Social ecological models have historically led community psychologists to consider the ways in which societal processes may impinge on children’s development. The impact of racial and ethnic discrimination on individual wellbeing is one clear manifestation of this trend.

Discrimination is increasingly recognised as a key determinant of wellbeing and health for people from ethnic and cultural minorities throughout the Western world (Williams & Mohammed, 2009). Within this area of work, research to date has predominantly focused on perceived race-based discrimination, or perceived racism, and its role in understanding and addressing health inequalities (Paradies, 2006; Paradies, Williams, Heggenhougen, & Quah, 2008; Pascoe & Smart Richman, 2009; Williams & Mohammed, 2009). A growing body of evidence suggests perceived discrimination is an important risk factor for a range of health outcomes, acting as a key stressor influencing ethnic and cultural disparities in wellbeing and health outcomes (Pascoe & Smart Richman, 2009; Williams & Mohammed, 2009).

Internationally, reviews report associations between perceived racism and poor health outcomes through cross-sectional and longitudinal studies and for a diverse range of population groups and settings (Paradies, 2006; Williams & Mohammed, 2009). Of the poor mental health outcomes found to be associated with perceived racism, psychological distress, and depressive and anxious symptoms are most common (Paradies, 2006; Williams & Mohammed, 2009). Associations between racism and physical health, including hypertension, cardiovascular disease, and low infant birth weight have also been reported (Paradies, 2006; Williams & Mohammed, 2009). In addition, a ‘dose-response’ relationship is increasingly noted, with individuals who perceive more severe, frequent, or chronic discrimination more likely to show health problems (Schulz, et al., 2000).

However, while the importance of investigating the impact of perceived
discrimination, including perceived racism, on the wellbeing of children and young people has been recognised (Ahmed, Mohammed, & Williams, 2007; Ombudsman Against Ethnic Discrimination, 2007; Paradies, et al., 2009) internationally it remains an area that is largely under-researched (Patcher & Garcia Coll, 2009). Reviews have identified that of 253 studies published internationally in the field of racism and health up to 2007 only 38 (15%) focused on child populations (Paradies, 2006; Williams & Mohammed, 2009). Another review also published across this time frame identified 40 studies, 70% of which were with participants from African American backgrounds (Patcher & Garcia Coll, 2009).

As with adult populations, research conducted primarily, but not exclusively, with African-American child populations have found strong associations between racism and poor child health and wellbeing outcomes (Patcher & Garcia Coll, 2009; Sanders-Phillips, 2009). Children’s experiences of racism have been linked to elevated risk of depressive symptoms (Rumbaut, 1994; Simons, et al., 2002), anger, delinquent behaviours, internalizing problems, and substance abuse (Whitbeck, Hoyt, McMorris, Chen, & Stubben, 2001). These associations remain after controlling for confounders such as stressful life events and neighbourhood disadvantage (Prelow, Danoff-Burg, Swensen, & Pulgiano, 2004) and within longitudinal studies (Brody et al., 2006; Gibbons, Gerrard, Cleveland, Wills, & Brody, 2004) after controlling for baseline symptoms.

Children as young as four years of age have been documented as being aware of racial differences and racial stereotypes and young school-aged children can accurately identify their own and others’ ethnicity (Aboud, 1988; Durkin, 1995; Sanders-Phillips, 2009). Young children aged three to four years are also recognised as having great difficulty making judgments that are incongruent with racial stereotypes and more likely than older children to identify with negative stereotypes associated with their own cultural group, although by eight years of age are more able to make judgements divergent from these stereotypes (Augoustinos & Rosewarne, 2001; Sanders-Phillips, 2009). Belonging to a stigmatised social group increases the likelihood of children perceiving discrimination (Brown & Bigler, 2005). Relatively young American children from ethnic-minority backgrounds have been found to show an understanding of discrimination at younger ages than their majority-culture peers (McKown & Weinstein, 2003).

Very little Australian research has examined the link between racism and child wellbeing and health outcomes (Paradies, Harris, & Anderson, 2008; Refugee Health Research, 2007; Zubrick et al., 2005). Studies that do exist are predominantly with Aboriginal populations (Priest, Paradies, Stevens, & Bailie, in press; Zubrick, et al., 2005) or with adolescents, particularly those from refugee or migrant backgrounds (Correa-Velez, Gifford, & Barnett, 2010; Mansouri, Jenkins, Morgan, & Taouk, 2009). Notwithstanding the critical need for more work investigating experiences of racism and outcomes for Aboriginal children and young people, and for adolescents from refugee and migrant backgrounds, research is also needed in this area specifically for younger children from a range of minority groups.

