

# Stereotypes About Childfree Adults (SACHA): Development and Validation of a Brief Scale

Jennifer Watling Neal and Zachary P. Neal  
Michigan State University

Childfree adults do not have or want children, and voluntarily opt out of parenthood. Although this group is large (more than one-fifth of some adult populations), its members are often subjected to negative stereotypes about their behavior, obligations, personal characteristics, and future outcomes. These negative stereotypes are important because they have implications for childfree adults' stigmatization. To help measure individuals' stereotyped views of childfree adults, we use data on a representative sample of 1,000 Michigan adults to develop and validate the Stereotypes about Childfree Adults (SACHA) scale. We demonstrate that this four-item scale exhibits (1) high internal consistency, (2) scalar invariance with respect to sex, race/ethnicity, and education, and (3) known-groups, convergent, and discriminant validity. We conclude by discussing potential applications of this scale for understanding stereotypes of individuals' reproductive decisions.

*keywords:* childfree; stereotypes; measurement; demography

## Introduction

Popular media (e.g., Sandler & Witteman, 2013) and scholarly research (e.g., Z. P. Neal & Neal, 2023) have recognized the existence of *childfree* adults, who do not want children and voluntarily opt out of parenthood. Within the broader psychology literature on attitudes, stereotypes, and prejudices, (for an overview, see Dovidio, Hewstone, Glick, & Esses, 2010), a growing body of research has emerged that focuses specifically on childfree adults. However, the few multi-item scales that have been developed to measure attitudes, stereotypes, or prejudices about childfree adults have some limitations (Bahtiyar-Saygan & Sakalli-Uğurlu, 2019; Ciesielski, 2024; Husnu, 2016; Koropecj-Cox & Çopur, 2015). First, they were developed in non-representative populations of students or internet users, and may not perform as expected in general populations. Second, while they all offer high internal consistency, they offer limited evidence of measurement validity and no evidence of measurement invariance. Finally, those that do offer evidence of validity are relatively long, and may be impractical to include on some surveys.

To overcome these limitations, in this paper we develop

and validate the brief four-item English-language Stereotypes About Childfree Adults (SACHA) scale using a representative sample of 1,000 Michigan (USA) adults. We begin by reviewing the existing literature on attitudes about childfree adults, including what is known about differences in the endorsement of these attitudes across various demographic characteristics. We also review existing scales for measuring attitudes, stereotypes, and prejudices about childfree adults, discussing their strengths and limitations. Next, using a representative sample of 1,000 Michigan adults, we develop the SACHA scale, presenting evidence of three aspects of its construct validity (known-groups, convergent, and discriminant) and evidence of its measurement invariance by sex, race, and education. We conclude with implications for improving the measurement of attitudes about childfree adults and for future research to understand these attitudes in general populations.

## Background

*Childfree* adults “neither have nor want children” (Z. P. Neal & Neal, 2023, p. 121). Because childfree adults' lack of desire to have children places them at odds with norms of pronatalism, they are at risk of being the target of negative stereotypes (Gillespie, 2000; Park, 2002). While there are multiple definitions of stereotypes and related cognitions in the broader psychology literature (see Dovidio et al., 2010), in this work we conceptualize a stereotype as a negative attitude about a target group (here, childfree adults) that is held more strongly by out-group members (i.e., non-childfree adults) than by in-group members (i.e., childfree adults). Both childfree men and women are more likely to

---

Correspondence concerning this article should be addressed to Jennifer Watling Neal, Department of Psychology, Michigan State University, East Lansing, MI 48824; [jneal@msu.edu](mailto:jneal@msu.edu).

Jennifer Watling Neal  <https://orcid.org/0000-0002-7749-8121>  
Zachary P. Neal  <https://orcid.org/0000-0003-3076-4995>

report being negatively stereotyped due to their reproductive choices than parents (Magarick & Brown, 1981; Somers, 1993). Understanding stereotypes about childfree adults is important for two reasons. First, recent estimates find that childfree adults may comprise over a fifth of the adult population (J. W. Neal & Neal, 2023), suggesting that these stereotypes may affect a substantial number of people. Second, stereotypes may lead childfree adults to experience discrimination in the workplace and other social settings (Turnbull et al., 2016; Verniers, 2020).

