Why and how we measure racism, sexism, and other forms of prejudice: Open letter from the New Zealand Attitudes and Values Study research team

It is important to scientifically measure and track change in racism, sexism, and other forms of prejudice over time. This is the only way to know how many people hold such beliefs, and to see if racism is going up or down over time.

The typical way that researchers measure racism is by presenting people with a set of statements of opinion and asking them to rate how strongly they agree or disagree with each statement. This is known as a Likert scale. A lot goes on behind the scenes in developing the Likert scales used in the New Zealand Attitudes and Value Study (NZAVS).

The key to attitude measurement is to have a good set of statements that measure the underlying attitude. There are a number of things to consider here. For a start you need statements that are worded in each direction, for example, "People from group X cannot be trusted" and "People from group X are trustworthy." This is to control for something called agreement bias, where people may tend to agree with things a bit more than they disagree.

Some people may read the statements in the negatively worded direction "People from group X cannot be trusted" and argue that the statement itself is offensive and hence the survey itself is racist. If we want to do the science well, and measure attitudes validly and reliably, then we need to include statements like these in our surveys. A good metaphor for this is that a set of statements is like a ruler that measures an attitude. You need to get your ruler straight. If we can't get our ruler straight then we can't measure levels of racism scientifically, and in that case we can't know whether we have a problem with prejudice in our country, or whether it is going up or down over time.

Getting your ruler straight is a lot more complex than just having statements worded in both directions. What we and other researchers do is use a series of statistical models to identify the statements that best fit together to measure an attitude, such as negative or positive attitudes toward a particular ethnic group. We use these techniques to identify a set of statements that when all used in the same survey, fit together to provide a good measure of the underlying attitude.

At the same time we also work hard to develop scales that use 'natural language'; we endeavour to express things in ways that people in New Zealand talk about them. Some of our statements are adapted from interviews with people in New Zealand, and some others are adapted from political speeches, blogs, etc.

We also balance this goal of wording our statements in ways that are relevant to New Zealand with the need to remain consistent with

Why do questionnaires like the NZAVS include statements that may seem racist?

In order to know if people are racist you need to come up with a way to measure their attitudes. For many of us, if one were to hear someone say some of the statements we use to measure racism in a conversation then it would be highly offensive. Sadly we live in a society and world where some people do hold these types of beliefs. We are asking people's opinions NOT stating our opinions.

Why is it important to measure racism anyway?

Because we want to know how to reduce racism. New Zealand is among the world's most tolerant societies, but we still have a long way to go. To achieve this goal we think that it is important to measure and track change in racism over time. Only by doing so can we know if there is a problem, and to see if it is getting better or worse over time. We can also identify factors that might decrease or increase racism.

international studies measuring racism and sexism more generally. Because of this, the NZAVS also includes standard scales that are used more widely in international research. This is also important because it allows us to compare New Zealand to other nations. New Zealand is among the world's most tolerant societies, however we still have a way to go.

One slightly more complex aspect of getting the ruler straight is to use a set of statements that differ in how strongly people will tend to agree or disagree with them. Think about a set of multi-choice questions in a midterm for a course on research methods and statistics. Ideally you want some questions that are quite easy, and that all the students who are passingly familiar with the material will tend to get correct. However, you also want to include some questions that are quite hard, and that only students who have a very good knowledge of the material will get correct. This is how you measure people's scores across a wide range, rather than just an overall pass/fail grade.¹

The same logic applies in the NZAVS when developing a set of statements to measure racism or sexism. You need some 'easy' statements where people who are potentially even a little bit racist may tend to agree ('I sometimes feel a little nervous when talking to people from group X'). Other people may also agree and for other reasons—a point we will return to below. You also need some much more strongly worded statements that only people who are strongly racist will tend to agree with ('People from group X are naturally inferior to people from other groups'). This is how you measure variation across the whole range of levels of an attitude, in this case someone's level of racism.

It gets even more complex than this however. For a start, how do you decide which statements are 'easy' and which are 'hard'? Also, how do you know that the 'easy' statements are actually referring to the same attitude as the 'hard' ones? Maybe they are measuring distinct types of beliefs, what we would call separate factors. Maybe, for example, the first statement from the example above ('I sometimes feel a little nervous when talking to people from group X') is measuring anxiety and not racism at all?

