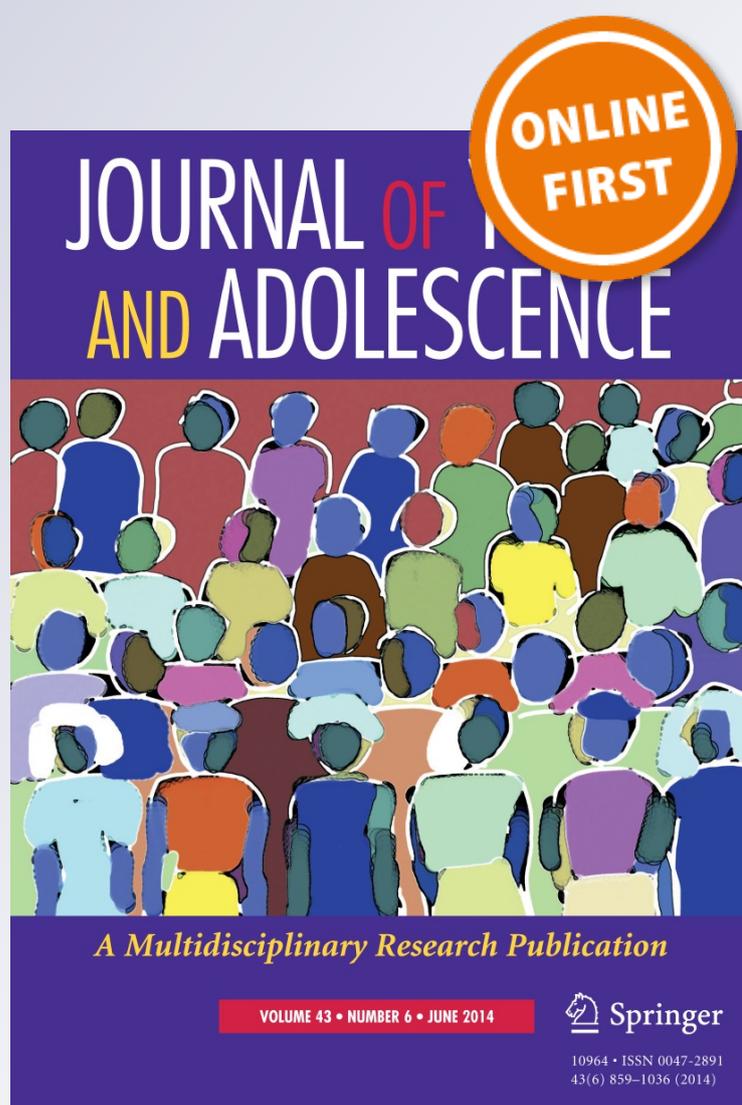# Experiences of Racism, Racial/Ethnic Attitudes, Motivated Fairness and Mental Health Outcomes Among Primary and Secondary School Students

Naomi Priest, Ryan Perry, Angeline Ferdinand, Yin Paradies & Margaret Kelaher

ONLINE FIRST

JOURNAL OF YOUTH AND ADOLESCENCE

A Multidisciplinary Research Publication

VOLUME 43 · NUMBER 6 · JUNE 2014

Springer

10964 · ISSN 0047-2891
43(6) 859–1036 (2014)

Springer

Springer

Experiences of Racism, Racial/Ethnic Attitudes, Motivated Fairness and Mental Health Outcomes Among Primary and Secondary School Students

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Abstract While studies investigating the health effects of racial discrimination for children and youth have examined a range of effect modifiers, to date, relationships between experiences of racial discrimination, student attitudes, and health outcomes remain unexplored. This study uniquely demonstrates the moderating effects of vicarious racism and motivated fairness on the association between direct experiences of racism and mental health outcomes, specifically depressive symptoms and loneliness, among primary and secondary school students. Across seven schools, 263 students (54.4 % female), ranging from 8 to 17 years old (M = 11.2, SD = 2.2) reported attitudes about other racial/ethnic groups and experiences of racism. Students from minority ethnic groups (determined by country of birth) reported higher levels of loneliness and more racist experiences relative to the majority group students. Students from the majority racial/ethnic group reported higher levels of loneliness and depressive symptoms if they had more friends from different racial/ethnic groups, whereas the number of friends from different groups had no effect on minority students' loneliness or depressive symptoms. Direct experiences of racism were robustly related to higher loneliness and depressive symptoms in multivariate regression models. However, the association with depressive symptoms was reduced to marginal significance when students reported low motivated fairness. Elaborating on the negative health effects of racism in primary and secondary school students provides an impetus for future research and the development of appropriate interventions.

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Introduction

Racism and racial discrimination are increasingly recognized as determinants of poor health outcomes among adults (Williams and Mohammed 2009), although knowledge of the prevalence and health impact of racial discrimination among children and adolescents is far less developed (Priest et al. 2013). Research on racial discrimination among children and adolescents has predominantly focused on direct experiences of discrimination (where children and adolescents themselves are the targets of discrimination). However, there is growing empirical evidence that vicarious racial discrimination also leads to negative health outcomes for children and adolescents. Vicarious racial discrimination is defined as hearing about or seeing another person's experience of racism (Mansouri and Jenkins 2010; Harrell 2000) as well as carers or close family members experiencing discrimination that may or may not be witnessed by children and adolescents (see Priest et al. 2012; Kelly et al. 2013). However, to date, few studies have investigated the health impacts of vicarious

racial discrimination for children and adolescents, and the co-occurrence and interrelationships between direct and vicarious racial discrimination are yet to be examined empirically.

Research on moderators and mediators of relationships between racial discrimination and health outcomes is also currently under-developed among children and adolescents, as well as among adults. This study aims to extend previous research investigating associations between racist experiences and depressive symptoms and loneliness in primary and secondary school students by considering multiple potential pathways including (a) the differential and interactive effects of racism experienced both directly and vicariously, (b) the impact of racism on different forms of mental health (i.e., depressive symptoms and loneliness), and (c) the potential moderating effects of social attitudes (including motivations to be fair and attitudes about other racial/ethnic groups). In doing so, the study aims to support effective school-based interventions to improve student wellbeing and reduce exposure to racism and racial discrimination.

Children's Experiences of Racial Discrimination

In a context of increasing globalization and population movements between and within countries, as well as evidence of growing racism and racial discrimination throughout the world, greater attention to understanding the impact of such experiences on children and adolescents in key settings of their lives is required. Children and adolescents spend much of their time interacting with peers at school (Guerra et al. 2011), with schools also being the most common setting within which they experience racism and racial discrimination (Mansouri and Jenkins 2010). However, research on peer relationships, including friendship, victimization and bullying has had minimal focus on race and ethnicity to date (Graham et al. 2013). Schools are key sites in the lives of children and adolescents as settings for peer relationships, including racism as expressed through racial discrimination, racial bullying and racial victimization, as well as academic learning and socialization (Mansouri and Jenkins 2010). More work is therefore needed to understand students' experiences of racism in schools and the ways in which such experiences impact their outcomes. This is particularly required across countries, population groups and among younger age groups, with research predominantly conducted with older adolescents, those with African-American backgrounds, and in North America (Priest et al. 2013).

In Australia, the primary and secondary school student population has a high level of racial/ethnic diversity. One third of students are either immigrants themselves or born in Australia to at least one immigrant parent (Katz and Redmond 2010) and a further 4.9 % are Indigenous (Australian Institute of Health and Welfare 2012). Over 200 languages and dialects and over 230 countries of origin are represented, with 17.5 % of permanent additions to the Australian population aged 0–17 years from Southeast Asia, 17.4 % from Southern Asia, 12.0 % from Southern and East Africa, 12.0 % from Northeast Asia and 5.2 % from the Middle East between 2006 and 2010 (Department of Immigration and Border Protection 2010). Racism and racial discrimination are critical, yet under-researched concerns for many Australian students, with a 2009 survey of 698 secondary students across four states finding 70 % of those from non-Anglo backgrounds reporting experiences of racism during their lifetime, with 67 % of these experiences occurring in school (Mansouri and Jenkins 2010). Yet, despite the diverse racial/ethnic population student profile and disturbing rates of racist experiences, research on the prevalence and impact of racist experiences for primary and secondary school students in Australia is lacking relative to that in North America.