Past work points to potential demographic differences in perceptions and stereotypes about childfree adults. Women are more likely than men to be accepting and have positive attitudes toward childfree adults (Çopur & Koropecjy-Cox, 2010; Dimitrova & Kotzeva, 2022; Koropecjy-Cox & Pendell, 2007; Merz & Liefbroer, 2012), although differences between men and women were not detected in all samples (see Bahtiyar-Saygan & Sakallı-Uğurlu, 2019; Koropecjy-Cox & Çopur, 2015; Maftai et al., 2021). Individuals who identify as members of an ethnic minority group (Dimitrova & Kotzeva, 2022) and non-White individuals (Koropecjy-Cox & Pendell, 2007) are more likely to disapprove of childfree individuals. However, at least one study showed that both African American and White women are equally likely to perceive childfree individuals less favorably than mothers (Vinson et al., 2010). Higher levels of education have been consistently linked to more positive attitudes toward childfree adults (Bahtiyar-Saygan & Sakallı-Uğurlu, 2019; Dimitrova & Kotzeva, 2022; Koropecjy-Cox & Çopur, 2015; Koropecjy-Cox & Pendell, 2007; Merz & Liefbroer, 2012; Polit, 1978). Finally, family status also has implications for stereotypes about childfree adults. People who do not have children are less likely to be disapproving of and more likely to hold positive attitudes toward childfree individuals (Dimitrova & Kotzeva, 2022; Koropecjy-Cox & Pendell, 2007; Maftai et al., 2021; Merz & Liefbroer, 2012; Polit, 1978). However, individuals who want to have children are more likely to view childfree adults as less moral, more regretful, and consequently less psychologically fulfilled (Ekelund & Ask, 2021).

To facilitate understanding these differences and their implications, efforts to measure attitudes, stereotypes, and prejudices about childfree adults have focused on the development of survey-based multi-item scales. Table 1 summarizes the names, number of items, and languages, and provides example items for four such scales. The Positive Attitudes about Childlessness (PAC; Koropecjy-Cox & Çopur, 2015) scale is a five-item English- and Turkish-language scale, and the Attitudes Toward Childlessness (ATC; Husnu, 2016) scale is an eight-item Turkish-language scale. As the names and example items of these two scales illustrate, they focus on all people without children, rather than specifically on people who do not want children, and therefore have limited

use for studying childfree people. In contrast, the 24-item Turkish-language Attitudes Toward Voluntary Childlessness Scale (ATVC; Bahtiyar-Saygan & Sakallı-Uğurlu, 2019) and the 14-item Polish-language Questionnaire of Prejudice toward Voluntarily Childless people (QPVC Ciesielski, 2024) both focus specifically on childfree or voluntarily childless people.

These existing scales offer a useful starting point for measuring stereotypes about childfree adults, and have a number of strengths including being developed in multiple national contexts and exhibiting high internal consistency. At the same time, they also have some limitations with respect to the *sample* within which they were developed, and the evidence for their *measurement* properties (see Table 2). First, all four scales were developed using populations of either undergraduate college students (PAC, ATC) or internet users (AVCS, QPVC). Although these populations are convenient to recruit for research, they may be systematically different from and therefore offer little insight into how the scale performs in the general population of adults. Second, all four scales were developed in non-representative samples. Because the samples of students or internet users are not representative of, and may be systematically different from, the population of students or internet users, they do not provide insight into how the scale performs in these populations. Third, the AVCS and QPVC are accompanied by evidence of their measurement validity, while the PAC and ATC are not. Finally, none of the existing scales are accompanied by evidence of their measurement invariance, that is, evidence that they perform similarly for different groups of respondents.

## Method

We aim to build on these existing scales, but overcome their limitations, by developing and then evaluating the Stereotypes About Childfree Adults (SACHA) scale's validity and measurement invariance in a representative population of adults in Michigan (USA).

## Data and Setting

The data for this study come from the State of the State Survey (SOSS), a recurring public opinion survey of Michigan adults conducted by the Institute for Public Policy and Social Research (IPPSR) at Michigan State University. This wave of SOSS data was collected April 12 – 21, 2022. To ensure representativeness, the sample of 1,000 adults was obtained by matching respondents on sex, age, race, and education to a sampling frame constructed from 2019 American Community Survey. Initial sampling weights were computed using propensity scores, then final weights were derived using post-stratification on presidential vote, sex, age, race, and education.