Children from Middle-Eastern and Asian (ME-A) backgrounds may represent groups who are affected by continuing racism. For example, in the wake of the Bali bombings and of the events of September 11, 2001, Muslims of both Middle-Eastern and Asian heritage within Australia have been subjected to racial vilification and intolerance (Human Rights and Equal Opportunity Commission, 2004). Research indicates that 44.9% of Australians feel that some ethnic groups do not ‘fit’ in Australia; people from ‘Muslim’ or ‘Middle-Eastern’ backgrounds were most commonly nominated as not “fitting in,” reflecting widespread ‘Islamaphobia’ (Dunn, Klocker, & Salabay, 2007). These processing of being ‘othered’ are commonly communicated in normative media (e.g., newspapers; Quayle &
Sonn, 2009). To date, no published research on racism or perceived discrimination experiences of young Australian children specifically from ME-A backgrounds is available. Such knowledge is needed to assess the extent to which experiences of racial vilification may be associated with children’s adjustment and wellbeing, and inform public health policy and practice regarding the implementation of anti-racism strategies.

The Present Study

We aimed first to examine the prevalence of experiences of perceived discrimination (PD) amongst a sample of Australian children of ME-A descent, and to examine the relationship of these experiences to child adjustment. Based on previous research, we hypothesized that PD would be most strongly associated with children's internalising tendencies (e.g., depressive and anxious problems). Although other research has indicated that children's externalising problems (e.g., aggression) are linked to PD, we believe that some forms of externalising behaviour appear to arise very early in development (e.g., ADHD), and therefore are less likely to be responses to experiences of discrimination. Although some children may respond to PD with reactive outbursts of aggression, we argue that children will be more likely to retaliate with indirect forms of aggression (i.e., in which children manipulate social relationships to inflict harm on others (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992) in retaliation to PD. Indirect aggression is a later-developing form of aggression (Côté, Vaillancourt, Barker, Nagin, & Tremblay, 2007) likely to arise in the face of sanctions against overt expressions of aggression (Archer & Coyne, 2005). Indirectly aggressive acts are more discrete than overt physical aggression and have a lower cost in terms of risk of retaliation (Archer & Coyne, 2005). This may make it a more readily available option to ethnically-marginalised children who may, as a group, lack power relative to their ethnic majority peers. We believe that indirect aggression may thus be a more likely to arise in the context of experiences of PD. Furthermore, as discrimination may reflect experiences of victimisation by children, we hypothesised that children whose self-report reflects frequent and severe discrimination would be seen by parents as having been subjected to victimisation (e.g., name-calling, physical violence) at the hands of their peers as well.

Method

Recruitment, Procedures and Participants

A community organisation advisory group was established to initiate a snowball sampling method. This method provided us access to two religious schools with large proportions of ME-A students. However, this method proved inadequate to collect the minimum sample required for basic hypothesis testing. We subsequently adopted an alternative sampling strategy by identifying neighbourhoods in an Australian metropolitan area with high concentrations of ME-A nationalities, based on community profiles available through the State government. Government schools in these neighbourhoods were contacted, and recruited for involvement in the study. These schools provided estimates of numbers of students who were of ME-A heritage, and information and consent letters were sent to the schools to be distributed to identified students. In total, 202 information and consent packages were distributed in ten schools. Families who provided consent were then mailed packages including parent- and child-report questionnaires. Parents were asked to complete their own questionnaire only. The cover letter indicated that the child questionnaire was to be completed by the child, and that it was important that responses reflect the child’s own thoughts. We did indicate that parents may be able to assist in clarifying anything that the child did not understand. This resulted in 47 completed parent- and child-reports, returned via reply-paid envelopes.

These families represented a very diverse range of ethnic groups, spanning national and/or ethnic heritages ranging geographically from north-east African (e.g., Somalia), through Asia to south-east and north-east Asia. Religious
affiliation was also diverse, with Muslim families representing the largest proportion of participants, with Christianity (20.8%) and Buddhism (12.5%) the other largest indicated religions. The mean child age was 10.61 years ($SD = 2.52$). Children ranged in age from seven to 15 years. Our sample was disproportionately female (64.6%).

