579	491	1,029	335	579	491

*p < .1; **p < .05; ***p < .01
HC2 robust standard errors are in parentheses.

Table B.6: Effects of Treatments on Liking Candidate (1-7) by Respondent Partisanship

	Like Vela				Like Coffman			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Spanish-language Ad	0.116	−0.247	−0.608***	−0.399***	0.146	−0.303*	−0.702***	−1.004***
	(0.082)	(0.160)	(0.102)	(0.118)	(0.102)	(0.159)	(0.114)	(0.123)
Constant (Control Mean)	5.317	4.792	5.129	4.437	4.722	5.634	4.969	5.467
	(0.057)	(0.109)	(0.078)	(0.081)	(0.072)	(0.112)	(0.086)	(0.083)
Sample	Bilingual	Bilingual	Monolingual	Monolingual	Bilingual	Bilingual	Monolingual	Monolingual
Party	Democrats	Republicans	Democrats	Republicans	Democrats	Republicans	Democrats	Republicans
N	1,028	335	578	491	1,029	335	579	490

*p < .1; **p < .05; ***p < .01
HC2 robust standard errors are in parentheses.

Table B.7: Effects of Treatments on Perceptions of Candidate Caring by Respondent Partisanship

	Vela Cares				Coffman Cares			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Spanish-language Ad	0.040**	−0.049	−0.113***	−0.226***	0.078***	−0.055	−0.133***	−0.181***
	(0.017)	(0.047)	(0.032)	(0.043)	(0.028)	(0.039)	(0.037)	(0.037)
Constant (Control Mean)	0.895	0.774	0.872	0.709	0.662	0.880	0.782	0.879
	(0.013)	(0.032)	(0.020)	(0.029)	(0.020)	(0.025)	(0.024)	(0.020)
Sample	Bilingual	Bilingual	Monolingual	Monolingual	Bilingual	Bilingual	Monolingual	Monolingual
Party	Democrats	Republicans	Democrats	Republicans	Democrats	Republicans	Democrats	Republicans
N	1,029	335	576	490	1,029	335	575	490

*p < .1; **p < .05; ***p < .01
HC2 robust standard errors are in parentheses.

Table B.8: Effects of Treatments on Confidence in Candidate to do the Right Thing on Immigration by Respondent Partisanship

| | Confidence in Vela | | | | Confidence in Coffman | | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Spanish-language Ad	0.110***	−0.073	−0.181***	−0.192**	0.128**	−0.139*	−0.179***	−0.491***
	(0.042)	(0.096)	(0.062)	(0.079)	(0.052)	(0.084)	(0.067)	(0.073)
Constant (Control Mean)	2.076	1.744	2.032	1.480	1.650	2.183	1.895	2.099
	(0.029)	(0.071)	(0.041)	(0.052)	(0.036)	(0.051)	(0.047)	(0.043)
Sample	Bilingual	Bilingual	Monolingual	Monolingual	Bilingual	Bilingual	Monolingual	Monolingual
Party	Democrats	Republicans	Democrats	Republicans	Democrats	Republicans	Democrats	Republicans
N	1,029	335	577	490	1,028	335	577	489

*p < .1; **p < .05; ***p < .01
HC2 robust standard errors are in parentheses.

C Binary Choice Models

Two of our dependent variables (*Prefer Candidate in General* and *Candidate Cares*) are binary. Some analysts prefer to analyze such dependent variables using a binary choice model such as logit or probit. While this is not in any way necessary in order to estimate the average treatment effect in a randomized experiment, we include logisitic regression tables for completeness. These tables correspond to Tables 5 and 7 in the text. In terms of sign and statistical significance, the substantive conclusions are equivalent. When we compute the average marginal effects (not shown, but included in the replication archive code) from these models, we obtain answers that match the OLS models to the second decimal place or better.

Table C.9: Effect of Spanish-language Ad on General Election Support (Logit)

| | Bush: General Election | Vela: General Election | | Coffman: General Election | |
	(1)	(2)	(3)	(4)	(5)
Spanish-language Ad	0.196**	0.203**	−0.088	0.012	−0.780***
	(0.093)	(0.100)	(0.114)	(0.101)	(0.113)
Spanish-language Survey	0.022	0.304***		−0.119	
	(0.093)	(0.100)		(0.101)	
Constant	−0.203**	0.137	−0.550***	−0.471***	0.051
	(0.081)	(0.084)	(0.080)	(0.085)	(0.075)
Sample	Bilingual	Bilingual	Monolingual	Bilingual	Monolingual
N	1,849	1,680	1,343	1,681	1,343
Log Likelihood	−1,277.430	−1,128.434	−874.043	−1,109.128	−891.265
AIC	2,560.860	2,262.869	1,752.085	2,224.255	1,786.530

*p < .1; **p < .05; ***p < .01

Table C.10: Effect of Spanish-language Ad on Perceptions of Candidate Caring (Logit)