One further concern is that many of the most commonly used measures of victimization and bullying do not ask youth to attribute their experience to an identity or specific personal characteristic, such as their race or ethnicity (Garnett et al. 2013). When race and ethnicity are considered in school-based victimization and bullying studies, this largely centers on differential prevalence across racial/ethnic groups, rather than examining racial bullying and racial victimization specifically (Larochette et al. 2010; Hoglund and Hosan 2013). While studies of discrimination among youth have predominantly examined racial discrimination, a range of measures are utilized that often do not ask for attribution of experience (Hoglund and Hosan 2013) and/or about the setting in which discrimination has occurred (Priest et al. 2013).

Consequences of Racial Discrimination

Children and adolescents are considered particularly vulnerable to the harmful effects of racism and racial discrimination, with consequences both in childhood and throughout the life-course (Sanders-Phillips 2009; Priest et al. 2013). Racism is a complex phenomenon operating across multiple levels and expressed in a range of ways; racism can be expressed through beliefs (e.g., negative and inaccurate stereotypes), emotions (e.g., fear/hatred) or behaviors/practices (e.g., unfair treatment, discrimination), ranging from open threats and insults (including physical violence) to phenomena deeply embedded in social systems and structures (Berman and Paradies 2010). Exposure in childhood to direct (Nyborg and Curry 2003; Coker et al. 2009) and/or vicarious racial discrimination (Priest et al. 2012; Kelly et al. 2013) has been associated with a diverse

range of negative health outcomes in children and adolescents. A recent systematic review of racism and child and youth health quantitative studies showed that, across all domains of health and health behavior outcomes, the impact of racism on negative mental health has been most frequently examined (Priest et al. 2013). Depressive symptoms were the most common of these negative mental health outcomes to be investigated and 79 % of associations between experiences of racial discrimination and increased depressive symptoms for children and youth examined by the review were significant (Priest et al. 2013). Some examine loneliness as a particular depressive symptom (Cogburn et al. 2011), while others specifically examined loneliness as a separate outcome (Juang and Alvarez 2010; Neto and Barros 2000). Thus, while both depressive symptoms and loneliness have been associated with experiences of racial discrimination among young populations, more work is needed to understand the specific effects of racial discrimination on these two closely related mental health outcomes, particularly among pre-adolescents, outside North America, and from racial/ethnic backgrounds other than African-American (Priest et al. 2013).

Depressive symptoms and loneliness are interrelated constructs that are conceptualized and measured in various ways among children and adolescents, as well as among adults, and frequently considered indicators of mental health and psychosocial functioning (Qualter et al. 2010; Lee and Turney 2012). Feeling lonely is included as a dimension in widely used depression scales for children (Faulstich et al. 1986; Derogatis and Savitz 2000), while others conceptualize loneliness as a separate, though highly interrelated, construct (Vanhalst et al. 2012). Reciprocal associations between loneliness and depressive symptoms have also been demonstrated among adolescents, as well as the potential for these constructs to reinforce one another over time (Vanhalst et al. 2012). In this study, we examine the effects of racism on depressive symptoms and loneliness as two separate constructs among students.

Social Context and Individual Differences as Moderators of Racism

While racism operates in multiple ways, research has predominantly focused on how direct experiences of racism are directly related to child and adolescent outcomes (Priest et al. 2013). However, the importance of examining multiple pathways between experiences of racism and outcomes such as depressive symptoms and loneliness, including the influence of vicarious experiences in particular, have been recognized (Quintana and McKown 2007; Harrell 2000). For example, vicarious (as well as direct) experiences of racial discrimination have been associated

with higher anger expression and depressive symptoms among African-American adolescents (see Stevenson and Arrington 2009), while caregiver experiences of racism (i.e., vicarious racism) have been associated with adolescent depressive symptoms (Ford et al. 2013). In contrast, however, vicarious racist experiences online were unrelated to psychological adjustment among adolescents (Tynes et al. 2008).

Although adverse effects of racial discrimination on negative mental health outcomes such as depressive symptoms and loneliness in young populations are increasingly acknowledged (Priest et al. 2013), there has been scant research examining potential moderators of racist experiences on school children's depressive symptoms and loneliness (but see Deng et al. 2010; Hunter et al. 2010). For example, vicarious racial discrimination may act as a moderator that intensifies the effects of direct experiences of racial discrimination on negative outcomes such as depressive symptoms and loneliness by implying a context of pervasive racism (Stroebe et al. 2011). Stroebe et al. (2011) noted that a context of pervasive discrimination may have a stronger impact on health outcomes because it threatens a basic need to perceive the world as just and fair (Lerner and Miller 1978; see also Schaafsma 2013).

We also propose a second moderator of the effect of racial discrimination on mental health outcomes. In addition to perceptions of the racism context, individual differences in racial/ethnic attitudes (how positive students feel about other racial/ethnic groups) may also moderate racism. Students who are more positive about other groups may be more resilient, dismissing experiences of racism as non-normative incidents in a context within which they otherwise have positive experiences with people from other racial/ethnic groups. Models of attitude formation processes emphasize that beliefs about the social world are a product of both the social environment and individual differences like personality (Duckitt 2001; Mischel and Shoda 1995). Thus, the extent to which children and adolescents feel motivated to respond without prejudice may influence the effect of racism on depressive symptoms and loneliness outcomes as a context effect while their racial/ethnic attitudes may operate on the effect of racism as an individual difference effect.

We argue that racial/ethnic attitudes should moderate the effect of direct and/or vicarious experiences of racial discrimination because racism perpetrated by those from other racial/ethnic groups may lead to targets or witnesses developing negative attitudes towards them. In other words, those with more negative racial/ethnic attitudes may experience the negative effects of racial discrimination on depressive symptoms and loneliness more intensely than those with neutral or positive racial/ethnic attitudes, with

such experiences reinforcing and accumulating stress responses and negative cognitions already heightened through negative racial/ethnic attitudes.

Hypotheses

The present study aims to examine associations between experiences of both direct and vicarious racial discrimination, motivated fairness, racial/ethnic attitudes, and mental health outcomes among Australian primary and secondary school students. To our knowledge, this is the first study to do so internationally. The study aims to extend previous research investigating associations between racist experiences and depressive symptoms and loneliness in primary and secondary school students by considering multiple potential pathways including (a) differential and interactive effects of racism experienced both directly and vicariously, (b) the impact of racism on different forms of mental health (i.e., depressive symptoms and loneliness), and (c) potential moderating effects of social attitudes (including motivations to be fair and racial/ethnic attitudes about other groups).

Expanding on our predictions regarding aim (c), we propose that higher levels of motivated fairness should increase the likelihood that racism will negatively impact health. We predict an interaction effect in which direct racism should be more strongly associated with higher levels of loneliness and depressive symptoms in students with higher motivated fairness. According to Stroebe et al. (2011, p. 485), "the same personal experience of discrimination can have very different implications for wellbeing, depending on individuals' construal of the likelihood that this situation will reoccur again in the future." In the present study, this likelihood should be determined by motivated beliefs about social fairness. We predict a second interaction effect in which more negative racial/ethnic attitudes should amplify the effect of racism on loneliness and depressive symptoms as students with negative attitudes are more likely to have developed such attitudes in the face of discrimination from these other racial/ethnic groups. We also model vicarious racism as a moderator of direct racism, reasoning that, along with motivated fairness, the former should also be a proximal indicator of the prevalence of racism in the students' social contexts.

Methods

Participants

This study was conducted as one component of a wider community baseline assessment for the evaluation of the localities embracing and accepting diversity (LEAD) program. LEAD was a community-based intervention to address racial discrimination and promote cultural diversity conducted in two local government areas (LGAs) in Victoria, Australia. The wider LEAD intervention and evaluation design are described in detail elsewhere (Ferdinand et al. 2013). Both LEAD LGAs have high levels of cultural and linguistic diversity and low to medium-average socio-economic status. LGA A is a large regional town with a population of approximately 60,000 people situated about 200 km from Melbourne while LGA B is an outer suburban area of Melbourne (population approximately 155,000). The participating LGAs were self-selected, but are comparable with other Victorian communities in levels of racism or discriminatory behavior.

