

Pre-Registration of Research Plans for “Measuring Attitudes Toward Indigenous Peoples” (Trans Mountain Pipeline Experiment)

Friday 15th February, 2019

Contents

1	Background	2
2	Methods	2
3	Racial Attitudes Toward Indigenous Peoples	2
3.1	Creating Scales	5
4	Construct Validity	5
4.1	Hypotheses: Affect and Social Distance	6
4.2	Outcome Variables	6
4.3	OLS and Covariates	6
5	Predicting Policy Attitudes	7
5.1	Hypotheses	7
5.2	Outcome Variables	8
5.3	Analysis	8
5.4	Additional Considerations	8
6	Not in the Pre-Registration Plan	8
6.1	Related Studies	8
6.2	Potential for Exploratory Analysis	8
7	References	12

1 Background

Very little work has been done to measure racial attitudes toward Indigenous peoples. The purpose of this present work is to develop a theoretically-informed, reliable, parsimonious, and valid scale measuring racial attitudes toward Indigenous peoples. Drawing from the existing research on White racial attitudes, Indigenous-settler relations, and pre-testing with Research Ethics Board (REB)-approved student samples recruited from McGill University (REB: 105-0818) and the University of British Columbia (REB: H18-02122), I developed items that should tap into White racial prejudice toward Indigenous peoples. As a secondary research question, I will develop a scale measuring “benevolent racism” toward Indigenous peoples.

My present task is to test these scales (assessing and reducing dimensionality and testing for construct validity) using a representative sample of the White adult population. My primary research goal is to develop a measure of “hostile racial prejudice” toward Indigenous peoples. My secondary goal is to develop a measure of “benevolent racism” toward Indigenous peoples. I aim to illustrate the importance of accounting for White racial attitudes toward Indigenous peoples when studying public opinion.

2 Methods

Canadian participants will be recruited through Dynata’s (formerly Survey Sampling International (SSI)’s) online panel. Participants are invited to participate in a study about opinions toward the Trans Mountain pipeline.¹ Participation is limited to White, English-speaking Canadian citizens.² Informed consent will be obtained. Respondents will answer a number of distractor questions, demographic questions, questions asking about political attitudes, policy preferences, feeling thermometer ratings, and social distance. Respondents will also be asked a battery of items asking about prejudicial attitudes toward Indigenous peoples (see Table 1). Data collection will begin on 15 February, 2019, after the pre-registration of this study.

3 Racial Attitudes Toward Indigenous Peoples

Very little work has been done to measure racial attitudes toward Indigenous peoples in Canada, although there is an active debate on how best to measure White American racial

¹This is for another study we are conducting, see “Talking Across Boundaries” also registered with EGAP as part of the Trans Mountain Pipeline Experiment).

²Limiting the analysis to White citizens helps control for the potential confounding effects of race and citizenship, increasing our power. Of course, our results will only be generalizable to White citizens. Given the political power that White citizens have, understanding White racial attitudes toward Indigenous peoples is normatively and theoretically important. It is necessary to restrict our analysis to English-speakers because respondents will be watching a video in English as part of another research question we are addressing. Future research should endeavour to study the racial attitudes of French-speakers, immigrants, and visible minorities.

prejudice toward Black Americans.³ Recent work convincingly shows that the purported complexity (issue pluralism) of White racial attitudes toward Black Americans is a measurement artifact and that the different scales used to measure White racial prejudice toward Black Americans are all measuring the same underlying concept of hostile prejudice and are not measuring different types of prejudice (Neblo, 2009a). Some have criticized existing measures of racial prejudice—particularly the racial resentment scale—for merely tapping into ideological differences (e.g., Sniderman and Carmines, 1997; Sniderman and Piazza, 1995; Sniderman and Tetlock, 1986). However, research shows that although the racial resentment scale more effectively discriminates between liberals and conservatives, the scale effectively taps into racial prejudice even after correcting for differential item functioning (DIF) by adherence to ideological principles (Enders, 2018).