**Table 1***Scales of childfree stereotypes and prejudice: Content*

<b>Scale</b>	<b>Number of items</b>	<b>Language</b>	<b>Specifically Childfree</b>	<b>Example Item</b>
Positive Attitudes about Childlessness (PAC; <a href="#">Koropecj-Cox &amp; Çopur, 2015</a> )	5	English, Turkish	No	“People without children lead empty lives.”
Attitudes toward Childlessness (ATC; <a href="#">Husnu, 2016</a> )	8	Turkish*	No	“People who have never had children lead empty lives.”
Attitudes toward Voluntarily Childlessness Scale (AVCS; <a href="#">Bahtiyar-Saygan &amp; Sakallı-Uğurlu, 2019</a> )	24	Turkish*	Yes	“Those who don’t want to have children are the ones who don’t like children.”
Questionnaire of Prejudice Towards Voluntarily Childless People (QPVC; <a href="#">Ciesielski, 2024</a> )	14	Polish*	Yes	“If someone does not want to have children, their life will be meaningless.”
Stereotypes about Childfree Adults (SACHA; this paper)	4	English	Yes	“Childfree people are selfish.”

\* English translation provided in the associated article.

**Table 2***Scales of childfree stereotypes and prejudice: Evaluation*

<b>Scale</b>	<b>Sample</b>			<b>Measurement</b>		<b>Invariance</b>
	<b>Population</b>	<b>Location</b>	<b>Representative</b>	<b>Internal</b>	<b>Validity</b>	
PAC	Students	Turkey, USA	No	$\alpha = 0.79$	None	None
ATC	Students	Turkey, Cyprus	No	$\alpha = 0.70$	None	None
AVCS	Internet	Turkey	No	$\alpha = 0.92$	Content, Concurrent, Convergent	None
QPVC	Internet	Poland	No	$\omega = 0.90$	Convergent	None
SACHA	Adults	USA	Yes	$\alpha = 0.82$	Known-groups, Convergent, Discriminant	Sex, Race, Education

## Sample

Sex was measured by asking “*What is your sex?*”, to which respondents could choose male, female, or intersex/other. Although an ‘intersex’ response option was offered, it was not selected by any respondents.

Race was measured by asking “*What is your race?*”, to which respondents could choose one or more of the following categories: White or Caucasian, African American or Black, Hawaiian or other Pacific Islander, Asian, American Indian or Alaskan Native, or Other. Additionally, ethnicity was measured by asking “*Are you of Hispanic, Latinx, or Spanish origin?*”, to which respondents could answer yes or no. Due to the small number of respondents in most racial/ethnic categories, we follow the U.S. Census convention by combining these two variables to measure race using a binary variable that distinguishes White Non-Hispanic (i.e., White alone) respondents from all others (i.e., Non-White).

Education was measured by asking “*What is the highest level of education you have completed?*”, to which respondents could choose from 10 options ranging from ‘Did not go to school’ to ‘Graduate degree.’ Following the U.S. Census convention, we recoded this variable into a binary variables that distinguishes respondents holding at least a four-year college degree from all others.

It is important to rely on a sample that is representative of the population of interest when developing measures intended to be used in the general population. Table 3 reports the demographic characteristics of the sample, the population estimate derived from the sample data using the sampling weights, and the most recently available U.S. Census estimate for Michigan and the United States. These values illustrate that the weighted and unweighted samples closely match the known sex, race, and education characteristics of both Michigan and the United States as reported by the U.S. Census. Therefore, they suggest that the sample is representative of the U.S. adult population with respect to these characteristics.

## Scale Item Pool

We reviewed the scholarly literature and popular media to identify stereotypes that are commonly applied to childfree adults. With the goal of constructing a brief measure, we selected common stereotypes, which yielded an initial pool of six items listed in Table 4 (see Supporting Information for more details). The survey asked respondents “*We are interested in your views of statements that describe people who do not want to have children. To what extent do you agree or disagree with the following statements?*” The response options for each item included: (1) *strongly disagree*, (2) *disagree*, (3) *neither agree nor disagree*, (4) *agree*, and (5) *strongly agree*.

## Other Measures

In addition to the demographic characteristics and scale items described above, we also measured interpersonal warmth and family status.

To measure interpersonal warmth, the survey asked respondents “*On a 0 to 100 scale, where 0 means very cold or unfavorable, and 100 means very warm or favorable, how do you feel toward people who never want to have or adopt children?*” and “*...how do you feel toward people who have children?*”. To avoid order effects, these two questions were presented in random order.

Following J. W. Neal and Neal (2023), we identify child-free respondents as those who answer ‘no’ to each of the following questions: (1) “Do you have, or have you ever had, any biological, step-, or adopted children,” (2) “Do you plan to have any biological or adopted children in the future,” and (3) “Do you wish you had or could have biological or adopted children.” All other respondents are classified as not child-free.

In our analysis of known-groups validity, we also contrast respondents who have or want(ed) children to others. We identify respondents who have or want(ed) children as those who answer ‘yes’ to any of the above three questions.