Three primary and two secondary schools from LGA A and two primary schools from LGA B participated in this study. Data were collected via students' self-report surveys in participating schools with parental consent. Primary school students were guided through the survey as a group with one of the authors, while secondary school students completed it independently with an author available for questions. Ethics approval was received from Melbourne University Human Ethics Sub-Committee and the Department of Education and Early Childhood Development.

The sample consisted of 263 (82.4 % primary and 17.6 % secondary) students, 120 (45.6 %) male and 143 (54.4 %) female with a mean age of 11.2 years ($SD = 2.2$; range 8–17 years). Ninety-nine students (37.8 %) were born in English-speaking countries and also had parents born in English-speaking countries. This was the reference category for subsequent analyses. The other birth-country categories included 77 students (29.3 %) who were born in English-speaking countries and had parents born in non-English-speaking countries, 66 (25.1 %) who were born in non-English-speaking countries themselves, and 21 (8.0 %) who did not know where one or both of their parents were born. For ease of understanding, we subsequently refer to these as (a) reference group, (b) minority English, (c) minority non-English, and (d) unknown parental country of birth. Country of birth was chosen as a proximal indicator of majority versus minority ethnic group status for ease of response given the young sample, and for ease of categorization.

Measures

Explanatory Variables: Experiences of Racial Discrimination

Racial discrimination was assessed via seven items examining direct experiences (*Has this happened to YOU at school?: Other students said you don't belong in Australia;*

Other students didn't want to play with you because of your culture; A teacher thought you couldn't do something because of your culture; You were left out by a student because of your culture; You were left out by a teacher because of your culture; You were teased or called names by other students because of your culture; You were spat on, pushed or hit by other students because of your culture), and three items examining vicarious experiences toward other students (*Has this happened to OTHER students at your school?: Students are left out because of their cultural group; Students are called names or teased because of their cultural group; Students are spat on, pushed or hit because of their cultural group*). These items were developed by the authors after recent systematic reviews indicated a lack of consensus regarding the best way to measure experiences of racism among both adults (Bastos et al. 2010; Shariff-Marco et al. 2011) and children (Priest et al. 2013).

Existing measures of perceived racial discrimination were unsuitable for this study as they were designed for adults or adolescents only, lacked sufficient psychometric validity, were designed for specific racial/ethnic groups, or were too lengthy (i.e., >20 items) as the funding and wider context of the evaluation study limited the overall survey length to <40 items across all domains to be measured.

While we recognize that "culture" is not synonymous with race or ethnicity, in some parts of the world, including Australia, culture is commonly used as a proxy for, and conflated with, race and/or ethnicity and/or religion (Walton et al. 2014). Thus, in keeping with common vernacular of Australian students, teachers and communities, "culture" was used as a proxy for race/ethnicity within survey items. A specific focus on school as a context for experiences of racism was taken in this study due to school being the most common setting within which children and young people report such experiences occur (Mansouri and Jenkins 2010). Moreover, anti-racism best practice advocates a settings-based approach (Paradies et al. 2009), and this study was ultimately conducted to inform a larger intervention implementation and evaluation as mentioned above.

Racial/Ethnic Attitudes and Motivated Fairness

Motivated fairness was assessed using three items examining sources of motivated fairness (e.g., *It is important to me that I'm nice to people from different cultures; Other students expect me to be nice to people from different cultures; Adults expect me to be nice to people from different cultures*) adapted from motivation to respond without prejudice scales (Plant and Devine 1998). Racial/ethnic attitudes were assessed using four items (*People from other cultural groups are good/nice/smart/honest*; "kind" replaced "nice" and "intelligent" replaced "smart" in the

secondary school version) adapted from the Multi-response Racial Attitude Measure (Aboud and Doyle 1996) and Preschool Racism Attitude Measure II (Williams et al. 1975).

To investigate dimensionality of these items, exploratory factor analysis was performed in Mplus v.7 using a maximum likelihood approach with orthogonal (direct oblimin) rotation to allow the factors to correlate with one another. Because all study variables were dichotomous, analysis was performed using a tetrachoric correlation matrix and a four-factor solution was derived. Four items loaded strongly and solely on a "motivated fairness" factor and four items loaded on a "racial/ethnic attitudes" factor. Response categories for these items were *most times*, *sometimes*, and *rarely*. Responses to each item were dichotomized where a score of 1 represented *most times* and 0 represented *sometimes* or *rarely*. The overall number of responses for each measure was coded as a composite binary: responding *most times* on any item versus *sometimes* or *rarely* on every item for motivated fairness, and responding *most times* on every item versus *sometimes* or *rarely* on any item for racial/ethnic attitudes. This distinction was necessary to maintain balanced sample sizes in each composite response category. Dichotomizing was warranted as a very large proportion of students' responses fell at the extreme end of the scales (for example around 70 % experienced no direct racism). MacCallum et al. (2002) contend that, although dichotomizing continuous variables is generally not warranted, such circumstances may constitute an exception.

Six items assessing racism loaded on a factor labelled "direct racism" and a further three items loaded on a factor labelled "vicarious racism." Response categories here were coded as 1 representing *every day*, *every week*, or *every month* and 0 representing *never*. The overall number of responses was coded as a composite binary (responding *every month/week/day* on any item compared with responding *never* on every item). Item content and factor loadings for each scale are presented in the "Appendix".

Outcomes: Student Emotional Health

Drawing from the KIDSCREEN-10 scale (Ravens-Sieberer et al. 2010), data were collected on two mental health outcomes by asking students to report on single items assessing loneliness (*In the past week I have felt lonely most times, sometimes, not much*) and depressive symptoms (*In the past week I have felt sad most times, sometimes, not much*), each coded as a binary variable for analysis (*most times/sometimes* vs. *not much*). Despite a high level of association between the two health items (OR 10.19; 95 % CI 6.92, 15.02), they demonstrated reasonably low internal consistency as a two-item scale ($\alpha = 0.66$) and had differential

relationships with a number of other variables at a bivariate level (see Tables 1, 2). As such, these variables were examined independently in subsequent analyses to explore possible unique effects on each.

Demographics

Students reported age, gender, school year level, number of friends and best friends from other cultures (*How many of your [BEST] friends are from other cultures? None, a few, some, lots*) and country of birth for self, mother and father. Four birth-country categories were created by categorising open-ended responses as (0) students who were born, and whose parents were born, in an English-speaking country; (1) students who were born in an English-speaking country and whose parents were born in non-English speaking country; (2) students who were born in a non-English-speaking country whose parents were also born in a non-English-speaking country; and (3) students who did not know where one or both of their parents were born.

Statistical Analysis

Data were analysed using Stata 12. All analyses were adjusted for clustering of students by school using the Huber–White sandwich variance estimator. The prevalence, frequency and forms of direct experiences of racism across demographic categories including age, gender and racial/ethnic background, as well as bivariate associations with vicarious racism, motivated fairness, racial/ethnic attitudes, loneliness and depressive symptoms were examined using Chi square tests and simple logistic regression.

Next, all variables were simultaneously entered in blocks using logistic regression to model self-experienced direct racism as the exposure predicting loneliness and depressive symptoms as outcomes in two separate models, adjusting for demographics (in step two) and attitudes and experiences (in step three). Wald tests indicated that each model explained significantly more variance than the baseline model. Variance inflation factors of less than three for variables across all models indicated multi-collinearity was not present. Interactions (i.e., effect modification) between racism and other independent variables (demographic variables, vicarious racism, racial/ethnic attitudes and motivated fairness) in the final model were also explored (with removal set at $p > 0.10$).

Results

Sample Proportions

As reported in Table 1, at least one form of racism was experienced directly by 32.2 % of the sample and 22.1 %

experienced at least one form of direct racism every day. A much higher proportion of students reported vicarious racism, as 71.7 % of students reported at least one form of racism experienced by other students, and 26.3 % reported all three forms of vicarious racism. Nearly half of the sample (47.3 %) reported experiencing at least one form of vicarious racism every day. For direct racism in particular, most reported experiences were perpetrated by students rather than teachers, and the most common experience reported was students being told they didn't belong in Australia (19.5 % at least monthly). For vicarious racism, students most commonly reported others being called names or teased because of their cultural group (65.7 % monthly or more), compared with other students being left out or being physically targeted.