As such, I felt comfortable developing items inspired by this literature, including the more commonly used scales measuring “racial resentment” and “modern racism” (which have already, to some extent, been adapted to measure racial attitudes toward Indigenous peoples in Australia and the United States). However, existing scales tapping into racial attitudes toward Indigenous peoples developed in the United States (Neblo, 2009b) and Australia (Augoustinos, Ahrens and Innes, 1994; Pedersen et al., 2000; Pedersen and Walker, 1997) rely too heavily on measures adapted from scales tapping into White Americans’ attitudes toward Black Americans.⁴

To address this shortcoming, I also designed measures that tap into potentially salient attitudes toward Indigenous peoples that are not captured by variables originally designed to measure racial attitudes toward Black Americans. This includes items tapping into the perception that Indigenous peoples receive unfair tax breaks and that more must be done to protect Indigenous languages. My primary research question considers how to create a reliable, valid, and parsimonious scale tapping into hostile prejudicial attitudes toward Indigenous peoples.

In addition to my primary research goal of developing a measure of prejudicial attitudes toward Indigenous peoples, my secondary research question considers whether I can develop a second scale that taps into the concept of “benevolent racism” (see Smallpage and Enders, 2018; Esposito and Romano, 2014). Benevolent racism refers to evaluations of racial groups that may appear subjectively positive—that is, positive to the person who is doing the evaluating—but are actually damaging to racial equality more broadly. This concept was

³Perhaps the most influential line of thinking posits that “Old fashioned” racist beliefs about the biological inferiority of Black Americans and explicit endorsement of segregation has been replaced by newer racial attitudes. According to some accounts, “new racism” (or “symbolic racism”) is increasingly complex, and fuses anti-Black affect with the belief that Black Americans violate values related to the Protestant ethic of hard work and self-sufficiency (e.g., Kinder and Sears, 1981; Kinder and Mendelberg, 2000; Sears and Henry, 2003, 2005; Tarman and Sears, 2005). Many variations of this line of thinking have been developed, including accounts of “modern racism” (McConahay, 1986), “symbolic racism” (Sears, 1988; Henry and Sears, 2002), “subtle racism” (Pettigrew and Meertens, 1995), and “racial resentment” (Kinder, Sanders and Sanders, 1996). Neblo (2009a,b) collectively refers to these accounts as *symbolic racism*. Neblo (2009a) convincingly shows that the purported complexity of racial prejudice is an artifact of measurement techniques.

⁴Harell, Soroka and Iyengar (2016) also note they adapted the American racial resentment scale (what they call “modern racism”) to measure attitudes toward Indigenous peoples in Canada, although the scale was ultimately not included in their analysis. They do not report how they adapted the scale, the distribution of attitudes, or any other information. See their Supplementary Materials.

developed from the theoretical framework for understanding sexism as ambivalent (Glick and Fiske, 1996). I developed a number of items to try to tap into the concept of benevolent racism. Let it be stated in advance that if I am unsuccessful in developing a reliable and valid measure of benevolent racism (my secondary research aim), I will not report a long discussion of benevolent racism in the main body of the paper. However, I will at least report the results of my secondary research question in the Supplementary Materials.

A note on terminology: “Indigenous peoples” is the term “used in international or scholarly discourse” (Government of Canada, 2018). However, this term is often less familiar with non-academic audiences. The term “Aboriginal” is more commonly used. This term includes peoples of First Nation, Inuit or Métis descent “regardless of where they reside and whether or not their names appear on an official register” (Government of Canada, 2018). In my academic publications I try to use the distinct nation names that peoples commonly identify themselves by (such as Mi’kmaq, Haida, or Dene), but where a global term is appropriate I use the term Indigenous. In the survey, I use items that ask about feelings and attitudes toward Aboriginals. I define the term “Aboriginal” for respondents the first time it appears in our survey.