## Analysis Plan

Our analysis proceeds in three stages: (1) scale development, (2) measurement invariance, (3) construct validity. To ensure that our estimates are representative of the adult population of Michigan, unless otherwise noted, all analyses incorporate the provided sampling weights using the survey package for R (Lumley, 2004). Additionally, to maximize our ability to include respondents, we use pairwise deletion and report the analytic sample size for each analysis. Sensitivity analyses confirm that our conclusions remain the same using unweighted data and/or listwise ( $N = 905$ ) deletion. The results of these sensitivity analyses, variable correlations, and all data and materials necessary to reproduce the results reported below, are available at <https://osf.io/awq3z/>.

**Scale development.** To select items from our initial pool for inclusion on the final scale, we use t-tests to identify statements that are more strongly endorsed by non-childfree respondents than by childfree respondents, and therefore that can be viewed as stereotypes. We construct the final SACHA scale as the mean of the retained items, and report its distributional properties in our sample. We also report the parameter estimates and fit indices of the corresponding one-factor confirmatory factor analysis, which we estimate using the lavaan package for R (Rosseel, 2012). Because the items are measured at the ordinal level, we use the WLSMV estimator (Brauer, Ranger, & Ziegler, 2023).

**Table 3***Sample demographics with U.S. Census comparisons*

	Sample Estimates (N = 1000)		U.S. Census Estimates	
	Unweighted	Weighted	Michigan	United States
Sex				
Male	461 (46.1%)	48.73%	49.30%	49.50%
Female	539 (53.9%)	51.27%	50.70%	50.50%
Race				
White alone	802 (80.2%)	77.39%	79.00%	75.80%
Non-White	198 (19.8%)	22.61%	20.80%	24.20%
Education				
College graduate	327 (32.7%)	26.86%	30.00%	32.90%
Not college graduate	673 (67.3%)	73.14%	70.00%	67.10%

**Table 4***Item Pool and Descriptive Statistics of Childfree and Non-Childfree Groups*

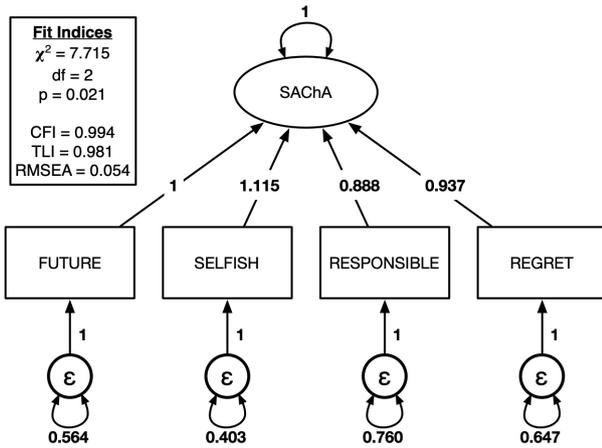
Label <sup>a</sup>	Item	N	CF	Mean (SE)	Statistic [95% CI]		p
				Not CF	Hedges' G	Student's T	
<b>FUTURE</b>	They have little stake in the future	970	2.22 (0.09)	2.58 (0.05)	0.28 [0.13-0.43]	3.61 [0.16-0.55]	< 0.001
<b>SELFISH</b>	They are selfish	969	1.92 (0.09)	2.24 (0.06)	0.22 [0.07-0.37]	3.02 [0.11-0.53]	0.003
<b>RESPONSIBLE</b>	They have few responsibilities	967	2.38 (0.1)	2.68 (0.06)	0.26 [0.11-0.42]	2.66 [0.08-0.51]	0.008
CAREER	They are career-minded	971	3.4 (0.07)	3.45 (0.04)	0.05 [-0.1-0.2]	0.70 [-0.1-0.21]	0.483
DISLIKE	They dislike spending time with children	969	2.64 (0.1)	2.81 (0.05)	0.10 [-0.05-0.25]	1.57 [-0.04-0.38]	0.117
<b>REGRET</b>	They will regret the decision later in life	970	2.34 (0.09)	2.90 (0.05)	0.5 [0.35-0.66]	5.20 [0.35-0.77]	< 0.001

<sup>a</sup> Bolded items were retained in the final scale; CF = Childfree

**Measurement invariance.** We estimate a series of models, again using lavaan and the WLSMV estimator, to first evaluate whether the factor structure is the same across groups (i.e. configural invariance), then whether the factor loadings are the same (i.e. metric invariance), and finally whether the item intercepts are the same (i.e. scalar invariance). We perform this analysis to test the scale's measurement invariance with respect to sex (male vs. female), race (White vs. Non-White), and education (college graduate vs. not). Because these tests are not designed to make inferences to an underlying population, and because weighted versions of these tests do not exist, we perform these analyses using the unweighted sample data.