Bivariate Associations by Emotional Health

As reported in Table 1, 29.6 % of students in the baseline sample reported experiencing loneliness most times or sometimes and 37.0 % reported experiencing depressive symptoms. At the bivariate level, reporting both loneliness (OR 3.38; 95 % CI 1.66–6.88, $p < 0.01$) and depressive symptoms (OR 2.82; 95 % CI 1.12–7.11, $p < 0.05$) was associated with a greater likelihood of experiencing direct racism. Reporting loneliness resulted in students being more likely to also report depressive symptoms (OR 10.19; 95 % CI 6.92–15.02, $p < 0.01$). Of the other attitude and experience variables reported in Table 2, reporting depressive symptoms was associated with a lower likelihood of having positive racial/ethnic attitudes (OR 0.60; 95 % CI 0.40–0.91, $p < 0.05$).

In terms of demographic differences, students from all three minority birth-country categories reported higher levels of loneliness relative to the majority ethnic group students. Minority English students (OR 1.94; 95 % CI 1.01–3.73, $p < 0.05$) and minority non-English students (OR 1.77; 95 % CI 1.14–2.75, $p < 0.01$) were significantly more likely to report loneliness. However, the difference for students with unknown parental country of birth was marginal (OR 1.08; 95 % CI 0.17–6.98, $p < 0.10$). The only other significant demographic difference at a bivariate level was that female students were marginally more likely to report more depressive symptoms than male students (OR 1.96; 95 % CI 0.90–4.27, $p < 0.10$).

Bivariate Associations by Racism, Fairness and Racial/Ethnic Attitudes

As shown in Table 2, female students were more likely to report motivated fairness than male students (OR 2.43; 95 % CI 1.34–4.39, $p < 0.01$) and younger students were marginally more likely to have positive racial/ethnic attitudes (OR 0.88; 95 % CI 0.77–1.02, $p < 0.10$). Table 1 shows that a greater proportion of students from all three

Table 1 Sample characteristics of students (n = 263) by self-reported direct racism and vicarious racism

	% (n)	Direct racism		Vicarious racism	
		% reporting (n)	Unadjusted OR (95 % CI)	% reporting (n)	Unadjusted OR (95 % CI)
Gender					
Male	45.63 (120)	35.29 (42)	1.00	67.50 (81)	1.00
Female	54.37 (143)	29.79 (42)	0.78 (0.29, 2.12)	75.00 (105)	1.44 (0.89, 2.34)
Age	–	–	1.01 (0.71, 1.43)	–	1.08 (0.92, 1.27)
Birth-country					
Student and parents born in English-speaking countries	37.64 (99)	19.19 (19)	1.00	64.29 (63)	1.00
Student born in English-speaking countries, parents born non-English-speaking countries	29.28 (77)	34.21 (26)	2.19* (1.06, 4.52)	74.03 (57)	1.58 (0.87, 2.89)
Child and parent born non-English-speaking countries	25.10 (66)	45.31 (29)	3.49* (1.12, 10.89)	78.12 (50)	1.98* (1.17, 3.38)
One or both parents' country of birth unknown	7.98 (21)	42.86 (9)	3.16* (1.16, 8.62)	76.19 (16)	1.78 (0.70, 4.53)
How many friends from other cultures					
None/a few	62.45 (163)	32.52 (53)	1.00	71.60 (116)	1.00
Some/lots	37.55 (98)	31.96 (31)	0.97 (0.42, 2.27)	71.43 (70)	0.99 (0.47, 2.08)
Loneliness					
Rarely	70.43 (181)	23.76 (43)	1.00	69.61 (126)	1.00
Sometimes/most times	29.57 (76)	51.32 (39)	3.38** (1.66, 6.88)	78.67 (59)	1.61 (0.82, 3.16)
Depressive symptoms					
Rarely	63.04 (162)	23.46 (38)	1.00	70.37 (114)	1.00
Sometimes/most times	36.96 (95)	46.32 (44)	2.82* (1.12, 7.11)	75.53 (71)	1.30 (0.67, 2.51)
Vicarious racism					
Never	28.35 (74)	6.85 (5)	1.00	–	–
Every day/week/month	71.65 (187)	42.25 (79)	9.95** (2.23, 44.31)	–	–
Direct racism					
Never	67.82 (177)	–	–	61.36 (108)	1.00
Every day/week/month	32.18 (84)	–	–	94.05 (79)	9.95** (2.23, 44.31)
Motivated fairness					
Rarely/sometimes	55.73 (146)	40.41 (59)	1.00	75.86 (110)	1.00
Most times	44.27 (116)	21.93 (25)	0.41** (0.25, 0.68)	66.96 (77)	0.64* (0.42, 0.98)
Positive racial/ethnic attitudes					
Rarely/sometimes	30.68 (81)	37.50 (30)	1.00	76.25 (61)	1.00
Most times	69.32 (183)	29.83 (54)	0.71* (0.50, 0.99)	69.61 (126)	0.71 (0.40, 1.27)

‡ *p* < .10; * *p* < .05; ** *p* < .01

minority birth-country categories reported direct racism relative to the reference group (*p* < 0.05). More minority non-English students also experienced vicarious racism (OR 1.98; 95 % CI 1.17–3.38, *p* < 0.05; see Table 1) and students with unknown parental country of birth were less motivated to be fair (OR 0.43; 95 % CI 0.23–0.80, *p* < 0.01; see Table 2). Those reporting direct racism were much more likely to also experience vicarious racism (OR 9.95; 95 % CI 2.23–44.31, *p* < 0.01; Table 1), while reporting direct (OR 0.41; 95 % CI 0.25, 0.68, *p* < 0.01) and vicarious (OR 0.64; 95 % CI 0.42–0.98, *p* < 0.05) racism was associated with a lower likelihood of reporting

motivated fairness, as shown in Table 2. Positive racial/ethnic attitudes were also associated with reduced odds of experiencing direct racism (OR 0.71; 95 % CI 0.50–0.99; see Table 1). Finally, motivated fairness was associated with greater odds of positive racial/ethnic attitudes (OR 1.66; 95 % CI 1.19–2.31; see Table 2).

Baseline Hierarchical Models

Multivariate models (see Tables 3, 4) indicated a robust association between direct racism and higher levels of loneliness (adjusted OR 4.13; 95 % CI 1.62–10.53,

Table 2 Sample characteristics of students (n = 263) by motivated fairness and racial/ethnic attitudes

	Motivated fairness		Racial/ethnic attitudes	
	% reporting (n)	Unadjusted OR (95 % CI)	% reporting (n)	Unadjusted OR (95 % CI)
Gender				
Male	32.50 (39)	1.00	69.17 (83)	1.00
Female	53.90 (76)	2.43** (1.34, 4.39)	69.23 (99)	1.00 (0.55, 1.83)
Age	–	0.97 (0.86, 1.10)	–	0.88‡ (0.77, 1.02)
Birth-country				
Student and parents born in English-speaking countries	48.48 (48)	1.00	66.67 (66)	1.00
Student born in English-speaking countries, parents born non-English-speaking countries	45.45 (35)	0.89 (0.37, 2.10)	70.13 (54)	1.17 (0.60, 2.29)
Child and parent born non-English-speaking countries	40.62 (26)	0.73 (0.36, 1.45)	69.70 (46)	1.15 (0.50, 2.65)
One or both parents' country of birth unknown	28.57 (6)	0.43** (0.23, 0.80)	76.19 (16)	1.60 (0.75, 3.40)
How many friends from other cultures				
None/a few	42.68 (70)	1.00	65.85 (108)	1.00
Some/lots	47.42 (46)	1.21 (0.88, 1.67)	75.51 (74)	1.60 (0.58, 4.41)
Loneliness				
Rarely	47.51 (86)	1.00	69.61 (126)	1.00
Sometimes/most times	25.06 (27)	0.60 (0.28, 1.25)	68.83 (53)	0.96 (0.62, 1.51)
Depressive symptoms				
Rarely	45.06 (73)	1.00	73.46 (119)	1.00
Sometimes/most times	41.67 (40)	0.87 (0.60, 1.27)	62.50 (60)	0.60* (0.40, 0.91)
Vicarious racism				
Never	52.05 (38)	1.00	74.32 (55)	1.00
Every day/week/month	41.18 (77)	0.64* (0.42, 0.98)	67.38 (126)	0.71 (0.40, 1.27)
Direct racism				
Never	50.57 (89)	1.00	71.75 (127)	1.00
Every day/week/month	29.76 (25)	0.41** (0.25, 0.68)	64.29 (54)	0.71* (0.50, 0.99)
Motivated fairness				
Rarely/sometimes	–	–	64.38 (94)	1.00
Most times	–	–	75.00 (87)	1.66** (1.19, 2.31)
Positive racial/ethnic attitudes				
Rarely/sometimes	35.80 (29)	1.00	–	–
Most times	48.07 (87)	1.66** (1.19, 2.31)	–	–