Variables are measured with a five-point, Likert-type scale ranging from Strongly disagree to Strongly agree. Some variables were reverse coded (R) so higher values equal more prejudicial (or benevolent racist) attitudes. In the surveys, the ordering of the items measuring racial attitudes (Table 1) will be randomized.

Table 1: Variables Measuring Racial Attitudes Toward Indigenous Peoples

“Aboriginal activists are making reasonable demands.” (R) (reasonable)
“Aboriginals are getting too demanding in their push for land rights.” (landrights)
“Aboriginals get more favours from the education system than they should have.” (edufavours)
“Irish, Jewish, Chinese, and many other minorities overcame prejudice and worked their way up. Aboriginals should do the same without any special favours.” (nofavours)
“More must be done to protect Aboriginal languages.” (R) (protectlang)
“The government does not show enough respect toward Aboriginals.” (R) (norespect)
“Aboriginals get unfair tax breaks.” (unfairtax)
“More Whites should do their part by adopting or fostering Aboriginal children.” (adopt)
“Affirmative action (preferential hiring or school admission) hurts the self-esteem of deserving Aboriginals.” (selfesteem)
“To keep Aboriginals safe, the number of RCMP (Canadian police) on reserves should be increased.” (rcmp)
“Aboriginals in remote areas do not need help moving to places with more job opportunities.” (R) (move)
“Aboriginals on reserves do not need help buying private property to become homeowners.” (R) (property)

3.1 Creating Scales

I will first conduct item analysis to compare item-rest scores to see if reliability is improved by removing any of the items. I will graph the item response functions for each item to make sure the items are monotonically related to the scale.

Because our goal is to use these scales to measure unobserved (latent) concepts, I will begin by using factor analysis to assess and reduce dimensionality. Factor analysis is a measurement model that reduces dimensionality by estimating latent concepts or factors. Based on theory and pre-testing, I expect the variables to load onto two factors. I expect the first seven items from Table 1 (reasonable to unfairtax) to load onto the first factor, a latent concept of hostile racial prejudice. Drawing from the theoretical expectations of ambivalent racism, I expect that the last five measures from Table 1 (adopt, selfesteem, rcmp, move, and property) will load onto a separate factor tapping into “benevolent racism.”

I will assess and report the dimensionality of the values items with a visual inspection of a scree plot of eigenvalues against factors (dimensions) and with a parallel analysis test. Theory and the results of these tests will determine how many factors I retain (I expect to retain two factors from an analysis of all the items, or one factor from an analysis of the seven items measuring hostile prejudice). I will then re-estimated the common factor model retaining the appropriate number of factors and interpreting the factor loadings (pattern coefficients) from an oblique (promax) rotation.⁵

My goal is not only to assess and reduce dimensionality, but also to create parsimonious scales. The goal is to propose five- (or even four-)item scales.⁶ With respect to the factor analysis results, I expect the items measuring hostile racial prejudice (reasonable-unfairtax) to load strongly (e.g., 0.50 or higher) on the concept (factor) of hostile prejudice and weakly (e.g., 0.30 or below) on the concept (factor) of benevolent racism. Vice versa for the items measuring benevolent racial attitudes (adopt-property). Items that do not load highly on the factor they are expected to (or items that do not have low loadings on the factor they are expected to) and items that cross-load onto both factors will be excluded from the final scales.

4 Construct Validity

I will test construct validity—whether operationalizations of hostile prejudice and benevolent racism toward Indigenous peoples measure the constructs as defined by theory—using tests of convergent validity. Specifically, I will identify whether the scales are associated with things theory predicts they should be: feelings toward Indigenous peoples and social distance. I

⁵I interpret the loadings from an oblique (as opposed to orthogonal) because theoretically I can expect benevolent attitudes toward a social group be correlated with more hostile attitudes toward that group (Glick and Fiske, 1996), and because oblique rotations have the potential to provide loading patterns that best conform to Thurstone’s “simple structure” principle.

