Perceived racial/ethnic discrimination and psychological outcomes among adult international adoptees in Finland: Moderating effects of social support and sense of coherence

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2015

doi:10.1037/ort0000099

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Perceived Racial/Ethnic Discrimination and Psychological Outcomes Among Adult International Adoptees in Finland: Moderating Effects of Social Support and Sense of Coherence

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Abstract

Quantitative literature on international adoptees and racial/ethnic discrimination is lacking despite results in qualitative studies from Europe and the United States that have consistently indicated how racism constantly complicates adoptees’ everyday lives. To advance the literature, the present study examined the prevalence of perceived racial/ethnic discrimination among 213 adult international adoptees in Finland (59.6% women and 40.4% men, mean age 24.1 years), and the association between perceived racial/ethnic discrimination and psychological well-being indicators, including psychological distress and sleeping problems. In addition, we examined social support and sense of coherence as moderators of the association between perceived racial/ethnic discrimination and psychological well-being. Our results showed that on average adult international adoptees perceived racial/ethnic discrimination occasionally. Hierarchical linear regression analyses indicated a significant association between perceived racial/ethnic discrimination and psychological distress and sleeping problems. Additionally, a significant two-way interaction of perceived racial/ethnic discrimination and social support indicated that the availability of social support may moderate the association between perceived racial/ethnic discrimination and psychological distress such that adoptees with high levels of social support may be protected from the
harmful effects of discrimination. These results highlight the meaning of social support in reducing the harmful effects of racial/ethnic discrimination on international adoptees.

Finland is a Scandinavian state with one of the world’s most comprehensive welfare systems, a high-quality education system, gender equality and human rights. Compared with other Nordic and most European countries, the number of people with a foreign background is still small in Finland. In 2011, the number of people of foreign origin was 257,000, about 5% of the total population of 5.4 million. By continent, 59% of all people with a foreign background were of European origin, 23% were of Asian origin, and 12% were of African origin (Statistics Finland, 2012). At present, Finland is more diverse than it has ever been before, and it is estimated that by 2020 the current level in the population of those with a foreign background will almost double (Ministry of the Interior, 2013).

In addition to having relatively few migrants, Finland has been, to date, a minor player in international adoptions. Until the 1970s, Finland was a donor country that provided children for adoption, mainly to the other Scandinavian countries. It was in the 1970s that abortion and daycare legislation was passed and attitudes towards single mothers began to grow more approving. Consequently, both domestic adoptions and adoptions abroad diminished and international adoption to Finland began. The number of internationally adopted children began to increase after the passage of the first international adoption law in 1985. The peak of international adoption in Finland was reached in 2005, after which the number of international adoptions has gradually decreased (Statistics Finland, 2014). This decrease is consistent with development in other European countries as well as in the United States and partly a result of improvements in child welfare in the sending countries. In addition, there has been a change in the characteristics of children being put up for intercountry adoption, in that they are now mainly older and have special needs (Selman, 2012). Currently, around 150 children per year are adopted to Finland and the Finnish
population includes around 4,500 international adoptees, of which approximately 1,000 are adults. The adopted children have primarily come from Russia, China, Colombia, Thailand, and Ethiopia (Statistics Finland, 2013).

With increasing immigration to Finland, scholars have begun to study the discrimination experiences of migrants (e.g., Liebkind & Jasinskaja-Lahti, 2000; Jasinskaja-Lahti, Liebkind, Jaakkola, & Reuter, 2006; Puuronen, 2011; Rastas, 2009). According to these studies, migrants in Finland, as in other European countries, experience various forms of racial and ethnic discrimination in different areas of daily life, including education, health care, housing and the labor market (European Union Agency for Fundamental Rights, 2012).

Despite this universality of international adoption in Western countries, immigrant and racism studies have seldom included international adoptees. Indeed, an average of 25,000 to 30,000 children are adopted every year between different countries (Selman, 2012). Consequently, international adoptees constitute large first generation groups of immigrants from divergent ethnic minorities in Europe and in the United State. Their exclusion in immigrant and racism studies probably results from the fact that international adoptees are not officially seen as immigrants, but as belonging ethnoculturally, socioeconomically, linguistically, and in their religious affiliation to the majority population (Koskinen, 2014b). However, this special position of international adoptees among other ethnic minorities needs to be taken into consideration in racism and health studies because the experiences of discrimination and the outcomes may differ from the experiences of other ethnic minorities. Moreover, international adoption research lacks an investigation of racial/ethnic discrimination among international adoptees. Adoption research in Finland as well as in other receiving adoption countries has mainly concentrated on general development, behavior problems, attachment issues, and educational performance during childhood as well as on adoptive parents’ experiences (e.g., Dalen, 2002; Dalen & Rygvold, 2006; Dalen & Theie,
2012; 2014; Eriksson et al., 2014; Högbacka, 2008; Juffer & van Ijzendoorn, 2005; Raaska et al., 2012; Raaska, Elovainio, Lapinleimu, Matomäki, & Sinkkonen, 2014; Rosnati, Montirosso, Barni, 2008).

Although limited in number, a few qualitative studies on adoptees’ experiences of discrimination in Finland have indicated that despite fulfilling all the criteria of Finnish nationality and culture, especially the nonwhiteness of adoptees makes them vulnerable to racism (e.g., Koskinen, 2014b; Rastas, 2009). A number of other Scandinavian qualitative adoption studies have consistently indicated that nonwhite international adoptees experience multiple forms of discrimination varying from its most blatant forms to the covert forms of everyday racism and institutionalized racism (Hübinette & Andersson, 2012; Hübinette & Tigervall, 2009; Lind, 2012; Lindblad & Signell, 2008; Tigervall & Hübinette, 2010). Consistent with these qualitative studies, a handful of quantitative studies focusing on racial discrimination among internationally adopted children in Spain (Reinoso, Juffer, & Tieman, 2013), the Netherlands, Norway, and the United States (Riley-Behringer, Groza, Tieman, & Juffer, 2014) have shown the prevalence of racial discrimination, especially among nonwhite adoptees. The most compelling message of these studies is that perceived discrimination is harmful for social and psychological well-being, and that to deal with it adoptees need to develop a broad range of coping strategies to respond to the diverse situations in which they may perceive discrimination. However, to our knowledge, there are neither quantitative adoption studies in receiving adoption countries nor racism and health studies that have assessed the association between perceived racial and ethnic discrimination and psychological well-being among international adoptees. Therefore, this research adds international adoption literature as well as discrimination and health literature expanding this line of research in a sample of adult international adoptees.
The rationale for researching the perceived discrimination and its psychological consequences is well founded, because several quantitative adoption studies in Europe and the United States have found that many adoptees have lower levels of psychological health than the rest of the population (e.g., Juffer & Ijzendoorn, 2005; Palacios & Brodzinsky, 2010; Rosnati, Montirosso, & Barni, 2008). Swedish studies have consistently suggested that international adoptees seem more likely than Swedish-born children to suffer from psychiatric disorders, criminality, and drug and alcohol abuse (Hjern, Vinnerljung, & Lindblad, 2004; Lindblad, Hjern, & Vinnerljung, 2003; von Borczyskowski, Hjern, Lindblad, & Vinnerljung, 2006). In general, the lower psychological health of adoptees is explained by preadoption trauma and separations. In the present study, we investigate the prevalence of perceived racial/ethnic discrimination among adult international adoptees in Finland and its relation to psychological outcomes, including psychological distress and sleeping problems. Moreover, we examine how social support, which means the availability of network members who express concern, love, and care for an individual (Sarason, Levine, Basham, & Sarason, 1983), and sense of coherence, which is seen to be a mediator of positive general health (Antonovsky, 1987), moderate the association between perceived racial/ethnic discrimination and psychological outcomes.