**Measures**

**Perceived Discrimination.** For the present study, we utilised the Everyday Discrimination Scale (EDS; Williams, Yu, Jackson, & Anderson, 1997) which is the most widely used measure by recent studies in this field (Williams & Mohammed, 2009). This 10-item scale addresses “chronic, routine, and relatively minor experiences of unfair treatment” (p. 340). Sample items include experiences of having been called names or insulted, having been threatened or harassed, and having been treated with less respect than other people (all items are listed in Table 2). Responses are coded on a 4-point scale (never, once, two or three times, and four or more times).

The EDS as used in this study does not explicitly ask whether participants attribute their experiences of perceived discrimination to their race or ethnicity. However, given the cultural background of participants and the context of the study (e.g., the questions regarding perceived discrimination were immediately preceded by questions about the child’s cultural background and ethnic identity), we made the assumption that the key form of discrimination experienced by participants was racial discrimination. This assumption and use of the EDS is consistent with the wider literature where there is some ongoing debate about the extent to which race should be explicitly mentioned in measures of discrimination (Williams & Mohammed, 2009). Other studies have made similar assumptions about the racial attribution of perceived discrimination measured using the EDS (Barnes et al., 2008; Burgess, Ding, Hargreaves, Van Ryn, & Phelan, 2008; Jang, Chiriboga, & Small, 2008; Lee & Ferraro, 2009; Lewis et al., 2009).

**Children's Adjustment.** Children's social adjustment was assessed through parent report using the 84-item Social Behaviour Questionnaire (SBQ; Tremblay et al., 1991). The SBQ assesses a wide range of externalising and internalising problem behaviours, as well as prosocial behaviours (e.g., “[my child] tried to help someone who had been hurt”). The SBQ assesses a wide range of externalising behaviours, including reactive aggression (i.e., use of aggression in response to perceived provocation; e.g., “when somebody accidentally hurt him/her, he/she reacted with anger and fighting”) and proactive aggression (i.e., use of aggression in order to attain a desired outcome; e.g., “scared other children to get what he/she wanted”), indirect aggression (e.g., when mad at someone, said bad things behind the other's back”), and general conduct problems (e.g., “Damaged or broke things belonging to others”). The internalising scale consists of subscales measuring anxiety (e.g., “Clung to adults or was too dependent”), emotional problems (e.g., Had trouble enjoying him/herself”), and social withdrawal (e.g., “Showed little interest in activities involving other children”). As well, three items addressed experiences of victimisation (e.g., “was made fun of by other children”). All items are measured on a 3 point scale (1 = never; 2 = sometimes; 3 = often) reflecting the caregivers sense of the frequency of specific behaviours in the previous month. Scores were derived as sums of responses to these three items (range: 3 – 9).

**Results**

Experiences of everyday discrimination were common amongst our participating children (see Table 1). Although the mean score was 2.1 experiences of discrimination, we noted a wide range in how many experiences children reported. Only 12.8% of the sample indicated no experiences of discrimination in their lives, while 35.9% reported experiencing five or more discriminatory events. The most common experiences of discrimination (see Table 2) were feeling that others acted as if they were better than the child, having been treated with
The least common experiences are also the most blatant: having been followed in shops by security people, and being poorly treated in restaurants and shops. These items were likely to be uncommon given that few of the participating children would have much opportunity for unsupervised time in shops and restaurants.

The internal consistency (coefficient alpha) for the EDS was very good ($\alpha = .84$). For the SBQ, subscale-level data were available for 47 children, except for the victimisation, oppositional, and reactive aggression subscales, for which we had data for 46 children, and the proactive aggression subscale, for which we had data for 45 children. Internal consistencies for these subscales were all adequate for research purposes, with coefficient alphas ranging from .66 (withdrawal) to .82 (anxiety). The majority of alphas ranged between .70 and .79.

Zero-order correlations between the PD measure, children’s prosocial behaviour, and each of the internalising and externalising scales are presented in Table 3. As expected, the internalising scales all showed strong and positive associations with one another, as did the externalising type scales. The associations between anxiety and several of the externalising scales were particularly strong, including the indirect aggression ($r = .71, p < .001$) and conduct problems ($r = .76, p < .001$) scales.