⁶I may, however, recommend measures with more items, if, for instance, a four-item measure loses too much content validity (based on theory and feedback) or I may recommend a full scale and a reduced scale. Ultimately, I will do my best to negotiate the contrasting demands of a measure that is more internally reliable and has higher content validity (often, scales with more items) versus a more parsimonious scale that will be more widely used in political science (often, scales with fewer items).

will also identify whether the scales predict policy preferences (see the next section).

4.1 Hypotheses: Affect and Social Distance

My main research question is to develop a scale that taps into racial prejudice as it is most commonly understood (hostile prejudice). I expect that hostile racial prejudice toward Indigenous peoples will correlate negatively with warm feelings toward Indigenous peoples and that it will be positively related with a desire for social distance from Indigenous peoples (H1 and H2 are main hypotheses).

My secondary research question is to develop a scale that taps into benevolent racism. I expect that benevolent racial prejudice to Indigenous peoples will not be negatively correlated with positive affect and that it will be negatively related to a desire for social distance from Indigenous peoples (benevolent racism will be correlated with a desire for greater social closeness) (H1-b and H2-b are secondary hypotheses).

Table 2: Hypotheses (Affect and Social Distance)

H1 Hostile prejudicial attitudes will be negatively correlated with warm feelings toward Indigenous peoples.
H1-b Benevolent racial attitudes will not be negatively correlated with feelings toward Indigenous peoples.
H2 Hostile prejudicial attitudes will be positively correlated with social distance from Indigenous peoples.
H2-b Benevolent racial attitudes will be negatively correlated with social distance from Indigenous peoples.

4.2 Outcome Variables

Affect is measured by dividing feeling thermometer scores for Indigenous people by the mean of all feeling thermometer scores (for all groups). Higher values indicate more positive affect toward Indigenous peoples.⁷ Calculating social distance involves creating summated scales for social contact (whether respondents are comfortable/ uncomfortable with a close relative dating, having a neighbour, or working with) Whites and with Indigenous peoples, and then taking the difference between these two scales. Higher values on the social distance scale means respondents feel greater social distance from (*more opposition* to social contact with) Indigenous peoples relative to White people.

4.3 OLS and Covariates

When estimating the effect of racial prejudice on affect (Model 1), I will control for demographics (age, gender, province, immigrant, education, ideology, and vote intention). When estimating the relationship between racial prejudice and social distance (Model 2), I will

⁷If the reviewers prefer, I can also calculate the difference of feelings toward Aboriginals from the mean for all groups.

control for demographics and feelings toward Indigenous peoples (to show that hostile racial prejudice and benevolent racism predict social distance even controlling for how people *feel* about Indigenous peoples).

Table 3: Covariates List

Model 1	Model 2
age	age
gender	gender
province	province
immigrant	immigrant
edu	edu
ideol	ideol
vote	vote
	affect

5 Predicting Policy Attitudes

5.1 Hypotheses

Finally, I expect hostile racial attitudes to be negatively correlated with support for government spending to help Indigenous people (DV: “indighelp”). If my measure of hostile racial attitudes is really measuring what we think it is—prejudicial attitudes toward Indigenous peoples, not just ideology—it should predict spending to help Indigenous peoples even controlling for ideology (H3 is the main hypothesis). I would not expect a relationship between benevolent racism and spending to help Indigenous peoples in general (secondary hypothesis).

However, when government funding to increase Indigenous quality of life should be spent—either more funding to integrate Indigenous peoples into the economy or more funding to support Indigenous traditions on reserves—I expect that benevolent racism will be positively correlated with greater support for funding assimilationist policies (while hostile prejudice is correlated with a desire for less funding) (DV: “indigqol”). This item is scaled so higher values indicate a preference for increasing funding for assimilationist policies (government funding to help integrate Indigenous peoples into the Canadian economy).

Table 4: Hypotheses (Policy Preferences)

H3 Hostile prejudicial attitudes will be negatively correlated with preferences for spending to help Indigenous peoples.
H4 Benevolent racial attitudes will positively correlated with preferences for increasing funding for Government of Canada programs to help Aboriginals.