### Racial/Ethnic Discrimination and Psychological Well-Being

*Racial discrimination* is based on racism, and according to one of the most cited definitions it is considered to be “the beliefs, attitudes, institutional arrangements, and acts that tend to denigrate individuals or groups because of phenotypic characteristics or ethnic group affiliation” (Clark, Anderson, Clark, & Williams, 1999, p. 805). Narrowly defined, racial discrimination is seen as referring to discrimination on the basis of skin color or physical characteristics. *Ethnic discrimination*, in turn, is seen as referring especially to
discrimination that is based on ethnic group membership (Bhui et al., 2005). However, racial discrimination and ethnic discrimination are difficult to distinguish because both may be associated with phenotypic characteristics, cultural heritage, and ethnic group classification (Greene, Way, & Pahl, 2006). In addition, in the present study we see “race” as a social construct that, along with nonwhite people, refers also to white people who are often wrongly seen racially as neutral or nonracial (see Frankenberg, 1993). Consequently, we use the term racial/ethnic discrimination to refer to this broader meaning of discrimination. We investigate the perceived discrimination against both white adoptees of Eastern European origin who come mainly from Russia and do not differ in appearance from the majority of the Finnish population, as well as that against nonwhite adoptees of Asian, African, and South American origin. To include adoptees of Russian origin is reasonable because they form the largest ethnic group among international adoptees in Finland. When it comes to discrimination, several studies in Finland have shown that attitudes toward immigrants from Russia are seen to be negative and racist (e.g., Jasinskaja-Lahti et al., 2006; Puuronen, 2011). This so-called Russia-hate in Finland is seen to be based on centuries of historical and political involvement between Russia and Finland.

Numerous review articles have found that racial/ethnic discrimination contributes to variations in health risks within racial and ethnic minorities (Brondolo, Gallo, & Myers, 2009b; Paradies, 2006; Priest et al., 2012; Williams & Mohammed, 2009; 2013a; 2013b). Several studies have presented strong evidence for the association between perceived racial/ethnic discrimination and physiological stress responses such as higher blood pressure, hypertension, coronary heart disease, cardiovascular diseases, and release of cortisol (e.g., Brondolo, Rieppi, Kelly, & Gerin, 2003; Brondolo et al., 2008; Clark et al., 1999; Clark, 2000; Harrell, Hall, & Taliaferro, 2003). Racial and ethnic discrimination has also been seen as affecting physical health through negative health behaviors, because several studies have
consistently shown the relationship between perceived racial/ethnic discrimination and risky behaviors such as smoking and substance abuse (e.g., Borrell et al., 2010; Harris et al., 2006; Landrine & Klonoff, 1996).

Concerning the health outcomes of racial/ethnic discrimination, the strongest association has been found to be with mental health (Paradies, 2006; Priest et al., 2012; Williams & Mohammed, 2009). There is a strong evidence that perceived racial and ethnic discrimination is related to depressive symptoms, anxiety (e.g., Banks, Kohn-Wood, & Spencer, 2006; Finch, Kolody, & Vega, 2000; Greene et al, 2006; Jasinskaja-Lahti et al., 2006; Miller & Travers, 2005; Noh & Kaspar, & Wickrama, 2007; Thomas, Witherspoon, & Speight, 2008; Oppedal, Røysamb, & Heyerdahl, 2005; Yip, 2015), and cynicism and hostility (Brondolo et al., 2011; Trevino & Ernst, 2012). Furthermore, several studies have indicated an association between experiences with racism and psychological distress (Bynum, Burton, & Best, 2007; Deblaere, 2009; Miller & Travers, 2005; Paradies, 2006; Utsey & Hook, 2007; Wamala, Boström, & Nyqvist, 2007). In turn, racism-related distress has been seen to lead to a variety of sleep disturbances (Beatty et al., 2011; Brondolo et al., 2008; Grandner et al., 2012; Lewis et al., 2013; Slopen, Lewis & Williams, 2015; Steffen & Bowden, 2006; Thomas, Bardwell, Ancoli-Israel, &Dimsdale, 2006; Yip, 2015) that involved difficulties in falling asleep, nightmares, fragmented sleep, and daytime sleepiness. It has been suggested that especially the anticipation of, vigilance for, and reservation about racial/ethnic discrimination are associated with sleep difficulties (Hicken, Lee, Ailshire, Burgard, & Williams, 2013). In turn, sleep disturbances are seen as a pathway through which racial discrimination affects depression (Steffen & Bowden, 2006). Moreover, perceived discrimination seems to negatively affect global personal self-esteem and life satisfaction (Greene et al., 2006; Harris et al., 2006; Major, Kaiser, O'Brien, & McCoy, 2007; Yip, 2015) as well as to lead to general life stress (Pieterse, Carter, & Ray, 2013). The current study extends the existing literature
on discrimination and psychological health by exploring the association between racial/ethnic
discrimination and psychological well-being indicators, including psychological distress and
sleeping problems, in a sample of adult international adoptees. We hypothesized perceived
racial/ethnic discrimination to associate with psychological distress and sleeping problems.

**Social Support and Sense of Coherence**

Folkman and Lazarus (1988) have argued that coping mediates the effects of stress. Coping strategies have been widely studied as protective factors against discrimination for
divergent ethnic and racial groups. There are a number of different strategies individuals use
to respond to racial and ethnic discrimination (see Skinner, Edge, Altman, & Sherwood,
2003). The health consequences of discrimination also vary according to personal coping
responses (Brondolo et al., 2009b). In the present study, we hoped to build on this line of
research and expand it to adult international adoptees and focus on the moderating role of
social support, which is a commonly used coping strategy following instances of racial and
ethnic discrimination (Krieger, 1999; Liang, Nathwani, Ahmad, & Prince, 2010; Swim,
Hyers, Cohen, Fitzgerald, & Bylsma, 2003; Sanders Thompson, 2006; Utsey, Ponterotto,
Reynolds, & Cancelli, 2000).