Child-reported PD was significantly

Table 1. *Frequencies of total number of experiences of discrimination reported*  

<table>
<thead>
<tr>
<th>Frequency of total number of child self-reported PD</th>
<th>0</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>7-8</th>
<th>9-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>6</td>
<td>16</td>
<td>7</td>
<td>12</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Percent</td>
<td>12.8</td>
<td>34.0</td>
<td>14.9</td>
<td>25.4</td>
<td>8.4</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Table 2. *Response frequencies Everyday Discrimination questions*  

<table>
<thead>
<tr>
<th>Item</th>
<th>Never</th>
<th>Once</th>
<th>2-3 times</th>
<th>4+ times</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Less courtesy/politeness</td>
<td>41.7</td>
<td>29.2</td>
<td>14.6</td>
<td>14.6</td>
<td>48</td>
</tr>
<tr>
<td>b. Treated with less respect</td>
<td>53.2</td>
<td>17.0</td>
<td>23.4</td>
<td>6.4</td>
<td>47</td>
</tr>
<tr>
<td>c. Not treat well at restaurants and shops</td>
<td>75.6</td>
<td>11.1</td>
<td>4.4</td>
<td>8.9</td>
<td>45</td>
</tr>
<tr>
<td>d. People act as it they think you are not smart</td>
<td>76.6</td>
<td>14.9</td>
<td>6.4</td>
<td>2.1</td>
<td>47</td>
</tr>
<tr>
<td>e. People act as if they are afraid of you</td>
<td>76.1</td>
<td>10.9</td>
<td>8.7</td>
<td>4.3</td>
<td>46</td>
</tr>
<tr>
<td>f. People act as if they think you are dishonest</td>
<td>68.8</td>
<td>16.7</td>
<td>4.2</td>
<td>10.4</td>
<td>48</td>
</tr>
<tr>
<td>g. People act as if they’re better than you</td>
<td>37.0</td>
<td>30.4</td>
<td>17.4</td>
<td>15.2</td>
<td>46</td>
</tr>
<tr>
<td>h. Been called names or insulted</td>
<td>53.2</td>
<td>19.1</td>
<td>17.0</td>
<td>10.6</td>
<td>47</td>
</tr>
<tr>
<td>i. Been threatened or harassed</td>
<td>76.6</td>
<td>12.8</td>
<td>6.4</td>
<td>4.3</td>
<td>47</td>
</tr>
<tr>
<td>j. Been followed around in shops by security people</td>
<td>70.2</td>
<td>14.9</td>
<td>4.3</td>
<td>10.6</td>
<td>47</td>
</tr>
<tr>
<td>Variable</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>1. Perceived Discrimination</td>
<td>-.14</td>
<td>.20</td>
<td>.30*</td>
<td>.31*</td>
<td>.15</td>
</tr>
<tr>
<td>2. Prosocial</td>
<td>-</td>
<td>.17</td>
<td>.11</td>
<td>-.13</td>
<td>.18</td>
</tr>
<tr>
<td>3. Anxiety</td>
<td>-</td>
<td>.68***</td>
<td>.49***</td>
<td>.51***</td>
<td>.67***</td>
</tr>
<tr>
<td>4. Emotional Problems</td>
<td>-</td>
<td>.41**</td>
<td>.62***</td>
<td>.42**</td>
<td>.63***</td>
</tr>
<tr>
<td>5. Withdrawn</td>
<td>-</td>
<td>.43**</td>
<td>.46***</td>
<td>.40**</td>
<td>.44**</td>
</tr>
<tr>
<td>6. Victimisation</td>
<td>-</td>
<td>.38**</td>
<td>.57**</td>
<td>.45**</td>
<td>.30*</td>
</tr>
<tr>
<td>7. Reactive Aggression</td>
<td>-</td>
<td>.46**</td>
<td>.64***</td>
<td>.62***</td>
<td></td>
</tr>
<tr>
<td>8. Proactive Aggression</td>
<td>-</td>
<td>.45**</td>
<td>.53***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Indirect Aggression</td>
<td>-</td>
<td>.67***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Conduct Problems</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ .10  *p ≤ .05  **p ≤ .01  ***p < .001
associated with a number of parent-reported child behaviours (see Table 3). As hypothesised, children who reported more PD were seen by their parents as showing more withdrawn social behaviours ($r = .31, p < .05$), and as having more emotional problems ($r = .30, p < .05$). They were also seen as showing more indirect aggression ($r = .37, p < .01$). Associations between reactive physical aggression and child-reported PD approached, but did not attain, traditional levels of statistical significance ($r = .26, p < .10$).