5.2 Outcome Variables

The survey included a range of items asking about a range of spending preference (e.g., healthcare, defence, welfare, environment, etc.) including an item asking about spending to help Indigenous peoples (Aboriginals). Support for government spending to help Indigenous people is measured by dividing preferences for spending on Indigenous people by the mean of all spending preferences. Higher values indicate a preference for more spending to help Indigenous peoples (the DV in Model 3). This is a main hypothesis for my main analysis of prejudicial attitudes.

To test hypotheses related to my secondary research question (benevolent racism), I asked respondents to make a trade-off between increasingly funding Aboriginal communities directly or increasing funding for Government of Canada programs to help Aboriginals (or a central position of not increasing funding). This is the DV in Model 4. Add a measure of support for “White Paper” policies related to integration: support Indigenous peoples’ integration in the Canadian economy (the DV in Model 5).

5.3 Analysis

I will predict the outcome variables using OLS. I control for demographics (age, gender, education, immigrant, ideology, and vote intention) in each of the separate models.

5.4 Additional Considerations

With respect to missing values, I will exclude responses for which there is missing data on the dependent variables. I recode missing values of independent variables to their means. Because this data was collected as part of another project which involved an experimental treatment, I will analyze the results from the placebo separately.

6 Not in the Pre-Registration Plan

6.1 Related Studies

I also plan to use variables in our experiment in two separate publications, registered under a separate registration. See “Talking Across Boundaries” and “Competence and Electability” also registered with EGAP as part of the Trans Mountain Pipeline Experiment.

6.2 Potential for Exploratory Analysis

We have also included a number of variables that we do not plan to use in our analysis, either for other research (see above), as distractors, or because these items might satisfy reviewer requests. For instance, items tapping into attitudes toward immigrants can be used as tests of divergent validity (e.g., to show that measures of prejudice or benevolent racism toward Indigenous peoples do not correlate with things they should not). The decision to add covariates or test hypotheses not specified in this PRP will be made through “blind jury” consultation (see Lin, 2016). This research is novel and I am open to blind jury feedback

and reviewer suggestions, but deviations from the pre-registration plan will be clearly noted as “exploratory.” The full list of variables included in the study is listed in the table below.

Table 5: All variables in survey

ethnicity (inclusion criteria)
citizen (inclusion criteria)
gender - SSI
yearborn - SSI
income - SSI
edu - SSI
employ - SSI
province
locale
feelcan
feelblack
feelindig
feelimm
feelchris
feelatheist
sd_wdate
sd_indigdate
sd_immdate
sd_wneigh
sd_indigneigh
sd_immneigh
sd_work
sd_indigwork
sd_immwork
canvote
leftright
spendhealth
spendwelfare
spendedu
spendenv
spendcrime
spenddef
spendimm
spendmin
spendindig
threat
immcrime
immjobs
econ
nopcode

disenjoy
dissame
disavoid
fundqol
talkfriend
talkfam
buycott
petition
meet
talkmeet
compt
elect
feelranch
reasonable
landrights
edufavours
nofavours
protectlang
norespect
unfairtax
adopt
selfesteem
rcmp
move
property
persp
symp
pov
angry
irritate
scorn
likesupport
likeoppose
transmount
transmount2
111time
111checkop
111reply
111time2
112time
112checkop
112reply
112time2
121time
121checkop

121reply
121time2
122time
122checkop
122reply
122time2
111time
111checkop
111reply
111time2
211time
211checkop
211reply
211time2
212time
212checkop
212reply
212time2
221time
221checkop
221reply
221time2
222time
222checkop
222reply
222time2
301time
301checkop
301reply
301time2
checkname
checkopinion
checkid