Social support, when confronting racism and seeking emotional social support, has been
considered to be an emotion-focused strategy (Tull, Sheu, Butler, & Cornelious, 2005) that
indicates the availability of network members (e.g., family, friends, and peer groups) who
express concern, love, and care for the individual. To be precise, social support refers to
communication with significant others about harmful events or experiences, which helps the
individual to understand that discrimination is a shared experience (Brondolo et al., 2009a;
Sarason et al., 1983). Though it is widely accepted that social support is a commonly used
strategy to deal with racial/ethnic discrimination, and that social support may buffer the
impact of racism on physical health (e.g., Clark, 2003; Finch & Vega, 2003), there are only a few quantitative studies hypothesizing that social support may buffer the effects of discrimination on psychological distress (Brondolo et al., 2009a; Noh & Kaspar, 2003; Sanders Thompson, 2006). Moreover, social support has been found to have detrimental impact on individuals (Alvarez & Juan, 2010; Liang, Alvarez, Juang & Liang, 2007). However, in a few qualitative studies of perceived discrimination, participants have reported that social support decreases levels of anger and frustration (Elligan & Utsey, 1999; Swim et al., 2003). In spite of inconsistent findings in studies regarding social support as a buffer against harmful effects of discrimination, we hypothesized that social support moderates the association between perceived racial/ethnic discrimination and psychological outcomes among adult international adoptees in Finland.

Like social support, sense of coherence has also been found to positively impact an individual’s mental health and mediate the influences of life stressors on psychological well-being (Antonovsky, 1979). Based on the sense of coherence theory, Antonovsky (1987, p. 19) presented sense of coherence as a mediator of positive general health and defined it as follows:

a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one’s internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement.

To define further, Antonovsky described these three sections as comprehensibility, manageability, and meaningfulness, respectively. Simply put, sense of coherence is a major
factor determining how well an individual manages stress and stays healthy. Previous studies on racial and ethnic minorities have suggested that sense of coherence is associated with better physical and psychological health and self-esteem (e.g., Ying, Akutsu, Zhang, & Huan, 1997; Ying, Lee, & Tsai, 2000). When it comes to perceived discrimination, it has been suggested that higher levels of perceived racial/ethnic discrimination are associated with a reduced sense of coherence. Additionally, it has been shown that higher self-esteem is associated with a stronger sense of coherence, which in turn is associated with lower levels of depression and anxiety (Lam 2007; Ying et al., 2000). Moreover, it has been proposed that sense of coherence mediates the association of perceived racial discrimination to psychological distress, anxiety and depressive symptoms (Han & Lee, 2011; Lam 2007).

The aim of this study was to examine the prevalence of perceived racial/ethnic discrimination among adult international adoptees in Finland. We also examined the associations between perceived racial/ethnic discrimination and psychological outcomes and whether social support and sense of coherence moderate the association between perceived racial/ethnic discrimination and psychological wellbeing indicators, including psychological distress and sleeping problems. The model tested in this study is shown in Figure 1. We formulated the following hypotheses:

1. Perceived racial/ethnic discrimination associates with psychological distress and sleeping problems.

2. Social support and sense of coherence protect the adoptees from the negative effects of perceived racial/ethnic discrimination on psychological well-being.
Methods

The material for this study was derived from a data set in the FINnish ADOption (FinAdo) study, which conducted an extensive survey of the physical and psychological health and adjustment of international adoptees in Finland. The adoptees were identified through official adoption organizations approved by the Ministry of Social Affairs and Health. The research design was supported by the Ethics Review Committee of the Hospital District of South-West Finland. The survey was conducted between 2009 and 2010. The criteria for the sample were that adoptees were 18 years or older and adopted through one of the Finnish adoption agencies. Before sending the questionnaire, the adoptive parents were sent a letter to ensure that adoptees had been told that they were adopted. The questionnaire was sent to 554 international adoptees. Later the nonrespondents were sent a reminder questionnaire. In total, 213 questionnaires were returned and the participation rate of the adult international adoptees was 38.4%. For additional background and health information, the questionnaires were sent
to the parents of the above 554 adoptees. In total, 348 questionnaires were returned by the adoptive parents, and the participation rate was 62.9%.

Participants

The participants consisted of 127 (59.6%) women and 86 (40.4%) men. The mean age for women was 24.4 years (SD = 4.7), and for men it was 23.9 years (SD = 4.4). The continents of birth were Asia (n = 87; 41%), Eastern Europe (n = 56; 26%), South America (n = 46; 22%), and Africa (n = 24; 11%). The mean age on arrival in Finland was 2.8 years (SD = 2.5). The placements before adoption were (1) foster home (n = 10; 6.3%), (2) orphanage (n = 68; 42.7%), or (3) several placements (n = 81; 51.0%). The majority of participants were working (n = 97; 48%), followed by full-time students (n = 60; 30%), and not working or studying (n = 45; 22%). The majority of the adoptive parents had a socioeconomic status that was upper middle class (n = 140; 46.6%), followed by lower middle class (n = 68; 22.5%), working class (n = 44; 14.6%), and other (n = 49; 16.3%).

Measures

Perceived racial/ethnic discrimination. A 12-item self-report questionnaire measured perceived racial/ethnic discrimination. The 12 items included in the measure are presented in Table 1. Instead of using existing measures we decided to develop a measure that attempts to assess international adoptees’ experiences of discrimination in Finnish and/or in Scandinavian contexts. This approach was necessary because international adoptees often differ socioeconomically, culturally, linguistically and in their religious affiliation from other ethnic minorities, and as a consequence their experiences of discrimination may also be different. Moreover, several reviews and studies have suggested that many existing measures
may not capture the experiences of diverse ethnic/racial groups (e.g. Bastos, Celeste, Faerstein, & Barros, 2010; Shariff-Marco et al., 2011). Therefore, as per Bastos et al. (2010), a three-step approach was applied to develop the 12-item perceived racial/ethnic questionnaire. First, a literature review was conducted to identify, from previous qualitative research, the general experiences of racial/ethnic discrimination among adult international adoptees in Scandinavia (Hübinette & Tigervall, 2009; Lindblad & Signell, 2008; Rastas, 2009; Tigervall & Hübinette, 2010). Second, a draft of survey items was created to fit into the most typical experiences of perceived discrimination. Third, for the content validation the items were reviewed by the research team and by an international adoption expert. Finally, as a result of item clarifications and revisions, the final questionnaire included 12 items. Each item was coded on a 4-point scale: 0 (never), 1 (sometimes), 2 (quite often), and 3 (often). The responses were averaged, with higher scores indicating a higher level of perceived discrimination ($M = 0.86, SD = 0.56$). The Cronbach α value for this scale was .90.

