Article

The Association between Discrimination and Psychological and Social Well-being: A Population-based Study of Russian, Somali and Kurdish Migrants in Finland

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Abstract

Background

Discrimination is known to negatively affect the psychological well-being of migrants. Less is known on the association between discrimination and social well-being.

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Aim
We examined the association between experienced discrimination and psychological (mental health, quality of life) and social well-being (loneliness, feelings of safety, trust towards society) in Russian, Somali and Kurdish migrants in Finland.

Methods
We used data from the Finnish Migrant Health and Wellbeing Study (Maamu). The participants comprised 1795 persons of Russian, Somali or Kurdish origin aged 18–64 years. Experiences of discrimination, loneliness, safety and trust towards society were measured using interview questions. Mental health symptoms were measured using the HSCL-25 and quality of life using EUROHIS-QOL. Logistic regression analyses were conducted to investigate the associations between discrimination and psychological and social well-being, separately for the three ethnic groups.

Results
Discrimination increased the odds for mental health symptoms and decreased the odds for quality of life among Russian and Kurdish migrants, but not Somalis. Discrimination was associated with feeling unsafe and decreased trust towards society among all migrants. Among Kurds, discrimination increased the odds also for loneliness.

Conclusions
Discrimination is an essential threat to the psychological and social well-being of Russian, Somali or Kurdish migrants.

Keywords
Discrimination, mental health, social well-being, migrant, population-based study, Maamu study

Introduction

Mental health, discrimination and social well-being among migrant populations

Migrant populations have been demonstrated to be more vulnerable to poor mental health compared to non-migrants. Many migrant groups, especially those with refugee background, are found to have more psychiatric disorders, mental health problems, and lowered psychological well-being than majority populations (Bayard-Burfield, Sundquist &

Johansson, 2001; Blomstedt, Johansson & Sundquist, 2007; Carta, Bernal, Hardoy & Haro-Abad, 2005; Kirmayer et al., 2011; Tagay et al., 2008; Taloyan, Sundgvist & Al-Windi, 2008). A recent population-based study in 23 European countries showed that in many West European countries, the prevalence rates of depressive symptoms were higher for migrant and ethnic minority groups than the native population (Missinne & Bracke, 2012). A clear need for data on the psychosocial health of various migrant groups in Europe has been stated (Toselli, Gualdi-Russo, Marzouk, Sundquist & Sundquist, 2014).

Migrants and other ethnic minorities often face discrimination. Particularly migrant men of non-European background are known to perceive a high level of discrimination (Sundquist, Bayard-Burfield, Johansson & Johansson, 2000; Wiking, Johansson & Sundquist, 2004). A Swedish study found that 81 per cent of Kurdish men experienced discrimination (Taloyan, Johansson, Johansson, Sundquist & Kocturk, 2006). In the Spanish Health Interview Survey the prevalence of discrimination was highest among migrants from low income countries (14–23 per cent) and lowest among Spanish-born men working in non-manual occupations (3 per cent) (Borell et al., 2010). A previous Finnish population-based study on Russian, Estonian, Somali and Vietnamese migrants found high prevalence rates of discrimination and violence among Somalis: half of the Somalis reported experiences of violence during the past six months, compared to one in every six Finns (Pohjanpää, Paananen & Nieminen, 2003). Furthermore, half of the Somalis had experienced discrimination when applying for a job. A significant proportion of European citizens feel that ethnic discrimination is rather increasing than decreasing, and approximately half of the European population considers that more should be done to combat discrimination (European Union, 2007).

Diener, Suh, Lucas and Smith (1999) define subjective well-being as a broad category phenomena including individuals' emotional responses, domain satisfactions and global judgement of life satisfaction. The life satisfaction of migrants has been shown to differ both between first generation and second generation migrants and between migrant populations and native populations (Safi, 2010). For example, a Swedish study found the health-related quality of life of elderly Iranian migrants to be poorer compared to Swedish peers (Koochek, Montazeri, Johansson & Sundquist, 2007). Studies on Somali migrants in the US and Russian origin migrants in Israel have reported an association between good quality of life and successful acculturation (Abdulaziz, 2009; Benish-Weisman & Shye, 2011). Social well-being, on the other hand, can be defined as the appraisal of one's circumstance and functioning in society

(Keyes, 1998). For example, Lindström (2005) has demonstrated that many migrant populations participate to a significantly lower extent in a variety of civic and social activities when compared to the reference population born in the host country.