**Construct validity.** We evaluate three aspects of SACHA's construct validity. First, we test its known-groups validity by examining mean differences between groups based on sex, race, education, and family status (i.e., whether or not individuals have or want(ed) children; Davidson,

2014). Based on prior research, we expect stereotype scores on SACHA to be higher for men, Non-White respondents, non-college graduates, and individuals who have or want(ed) children. Second, we test its convergent validity by examining its association with a measure of interpersonal warmth toward childfree adults. We expect this association to be significant and negative because respondents who hold more stereotyped views of childfree adults should feel less warm toward them. Finally, we evaluate its discriminant validity by examining its association with a measure of interpersonal warmth toward parents. We expect this association to be non-significant because SACHA is intended to only measure stereotyped views of childfree adults, and not general negative affect toward others.



**Figure 1**

*Confirmatory factor analysis with standardized loadings and variances, and model fit statistics ( $N = 982$ ).*

## Results

### Scale development

Table 4 reports the mean (sd) score for childfree and non-childfree respondents on each item in the item pool. Larger values represent stronger agreement with the statement as a description of childfree adults. As expected, non-childfree respondents more strongly endorsed each item than childfree respondents. Both Hedges'  $G$  and Student's  $T$  capture the magnitude of these differences. These statistics' 95% confidence intervals, and the  $p$ -value associated with the  $T$  statistic, reveal that these differences are statistically significant for only four items: FUTURE, SELFISH, RESPONSIBLE, and REGRET. We construct the SACHA scale as the mean of these four items ( $N = 982$ ). The resulting scale exhibits high internal consistency ( $\alpha = 0.82$ ), with a mean near the midpoint of the scale ( $M = 2.47$ ,  $SD = 0.92$ ), and a modest positive skew characteristic of negative attitudes (i.e., most respondents do not hold stereotypes about childfree adults; skew = 0.31).

Figure 1 shows the corresponding one-factor measurement model ( $N = 982$ ), with standardized loadings, standardized variances, and model fit statistics. The comparative fit index ( $CFI = 0.994$ ) and Tucker Lewis index ( $TLI = 0.981$ ) are both greater than 0.95, and the Root Mean Square Error of Approximation ( $RMSEA = 0.054$ ) is less than 0.1, indicating good fit.

### Measurement invariance

Table 5 reports the results of a series of nested tests of measurement invariance by sex (male vs. female), race (White vs. Non-White), and education (college graduate vs. not). The CFI, RMSEA, and SRMR of each model indicate

good fit that does not decline as additional constraints are imposed. For each grouping variable, both  $p$ -values testing change in the  $\chi^2$  statistic are non-significant. This indicates that SACHA exhibits scalar invariance for each of these groups. That is, for example, SACHA measures stereotypes about childfree adults in the same way (i.e., same factor structure, item loadings, and item intercepts) for both male and female respondents, and therefore can be used to compare male and female respondents.

### Construct validity

Table 6 reports preliminary evidence of three aspects of SACHA's construct validity. The top panel evaluates its known-group validity by comparing the mean score of groups defined by sex, race, education, and family status. As expected based on prior research, we find that SACHA is statistically significantly larger for men ( $M = 2.69$ ) than women ( $M = 2.37$ ,  $t_{980} = -4.45$ ,  $p < 0.001$ ), non-college graduates ( $M = 2.59$ ) than college graduates ( $M = 2.33$ ,  $t_{980} = -1.24$ ,  $p < 0.001$ ), and respondents who have or want(ed) children ( $M = 2.65$ ) than others ( $M = 2.22$ ,  $t[961] = -5.68$ ,  $p < 0.001$ ). Mirroring past mixed findings concerning the role of minority status, we find that Non-White respondents have a higher mean SACHA score ( $M = 2.6$ ) than White respondents ( $M = 2.5$ ), but that the difference is not statistically significant ( $t[980] = -1.24$ ,  $p = 0.21$ ).

The middle panel evaluates SACHA's convergent validity by testing its association with respondents' interpersonal warmth toward childfree adults. As expected, we find that these two measures are statistically significantly positively correlated ( $r = -0.39$ ,  $p < 0.001$ ,  $N = 955$ ).

The bottom panel evaluates SACHA's discriminant validity by testing its association with respondents' interpersonal warmth toward parents. As expected, we find that these two measures are uncorrelated ( $r = 0.01$ ,  $p = 0.72$ ,  $N = 941$ ).