**Psychological distress.** A 12-item self-reported General health questionnaire (GHQ; Goldberg, 1972) measured psychological distress. This measure was used because it is one of the most commonly used psychological distress measures in Finland (e.g., Aromaa & Koskinen, 2004; Viinamäki et al., 2000). The scale asks whether the respondent has experienced a particular symptom or behavior recently. Items were, for example, as follows: “Have you recently been losing confidence in yourself?” Each item was rated on a 4-point scale: 0 (not at all), 1 (not more than usually), 2 (somewhat more than usually), and 3 (much more than usually). The responses were averaged, with higher scores indicating a higher level of psychological distress ($M = 0.96, SD = 0.46$). The Cronbach α value for this scale was .87.

**Sleeping problems.** Though the GHQ-12 included one item that measured sleep disturbances, we decided to assess sleep problems with a separate measure because it has been suggested that the GHQ-12 item has a limited ability to correctly identify sleep
disturbances (Lallukka, Dregan, & Armstrong, 2010). Consequently, sleeping problems were assessed by six different dichotomous questions that ask participants to indicate whether they have the following problems with sleeping: difficulty falling asleep, frequent waking during the night, insomnia, nightmares, morning tiredness, and early morning awakening. The total number of sleeping problems were counted with higher scores, indicating higher levels of sleeping problems ($M = 1.31, SD = 1.42$). The Cronbach $\alpha$ value for this scale was .64.

**Social support** (SSQ; Sarason et al., 1983). A 4-item short form on the social support questionnaire asks participants to list, for each item, all of the individuals who provided them with support in the situation described (spouse or partner, immediate family, friend, co-worker, neighbor, other close acquaintances). This measure was chosen because it is a widely used social support measure and applied also in studies examining associations between racism and health (e.g., Clark, 2003). The items included the following statements: (1) Whom can you count on to help you feel more relaxed when you are under pressure or tense? (2) Whom can you count on to care about you, regardless of what is happening to you? (3) Whom can you count on to help you feel better when you are feeling generally down? (4) Whom can you count on to be dependable when you need help? The number of available sources of social support were counted for each of the four items with higher scores indicating higher levels of social support ($M = 8.58, SD = 3.43$). The Cronbach $\alpha$ value for this scale was .84.

**Sense of coherence** (SOC; Antonovsky, 1987). A 12-item orientation-to-life questionnaire self-report measured global orientation, which expresses the extent to which one has a pervasive and enduring though dynamic feeling of confidence. This measure was chosen for the present study because it has consistently been found to be a determinant between experienced racial/ethnic discrimination and psychological well-being (e.g., Lam, 2007; Ying et al., 2000). A sample item is: “How often do you have the feeling that there is little meaning
in the things you do in your daily life?” Participants answered to each item on a semantic
differential scale ranging from 1 (newer) to 7 (always). The responses were averaged, with
higher scores indicating a higher level of sense of coherence (\( M = 4.62, SD = 0.95 \)). The
Cronbach \( \alpha \) value for this scale was .84.

**Demographic information.** Participants indicated characteristics such as name, gender,
and date of birth, native country, and whether they were studying, working or outside both
studying and working lives. In addition, in the adoptive parents’ questionnaire concerning the
background and health information, parents indicated such characteristics as their
socioeconomic status, information about the adoptee’s placing background and age on arrival
in Finland. This demographic information served as control variables and was requested
because it may also have an effect on the psychological outcomes of international adoptees
and other racial and ethnic minorities (e.g., Raaska et al., 2014: Williams & Mohammed,
2009).
### Table 1. Items of Perceived Racial/Ethnic Discrimination Measure

<table>
<thead>
<tr>
<th>Perceived racial/ethnic discrimination item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have encountered staring.</td>
<td>1.45</td>
<td>1.00</td>
</tr>
<tr>
<td>2. People have come too close to me (e.g., my hair is touched).</td>
<td>0.77</td>
<td>0.93</td>
</tr>
<tr>
<td>3. People have asked me questions about myself, about my origin and background (e.g., about my biological parents, about the conditions of my birth country, about my fate as an adoptee).</td>
<td>2.03</td>
<td>0.95</td>
</tr>
<tr>
<td>4. I have been derogated with insults such as “nigger,” “Russki” or other offensive terms.</td>
<td>1.18</td>
<td>0.86</td>
</tr>
<tr>
<td>5. I have been told to move back to my birth country.</td>
<td>0.57</td>
<td>0.76</td>
</tr>
<tr>
<td>6. My right to be in Finland has been questioned.</td>
<td>0.49</td>
<td>0.77</td>
</tr>
<tr>
<td>7. I have been assaulted because of my appearance.</td>
<td>0.12</td>
<td>0.42</td>
</tr>
<tr>
<td>8. I have been threatened with violence or received death threats.</td>
<td>0.32</td>
<td>0.62</td>
</tr>
<tr>
<td>9. I have been threatened sexually (e.g., I have encountered suggestions of sex, insinuations of hyper sexuality of certain ethnic groups).</td>
<td>0.33</td>
<td>0.64</td>
</tr>
<tr>
<td>10. I have been supposed to typify my birth or ethnic culture in some way (e.g., being athletic, having a good sense of rhythm).</td>
<td>0.78</td>
<td>0.95</td>
</tr>
<tr>
<td>11. I have been supposed to typify certain personality traits or characteristics because of my ethnic origin (happy, sociable, temperate, etc.).</td>
<td>0.90</td>
<td>0.94</td>
</tr>
<tr>
<td>12. My Finnish language skills have been questioned or wondered.</td>
<td>1.27</td>
<td>1.16</td>
</tr>
</tbody>
</table>

*Note.* Measure uses a 4-point rating scale (0 = never, 1 = sometimes, 2 = quite often, 3 = often) N = 213; Reported as mean (M) and standard deviation (SD)
Data analyses

The dependent variables were psychological distress and sleeping problems, which were studied as continuous variables. Similarly, social support, sense of coherence, adoptees’ age at the time of assessment and age on arrival in Finland were presented as continuous variables. The other variables – gender, continent of birth, placement before adoption, study/work status of the adoptee, and socioeconomic status of the adoptive family – were studied as categorical variables. A linear regression analysis was used to study the univariate associations between continuous and categorical predictors and continuous response variables. A Pearson correlation coefficient was used to study the correlates between the main study variables. The main statistical analyses were made using hierarchical linear regression. Because our main interest was to study the association between perceived racial/ethnic discrimination and psychological outcomes, perceived racial/ethnic discrimination was entered at the first stage of regression analysis as an independent variable. In the second stage, age at the time of assessment, age on arrival in Finland, gender, placement before adoption, continent of birth, adoptees’ study/work status, and the adoptive families’ socioeconomic status were added to the equation because we wanted to test whether they have any confounding effect on the association between racial/ethnic discrimination and psychological outcomes. These demographic variables were chosen because they are seen to have an effect on psychological outcomes among international adoptees (Dalen & Theie, 2012; Raaska et al., 2014). In the third stage, social support was added to the equation, and in the fourth stage sense of coherence was added. The interactions between experienced discrimination and social support and sense of coherence were added one at a time to the second-stage model. Statistical analyses were made using SAS for Windows version 9.3, and p values below 0.05 were considered to be statistically significant.
Because of the low participation rate of adoptees (38.4%), we carried out a dropout analysis in which we compared respondents and those nonrespondents whose adoptive parents had returned the questionnaire on background and health information. In the dropout analysis, continuous variables (age at the time of assessment and age on arrival in Finland) were compared between two groups using an independent samples \( t \) test and comparisons between categorical variables (gender, continent of birth, placement before adoption, and adoptive family’s socioeconomic status) were made using a chi-square test.