‡ $p < .10$; * $p < .05$; ** $p < .01$

$p < 0.01$; see Table 3) and depressive symptoms (adjusted OR 3.60; 95 % CI 1.26–10.27, $p < 0.05$; see Table 4) after adjusting for main effects of demographics and other explanatory variables. Contrary to expectations, having more friends from other cultures was associated with higher levels of loneliness (OR 2.25; 95 % CI 1.37–3.69, $p < 0.01$; see Table 3) and depressive symptoms (OR 1.76; 95 % CI 1.40–2.22, $p < 0.01$; see Table 4). Stratified analyses indicated that this was only the case for students from the majority birth-country group (i.e., both parents and student born in English speaking countries). In both models, there were also significantly *lower* levels of loneliness and depressive symptoms for some minority

birth-country categories after adjusting for the effects of direct racism. Generally racial/ethnic attitudes and vicarious experiences of racism were not significantly associated with loneliness and depressive symptoms once the contribution of direct racism was taken into account. However, as shown in Table 3, students who were motivated to be fair were less likely to report loneliness (OR 0.09; 95 % CI 0.01–0.97, $p < 0.05$).

Direct Racism Interaction Effects

There was one significant interaction with direct racism predicting health outcomes. Direct racism interacted with

motivated fairness in the sense that the those who reported direct racism *and* motivated fairness were more likely to experience depressive symptoms (OR 2.34; 95 % CI 1.05–5.23, $p < 0.05$), while taking into account the main effect of each of these variables. Direct racism was highly associated with depressive symptoms in those reporting higher levels of motivated fairness (OR 9.05; 95 % CI 1.67–49.06, p = 0.01), while only moderately associated for those reporting low levels of fairness (OR 2.77; 95 % CI 1.04–7.40, $p < 0.05$). The main effect of direct racism on depressive symptoms was reduced to marginal significance ($p < 0.10$) when this interaction term was included in the model.

Although we had predicted that vicarious racism might also interact with direct racism, we were unable to model this interaction term as too few participants (five students, or 6.8 % of the sample) experienced direct racism and no vicarious racism. All possible two-way interactions were examined individually in the full models predicting both loneliness and depression and there were no further significant effects.

Discussion

The present study extended prior racial discrimination research by addressing several gaps in the existing literature. We focused on the experiences of Australian primary and secondary school students from both majority and minority racial/ethnic backgrounds, within a context of increasing levels of racial/ethnic diversity as well as heightened intercultural tensions and racism across the Australian population (Markus 2013). While the vulnerability of students to racial discrimination's harmful effects on health, including mental health outcomes such as depressive symptoms and loneliness, is increasingly recognized, the prevalence and impact of racial discrimination on children and youth remains understudied, particularly among pre-adolescent populations and in contexts outside North America.

Extending previous research, this study examined both direct and vicarious experiences of racial discrimination reported by students, whereas very few studies previously have examined the health impact of vicarious racial discrimination among student populations, nor the co-occurrence and interrelationships between direct and vicarious racial discrimination. Furthermore, to better understand whether students' motivated fairness and attitudes towards other racial/ethnic groups influence the effect of racism on their depressive symptoms and loneliness outcomes, this study tested moderation effects and found motivated fairness significantly modified the association between direct racism and depressive symptoms.

Prevalence Findings

Students' experiences of racism were substantial, with nearly half of the students born in non-English-speaking countries experiencing at least one form of direct racism once a month or more frequently, and nearly a quarter of all students experiencing at least one form of direct racism every day. Vicarious experiences of racism were proportionately higher still, with two thirds of students reporting that other students were called names or teased due to their cultural background at least once a month. Both direct racism and loneliness were more likely to be experienced by students from non-English backgrounds and direct experiences of racial discrimination were consistently related to higher levels of loneliness and depressive symptoms after adjusting for demographic differences as well as racial/ethnic attitudes and motivated fairness. This finding is consistent with the existing evidence that racial discrimination is a key health risk in school environments (Priest et al. 2013) and the few studies that have specifically examined racism as a determinant of loneliness (Neto and Barros 2000; Juang and Alvarez 2010).

For students who were themselves born in English-speaking countries along with their parents, having more friends from other cultures was associated with higher levels of loneliness and depressive symptoms. We speculate that these majority group students with more friends from other cultures may be more likely to witness these friends experiencing racism or be more sensitized to negative emotional consequences from these experiences, manifesting as increased depressive symptoms and loneliness. Another possibility is that higher loneliness and depressive symptoms may be linked to these majority group students experiencing a degree of ostracism from their majority group peers. In other words, they may experience exclusion due to having friends from other cultures, or they may make friends with students from other cultures after being excluded by those from their own culture. Further investigation across multiple time points and using more in-depth measures of peer relationships and friendship networks is required to investigate this finding in more detail.

More positively, 44.3 % of students reported high levels of motivated fairness towards those from other cultural groups and 69.3 % reported positive racial/ethnic attitudes, with both of these variables associated with reduced reporting of racism. However, it is still concerning that over half of students reported low levels of motivation to be fair to those from other cultural groups. Students who were motivated to be fair were also less likely to report loneliness after adjusting for direct and vicarious experiences of racism. Although this finding requires further exploration across a wider sample and using more detailed

Table 3 Multivariate associations between direct racism and loneliness

	OR (95 % CI)	Adjusted OR (95 % CI)	Adjusted OR (95 % CI)
Direct racism			
Never	1.0	1.0	1.0
Every day/week/month	3.38** (1.66, 6.88)	3.94** (1.73, 9.01)	4.13** (1.62, 10.53)
Age		0.88‡ (0.77, 1.02)	0.85* (0.72, 1.00)
Gender			
Male		1.0	1.0
Female		1.46 (0.86, 2.48)	1.55‡ (0.93, 2.56)
Racial/ethnic background			
Students and parents born English-speaking countries		1.0	1.0
Student born English, parents born non-English-speaking countries		1.06 (0.59, 1.91)	1.04 (0.59, 1.85)
Student and parent born non-English-speaking countries		0.69** (0.56, 0.85)	0.68** (0.59, 0.78)
One or both parents' country of birth unknown		0.38 (0.06, 2.45)	0.32 (0.04, 2.28)
Friends from other cultures			
None/a few		1.0	1.0
Some/lots		2.09** (1.33, 3.29)	2.25** (1.37, 3.69)
Positive intercultural attitudes			
Rarely/sometimes			1.0
Most times			0.94 (0.55, 1.60)
Vicarious racism			
Never			1.0
Every day/week/month			1.07 (0.52, 2.21)
Motivated fairness			
Rarely/sometimes			1.0
Most times			0.09* (0.01, 0.97)

Base category: *not much loneliness*

‡ $p < .10$; * $p < .05$; ** $p < .01$

measures, it suggests that anti-racism and prejudice reduction interventions within schools may serve to benefit the mental health outcomes of those from both majority and minority racial/ethnic backgrounds.

Interaction Findings

Although motivated fairness was associated with both reduced experiences of direct racism and loneliness at a bivariate level, those students with high levels of motivated fairness who also report direct experiences of racism are at greater risk of experiencing depressive symptoms, supporting our second prediction. This novel finding requires exploration in future research but is consistent with effects found in at least one previous study in which people viewing the world as unfair/unjust who experienced discrimination (and perceive it as common rather than rare) were more likely to have depressive symptoms (Stroebe et al. 2011). It may be that high levels of motivated fairness

among individuals in our study reflect unfair/unjust worldviews and a belief that racism is commonplace.