## Discussion

Research designed to understand attitudes, stereotypes, and prejudices about childfree adults lacks brief scales that have been validated in representative samples. In this paper, we address these measurement gaps by developing the four-item SACHA scale (see *Appendix*) and presenting evidence of its reliability, construct validity, and measurement invariance in a representative sample of Michigan adults. SACHA exhibits high reliability and good fit with a one-factor model. Tests of measurement invariance demonstrate that SACHA performs similarly across male and female respondents, White and non-White respondents, and college-educated and non-college educated respondents. Finally, tests of construct validity demonstrate that SACHA exhibits known-group validity with respect to gender, education, race and family status, convergent validity with interpersonal warmth toward childfree adults, and discriminant

**Table 5***Tests of measurement invariance*

Group	Invariance	CFI	RMSEA	SRMR	$\chi^2$	$\Delta\chi^2$	<i>p</i>
Sex (N = 982)	Configural	0.994	0.054	0.016	3.001	NA	NA
	Metric	0.996	0.034	0.021	5.086	3.245	0.355
	Scalar	0.994	0.034	0.025	7.381	4.757	0.19
Race (N = 982)	Configural	0.996	0.044	0.015	2.809	NA	NA
	Metric	0.994	0.041	0.023	6.49	5.425	0.143
	Scalar	0.99	0.044	0.027	10.123	6.722	0.081
Education (N = 982)	Configural	0.993	0.056	0.016	2.986	NA	NA
	Metric	0.995	0.036	0.022	5.207	3.473	0.324
	Scalar	0.996	0.026	0.023	6.054	1.875	0.599

**Table 6***Evidence of construct validity*

Variable	Group	Mean	SE	Test of Group Difference
<u>Known groups</u>				
Sex (N = 982)	Male	2.69	0.06	$t[980] = -4.45, p < 0.001$
	Female	2.37	0.04	
Race (N = 982)	Non-White	2.6	0.07	$t[980] = -1.24, p = 0.21$
	White	2.5	0.04	
Education (N = 982)	Not college graduate	2.59	0.04	$t[980] = -3.63, p < 0.001$
	College graduate	2.33	0.06	
Family status (N = 963)	Have or want(ed) children	2.65	0.04	$t[961] = -5.68, p < 0.001$
	Others	2.22	0.06	
<u>Convergent</u>				
Warmth toward childfree (N = 955)		67.15	1.14	$r = -0.39, p < 0.001$
<u>Discriminant</u>				
Warmth toward parents (N = 941)		79.84	0.88	$r = -0.01, p < 0.72$

validity with interpersonal warmth toward parents. Taken together, these results provide evidence that SACHA is reliable, suitable for use with and for comparing across multiple demographic groups, and valid for measuring stereotypes about childfree adults.

Although this study contributes to the literature by developing and validating SACHA in a large representative sample, results should be interpreted in light of some limitations. First, because we used data from the SOSS, our data are limited to one U.S. state (i.e., Michigan). However, this concern is tempered because the demographic characteristics of Michigan mirror those of the U.S. nationally (see Table 3). Second, because we aimed to create a brief measure, we started with a small initial item pool. This yields a reliable, valid, and feasible four-item scale, but may omit some domains of stereotypes about childfree adults (e.g., whether childfree adults are less psychologically fulfilled), which would require a longer scale to capture.

Future research should examine the measurement properties of SACHA in additional samples, including samples from other U.S. states or other countries. Replicating this work may be particularly important in contexts where norms of pronatalism may be especially strong, for example in the Southern U.S. (Sherman & Witherspoon, 2023) or Japan (Fassbender, 2021). Alternatively, because preliminary evidence from our study suggests that SACHA is promising, future research may use it to identify contexts where endorsement of stereotypes is high and childfree adults are more likely to report experiences of discrimination or social isolation. In addition to exploring childfree stereotypes in other contexts, future research should also explore the intersectionality of these cognitions. Specifically, while SACHA and other related scales aim to measure attitudes held about the entire population of childfree adults, some stereotypes may apply only to demographic subgroups of childfree adults (e.g., only childfree women, only younger childfree adults),

and may require more specialized scales to capture.

Childfree individuals represent over one-fifth of some adult populations (J. W. Neal & Neal, 2021; Z. P. Neal & Neal, 2022) and commonly report experiencing stigmatization and discrimination (e.g., Doyle et al., 2012; Gillespie, 2000; Mollen, 2006; Mueller & Yoder, 1999; Park, 2002; Turnbull et al., 2016). However, research on stereotypes about childfree adults has been hindered by a lack of validated multi-item scales and an over-reliance on non-representative samples. Using a representative sample of Michigan adults, our study provides initial evidence that SACHA, a brief multi-item scale designed to measure stereotypes about childfree adults, is reliable, invariant across demographic characteristics, and valid. SACHA provides researchers with a promising new tool for understanding both predictors and outcomes of stereotypes about childfree adults, paving the way for an improved understanding of perceptions of a population that defies pronatalist expectations.