**Results**

Univariate analyses were conducted to examine the univariate associations between demographic variables and the study variables (perceived racial/ethnic discrimination, psychological distress, sleeping problems, social support, and sense of coherence; see Table 2). Adoptees who were older at the time of assessment had perceived more racial/ethnic discrimination \((p = .009)\), whereas adoptees who had been adopted at younger ages had perceived less discrimination \((p = .002)\). In addition, women reported more experiences of discrimination than men \((p = .015)\). Those adoptees whose continent of birth were Asia, Africa, and South America reported more experiences of discrimination than adoptees that came from Eastern Europe \((p \text{ values for these were, respectively, } < .001, < .000, \text{ and } < .000)\). Moreover, perceived racial/ethnic discrimination was associated with adoptive parents’ socioeconomic status, as a lower middle class background was more associated with perceived discrimination than an upper middle class one was \((p = .050)\). However, only African birth origin compared with Eastern European birth origin was associated with psychological distress \((p = .023)\). Social support and sense of coherence were both associated with adoptees’ placement before adoption, as adoptees with an orphanage background reported less use of social support than adoptees with a foster home background did \((p = \ldots)\)
In addition, Asian birth origin compared with Eastern European birth origin was associated with greater psychological distress and greater sleeping problems. Additionally, greater psychological distress was associated with greater sleeping problems, and greater use of social support was associated with greater sense of coherence. The main study variables were negatively correlated with each other in that fewer experiences of racial/ethnic discrimination, lower psychological distress, and fewer sleeping problems were related to a higher sense of coherence. In terms of perceived racial/ethnic discrimination, participants reported a mean of 0.86 (SD = 0.56) ranging from 0 to 3, indicating that, on average, adoptees have at some point experienced discrimination. Hence, we made an additional analysis in which we focused on nonwhite adoptees only and excluded adoptees with Eastern European birth origin. According to this analysis, the mean of perceived racial/ethnic discrimination increased 13% from 0.86 (SD = 0.56) to 0.99 (SD = 0.55), indicating still that on average, adoptees occasionally perceived discrimination. However, we did not exclude adoptees with Eastern European birth origin from our final analyses because we assumed that they experienced ethnic discrimination due to their Russian background.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Perceived discrimination</th>
<th>Psychological distress</th>
<th>Sleeping problems</th>
<th>Social support</th>
<th>Sense of coherence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at the time of assessment</td>
<td>.02** (.00)</td>
<td>.01 (.01)</td>
<td>-.02 (.02)</td>
<td>.09 (.05)</td>
<td>.01 (.01)</td>
</tr>
<tr>
<td>Age on arrival in Finland</td>
<td>-.05** (.02)</td>
<td>.00 (.01)</td>
<td>.03 (.04)</td>
<td>-.10 (.10)</td>
<td>-.03 (.03)</td>
</tr>
<tr>
<td>Gender (men)a</td>
<td>-.19* (.08)</td>
<td>.05 (.07)</td>
<td>-.23 (.20)</td>
<td>-.77 (.49)</td>
<td>-.08 (.13)</td>
</tr>
<tr>
<td>Placement before adoptionb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orphanage</td>
<td>-.03 (.17)</td>
<td>.05 (.15)</td>
<td>-.01 (.46)</td>
<td>-2.36* (.10)</td>
<td>-.92** (.31)</td>
</tr>
<tr>
<td>Several placements</td>
<td>-.00 (.17)</td>
<td>.11 (.15)</td>
<td>.26 (.45)</td>
<td>-1.81 (.11)</td>
<td>-.92** (.31)</td>
</tr>
<tr>
<td>Continent of birthc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>.53*** (.09)</td>
<td>.02 (.08)</td>
<td>.04 (.25)</td>
<td>1.20* (.60)</td>
<td>.14 (.16)</td>
</tr>
<tr>
<td>Africa</td>
<td>.81*** (.12)</td>
<td>.26* (.11)</td>
<td>.14 (.35)</td>
<td>-0.18 (.85)</td>
<td>.03 (.23)</td>
</tr>
<tr>
<td>South-America</td>
<td>.40*** (.10)</td>
<td>-.02 (.09)</td>
<td>-.21 (.28)</td>
<td>0.66 (.69)</td>
<td>.21 (.19)</td>
</tr>
<tr>
<td>Adoptees socioeconomic statusd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>-.14 (.09)</td>
<td>-.10 (.08)</td>
<td>-.38 (.22)</td>
<td>-.76 (.57)</td>
<td>-.01 (.15)</td>
</tr>
<tr>
<td>Not working/studying</td>
<td>-.07 (.10)</td>
<td>-.06 (.08)</td>
<td>-.42 (.24)</td>
<td>-.88 (.63)</td>
<td>-.02 (.17)</td>
</tr>
<tr>
<td>Parents socioeconomic statusc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower middle class</td>
<td>.26* (.10)</td>
<td>.04 (.10)</td>
<td>.03 (.27)</td>
<td>-.84 (.63)</td>
<td>.25 (.18)</td>
</tr>
<tr>
<td>Working class</td>
<td>-.05 (.11)</td>
<td>-.08 (.12)</td>
<td>-.20 (.35)</td>
<td>-.91 (.83)</td>
<td>-.23 (.24)</td>
</tr>
<tr>
<td>Other</td>
<td>.11 (.11)</td>
<td>.03 (.10)</td>
<td>.46 (.30)</td>
<td>.37 (.70)</td>
<td>.12 (.20)</td>
</tr>
</tbody>
</table>

Note. The reference groups were a women, b Eastern Europe, c foster home, d working, and e upper middle class. *p < .05, **p < .01, ***p < .001
### Table 3. Means, Standard Deviations, and Bivariate Correlations of the Main study Variables (N = 213)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perceived racial/ethnic discrimination</td>
<td>.86</td>
<td>.56</td>
<td>0–2.8</td>
<td>–</td>
<td>.34***</td>
<td>.33***</td>
<td>.10</td>
<td>-.25***</td>
</tr>
<tr>
<td>2. Psychological distress</td>
<td>.96</td>
<td>.46</td>
<td>0–2.6</td>
<td>–</td>
<td>.35***</td>
<td>-.12</td>
<td>-.56***</td>
<td></td>
</tr>
<tr>
<td>3. Sleeping problems</td>
<td>1.31</td>
<td>1.42</td>
<td>0–6.0</td>
<td>–</td>
<td>-.10</td>
<td>-.40***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Social support</td>
<td>8.58</td>
<td>3.43</td>
<td>0–23.0</td>
<td>–</td>
<td>.33***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Sense of coherence</td>
<td>4.62</td>
<td>0.95</td>
<td>2–6.3</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* p < .001
Experienced Discrimination and Psychological Distress