The motivation to respond without prejudice (Plant and Devine 1998) has typically been applied as a self-regulatory process determining prejudice reduction in perpetrators (e.g., Devine et al. 2002). However, such motivations may also function in both perpetrators and recipients of prejudice alike as a form of just-world belief. Students may apply directives from others—parents, teachers and peers—as well as themselves to be fair to other groups as guiding social principles; and when these principles are violated through experiences of racism, wellbeing may be adversely (and disproportionately) affected.

The interaction between discrimination and motivated fairness may also be explained by cognitive dissonance theory (Festinger 1957), which seeks to describe a universal motivation for justification and rationalization. The theory posits that attempts at dissonance reduction are driven by an ego-justifying desire to preserve a positive

Table 4 Multivariate associations between direct racism and depressive symptoms

	OR (95 % CI)	Adjusted OR (95 % CI)	Adjusted OR (95 % CI)
Direct racism			
Never	1.0	1.0	1.0
Every day/week/month	2.82* (1.12, 7.11)	3.18* (1.30, 7.77)	3.60* (1.26, 10.27)
Stratified by motivated fairness = rarely/sometimes			2.77* (1.04, 7.40)
Stratified by motivated fairness = most times			9.05** (1.67, 49.06)
Age		1.10 (0.98, 1.24)	1.08 (0.95, 1.23)
Gender			
Male		1.0	1.0
Female		2.41** (1.27, 4.58)	2.66** (1.39, 5.11)
Racial/ethnic background			
Students and parents born English-speaking countries		1.0	1.0
Student born English, parents born non-English-speaking countries		0.67** (0.56, 0.81)	0.66** (0.53, 0.83)
Student and parent born non-English-speaking countries		0.82 (0.41, 1.65)	0.81 (0.40, 1.64)
One or both parents' country of birth unknown		0.46‡ (0.20, 1.10)	0.43‡ (0.17, 1.05)
Friends from other cultures			
None/a few		1.0	1.0
Some/lots		1.68** (1.32, 2.15)	1.76** (1.40, 2.22)
Positive racial/ethnic attitudes			
Rarely/sometimes			1.0
Most times			0.67 (0.39, 1.14)
Vicarious racism			
Never			1.0
Every day/week/month			0.70 (0.27, 1.83)
Motivated fairness			
Rarely/sometimes			1.0
Most times			0.19 (0.03, 1.42)

Base category: *not much* compared to most times/sometimes feeling depressive symptoms

‡ $p < .10$; * $p < .05$; ** $p < .01$

image of the self following behavior that contradicts such an image (Aronson 1992; Greenwald and Ronis 1978; Steele and Liu 1983). Jost et al. (1994, 2004) extended this reasoning in their system justification theory (SJT), suggesting that people experience ideological dissonance and are thus motivated to defend the system—rather than the self—even if this comes at the expense of a positive self-image (Jost et al. 2003).

SJT suggests that individuals are motivated to perceive the social system as fair and just, and perceptions of systemic fairness serve a palliative function, reducing anxiety and dissonance for individuals within that system (Jost and Hunyady 2002). Consistent with this reasoning, those who endorse just-world beliefs, such as meritocracy, appear to be more adversely affected by discrimination experiences (e.g., Major et al. 2007; Foster et al. 2006). Similarly, within clinical psychology, approaches such as cognitive

behavioral therapy recognize that an individual holding strong core beliefs regarding fairness, such as "I/others should be treated fairly," will be likely to experience more psychological distress when this does not occur than an individual who does not hold this belief (Edelman 2013). Extending this reasoning, it is plausible that students in our sample who endorsed just-world beliefs in the form of motivated fairness were more adversely affected by experiences of discrimination because this contravened their expectations of fairness. Exploring how to promote motivated fairness among students within interventions, without leading to increased loneliness or depressive symptoms, is also an important priority for anti-racism intervention work with primary and secondary school students.

Contrary to our expectations, racial/ethnic attitudes did not act as a moderator of associations between experiences of racism and either depressive symptoms or loneliness.

Rather, we found that there was a direct association between racial/ethnic attitudes and direct racist experiences, with higher levels of reported experiences of direct racism associated with less positive racial/ethnic attitudes. Relationships between racist experiences (whether direct or vicarious) and racial/ethnic attitudes have rarely been studied empirically among adults or children (Habtegiorgis et al. 2014). More work is required both theoretically and empirically to examine relationships between these constructs that are possibly reciprocal and mutually reinforcing.

Limitations

Previous research suggests that vicarious racism may interact with direct racism to predict negative mental health; however, were unable to test this prediction as there were too few students that experienced direct racism but not vicarious racism. Several existing studies do suggest that "being aware of racial harassment aimed at others may be nearly as toxic as being the direct target of racial harassment" (Chrobot-Mason et al. 2013, p. 485) and that vicarious racism at work "was associated with deleterious wellbeing consequences that were comparable to those suffered by direct targets" (Douglas Low et al. 2007, p. 2290). Several studies have also identified that vicarious experiences of racism, specifically carer experiences of racism, have deleterious effects on children's health (Priest et al. 2012; Kelly et al. 2013).

The use of binary coded response scales limited variance in responses, resulting in the overlap between those experiencing vicarious and direct forms of discrimination. Therefore, testing interactions between direct and vicarious experiences of racism with health effects using continuous variables and multi-item scales is an important first step to overcome limitations of using binary responses in analysis. However, single-item indicators of health or events are not atypical in community-based studies with adults and children, given the need to limit participation demands for participants as well as schools. Single-item measures of self-rated health are commonly used and have been shown to predict objective health outcomes (DeSalvo et al. 2006). Given the constraints of the intervention evaluation from which the data for the present study was drawn, which required the use of short-form measures, there is a need to replicate our findings using more robust psychometrically validated instruments across a larger sample. Nonetheless, the findings of this study in terms of the effects of racial discrimination on student reported loneliness and depressive symptoms are consistent with studies using multi-item measures of these constructs.

There were a number of more minor methodological limitations, including the inability to generalize to other

student populations within (and beyond) Australia as the study population is not a representative sample of Australian students. More detailed and nuanced measurement of racial/ethnic background is recommended in future studies. For example, other variables such as language spoken at home, English proficiency, nativity/immigrant status, self-identified racial/ethnic background, and religious background, in addition to country of birth should be considered. The study is also limited by a relatively small sample size which may reduce power in subgroup analyses. The cross-sectional design also limits definitive conclusions about causal directions. Although longitudinal studies suggest that racism precedes poor health (Paradies 2006; Pascoe and Smart Richman 2009; Williams and Mohammed 2009), the converse cannot be ruled out in this study. It is also plausible that loneliness and depressive symptoms precede low levels of motivated fairness, or that these function in a reciprocal process. Future research should employ longitudinal designs to examine trajectories of experiences of racism and racial/ethnic attitudes in relation to outcomes such as loneliness and depressive symptoms, as well as to explore moderating, and mediating factors of these relationships over time.

Conclusions

It is widely acknowledged that childhood and adolescence are foundational for mental health outcomes throughout life (Maggi et al. 2010). Interventions within these periods are widely recommended as an important means of reducing inequalities in mental health outcomes across the lifespan. Thus, further research is needed both to improve our understanding of racism as a determinant of mental health for children and youth and to inform action to prevent racism and ameliorate its detrimental effects (Paradies et al. 2009).

The findings of our study support a need for effective school-based interventions aimed at improving emotional wellbeing through reducing racial discrimination and promoting positive attitudes towards diversity. Emerging literature suggests that positive benefits can be achieved through well designed programs (Aboud et al. 2012; Cristol and Gimbert 2008; Johnson and Aboud 2013). Interventions to promote a culture of fairness in school in particular may have a positive impact on experiences of loneliness for all students. Our findings also suggest, however, that just-world type beliefs like motivated fairness might *facilitate* the adverse effects of direct racist experiences on health; so caution when designing such interventions is advised.

The present study demonstrates the importance of considering more complex pathways though which racism impacts health, namely both the context within which

racism is experienced and individual beliefs about whether students should be fair to people from other groups. As we have argued, both of these moderating factors may relate to just-world perceptions. This study is the first of its kind to show internationally that motivated fairness beliefs moderate the association between direct experiences of racism and emotional health outcomes among students, and the first in Australia to show associations between direct experiences of racism and adverse emotional health outcomes among students. We thus provide a basis for more work exploring these findings across larger samples using more robust measures and longitudinal designs.

