

Portland State University

PDXScholar

OHSU-PSU School of Public Health Faculty
Publications and Presentations

OHSU-PSU School of Public Health

5-22-2024

Language-Based Acculturation is Linked with Reproductive Autonomy Among Oregon Mexican-Origin Latinas

Sara Diaz-Anaya

Oregon Health & Science University

Emily R. Boniface

Oregon Health & Science University

Grace Parra

Portland State University

Edlyn Wolwowicz

Oregon Health & Science University

Blair G. Darney

OHSU-PSU School of Public Health

Follow this and additional works at: https://pdxscholar.library.pdx.edu/sph_facpub



Part of the [Medicine and Health Sciences Commons](#)

Let us know how access to this document benefits you.

Citation Details

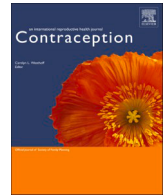
Diaz-Anaya, S., Boniface, E. R., Parra, G., Wolwowicz, E., & Darney, B. G. (2024). Language-based acculturation is linked with reproductive autonomy among Oregon Mexican-origin Latinas. *Contraception*, 110505.

This Article is brought to you for free and open access. It has been accepted for inclusion in OHSU-PSU School of Public Health Faculty Publications and Presentations by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: pdxscholar@pdx.edu.



Contents lists available at ScienceDirect

Contraception

journal homepage: www.elsevier.com/locate/contraception

Language-based acculturation is linked with reproductive autonomy among Oregon Mexican-origin Latinas^{☆,☆☆}

Sara Diaz-Anaya^a, Emily R. Boniface^{b,c}, Grace Parra^a, Edlyn Wolwowitz^b, Blair G. Darney^{b,c,d,*}

^a Portland State University, Portland, OR, United States

^b Oregon Health & Science University, Department of Obstetrics and Gynecology, Portland, OR, United States

^c OHSU-PSU School of Public Health, Portland, OR, United States

^d National Institute of Public Health, Center for Population Health Research, Cuernavaca, Morelos, Mexico

ARTICLE INFO

Article history:

Received 1 February 2024

Received in revised form 16 May 2024

Accepted 20 May 2024

Keywords:

Acculturation

Contraception

Immigrant health

Latina

Reproductive autonomy

ABSTRACT

Objectives: We test whether the level of acculturation is associated with reproductive autonomy among Mexican-origin Latinas in Oregon.

Study design: This was a cross-sectional study that used validated reproductive autonomy and language-based acculturation scales and sociodemographic information. We compared maximum reproductive autonomy score, overall and for each subscale (decision-making, freedom from coercion, and communication), by acculturation group. We developed a multivariable logistic regression model adjusted for age, education, and regular income source.

Results: Our sample included 434 respondents: 70.7% low, 26.7% bicultural, and 2.5% in the high acculturation group. A higher unadjusted proportion of women in the bicultural/high acculturation group than the low acculturation group had maximum reproductive autonomy scores (13.4% compared with 3.9%; $p < 0.001$). In adjusted analyses, women in the high/bicultural acculturation group had significantly higher odds of reporting a maximum reproductive autonomy score (adjusted odds ratio = 2.55, 95% CI: 1.08–5.98).

Conclusions: Language-based acculturation was positively associated with reproductive autonomy among a community-dwelling sample of Mexican-origin Latinas in Oregon.

© 2024 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Reproductive autonomy is defined as the power one holds over matters of childbearing, pregnancy, and contraceptive use and can be influenced by structural, cultural, community, or partner influence, as well as other factors [1]. Women with lower levels of education and income, as well as other intersecting identities, such as Latina ethnicity or being an immigrant, have reported lower levels of

reproductive autonomy [1]. One cultural explanation for understanding the relationship between immigrant status and reproductive autonomy is acculturation.