The results shown in Table 4 were derived in six steps. In Step 1, the results indicated that perceived racial/ethnic discrimination was significantly related to psychological distress, and accounted for 11% of the variance in psychological distress. In Step 2, age at the time of assessment, age on arrival to Finland, gender, continent of birth, placement before adoption, adoptees’ work/study status, and adoptive families’ socioeconomic status accounted for an additional 7% of the variance in psychological distress. Only perceived racial/ethnic discrimination was significantly related to psychological distress. In Step 3, both perceived racial/ethnic discrimination and social support were significantly related to psychological distress, and accounted for an additional 4.5% increment in the explained variance of psychological distress. In Step 4, the addition of sense of coherence accounted for an additional 25% of the variance in psychological distress, and both perceived racial/ethnic discrimination and sense of coherence exhibited significant direct associations with psychological distress. The addition of sense of coherence to the regression model reduced the direct link between perceived racial/ethnic discrimination and psychological distress by 46% (from 0.37 to 0.20), although the direct association between perceived racial/ethnic discrimination and psychological distress remained statistically significant. In Step 5, we tested the moderating effect of social support between perceived racial/ethnic discrimination and psychological distress, and found a statistically significant and negative association between social support, perceived racial/ethnic discrimination, and psychological distress. This finding indicates that the use of social support reduced the psychological distress from perceived racial/ethnic discrimination. As illustrated in Figure 2, those adult international adoptees with a tendency to use social support may be less vulnerable to psychological distress from perceived racial/ethnic discrimination, whereas those who tend not to use social
support are more negatively affected by perceived racial/ethnic discrimination. In Step 6, we tested the moderating effects of sense of coherence. Though the sense of coherence reduced the distressing influence of perceived racial/ethnic discrimination, the moderating effect was not statistically significant.

Table 4. Associations Between Perceived racial/ethnic Discrimination, Coping, sense of Coherence, and Psychological distress as the Dependent Variable Among International Adoptees (N = 213)

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>SE</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived racial/ethnic discrimination</td>
<td>.28***</td>
<td>.05</td>
<td>.112</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived racial/ethnic discrimination</td>
<td>.36***</td>
<td>.09</td>
<td>.185</td>
</tr>
<tr>
<td>Age at time of assessment</td>
<td>.01</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Age on arrival in Finland</td>
<td>-.01</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>Gender (men)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.14</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>Continent of birth&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>-.19</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>-.04</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>South-America</td>
<td>-.23</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>Placement before adoption&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orphanage</td>
<td>-.01</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>Several placements</td>
<td>.05</td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>Adoptee’s work/study status&lt;sup&gt;d&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student vs. working</td>
<td>-.08</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>Not working/studying</td>
<td>-.01</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>Adoptive family’s socioeconomic status&lt;sup&gt;e&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower middle class</td>
<td>.01</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>Working class</td>
<td>-.01</td>
<td>.13</td>
<td></td>
</tr>
</tbody>
</table>
Other .01 .10
Step 3 .229
Perceived racial/ethnic discrimination .37*** .10
Social support -.03* .01
Step 4 .478
Perceived racial/ethnic discrimination .20* .08
Sense of coherence -.30*** .04
Step 5 .265
Perceived racial/ethnic discrimination x social support -.06* .02
Step 6 .487
Perceived racial/ethnic discrimination x sense of coherence -.10 .07

Note. The reference groups were a women, b Eastern Europe, c foster home, d working, and e upper middle class. Steps 3 – 6 were controlled for the demographic characteristics included in Step 2. The step 1 – 4 shows direct main effects of perceived discrimination, social support, and sense of coherence. The steps 5 – 6 shows interaction effects of social support, sense of coherence and perceived discrimination. *p < .05 ***p < .001.

Figure 2. The interaction effect of experienced discrimination and social support on psychological distress.
Perceived Racial/Ethnic Discrimination and Sleeping Problems

The results shown in Table 5 were derived in six steps. In Step 1, the results indicated that perceived racial/ethnic discrimination was significantly related to sleeping problems, and accounted for 11% of the variance in sleeping problems. In Step 2, age at the time of assessment, age on arrival to Finland, gender, continent of birth, placement before adoption, adoptees’ work/study status, and adoptive families’ socioeconomic statuses accounted for an additional 4% of the variance in sleeping problems. Only perceived racial/ethnic discrimination was significantly related to sleeping problems. In Step 3, both perceived discrimination and social support were significantly related to sleeping problems, and accounted for an additional 5% increment in the explained variance of sleeping problems. In Step 4, the addition of sense of coherence accounted for almost an additional 11% of the variance in sleeping problems, and both perceived racial/ethnic discrimination and sense of coherence exhibited significant direct associations with psychological distress. The addition of sense of coherence to the regression model reduced the direct link between perceived discrimination and sleeping problems by 39% (from 0.83 to 0.51), although the direct association remained statistically significant. In Step 5, we tested the moderating effect of social support between perceived racial/ethnic discrimination and sleeping problems, and in Step 6 we tested the moderating effect of sense of coherence between experienced discrimination and sleeping problems. Although both social support and sense of coherence reduced the association between experienced discrimination and sleeping problems, the moderating effects were not statistically significant.
Table 5. Associations Between Perceived Racial/Ethnic Discrimination, Coping, sense of Coherence, and Sleeping Problems as the Dependent Variable Among International Adoptees \((N = 213)\).