Author contributions NP conceived of the study, participated in its design and coordination of data collection, assisted with statistical analysis and drafted the manuscript; RP participated in the design, performed the statistical analysis and helped draft the manuscript; AF participated in the design and data collection coordination; YP participated in conceiving the study and its design and advised on statistical analysis; MK participated in conceiving the study and its design and advised on statistical analysis. All authors read and approved the final manuscript.

Appendix

See Table 5.

Table 5 Item content and factor loadings (from the polychoric correlation matrix) for student attitudes and experiences using maximum likelihood factor analysis with oblique (geomin) rotation

	Factor 1	Factor 2	Factor 3	Factor 4
Items assessing motivated fairness				
It is important to me that I'm nice to people from different cultural groups	**0.61**	0.16	0.02	0.05
Other students expect me to be nice to people from different cultures	**0.66**	0.07	−0.02	−0.18
Adults expect me to be nice to people from different cultures	**0.86**	−0.13	−0.03	0.01
Teachers want us to be friends with students from other cultural groups	**0.62**	0.05	0.11	0.00

Table 5 continued

	Factor 1	Factor 2	Factor 3	Factor 4
Items assessing positive racial/ethnic attitudes				
People from other cultural groups are good	0.24	**0.74**	−0.13	0.10
People from other cultural groups are nice/kind[a]	0.02	**0.76**	−0.02	−0.21
People from other cultural groups are smart/intelligent[a]	−0.03	**0.60**	0.08	−0.11
People from other cultural groups are honest	−0.01	**0.62**	0.14	−0.23
Items assessing direct racist experiences				
Other students said that you don't belong in Australia	0.11	0.00	**0.78**	0.09
Other students didn't want to play/hang out with you because of your culture[a]	0.24	−0.16	**0.91**	−0.04
A teacher thought you couldn't do something because of your culture	−0.07	−0.09	**0.76**	−0.06
You were left out by a student because of your culture	−0.06	0.06	**0.80**	0.15
You were left out by a teacher because of your culture	−0.01	0.11	**0.84**	0.08
You were spat on, pushed or hit by other students because of your culture	−0.06	0.03	**0.68**	0.16
Items assessing vicarious racist experiences				
Students are left out because of their cultural group	0.04	−0.13	0.01	**0.60**
Students are called names or teased because of their cultural group	0.09	0.03	0.08	**0.64**
Students are spat on, pushed or hit because of their cultural group	−0.09	0.00	0.04	**0.75**

Adjusted for clustering effects of school

Values shown in bold have factor loadings greater than the cutoff criterion of 0.30

[a] Indicates that items were worded differently for primary/secondary students

References

Aboud, F. E., & Doyle, A.-B. (1996). Parental and peer influences on children's racial attitudes. *International Journal of Intercultural Relations, 20*(3/4), 371–383.

Aboud, F. E., Tredoux, C., Tropp, L. R., Brown, C. S., Niens, U., Noor, N. M., et al. (2012). Interventions to reduce prejudice and enhance inclusion and respect for ethnic differences in early childhood: A systematic review. *Developmental Review, 32*(4), 307–336.

Aronson, E. (1992). The return of the repressed: Dissonance theory makes a comeback. *Psychological Inquiry, 3*(4), 303–311. doi:10.1207/s15327965pli0304_1.

Australian Institute of Health and Welfare. (2012). *A picture of Australia's children 2012*. Canberra: AIHW.

Bastos, J. L., Celeste, R. K., Faerstein, E., & Barros, A. J. D. (2010). Racial discrimination and health: A systematic review of scales with a focus on their psychometric properties. *Social Science and Medicine, 70*(7), 1091–1099.

Berman, G., & Paradies, Y. (2010). Racism, disadvantage and multiculturalism: Towards effective anti-racist praxis. *Ethnic & Racial Studies, 33*(2), 214–232.

Chrobot-Mason, D., Ragins, B. R., & Linnehan, F. (2013). Second hand smoke: Ambient racial harassment at work. *Journal of Management Psychology, 28*(5), 470–491.

Cogburn, C. D., Chavous, T. M., & Griffin, T. M. (2011). School-based racial and gender discrimination among African American adolescents: Exploring gender variation in frequency and implications for adjustment. *Race and Social Problems, 3*(1), 25–37.

Coker, T. R., Elliott, M. N., Kanouse, D. E., Grunbaum, J. A., Schwebel, D. C., Gillialand, M. J., et al. (2009). Perceived racial/ethnic discrimination among fifth-grade students and its association with mental health. *American Journal of Public Health, 99*(5), 878–884.

Cristol, D., & Gimbert, B. (2008). Racial perceptions of young children: A review of literature post-1999. *Early Childhood Education Journal, 36*(2), 201–207.

Deng, S., Kim, S. Y., Vaughan, P. W., & Li, J. (2010). Cultural orientation as a moderator of the relationship between Chinese American adolescents' discrimination experiences and delinquent behaviors. *Journal of Youth and Adolescence, 39*(9), 1027–1040.

Department of Immigration and Border Protection. (2010). *Settlement reporting facility.* http://www.immi.gov.au/living-in-australia/delivering-assistance/settlement-reporting-facility/. Accessed March 22, 2014.

Derogatis, L. R., & Savitz, K. L. (2000). The SCL-90-R and the Brief Symptom Inventory (BSI) in primary care. In M. E. Maruish (Ed.), *Handbook of psychological assessment in primary care settings* (pp. 297–334). Mahwah, NJ: Lawrence Erlbaum Associates.

DeSalvo, K. B., Bloser, N., Reynolds, K., He, J., & Muntner, P. (2006). Mortality prediction with a single general self-rated health question: A meta-analysis. *Journal of General Internal Medicine, 21*(3), 267–275.

Devine, P. G., Plant, E. A., Amodio, D. M., Harmon-Jones, E., & Vance, S. L. (2002). The regulation of explicit and implicit race bias: The role of motivations to respond without prejudice. *Journal of Personality and Social Psychology, 82*(5), 835–848.

Douglas Low, K. S., Radhakrishnan, P., Schneider, K. T., & Rounds, J. (2007). The experiences of bystanders of workplace ethnic harassment. *Journal of Applied Social Psychology, 37*(10), 2261–2297.

Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. *Advances in Experimental Psychology, 33*, 41–113.

Edelman, S. (2013). *Change your thinking.* Sydney, NSW: ABC Books.

Faulstich, M. E., Carey, M. P., Ruggiero, L., Enyart, P., & Gresham, F. (1986). Assessment of depression in childhood and adolescence: An evaluation of the Center for Epidemiological Studies Depression Scale for Children (CES-DC). *American Journal of Psychiatry, 143*, 1024–1027.

Ferdinand, A. S., Paradies, Y., & Kelaher, M. A. (2013). The role of effective partnerships in an Australian place-based intervention to reduce race-based discrimination. *Public Health Reports, 128*(Suppl 3), 54–60.

Festinger, L. (1957). *A theory of cognitive dissonance.* Redwood, CA: Stanford University Press.

Ford, K. R., Hurd, N. M., Jagers, R. J., & Sellers, R. M. (2013). Caregiver experiences of discrimination and African American adolescents' psychological health over time. *Child Development, 84*(2), 485–499. doi:10.1111/j.1467-8624.2012.01864.x.

Foster, M. D., Sloto, L., & Ruby, R. (2006). Responding to discrimination as a function of meritocracy beliefs and personal experiences: Testing the model of shattered assumptions. *Group Processes & Intergroup Relations, 9*(3), 401–411.

Garnett, B. R., Masyn, K. E., Austin, S. B., Miller, M., Williams, D. R., & Viswanath, K. (2013). The Intersectionality of discrimination attributes and bullying among youth: An applied latent class analysis. *Journal of Youth and Adolescence.* doi:10.1007/s10964-013-0073-8.

Graham, S., Munniksma, A., & Juvonen, J. (2013). Psychosocial benefits of cross-ethnic friendships in urban middle schools. *Child Development,.* doi:10.1111/cdev.12159.

Greenwald, A. G., & Ronis, D. L. (1978). Twenty years of cognitive dissonance: Case study of the evolution of a theory. *Psychological Review, 85*, 53–57.

Guerra, N. G., Williams, K. R., & Sadek, S. (2011). Understanding bullying and victimization during childhood and adolescence: A mixed methods study. *Child Development, 82*(1), 295–310.