Acculturation can be generally defined as how immigrants adapt to their new host country and the processes in which they begin to potentially adopt the values, practices, and norms of the new society [2]. Acculturation has been linked to health outcomes, with higher levels of acculturation associated with greater access to health care and use of preventive services, but also with poorer health outcomes, which may vary by Latino subgroups [2]. Language proficiency in the host country language is often used as a measure of acculturation, is a key predictor of immigrant health [3], and has been linked to contraceptive use [4]. The link between acculturation and reproductive autonomy is less well understood [5]. The purpose of this study was to test whether the level of acculturation is associated with reproductive autonomy among Mexican-origin Latinas in Oregon. We hypothesized that higher levels of acculturation would be associated with higher levels of reproductive autonomy.

* Conflicts of interest: The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this article.

** Funding was provided by NIH Build Exito (UL1GM118964 | RL5GM118963 | TL4GM118965) and URISE (IT34GMI41989 01) grants. Dr. Darney and Ms. Boniface were supported by grant #1 PHEPA000004-01-00 from the Department of Health and Human Services, Office of Population Affairs (DHHS/OPA), Darney, PI. The funders had no role in the study design; data collection, analysis and interpretation of data; writing of the report; or decision to submit.

* Corresponding author.

E-mail address: darneyb@ohsu.edu (B.G. Darney).

2. Methods

We conducted a cross-sectional survey study. Our bilingual, bi-cultural (Spanish- and English-speaking Mexican Americans) study team administered the survey to a convenience sample of Latinas aged between 15–49 years at the Consulate General of Mexico in Portland, OR, between January and August 2022. Participants were at the Consulate for passport, birth certificate, or other services and were approached and introduced to the survey by the study team while waiting for their appointments. Eligible participants provided verbal informed consent after reading an information sheet about the study and took the survey in their preferred language, Spanish or English.

We developed a 26-item survey using validated reproductive autonomy and language-based acculturation scales and socio-demographic items used in our team's prior research [6]. The staff of the Consulate General of Mexico also gave feedback regarding the survey content and language before it was finalized for recruitment.

Our primary outcome was maximum reproductive autonomy score. The reproductive autonomy scale [1] has been administered in Spanish-speaking populations (see Appendix A) [4]. We assessed maximum scores overall and for the three subscales: decision-making, freedom from coercion, and communication. Our primary independent variable was respondent acculturation, categorized as low acculturation, bicultural, or high acculturation. Our acculturation scale asked about the language the respondent used at home, with friends and in childhood and the primary language they typically think in [7]. Due to the small number of respondents in the high acculturation group, we combined bicultural and high acculturation respondents for most analyses. Respondents who spoke a language other than Spanish or English were given the option to report that language ($n = 7$ reported speaking an indigenous language). Additional study covariates are listed in Table 1.

2.1. Analysis

We excluded 66 participants (out of 500) from analysis due to missing data ($n = 58$ missing at least one response to reproductive

Table 2

Proportion of respondents with maximum reproductive autonomy scores, by acculturation group, Mexican-origin Oregon Latinas, $N = 434$.

Score/subscale	Low acculturation	Bicultural/high acculturation	<i>p</i> -value
<i>n</i> (%)	307 (70.7)	127 (29.3)	
Overall score	12 (3.9)	17 (13.4)	< 0.001
Decision-making subscale	39 (12.7)	32 (25.2)	0.001
Coercion subscale	214 (69.7)	91 (71.7)	0.686
Communication subscale	189 (61.6)	64 (50.4)	0.032

Note. We assessed scores following guidance from the authors who developed the scale: overall (possible range 1–3.7) and for the three subscales: decision-making (range 1–3), freedom from coercion (range 1–4), and communication (range 1–4).

autonomy questions, two missing more than one acculturation question, and six missing both). We compared sociodemographic characteristics by the three-category acculturation group (low, bicultural, or high acculturation) for the respondents included in all main analyses, using Pearson χ^2 test or Fisher exact test. We compared the unadjusted proportion of respondents in each binary acculturation group who reported the maximum reproductive autonomy score, overall and for each subscale, using Pearson χ^2 test. We developed a multivariable logistic regression model adjusted for age group, education level, and regular income source. All analyses were performed in Stata version 15.1 (StataCorp, College Station, TX).