7 References

References

- Augoustinos, Martha, Cheryl Ahrens and J Michael Innes. 1994. "Stereotypes and prejudice: The Australian experience." *British Journal of Social Psychology* 33(1):125–141.
- Enders, Adam. 2018. "A Matter of Principle? On the Relationship Between Racial Resentment and Ideology." *working paper* .
- Esposito, Luigi and Victor Romano. 2014. "Benevolent racism: Upholding racial inequality in the name of black empowerment." *Western Journal of Black Studies* 38(2):69.
- Glick, Peter and Susan T Fiske. 1996. "The ambivalent sexism inventory: Differentiating hostile and benevolent sexism." *Journal of personality and social psychology* 70(3):491.
- Government of Canada. 2018. "TCPS 2 Chapter 9: Research Involving the First Nations, Inuit and Métis Peoples of Canada.".
URL: <http://www.pre.ethics.gc.ca/eng/policy-politique/initiatives/tcps2-epc2/chapter9-chapitre9/>
- Harell, Allison, Stuart Soroka and Shanto Iyengar. 2016. "Race, prejudice and attitudes toward redistribution: A comparative experimental approach." *European Journal of Political Research* 55(4):723–744.
- Henry, Patrick J and David O Sears. 2002. "The symbolic racism 2000 scale." *Political Psychology* 23(2):253–283.
- Kinder, Donald R and David O Sears. 1981. "Prejudice and politics: Symbolic racism versus racial threats to the good life." *Journal of personality and social psychology* 40(3):414.
- Kinder, Donald R, Lynn M Sanders and Lynn M Sanders. 1996. *Divided by color: Racial politics and democratic ideals*. University of Chicago Press.
- Kinder, Donald R and Tali Mendelberg. 2000. "Individualism reconsidered: Principles and prejudice in contemporary American opinion." *Racialized politics: The debate about racism in America* pp. 44–74.
- Lin, W. 2016. "Standard Operating Procedures for Don Green's Lab at Columbia (Version 1.05: June 7, 2016).".
- McConahay, John B. 1986. "Modern racism, ambivalence, and the modern racism scale.".
- Neblo, Michael A. 2009a. "Meaning and measurement: Reorienting the race politics debate." *Political Research Quarterly* 62(3):474–484.
- Neblo, Michael A. 2009b. "Three-fifths a racist: A typology for analyzing public opinion about race." *Political Behavior* 31(1):31–51.

- Pedersen, Anne, Brian Griffiths, Natalie Contos, Brian Bishop and Iain Walker. 2000. "Attitudes toward Aboriginal Australians in city and country settings." *Australian Psychologist* 35(2):109–117.
- Pedersen, Anne and Iain Walker. 1997. "Prejudice against Australian Aborigines: Old-fashioned and modern forms." *European Journal of Social Psychology* 27(5):561–587.
- Pettigrew, Thomas F and Roel W Meertens. 1995. "Subtle and blatant prejudice in Western Europe." *European journal of social psychology* 25(1):57–75.
- Sears, David O. 1988. Symbolic racism. In *Eliminating racism*. Springer pp. 53–84.
- Sears, David O and Patrick J Henry. 2003. "The origins of symbolic racism." *Journal of personality and social psychology* 85(2):259.
- Sears, David O and Patrick J Henry. 2005. "Over thirty years later: A contemporary look at symbolic racism." *Advances in experimental social psychology* 37(95):150.
- Smallpage, Steven M. and Adam Enders. 2018. "'Benevolent Racism': (Attempting to) Understand White Liberal Racial Attitudes." *Working paper* .
- Sniderman, Paul M and Edward G Carmines. 1997. "Reaching beyond race." *PS: Political Science & Politics* 30(3):466–471.
- Sniderman, Paul M and Philip E Tetlock. 1986. "Symbolic racism: Problems of motive attribution in political analysis." *Journal of social issues* 42(2):129–150.
- Sniderman, Paul M and Thomas Leonard Piazza. 1995. *The scar of race*. Harvard University Press.
- Tarman, Christopher and David O Sears. 2005. "The conceptualization and measurement of symbolic racism." *The Journal of Politics* 67(3):731–761.