Online Supplemental Materials

Prosociality in Young Latinx Children: Exploring the Role of Grandparents

Barragan, R. C., Brooks, R., Sanders, E. A., & Meltzoff, A. N.

Journal of Latinx Psychology. https://doi.org/10.1037/lat0000241

1.0. Detailed Check of "Do Not Know" Responses

In preliminary analyses we examined patterns in the data related to questionnaire responses of "do not know" (and the rare occurrences of omitted responses). There were three variables for which caregiver respondents could use alternate responses: "do not know" (for maternal education and also for the use of Electronic Benefit Transfer, EBT) or "other" (for gender identity of test child). If a caregiver chose "do not know," "other," or omitted a response, the item was categorized as "unknown," resulting in three categories for each of these variables (gender: unknown, female, or male; maternal education: unknown, not graduated high school, or graduated high school; EBT: unknown, EBT not used, or EBT used). We used effect coding for the three categories and conducted logistic regression analyses with children's 1:1 responding as the outcome. The results showed that the "unknown" was *not* a significant predictor of children's 1:1 prosocial choice and did not substantively change the significance of the grandparent live-with effect. The findings in the main text concerning the grandparent live-with effect remained significant, $p = .029$, and the demographic effects remained not significant (Table S1). For simplicity in Table 1 in the main text, we collapsed the unknown category into the "other" response for those variables (i.e., female vs. other; high school completed and beyond vs. other; and household EBT use vs. other).

2.0 Detailed Check of Maternal Education

As a further check of the data, we re-examined maternal education (because the median was graduating high school). In the analysis reported in the main text, maternal education was categorized with a median split by grouping together the education levels of graduating high school and having at least some college education versus not graduating high school. An alternate categorization is to group together mothers whose highest educational attainment was with or without high school graduation versus mothers with at least some college education. The results remained substantively the same with this alternate categorization: For example, the grandparent live-with effect was still significant ($p = .031$), and the covariates were still not significant.

3.0 Exploratory Analyses

Two-way interactions with Grandparent Lives-With Child

As listed in our preregistration, we examined whether there were significant moderating effects on grandparents (or grandmothers) living with the child. We added two-way interaction terms to Model 2 (see main text), specifically the interactions of grandparent effect with family covariates (any aunt/uncle, etc.) and with design covariates (park location, etc.) The results remained substantively the same: For example, the grandparent live-with effect was still significant ($p = .010$), and the covariates and their interactions were not significant. The grandmother live-with effect was also still significant ($p = .012$), and the covariates and their two-way interactions were not significant.

Grandparent Caring for the Child

For an exploratory analysis (see preregistration), we also asked the caregivers whether or not the grandmother and/or grandfather "care for" the child. Results are displayed in Tables S2 and S3. As can be seen, the two care-for variables exhibited the same patterns, with no significant predictors of prosocial choice observed in any model.

Table S1

Logistic Regression Results for Prosocial Choice (1:1) Using "Any Grandparent Lives with Child" as Focal Predictor, with Unknown Response Categories Modeled Explicitly

Parameter	Model (Nagelkerke R^2 = .08)					
	Est	(*SE*)	*z*	*p*	*OR*	*OR* 95% CI
Intercept (mean)	1.03	(0.50)	2.06	.039*	2.80	[1.05, 7.44]
Focal Predictors						
Time (months)	-0.18	(0.08)	-2.15	.032*	0.84	[0.71, 0.98]
Gpar lives with	0.68	(0.31)	2.18	.029*	1.98	[1.07, 3.65]
Time × Gpar	-0.15	(0.08)	-1.89	.058	0.86	[0.74, 1.01]
Family Covariates						
Any aunt/uncle	-0.14	(0.18)	-0.77	.442	0.87	[0.62, 1.23]
Any older sisters	-0.20	(0.14)	-1.37	.170	0.82	[0.62, 1.09]
Any older brothers	0.16	(0.14)	1.15	.249	1.17	[0.90, 1.53]
Unknown gender	-0.23	(0.68)	-0.34	.730	0.79	[0.21, 3.00]
Child female	0.09	(0.36)	0.24	.814	1.09	[0.53, 2.22]
Child age (*z*)	0.09	(0.14)	0.67	.502	1.10	[0.84, 1.44]
Unknown education	0.56	(0.49)	1.15	.250	1.75	[0.68, 4.53]
Maternal education	-0.16	(0.28)	-0.56	.573	0.85	[0.50, 1.47]
Unknown economic	0.29	(0.49)	0.58	.563	1.33	[0.51, 3.50]
Economic insecurity	-0.12	(0.29)	-0.40	.687	0.89	[0.50, 1.57]
Design Covariates						
Park location	0.14	(0.14)	0.98	.329	1.15	[0.87, 1.52]
Sticker placement	0.15	(0.13)	1.11	.265	1.16	[0.89, 1.51]
Caregiver resp lang	0.16	(0.16)	1.00	.319	1.17	[0.86, 1.59]

Note. N = 250 children. All predictors effect-coded, except time (coded in months since start of the study) and child age (in years, *z*-scored). Logistic regression with maximum likelihood used to analyze data. "Gpar" = grandparent. "resp lang" = respondent's language. * $p < .05$.