3. Results

Of our sample of 434 reproductive-aged Latina respondents, the majority (70.7%) of respondents fell into the low acculturation group (Table 1), 26.7% were bicultural, and 2.5% in the high acculturation group.

Table 2 presents the proportion of respondents with the maximum reproductive autonomy score by binary acculturation group (low vs bicultural/high); 3.9% (12/307) of women in the low acculturation group had the maximum reproductive autonomy score,

Table 1

Respondent characteristics by degree of acculturation, Mexican-origin Oregon Latinas, $N = 434$.

	Low acculturation	Bicultural	High acculturation	Overall	<i>p</i> -value
<i>n</i> (%)	307 (70.7)	116 (26.7)	11 (2.5)	434	
Age group (years)					< 0.001
15–19	4 (1.3)	8 (6.9)	0 (0.0)	12 (2.8)	
20–24	21 (6.8)	19 (16.4)	1 (9.1)	41 (9.5)	
25–29	52 (16.9)	31 (26.7)	4 (36.4)	87 (20.1)	
30–39	130 (42.4)	40 (34.5)	5 (45.4)	175 (40.3)	
40–49	100 (32.6)	18 (15.5)	1 (9.1)	119 (27.4)	
Live in Portland metro area					0.029
No	88 (28.7)	48 (41.4)	6 (54.6)	142 (32.7)	
Yes	218 (71.0)	68 (58.6)	5 (45.4)	291 (67.1)	
Missing	1 (0.3)	0 (0.0)	0 (0.0)	1 (0.2)	
Years in the United States					< 0.001
< 5	47 (15.3)	3 (2.6)	0 (0.0)	50 (11.5)	
5–10	67 (21.8)	8 (6.9)	0 (0.0)	75 (17.3)	
> 10	172 (56.0)	63 (54.3)	5 (45.4)	240 (55.3)	
All of my life	20 (6.5)	41 (35.3)	6 (54.6)	67 (15.4)	
Missing	1 (0.3)	1 (0.9)	0 (0.0)	2 (0.5)	
Relationship					0.160
Married/cohabitating	244 (79.5)	80 (69.0)	8 (72.7)	332 (76.5)	
Single	61 (19.9)	35 (30.2)	3 (27.3)	99 (22.8)	
Missing	2 (0.7)	1 (0.9)	0 (0.0)	3 (0.7)	
Education					< 0.001
Less than high school	170 (55.4)	10 (8.6)	1 (9.1)	181 (41.7)	
High school/GED	108 (35.2)	62 (53.5)	6 (54.5)	176 (40.6)	
Associate's degree or more	29 (9.5)	44 (37.9)	4 (36.4)	77 (17.7)	
Have a job/regular income					0.427
No	65 (21.2)	20 (17.2)	4 (36.4)	89 (20.5)	
Yes	240 (78.2)	95 (81.9)	7 (63.6)	342 (78.8)	
Missing	2 (0.7)	1 (0.9)	0 (0.0)	3 (0.7)	

GED, General Educational Development.

which indicates a high level of reproductive autonomy, compared to 13.4% (17/127) of women who fell into the bicultural/high acculturation category, a statistically significant difference ($p < 0.001$). The reproductive autonomy subscales of decision-making, and communication were significantly different by acculturation group ($p = 0.001$ and $p = 0.03$, respectively), while freedom from coercion was not (Table 2). In adjusted analyses (controlling for age, education, and income), women in the bicultural/high acculturation group had significantly higher odds of reporting a maximum reproductive autonomy score (adjusted odds ratio = 2.55, 95% CI: 1.08–5.98; data not shown).

4. Discussion

In our community sample of Mexican-origin Latinas in Oregon, higher language-based acculturation (high or bicultural) is positively associated with reproductive autonomy. However, we did not find an association of higher acculturation with all reproductive autonomy subscales: freedom from coercion was not different by acculturation group.