We could argue back and forth about this based on how the statement seems to us personally—how we interpret it. This doesn't get us anywhere in terms of working out how straight our ruler is for scientifically measuring racism. To work out which statements fit together to reliably measure something like racism or sexism, we rely on a branch of statistics known as psychometrics. If done correctly, these types of analyses help us to develop a set of statements that, when measured together as a set, provide a scientific measure of the attitude you are interested in. There is a deep logic to how the statements are worded and statistically scored.

So why do questionnaires like the NZAVS sometimes seem to have unusual or strange sounding statements in them? It's because the statements that work well and help us to get a good ruler for measuring racism (or any other attitude or measure of personality, etc.) may not necessarily look like the statements that one would naturally think are a

Are there other ways to measure racism?

Self-report questionnaires and other polls are a really useful way to track attitudes like racism and sexism. If we want to estimate the proportion of the population who may hold prejudiced beliefs in a large-scale national probability sample like the NZAVS, or to model the rate of change over time, then using self-report questionnaires are the best method we have.

Doesn't talking about racism make it worse?

NOT talking about racism makes it worse because then people can ignore that racism is there. We know of no evidence suggesting that measuring or talking about racism might increase levels of racism in society. If anything, measuring racism draws attention to the problem, and might help to reduce it by signalling that many other people do not think racism is OK, and do not share the same racist opinions.

¹ This is what I (Chris Sibley) do in the midterm for the 300-level course on research methods in psychology, which I teach at the University of Auckland.

good measure. This is actually a good thing, as it makes it harder for people to 'break' or 'fake' their responses.

Take the example statement 'I sometimes feel a little bit nervous when talking to people from group X.' Some people might agree with this statement but not be racist at all. Perhaps they are anxious when interacting with anyone, not just people from group X? Perhaps they are a little nervous because they sometimes struggle to pronounce the names of people from group X and thus worry about giving offence? If you only focus on this one statement as a measure of racism, then it would be reasonable to be concerned about what it is measuring (a mix of racism, anxiety, other things completely). ² Statisticians refer to this as measurement error. Our research team spends a lot of our time thinking about and trying to develop new ways to identify and adjust for measurement error. It's something that you have to live and breathe if you are involved in ongoing longitudinal questionnaire research like the NZAVS.

In the end, a good ruler for measuring attitudes contains multiple statements. All of the statements have their own level of measurement error, but what we are interested in is how a set of statements fit together like pieces of a jigsaw puzzle to measure the attitude, not someone's responses solely to one statement in isolation of their responses to the other statements. By using a set of statements, we can adjust for or remove measurement error.

To conclude, it is important to measure and track possible change in current levels of prejudice. Measuring attitudes is complex and the statements we use to measure racism or sexism may look strange to people sometimes on the surface of things. It is not that some statements are racist or not just because they tend to be worded in one direction or the other. The key is how the statements that we use fit together to provide a good ruler for measuring racism, sexism, ageism or any other attitude. If we do not collect this information, we cannot know if there is a problem with the level of prejudice in society, whether it is changing, or how to change it. If we do not measure and track yearly levels of racism and other forms of prejudice, then we risk turning a blind eye and ignoring the problem or even knowing if there is one.

Is it racist to talk about racism?

Our team strongly argues that the answer is 'no'. Pretending something doesn't exist does not make it non-existent. The lived experiences of people from different ethnic groups within New Zealand show that prejudiced attitudes, are, unfortunately, all too common. It is only when we shine a light on racism, openly acknowledging and naming it, that we can begin to challenge it. This is one of the key longterm goals of the NZAVS.

Key points

- The only way we can know if racism is a problem in New Zealand is to measure it scientifically, and to see if it is getting better or worse over time.
- The measurement of racism is complex. It is typically done by asking people if they
 agree or disagree with a series of scientifically selected attitude statements. There is
 a deep logic behind how we select these statements.
- Sometimes these attitude statements can seem offensive, but it's important to include them because some parts of our society endorse them. If we exclude these statements, we can't measure racism and other forms of prejudice.

² This is also an extremely interesting research question in its own right, and something that members of the NZAVS research team are currently working on. To look at this we use methods from a slightly different branch of statistics, known as mixture modelling.

Signed, members of the NZAVS research team,

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Link to the NZAVS webpage: www.psych.auckland.ac.nz/uoa/NZAVS