	Bush Cares	Vela Cares		Coffman Cares	
	(1)	(2)	(3)	(4)	(5)
Spanish-language Ad	0.193*	0.148	−0.743***	0.180	−0.820***
	(0.106)	(0.142)	(0.123)	(0.112)	(0.128)
Spanish-language Survey	−0.179*	−0.201		−0.233**	
	(0.105)	(0.142)		(0.111)	
Constant	1.020***	1.860***	1.268***	1.072***	1.483***
	(0.091)	(0.122)	(0.093)	(0.094)	(0.097)
Sample	Bilingual	Bilingual	Monolingual	Bilingual	Monolingual
N	1,858	1,680	1,336	1,680	1,337
Log Likelihood	−1,068.770	−672.905	−791.570	−960.473	−742.389
AIC	2,143.540	1,351.811	1,587.141	1,926.946	1,488.777

*p < .1; **p < .05; ***p < .01

D   Spanish-Language Survey

Prefer Candidate in General

> "¿Si la elección para presidente fuera el día de hoy, y los candidatos fueran Hillary Clinton, por el Partido Demócrata y Jeb Bush, por el Partido Republicano, por quién votaría?" (First two response options in random order: Jeb Bush, Hillary Clinton, No sé.)

> Si las elecciónes para el congreso fueran el día de hoy y usted fuera un votante en el distrito en donde Mike Coffman es candidato, ¿por quién votaría? [El Republicano Mike Coffman, El Demócrata Morgan Carroll, No sé]

> Si las elecciónes para el congreso fueran el día de hoy y usted fuera un votante en el distrito en donde Filemon Vela es candidato, ¿por quién votaría? [El Demócrata Filemon Vela El Republicano Rey Gonzalez Jr., No sé.]

Like Candidate "¿Qué apreciación tiene sobre [Candidate], le agrada, le desagrada, o le es indiferente?" If *le agrada*: "¿Le agrada mucho, de manera moderada, o muy poco?" If *le desagrada*: "'Le desagrada mucho, de manera moderada, o muy poco?" (Branching question mapped into scale from 1 to 7.)

Candidate Cares "¿Usted cree que [Candidate] es alguien a quien le importa gente como usted o es alguien a quien no le importa gente como usted?" (Response options: 1: Cares about people like me, 0: Doesn't care about people like me.)

Confidence in Candidate "¿Cuánta confianza tiene usted en la capacidad que tiene [Candidate] para tomar las decisiones correctas sobre la cuestión de la inmigración ilegal: tiene mucha confianza, cierto grado de confianza, no tiene demasiada confianza, o no tiene nada de confianza?" (Scale from 1 to 4, where 4 indicates greater confidence.)

Linked Fate "¿Cree que lo que le ocurre en general a los hispanos y latinos en este país tendrá algo que ver con lo que le sucede a usted en su vida? ¿Le afectará mucho, algo, poco o nada?" (Scale from 1 to 4, where 4 indicates "a lot.")

E   Language Quiz

In order to determine if subjects were minimally competent in both Spanish and English, we asked subjects to answer two quiz questions, one about "Maria" and a second about "Adam." Subjects were randomly assigned to see one question in English and the other in Spanish. The order of the answer choices was also randomized. Subjects were categorized as "bilingual" if they received a perfect score on this two-question quiz.

Spanish Quiz 1 Por favor lea el siguiente texto y conteste la pregunta. María es una estudiante de una universidad. Ella recibe ayuda financiera, pero la cantidad de dinero que recibe depende de la excelencia de sus calificaciones, por lo tanto, si reprueba una clase, ella recibe menos dinero para pagar su colegiatura. Esto le causa estrés, pero ella está disfrutando sus clases. ¿Cuál de las siguientes declaraciones es VERDADERA?

- María es una maestra
- A María no le gustan sus cursos
- María no recibe ayuda financiera y ella se está pagando la universidad
- María tiene que tener buenas calificaciones para conseguir mas dinero para pagar su colegiatura

English Quiz 1 Please read the text below and answer the question. Maria is a student at a university. She receives financial aid, but the amount of money she gets depends on the quality of her grades, so if she fails a class, she receives less money to pay her tuition. This causes her stress, but she is enjoying her classes. Which of the following statements is TRUE?

- Maria is a teacher
- Maria dislikes her courses
- Maria does not receive financial aid and is paying for university by herself
- Maria needs to have good grades to get more money to pay her tuition

Spanish Quiz 2 Por favor, lea el siguiente texto y conteste la pregunta. Adam es cajero en un centro comercial. Él es muy bueno para hacer operaciones matemáticas en su cabeza, por lo que generalmente calcula el total sin utilizar la computadora. Esto suele ser una forma rápida y eficiente de hacer el trabajo, pero a veces comete errores. ¿Cuál de las siguientes declaraciones es VERDADERA?

- Adam es el dueño de un centro comercial
- Adam es malo para cálculos matemáticos
- Adam siempre está cometiendo errores y, por lo tanto, tiene que usar la computadora

– Adam generalmente hace operaciones matemáticas en su cabeza y suele ser bastante bueno en ello

English Quiz 2 Please read the text below and answer the question. Adam is a cashier at a mall. He is very good at doing math in his head, so he often calculates the total without using the computer. This is usually a quick and efficient way of doing the job, but sometimes he makes mistakes. Which of the following statements is TRUE?

– Adam is the owner of a mall

– Adam is bad at mental math

– Adam is always making mistakes and so needs to use the computer

– Adam often does the math in his head and is usually quite good at it