### References

- Bahtiyar-Saygan, B., & Sakallı-Uğurlu, N. (2019). Development of attitudes toward voluntary childlessness scale and its associations with ambivalent sexism in Turkey. *Journal of Family Issues, 40*(17), 2499–2527. <https://doi.org/10.1177/0192513X19860168>
- Brauer, K., Ranger, J., & Ziegler, M. (2023). Confirmatory factor analyses in psychological test adaptation and development. *Psychological Test Adaptation and Development, 4*. <https://doi.org/https://doi.org/10.1027/2698-1866/a000034>
- Ciesielski, P. (2024). Construction and validation of a tool for measuring prejudice towards voluntarily childless people. *European Journal of Psychological Assessment*.
- Çopur, Z., & Koropecykj-Cox, T. (2010). University students' perceptions of childless couples and parents in Ankara, Turkey. *Journal of Family Issues, 31*(11), 1481–1506. <https://doi.org/10.1177/0192513X10361577>
- Davidson, M. (2014). Known-groups validity. *Encyclopedia of Quality of Life and Well-Being Research, 3481–3482*. [https://doi.org/10.1007/978-94-007-0753-5\\_1581](https://doi.org/10.1007/978-94-007-0753-5_1581)
- Dimitrova, E., & Kotzeva, T. (2022). Contested parenthood: Attitudes toward voluntary childlessness as a life strategy in post-socialist Bulgaria. *Social Inclusion, 10*(3). <https://doi.org/10.17645/si.v10i3.5065>
- Dovidio, J. F., Hewstone, M., Glick, P., & Esses, V. M. (2010). Prejudice, stereotyping and discrimination: Theoretical and empirical overview. *Prejudice, stereotyping and discrimination, 3–28*. <https://doi.org/10.4135/9781446200919>
- Doyle, J., Pooley, J. A., & Breen, L. (2012). A phenomenological exploration of the childfree choice in a sample of Australian women. *Journal of Health Psychology, 18*(3), 397–407. <https://doi.org/10.1177/1359105312444647>
- Ekelund, M., & Ask, K. (2021). Stigmatization of voluntarily childfree women and men in the UK: The roles of expected regret and moral judgment. *Social Psychology, 52*, 275–286. <https://doi.org/10.1027/1864-9335/a000455>
- Fassbender, I. (2021). *Active pursuit of pregnancy: Neoliberalism, postfeminism and the politics of reproduction in contemporary japan* (Vol. 16). Brill.
- Gillespie, R. (2000). When no means no: Disbelief, disregard and deviance as discourses of voluntary childlessness. *Women's Studies International Forum, 23*(2), 223–234. [https://doi.org/10.1016/S0277-5395\(00\)00076-5](https://doi.org/10.1016/S0277-5395(00)00076-5)
- Husnu, S. (2016). The role of ambivalent sexism and religiosity in predicting attitudes toward childlessness in muslim undergraduate students. *Sex Roles, 75*(11), 573–582. <https://doi.org/10.1007/s11199-016-0639-5>
- Koropecykj-Cox, T., & Çopur, Z. (2015). Attitudes about childlessness and infertility treatments: A comparison of Turkish and American university students. *Journal of Comparative Family Studies, 46*(3), 373–402. <https://doi.org/10.3138/jcfs.46.3.373>
- Koropecykj-Cox, T., & Pendell, G. (2007). Attitudes about childlessness in the United States: Correlates of positive, neutral, and negative responses. *Journal of Family Issues, 28*(8), 1054–1082. <https://doi.org/10.1177/0192513X07301940>
- Lumley, T. (2004). Analysis of complex survey samples. *Journal of Statistical Software, 9*(1), 1–19. (R package version 2.2) <https://doi.org/10.18637/jss.v009.i08>
- Maftçi, A., Holman, A.-C., & Marchiș, M. (2021). Choosing a life with no children. The role of sexism on the relationship between religiosity and the attitudes toward voluntary childlessness. *Current Psychology, 1–11*. <https://doi.org/10.1007/s12144-021-02446-4>
- Magarick, R. H., & Brown, R. A. (1981). Social and emotional aspects of voluntary childlessness in vasectomized childless men. *Journal of Biosocial Science, 13*(2), 157–167. <https://doi.org/10.1017/S0021932000013328>
- Merz, E.-M., & Liefbroer, A. C. (2012). The attitude toward voluntary childlessness in Europe: Cultural and institutional explanations. *Journal of Marriage and Family, 74*(3), 587–600. <https://doi.org/10.1111/j.1741-3737.2012.00972.x>
- Mollen, D. (2006). Voluntarily childfree women: Experiences and counseling considerations. *Journal of Mental Health Counseling, 28*(3), 269–282. <https://doi.org/10.17744/mehc.28.3.39w5h93mreb0mk4f>
- Mueller, K. A., & Yoder, J. D. (1999). Stigmatization of non-normative family size status. *Sex Roles, 41*(11), 901–919. <https://doi.org/10.1023/A:1018836630531>
- Neal, J. W., & Neal, Z. P. (2021). Prevalence and characteristics of childfree adults in Michigan (USA). *Plos One, 16*(6), e0252528. <https://doi.org/10.1371/journal.pone.0252528>
- Neal, J. W., & Neal, Z. P. (2023). Prevalence, age of decision, and interpersonal warmth judgements of childfree adults: Replication and extensions. *Plos One, 18*(4), e0283301. <https://doi.org/10.1371/journal.pone.0283301>
- Neal, Z. P., & Neal, J. W. (2022). Prevalence, age of decision, and interpersonal warmth judgements of childfree adults. *Scientific Reports*. <https://doi.org/10.1038/s41598-022-15728-z>
- Neal, Z. P., & Neal, J. W. (2023). A framework for studying adults who neither have nor want children. *The Family Journal*. <https://doi.org/10.1177/10664807231198869>
- Park, K. (2002). Stigma management among the voluntarily childless. *Sociological Perspectives, 45*(1), 21–45.