<table>
<thead>
<tr>
<th>Variable</th>
<th>(b)</th>
<th>SE</th>
<th>(R^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived racial/ethnic discrimination</td>
<td>.84***</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived racial/ethnic discrimination</td>
<td>.80**</td>
<td>.27</td>
<td></td>
</tr>
<tr>
<td>Age at time of assessment</td>
<td>-.03</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>Age on arrival in Finland</td>
<td>.04</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Gender (men) (^a)</td>
<td>-.01</td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td>Continent of birth (^b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>-.10</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>-.47</td>
<td>.52</td>
<td></td>
</tr>
<tr>
<td>South-America</td>
<td>-.69</td>
<td>.39</td>
<td></td>
</tr>
<tr>
<td>Placement before adoption (^c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orphanage</td>
<td>-.07</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Several placements</td>
<td>.10</td>
<td>.48</td>
<td></td>
</tr>
<tr>
<td>Adoptee’s work/study status (^d)</td>
<td></td>
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</tr>
<tr>
<td>Student</td>
<td>-.28</td>
<td>.28</td>
<td></td>
</tr>
<tr>
<td>Not working/studying</td>
<td>-.23</td>
<td>.31</td>
<td></td>
</tr>
<tr>
<td>Adoptive family’s socioeconomic status (^e)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Lower middle class</td>
<td>.26</td>
<td>.29</td>
<td></td>
</tr>
<tr>
<td>Working class</td>
<td>-.03</td>
<td>.39</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>.52</td>
<td>.31</td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived racial/ethnic discrimination</td>
<td>.83**</td>
<td>.27</td>
<td></td>
</tr>
<tr>
<td>Social support</td>
<td>-.10†</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived racial/ethnic discrimination</td>
<td>-.51**</td>
<td>.26</td>
<td></td>
</tr>
<tr>
<td>Sense of coherence</td>
<td>-.56***</td>
<td>.13</td>
<td></td>
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<tr>
<td>Step 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived racial/ethnic discrimination x social support</td>
<td>-.10</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Step 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived racial/ethnic discrimination x sense of coherence</td>
<td>-.12</td>
<td>.25</td>
<td></td>
</tr>
</tbody>
</table>

Note. The reference groups were \(^a\) women, \(^b\) Eastern Europe, \(^c\) foster home, \(^d\) working, and \(^e\) upper middle class. Steps 3 – 6 were controlled for the demographic characteristics included in Step 2. The steps 1 – 4 shows direct main effects of perceived discrimination, social support, and sense of coherence. The steps 5 – 6 shows interaction effects of social support, sense of coherence and perceived discrimination. \(† \ p < .05 \quad ** \ p < .01 \quad *** \ p < .001\).
A dropout analysis was conducted to examine the differences between respondents and nonrespondents whose adoptive parents had returned the questionnaire concerning background and health information of adoptees. According to this analysis, those adoptees who had been adopted at older ages ($M = 3.8, SD = 3.2, p = .002$), were men ($51\%, p = .045$), and whose continent of birth was Africa ($22\%, p = .018$) failed more often to return the questionnaire compared to those who did. However, neither age at the time of assessment nor the socioeconomic status of the adoptive family were significantly related with the nonrespondents.

Discussion

International adoptees constitute large first generation groups of immigrants from divergent ethnic minorities in the Western world. Though it is well documented in qualitative adoption studies that international adoptees encounter racial discrimination, they are absent in quantitative studies on racism and health. This may be due to their strong socialization in the dominant culture of their adoptive countries, a feature that may distinguish their experiences from other ethnic groups. The results from the present study provide an empirical contribution to the existing literature on racism and health by expanding this line of research in a sample of adult international adoptees.

Our primary goal was to examine the prevalence of perceived racial/ethnic discrimination among adult international adoptees and the relationship between perceived racial/ethnic discrimination and psychological outcomes, indicators including psychological distress and
sleeping problems. Moreover, we examined whether social support and a sense of coherence moderate the association between perceived racial/ethnic discrimination and psychological outcomes. Data from univariate analyses indicated several significant findings. First, the univariate analyses of the present study indicate that international adoptees occasionally experience racial discrimination. The relatively low mean of perceived discrimination of 0.86 (from 0 to 3) may be explained by the fact that international adoptees, unlike other ethnic minorities in Finland, are members of the privileged section of Finnish society belonging culturally, socioeconomically and linguistically and in their religious affiliation to the majority population. Due to this position, they experience less discrimination than other ethnic minorities do. However, it is possible that, because of their sociocultural and adoption status, adoptees may encounter vicarious and subtle forms of racism that are often difficult to notice (Koskinen, 2014b). Although the mean of perceived racial/ethnic discrimination might appear low, it could be assumed that many areas of adoptees’ life have been influenced by discrimination. Second, univariate analyses indicate that adoptees that were older at the time of assessment had experienced more racial discrimination than younger participants had. This may imply that as adoptees become older their social environments become wider, which in turn make them more vulnerable to experiencing racism (Koskinen, 2014a). It is also likely that older international adoptees have more cumulative experiences of racial discrimination than younger ones do. Third, these results indicate that women are more likely to report having experienced racial discrimination. This finding is contrary to several previous studies (e.g., Liang et al., 2007; Paradies, 2006). One possible explanation for this contradiction is that women may be more comfortable than men in bringing out their vulnerable experiences (e.g., Liang et al., 2007; Swim et al., 2003). In addition, the male participants were younger than the female ones and they may therefore have fewer experiences of racial discrimination. However, it is also possible that female adoptees perceiving racial/ethnic discrimination were
more willing to participate in this study than were the male adoptees with the same level of problems, which may have biased this result. Fourth, consistent with research on racism experiences of adopted children in Spain (Reinoso, Juffer, & Tieman, 2013), the results indicate that adoptees of Eastern European origin who do not differ in appearance from the general Finnish population had experienced less racial discrimination than adoptees with other continents of birth. Specifically, adoptees with an African background perceived more racial discrimination, and possibly due to those experiences, also more psychological distress. Consequently, consistent with the qualitative research on racism against international adoptees in Scandinavia (e.g., Hübnette & Andersson, 2012; Koskinen, 2014b; Lind 2012; Lindblad & Signell, 2008; Rastas, 2009), this finding suggests that especially nonwhiteness plays an important role in the experiences of racial/ethnic discrimination among adult international adoptees in Finland.

The first hypothesis was supported by a positive association between experienced discrimination and psychological distress and sleeping problems even when demographic variables (age at the time of assessment, age on arrival in Finland, gender, continent of birth, placement before adoption, adoptees’ work/study status, and adoptive families’ socioeconomic status), social support, and sense of coherence were controlled for. Consequently, perceived racial/ethnic discrimination significantly explained higher levels of psychological distress and sleeping problems. These findings are in line with several reviews and studies that have consistently suggested that experienced discrimination has a harmful psychological impact on those against whom it is directed (e.g., Brondolo et al., 2009b; Harrell, 2000; Harris et al., 2006; Krieger, 1999; Paradies, 2006; Priest et al., 2012; Williams & Mohammed, 2009; 2013a; 2013b).