Habtegiorgis, A. E., Paradies, Y. C., & Dunn, K. M. (2014). Are racist attitudes related to experiences of racial discrimination? Within sample testing utilising nationally representative survey data. *Social Science Research, 47*, 178–191. doi:10.1016/j.ssresearch.2014.05.002.

Harrell, S. P. (2000). A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *American Journal of Orthopsychiatry, 70*(1), 42–57.

Hoglund, W. L. G., & Hosan, N. E. (2013). The context of ethnicity: Peer victimization and adjustment problems in early adolescence. *Journal of Early Adolescence, 33*(5), 585–609.

Hunter, S. C., Durkin, K., Heim, D., Howe, C., & Bergin, D. (2010). Psychosocial mediators and moderators of the effect of peer-victimization upon depressive symptomatology. *Journal of Child Psychology and Psychiatry, 51*(10), 1141–1149. doi:10.1111/j.1469-7610.2010.02253.x.

Johnson, P. J., & Aboud, F. E. (2013). Modifying ethnic attitudes in young children: The impact of communicator race and message strength. *International Journal of Behavioral Development, 37*(3), 182–191. doi:10.1177/0165025412466522.

Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology, 33*, 1–27.

Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology, 25*, 881–919.

Jost, J. T., & Hunyady, O. (2002). The psychology of system justification and the palliative function of ideology. *European Review of Social Psychology, 13*, 111–153.

Jost, J. T., Pelham, B. W., Sheldon, O., & Ni Sullivan, B. (2003). Social inequality and the reduction of ideological dissonance on behalf of the system: Evidence of enhanced system justification among the disadvantaged. *European Journal of Social Psychology, 33*(1), 13–36.

Juang, L. P., & Alvarez, A. A. (2010). Discrimination and adjustment among Chinese American adolescents: Family conflict and family cohesion as vulnerability and protective factors. *American Journal of Public Health, 100*(12), 2403–2409.

Katz, I., & Redmond, G. (2010). Review of the circumstances among children in immigrant families in Australia. *Child Indicators Research, 3*, 439–458.

Kelly, Y., Becares, L., & Nazroo, J. (2013). Associations between maternal experiences of racism and early child health and development: Findings from the UK Millennium Cohort Study. *Journal of Epidemiology & Community Health, 67*(1), 35–41.

Larochette, A.-C., Murphy, A. N., & Craig, W. M. (2010). Racial bullying and victimization in Canadian school-aged children:

Individual and school level effects. *School Psychology International, 31*(4), 389–406.

Lee, H., & Turney, K. (2012). Investigating the relationship between perceived discrimination, social status, and mental health. *Society and Mental Health, 2*(1), 1–20.

Lerner, M. J., & Miller, D. T. (1978). Just world research and the attribution process: Looking back and ahead. *Psychological Bulletin, 85*(5), 1030–1051.

MacCallum, R. C., Zhang, S., Preacher, K. J., & Rucker, D. D. (2002). On the practice of dichotomization of quantitative variables. *Psychological Methods, 7*(1), 19–40.

Maggi, S., Irwin, L. J., Siddiqi, A., & Hertzman, C. (2010). The social determinants of early child development: An overview. *Journal of Paediatrics and Child Health, 46*(1), 627–635. doi:10.1111/j.1440-1754.2010.01817.x.

Major, B., Kaiser, C. R., O'Brien, L. T., & McCoy, S. K. (2007). Perceived discrimination as worldview threat or worldview confirmation: Implications for self-esteem. *Journal of Personality and Social Psychology, 92*(6), 1068–1086.

Mansouri, F., & Jenkins, L. (2010). Schools as sites of race relations and intercultural tension. *Australian Journal of Teacher Education, 35*(7), 93–108.

Markus, A. (2013). *Mapping social cohesion: The scanlon foundation surveys national report 2013*. Melbourne: Scanlon Foundation.

Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review, 102*(2), 246.

Neto, F., & Barros, J. (2000). Predictors of loneliness among adolescents from Portuguese immigrant families in Switzerland. *Social Behavior & Personality, 28*(2), 193–206.

Nyborg, V. M., & Curry, J. F. (2003). The impact of perceived racism: Psychological symptoms among African American boys. *Journal of Clinical Child & Adolescent Psychology, 32*(2), 258–266.

Paradies, Y. (2006). A systematic review of empirical research on self-reported racism and health. *International Journal of Epidemiology, 35*(4), 888–901.

Paradies, Y., Chandrakumar, L., Klocker, N., Frere, M., Webster, K., Burrell, M., et al. (2009). *Building on our strengths: A framework to reduce race-based discrimination and support diversity in Victoria Melbourne*. VIC: Victorian Health Promotion Foundation.

Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin, 135*(4), 531–554.

Plant, E. A., & Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology, 75*(3), 811–832.

Priest, N., Paradies, Y., Stevens, M., & Bailie, R. (2012). Exploring relationships between racism, housing and child illness in remote Indigenous communities. *Journal of Epidemiology and Community Health, 6*(5), 440–447.

Priest, N., Paradies, Y., Trenerry, B., Truong, M., Karlsen, S., & Kelly, Y. (2013). A systematic review of studies examining the relationship between reported racism and health and wellbeing for children and young people. *Social Science and Medicine, 95*, 115–127.

Qualter, P., Brown, S. L., Munn, P., & Rotenberg, K. J. (2010). Childhood loneliness as a predictor of adolescent depressive symptoms: An 8-year longitudinal study. *European Child and Adolescent Psychiatry, 19*(6), 493–501. doi:10.1007/s00787-009-0059-y.

Quintana, S., & McKown, C. (2007). *The handbook of race, racism, and the developing child*. New York: Wiley.

Ravens-Sieberer, U., Erhart, M., Rajmil, L., Herdman, M., Auquier, P., Bruil, J., et al. (2010). Reliability, construct and criterion validity of the KIDSCREEN-10 score: A short measure for children and adolescents' well-being and health-related quality of life. *Quality Life Research, 19*, 1487–1500.

Sanders-Phillips, K. (2009). Racial discrimination: A continuum of violence exposure for children of color. *Clinical Child and Family Psychology Review, 12*(2), 174–195.

Schaafsma, J. (2013). Through the lens of justice: Just world beliefs mediate relationships between perceived discrimination and subjective well-being. *International Journal of Intercultural Relations, 37*, 450–458.

Shariff-Marco, S., Breen, N., Landrine, H., Reeve, B. B., Krieger, N., Gee, G. C., et al. (2011). Meausring everyday racial/ethnic discrimination in health surveys: How best to ask the questions, in one or two stages, across multiple racial/ethnic groups? *Du Bois Review, 8*(1), 159–177.

Steele, C. M., & Liu, T. J. (1983). Dissonance processes as self-affirmation. *Journal of Personality and Social Psychology, 41*, 831–846.

Stevenson, H. C., & Arrington, E. G. (2009). Racial/ethnic socialization mediates perceived racism and the racial identity of African American adolescents. *Cultural Diversity and Ethnic Minority Psychology, 15*(2), 125–136.

Stroebe, K., Dovido, J. F., Barreto, M., Ellmers, N., & John, M.-S. (2011). Is the world a just place? Countering the negative consequences of pervasive discrimination by affirming the world as just. *British Journal of Social Psychology, 50*, 484–500.

Tynes, B. M., Giang, M. T., Williams, D. R., & Thompson, G. N. (2008). Online racial discrimination and psychological adjustment among adolescents. *Journal of Adolescent Health, 43*, 565–569.

Vanhalst, J., Klimstra, T. A., Luyckx, K., Scholte, R. H. J., Engels, R. C. M. E., & Goossens, L. (2012). The interplay of loneliness and depressive symptoms across adolescence: Exploring the role of personality traits. *Journal of Youth and Adolescence, 41*(6), 776–787.

Walton, J., Priest, N., Kowal, E., Brickwood, K., Fox, B., White, F., et al. (2014). Talking culture? Egalitarianism, color-blindness and racism in Australian elementary schools. *Teaching and Teacher Education, 39*, 112–122.

Williams, J. E., Best, D. L., & Boswell, D. A. (1975). The measurement of children's racial attitudes in the early schools years. *Child Development, 46*, 494–500.

Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine, 32*(1), 20–47.

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