Table S2

Logistic Regression Results for Prosocial Choice (1:1) Using "Any Grandparent Cares for Child" as Focal Predictor

Parameter	Model 1 (Nagelkerke R^2 = .01)						Model 2 (Nagelkerke R^2 = .04))					
	Est	*(SE)*	*z*	*p*	*OR*	*OR 95% CI*	*Est*	*(SE)*	*z*	*p*	*OR*	*OR 95% CI*
Intercept (mean)	0.46	(0.25)	1.81	.071	1.58	[0.96, 2.59]	0.51	(0.28)	1.86	.063	1.67	[0.97, 2.87]
Focal Predictors												
Time (months)	-0.06	(0.07)	-0.87	.383	0.94	[0.82, 1.08]	-0.10	(0.08)	-1.39	.166	0.90	[0.78, 1.04]
Gpar cares for	-0.06	(0.25)	-0.22	.824	0.95	[0.58, 1.55]	-0.04	(0.27)	-0.14	.890	0.96	[0.56, 1.65]
Time x Gpar	-0.01	(0.07)	-0.13	.894	0.99	[0.87, 1.13]	0.00	(0.07)	-0.02	.982	1.00	[0.87, 1.15]
Family Covariates												
Any aunt/uncle							-0.06	(0.16)	-0.35	.726	0.95	[0.69, 1.30]
Any older sisters							-0.18	(0.14)	-1.27	.204	0.84	[0.64, 1.10]
Any older brothers							0.15	(0.14)	1.09	.275	1.16	[0.89, 1.52]
Child female							-0.02	(0.14)	-0.15	.879	0.98	[0.75, 1.28]
Child age (*z*)							0.10	(0.13)	0.79	.432	1.11	[0.85, 1.44]
Maternal education							0.07	(0.14)	0.47	.642	1.07	[0.81, 1.41]
Economic insecurity							0.04	(0.14)	0.29	.768	1.04	[0.79, 1.37]
Design Covariates												
Park location							0.12	(0.14)	0.88	.380	1.13	[0.86, 1.49]
Sticker placement							0.14	(0.13)	1.03	.305	1.15	[0.88, 1.48]
Caregiver resp lang							0.10	(0.16)	0.63	.532	1.10	[0.81, 1.51]

Note. N = 250 children. All predictors effect-coded, except time (coded in months since start of the study) and child age (in years, *z*-scored). Logistic regression with maximum likelihood used to analyze data. "Gpar" = grandparent. "resp lang" = respondent's language.

Table S3

Logistic Regression Results for Prosocial Choice (1:1) Using "Grandmother Cares for Child" as Focal Predictor

Parameter	Model 1 (Nagelkerke R^2 = .01)						Model 2 (Nagelkerke R^2 = .04)					
	Est	*(SE)*	*z*	*p*	*OR*	*OR 95% CI*	*Est*	*(SE)*	*z*	*p*	*OR*	*OR 95% CI*
Intercept (mean)	0.46	(0.25)	1.81	.071	1.58	[0.96, 2.59]	0.51	(0.28)	1.86	.063	1.67	[0.97, 2.87]
Focal Predictors												
Time (months)	-0.06	(0.07)	-0.91	.362	0.94	[0.82, 1.07]	-0.11	(0.07)	-1.42	.157	0.90	[0.78, 1.04]
Gma lives with	-0.07	(0.25)	-0.26	.797	0.94	[0.57, 1.54]	-0.05	(0.27)	-0.20	.844	0.95	[0.56, 1.62]
Time x Gma	-0.01	(0.07)	-0.09	.926	0.99	[0.87, 1.14]	0.00	(0.07)	0.04	.969	1.00	[0.87, 1.15]
Family Covariates												
Any aunt/uncle							-0.06	(0.16)	-0.35	.729	0.95	[0.69, 1.29]
Any older sisters							-0.17	(0.14)	-1.27	.206	0.84	[0.64, 1.10]
Any older brothers							0.15	(0.14)	1.08	.279	1.16	[0.89, 1.52]
Child female							-0.02	(0.14)	-0.15	.880	0.98	[0.75, 1.28]
Child age (*z*)							0.11	(0.13)	0.80	.421	1.11	[0.86, 1.45]
Maternal education							0.07	(0.14)	0.47	.640	1.07	[0.81, 1.41]
Economic insecurity							0.04	(0.14)	0.29	.771	1.04	[0.79, 1.37]
Design Covariates												
Park location							0.12	(0.14)	0.88	.377	1.13	[0.86, 1.49]
Sticker placement							0.14	(0.13)	1.03	.302	1.15	[0.88, 1.48]
Caregiver resp lang							0.10	(0.16)	0.62	.536	1.10	[0.81, 1.50]

Note. N = 250 children. All predictors effect-coded, except time (coded in months since start of the study) and child age (in years, *z*-scored). Logistic regression with maximum likelihood used to analyze data. "Gma" = grandmother. "resp lang" = respondent's language.