Consistent with our second hypothesis, there was a significant interaction between perceived racial/ethnic discrimination and social support in predicting psychological distress.
Specifically, there was a significant negative association between perceived racial/ethnic discrimination and psychological distress for high use of social support (See Figure 2). This finding indicates that those adoptees who have a tendency to use social support may be less vulnerable to psychological distress from perceived discrimination. Our finding is consistent with qualitative studies that have suggested that social support may decrease levels of distress (Elligan & Utsey, 1999; Swim et al., 2003), but it contradicts the quantitative studies that provide minimal support for the hypothesis that social support buffers the impact of racial discrimination and psychological health (Alvarez & Juang, 2010; Liang et al., 2007; Noh & Kaspar, 2003; Sanders Thompson, 2006). This difference may be partly explained by the special position of international adoptees in their adoptive countries. Their strong cultural socialization into the dominant culture may make them more likely to seek out social support than other ethnic groups and immigrants (see Liang et al., 2010). Another explanation may be found in the cultural competence of transracial adoptive parents. Adoptive parents are particularly trained to help their children to develop coping skills for a life as a person of color in their adoptive home countries (Vonk & Massatti, 2008). A further explanation could be found in the relatively low mean of psychological distress of 0.96 (from 0 to 2.6), because there are suggestions that social support may be especially helpful at low levels of stress exposure (Brondolo, 2009). However, we did not find social support to protect the adoptees from the negative effects of perceived racial/ethnic discrimination on sleeping problems. Though the results showed a negative and independent association between sense of coherence and psychological outcomes (psychological distress and sleeping problems, the results did not indicate any support for the view that sense of coherence moderated the association between racial/ethnic discrimination, psychological distress and sleeping problems. Although this is contrary to our hypotheses, it is in line with some previous findings (Moksnes et al., 2011; Nielsen & Hansson, 2007) that have not found moderation
effects of sense of coherence on the relation between stress and psychological well-being. In addition, it is possible that the most of the variance accounted for by sense of coherence could be attributed to the direct relationship between sense of coherence and psychological distress and sleeping problems. According to Antonovsky (1987), an individual with a strong sense of coherence is less likely to perceive a situation as stressful as an individual with a lower sense of coherence. Therefore it is possible that adoptees with a strong sense of coherence will not experience perceived racial/ethnic discrimination as harmful as adoptees with lower sense of coherence. However, both the role of social support and sense of coherence in moderating the association between discrimination and psychological well-being among international adoptees should be further explored.

Limitations and Future Research

There are several limitations in the present study that should be acknowledged when interpreting the results. First, this study relied on a cross-sectional design, and therefore predictive and causal conclusions cannot be drawn from the findings. Additionally, as a survey-based study, this study relied on participants’ subjective self-reports, which may have biased their responses. Furthermore, a survey-based study is limiting in that it constrains individuals’ responses to the choices given, a constraint that does not allow individuals to respond in full to the questions asked and that may exclude important information about participants’ experiences. Consequently, future research might benefit from longitudinal or experimental designs to examine these causal relationships further. Future research could also focus on observational measures and include the perspectives of significant others, such as partners, close friends or co-workers. Moreover, studies that follow international adoptees across multiple time points might assess the way that perceived racial/ethnic discrimination
impacts over a lifetime or certain phases of life.

The second limitation of the study comes from the racial/ethnic discrimination scale used. In the present study, assessing perceived racial/ethnic discrimination was related to a limited number of situations. Consequently, future studies should take note that experience of racial/ethnic discrimination is a complex, multidimensional, and context specific in nature, and they should consider more sensitive measures to research what forms of racial/ethnic discrimination are most closely associated with negative psychological outcomes. Unfortunately, we were not able to use existing measures of racial/ethnic discrimination, and future studies could use measures that are meaningful across different groups (e.g. Shariff-Marco et al., 2011), thereby making the results more comparable. Moreover, in addition to social support, future studies may include other coping strategies – such as racial and ethnic identity, confrontation/anger, problem focused, and avoidance coping (See Basow, Lilley, Bookwala, & McGillicuddy-DeLisi, 2008; Brondolo, ver Halen, et al., 2009) – that buffer the effects of discrimination on psychological well-being. Additionally, future studies should consider adoption-specific coping strategies, such as adoption appraisal, which have found to be associated with mental health problems and well-being (Rushton, Grant, Feast, & Simmonds, 2013; Storsbergen, Juffer, van Son, & Hart, 2010). Because gender, socioeconomic status and complexion are suggested to be moderators between race-related stress and mental health symptoms (e.g. Clark et al., 1999; Greer, Laseter, & Asiamah, 2009), future studies should consider also these factors among adult international adoptees.

Third, psychological distress and sleeping problems were the variables chosen to represent psychological outcomes. Psychological distress and sleeping problems are significant areas for research because they have been found to be associated with discrimination (e.g., Hicken et al., 2013; Lewis et al., 2013; Slopen, Lewis, & Williams, 2015). However, because racism is a complex stressor, future studies should include other psychological outcomes (e.g.,
depression, anxiety, hostility, and self-esteem) that have seen to be relevant to racial and ethnic minorities (Brondolo et al., 2011; Paradies, 2006; Priest et al., 2012; Williams & Mohammed, 2009). Fourth, as preliminary analyses revealed gender, age, and birth origin differences, future studies on adult international adoptees’ experiences with racial/ethnic discrimination may want to investigate the influence of these characteristics.

Lastly, the response rate (38.4%) was relatively low and it is possible that this sample may be biased because it represents only those adoptees that were willing to participate in this study. According to the dropout analysis, those adoptees who had been adopted at older ages, were men, and whose continent of birth was Africa were overrepresented among the nonresponders. Because univariate analyses indicated that adoptees whose continent of birth was Africa and that adoptees who were adopted at older ages had perceived more racial/ethnic discrimination, it is possible that the association reported here may be underestimated. Therefore, more research is needed to replicate these results with samples recruited in other ways.

**Implications for Counseling**

The results of the present study suggest that racial/ethnic discrimination is harmful in terms of psychological well-being. On that account, the primary clinical implication of the present study is to challenge counselors working with international adoptees and their parents to become more aware of racial/ethnic discrimination and to recognize its detrimental impact on international adoptees psychological well-being. Consequently, counselors should consider interventions at multiple levels. First, adoptive parents attending preadoption counseling and adoption preparation courses should be educated in how to recognize different forms of racial/ethnic discrimination, how to discuss these with adoptees, and how to cope
with them. Second, postadoption services should continue this assistance with adoptive parents and adoptees. Counselors, in particular, should pay attention to the role of social support in dealing with racial/ethnic discrimination because it may buffer the harmful effects of discrimination on psychological well-being. However, some previous studies have failed to find positive effects of social support between discrimination and psychological well-being (e.g., Noh & Kaspar, 2003; Sanders Thompson, 2006), which may be related to rumination type of social support that instead of decreasing distress may evoke anger, frustration, and anxiety (Brondolo, 2009a). Consequently, as we conduct further studies and gain a fuller understanding of the different types of social support and its quality at different stages in racial/ethnic discrimination, we can provide better guidance to help adoptees seek the kind of support that helps them develop appropriate, effective strategies for reducing specific threats of discrimination. Lastly, we would like extend social support as a broader attitude and emphasize that coping with racial/ethnic discrimination should not be placed on the shoulders of adoptees and their parents only. Interventions must involve all levels of society and include policy, social activism, and social change.

**Keywords:** international adoption, racial/ethnic discrimination, psychological distress, sleeping problems, sense of coherence
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