**Discussion**

This study provides the first Australian data on perceived discrimination experiences of young children specifically from Middle Eastern and Asian backgrounds. Children reported experiencing a range of discriminatory acts on a regular basis, with more than one-third reporting five or more discriminatory events in their lifetime. Whilst the majority of these experiences may sound relatively mild and/or subtle, (e.g., being treated with less politeness or courtesy), previous research has shown that experiences such as these can be deleterious to mental health, particularly when they are persistent (Simons et al., 2002).

Our research provided the first indication that PD is associated with adjustment problems amongst young Australian children from ME-A backgrounds, with significant associations with both internalising and externalising problems. These results are important as they do not reflect shared-source variance; Children’s reports of PD were distinct from parent’s ratings of children’s adjustment. Reports from a common rater (e.g., child self-reports) may show inflated correlations; correlations obtained from different raters are likely to be more conservative. Moreover, these associations were statistically significant, despite the constraints on power due to the small sample size.

Whilst the predicted relationships with other adjustment outcomes such as emotional problems and reactive physical aggression were not statistically significant, the directions of effect were consistent with our hypotheses. Nonetheless, as a pilot study, this research was limited by the small sample and associated lack of statistical power in the analyses. Recruiting families proved very difficult. Reliance on parent-reports of children's adjustment, although beneficial in avoiding shared-source variance that might inflate correlations between PD and adjustment, may have posed recruitment problems. Although the children recruited had generally good language skills, the English-language competence of parents was limited, as evidenced by missing data on some parent questionnaires. As well, some parents may have been unable to comprehend the recruitment packages, potentially limiting our sample size. We did provide telephone contact numbers to parents in the information letter, however we have no reason to believe that this was adequate to aid in recruiting parents whose language skills were not strong.

Matsumoto and Juang (2008) have noted a greater comfort level of majority-culture Western individuals to engage in research. For recent-immigrant parents, there may have been discomfort with the idea of providing these very personal responses to a government-body-funded project. Fears that the information could be used against their ethnic community might have deterred involvement. We were limited by our funding from taking up opportunities for cross-cultural workers to provide support to the project. Future research should heed these challenges and ensure adequate funding to overcome these shortcomings. Such research should also endeavour to examine these relationships within more specific minority communities, notwithstanding our finding of common discriminatory experiences among our diverse sample of participants. Given the challenges of recruiting families from these communities, researchers may be wise to consider potential gains in understanding that may be accrued via qualitative research. Indeed, as an area of research largely initiated by public health researchers, community psychologists may contribute valuably to this area in future by...
stepping away from measurement and stepping toward a deeper understanding of the phenomenology of children’s experiences, and of their reactions and responses to those experiences.

Our assumption of PD experiences measured in this study as being attributed to racial discrimination is also a potential limitation, although such an assumption is consistent with other studies in this area (Barnes et al., 2008; Burgess et al., 2008; Jang et al., 2008; Lee & Ferraro, 2009; Lewis et al., 2009). These studies, however, have not been conducted with children as young as the present study, and so further research is needed to examine the validity of this assumption with this age group. Children and adolescents—even those who are members of ethnic minorities—may feel discriminated against for reasons other than their ethnicity. For example, they may feel that their age itself brings with it discrimination from adults, and hence they may feel they are followed around in shops (e.g.) because they are teenagers, not because of their ethnicity. This is an example of an interpretive problem that may be better addressed via qualitative rather than quantitative research methods.

Overseas research has begun to examine mediators and moderators of the association between PD and adjustment, including individual-level constructs, such as ethnic identity and orientation to other ethnic groups (Lee, 2003; Umaña-Taylor & Updegraff, 2007) and family-level constructs, such as ethnic socialisation (Harris-Britt, Valrie, Kurtz-Costes, & Rowley, 2007). Our exploratory study is an important first step in identifying the potential health impact of perceived discrimination on ME-A children’s psychological and social development and provides a foundation for and impetus to further research. There is clearly much more work to be done in Australia and New Zealand to understand the impact of discrimination on the wellbeing, development and health outcomes of children and young people from a range of cultural backgrounds.

More than this, intervention programming to reduce the often-subtle forms of racism that ethnic minority members experience (e.g., Pederson, Aly, Hartley, & McGarty, 2009; Pedersen, Walker, & Wise, 2005) needs to be extended to younger populations, as these young people are already at risk. Both social justice and public health concerns indicate the clear need for a stronger societal emphasis on anti-racist education.

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