Our data support previous studies that have found a positive association between acculturation and obtaining emergency contraception [8] and use of long-acting reversible contraception [4]. However, most research to date has included clinical samples focused on contraceptive use, not reproductive autonomy. Use of contraception can be an indicator of exercising reproductive autonomy but is not synonymous with reproductive autonomy. The more limited literature on acculturation and reproductive autonomy found that number of years in the United States (an alternative measure of acculturation) was positively associated with the belief that it is a woman's choice whether to have an abortion [5] supporting our study results that higher levels of acculturation are associated with reproductive autonomy.

Our study has limitations. Our results may not be generalizable to all Mexican-origin Latinas due to the age distribution of our sample and our recruitment site at the Consulate General of Mexico, where Mexican-origin Latinas with ties to Mexico may be less acculturated than the overall population of Mexican-origin Latinas. However, our community recruitment site is also a strength – most evidence about reproductive autonomy in Latinas comes from populations presenting for family planning services [4,5,8,9]. Furthermore, less acculturated populations, such as our sample, can be hard to access and include in research. In addition, our study topic was sensitive, which can result in social acceptability bias and likely contributed to our missing data.

We found that language-based acculturation was positively associated with reproductive autonomy. Our study highlights the importance of considering different acculturation levels in information dissemination and program implementation. Women with low levels of acculturation may experience intersecting oppressions to their autonomy, including reproductive autonomy.

Acknowledgments

We would like to thank the Latinas who participated in this survey, the Consul General, Carlos Quesnel, and all the staff of the Consulate General of Mexico of Portland, OR, who supported data collection. We also thank Laura Jacobson, PhD, MPH, for her support of this manuscript.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.contraception.2024.110505.

References

- [1] Upadhyay UD, Dworkin SL, Weitz TA, Foster DG. Development and validation of a reproductive autonomy scale. *Stud Fam Plann* 2014;45:19–41. <https://doi.org/10.1111/j.1728-4465.2014.00374.x>
- [2] Abraído-Lanza AF, Echeverría SE, Flórez KR. Latino immigrants, acculturation, and health: promising new directions in research. *Annu Rev Public Health* 2016;37:219–36. <https://doi.org/10.1146/annurev-publhealth-032315-021545>
- [3] Shin YJ, Maupome G. Segmentation of Mexican-heritage immigrants: acculturation typology and language preference in health information seeking. *J Immigr Minor Health* 2017;19:1163–73. <https://doi.org/10.1007/s10903-016-0401-7>
- [4] Roncancio AM, Ward KK, Berenson AB. The use of effective contraception among young Hispanic women: the role of acculturation. *J Pediatr Adolesc Gynecol* 2012;25:35–8. <https://doi.org/10.1016/j.jpog.2011.08.008>
- [5] Chamberlain R, Fatehi M, Fogel J, Kuly J. Hispanic acculturation: associations with family planning behaviors and attitudes. *Kans J Med* 2021;14:103–7. <https://doi.org/10.17161/kjm.vol1414845>
- [6] Wolwicz-Lopez E, Boniface E, Díaz-Anaya S, Cornejo-Torres Y, Darney BG. Awareness of the public charge, confidence in knowledge, and the use of public healthcare programs among Mexican-origin Oregon Latino/as. *Int J Equity Health* 2023;22:212. <https://doi.org/10.1186/s12939-023-02027-w>
- [7] Marin G, Sabogal F, Marin BV, Otero-Sabogal R, Perez-Stable EJ. Development of a short acculturation scale for Hispanics. *Hisp J Behav Sci* 1987;9:183–205.
- [8] Ward KK, Roncancio AM, Berenson AB. Cultural adaptation among Hispanic women as related to awareness and acquisition of emergency contraception. *Contraception* 2010;82:534–7. <https://doi.org/10.1016/j.contraception.2010.05.012>
- [9] Carvajal DN, Zambrana RE. Challenging stereotypes: a counter-narrative of the contraceptive experiences of low-income Latinas. *Health Equity* 2020;4:10–6. <https://doi.org/10.1089/hecq.2019.0107>