<https://doi.org/10.1525/sop.2002.45.1.21>

- Polit, D. F. (1978). Stereotypes relating to family-size status. *Journal of Marriage and the Family*, 40, 105–114. <https://doi.org/10.2307/350612>
- Rossee, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48(2), 1–36. <https://doi.org/10.18637/jss.v048.i02>
- Sandler, L., & Witteman, K. (2013). None is enough. *Time Magazine*, 182(7), 38–46.
- Sherman, C., & Witherspoon, A. (2023). Abortion rights across the us. *The Guardian*. Retrieved from <https://www.theguardian.com/us-news/ng-interactive/2023/nov/10/state-abortion-laws-us>
- Somers, M. D. (1993). A comparison of voluntarily childfree adults and parents. *Journal of Marriage and the Family*, 55, 643–650. <https://doi.org/10.2307/353345>
- Turnbull, B., Graham, M. L., & Taket, A. R. (2016). Social exclusion of Australian childless women in their reproductive years. *Social Inclusion*, 4(1), 102–115. <https://doi.org/10.17645/si.v4i1.489>
- Verniers, C. (2020). Behind the maternal wall: The hidden backlash toward childfree working women. *Journal of Theoretical Social Psychology*, 4(3), 107–124. <https://doi.org/10.1002/jts5.65>
- Vinson, C., Mollen, D., & Smith, N. G. (2010). Perceptions of childfree women: The role of perceivers' and targets' ethnicity. *Journal of Community & Applied Social Psychology*, 20(5), 426–432. <https://doi.org/10.1002/casp.1049>

## Open Science

We report how we determined our sample size, all data exclusions, all data inclusion/exclusion criteria, whether inclusion/exclusion criteria were established prior to data analysis, all measures in the study, and all analyses including all tested models. If we use inferential tests, we report exact p values, effect sizes, and 95% confidence or credible intervals.

**Open Data.** I confirm that there is sufficient information for an independent researcher to reproduce all of the reported results, including codebook if relevant, at <https://osf.io/awq3z/>.

**Open Materials.** I confirm that there is sufficient information for an independent researcher to reproduce all of the reported methodology at <https://osf.io/awq3z/>.

**Preregistration of Studies and Analysis Plans.** This study was not preregistered.

**Open Analytic Code.** I confirm that all the scripts, code, and outputs needed to reproduce the results are provided at <https://osf.io/awq3z/>.

*Appendix. The Stereotypes About Childfree Adults (SACHA) scale*

**We are interested in your views of statements that describe people who do not want to have children. To what extent do you agree or disagree with the following statements?**

1. They have little stake in the future. (FUTURE)
2. They are selfish. (SELFISH)
3. They have few responsibilities. (RESPONSIBLE)
4. They will regret the decision later in life. (REGRET)

**Response options:** (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, (5) strongly agree

**Scoring:** The scale score is computed as the mean of the four items.