The association between discrimination and psychological and social well-being

There is clear evidence on the association between discrimination and psychological well-being in migrant populations. In the recent meta-analysis by Schmitt, Branscombe, Postmes and Garcia (2014), perceived ethnic discrimination was found to be significantly associated with poor psychological well-being. Likewise, Toselli et al. (2014) conclude, based on their literature review, that racism and ethnic discrimination are associated with a higher prevalence of psychosocial disorders in immigrants. The same conclusions have been reached in other extensive reviews (Paradies, 2006; Pascoe & Smart Richman, 2009). In Finland as well, discrimination has been found to be related to mental health, psychological problems and stress among different migrant groups (Jasinskaja-Lahti & Liebkind, 2001; Jasinskaja-Lahti, Liebkind & Perhoniemi, 2006; Liebkind, 1996; Liebkind & Jasinskaja-Lahti, 2000). Particularly discrimination in daily life situations has been shown to be associated with increased depressive, anxiety and psychosomatic symptoms.

However, most of the previous studies on the association between ethnic discrimination and mental health or psychological well-being have focused on the negative indices of mental health, such as mental health problems, particularly symptoms of depression, anxiety or stress and low self-esteem. The association between discrimination and social well-being among migrants has been largely neglected in research, and few studies have examined the association between discrimination and the positive indicators of well-being. We argue that along with the mental health effects, perceived discrimination also has ramifications for migrants' social well-being. Moreover, we suggest that feelings of safety and trust towards society are important indicators of immigrants' social well-being which may be damaged by the presence of discrimination as it communicates social inequality and exclusion.

Trust is an element of social capital, which is today considered one of the keys to societal-level well-being and prosperity (Coleman, 1990). In social psychological intergroup literature trust is often seen as a positive psychological bias towards others (Yamagishi & Yamagishi, 1994), which also includes expectations that the outgroup members have good intentions towards one's ingroup and that they will genuinely act in the

ingroup's interests (Kelman, 2005; Tropp, 2008). Moreover, trust has been shown to directly result from positive contact with an outgroup, with the lack of trust being conversely a result of negative intergroup contact experiences (e.g., Capozza, Flavo, Favara & Trifiletti, 2013; Kenworthy et al., 2015). Therefore, in this study we expect immigrants' perceptions of discrimination to be associated with less trust towards the national majority group.

The research on post-traumatic stress disorder has stressed the evolutionary importance of social bonding, whereby the species survival has depended on the ability to form cooperative social networks based on trust and norms of behaviour (Charuvastra & Cloitre, 2008). Exposure to negative or even traumatic social interactions may thus lead not only to the mistrust but to a greater sense of threat or fear as this represents not just the risk of physical injury but also the breakdown of social norms as well as the sense of safety associated with being a member of a rule-guided community. In contrast to the research on security threat related to immigration, feelings of safety or security among immigrants have been studied relatively little. In their study on Somali refugees, Silove et al. (2007) argued that negative attitudes of majority group members towards immigrants and refugees in particular affect the safety system, attachment-bonding system and identity/role system and this may further exacerbate other risk factors for poor mental health among this population. Conversely, positive attitudes towards migrants enhance feelings of safety and thus increase social well-being. It could be further argued that in the context of severe discrimination or racially motivated violence, refugees are particularly vulnerable to re-experience feelings of being not safe due to their traumatic pre-migration history (Ehlers, Hackmann & Michael, 2004). Based on these notions, in this study we expect perceived discrimination to be associated with immigrants' less feelings of being safe in their new country of residence, with this pattern being specifically expected to Somali and Kurdish participants.

Aim and setting of the study

The Finnish Migrant Health and Wellbeing Study (Maamu) is a large-scale population-based study on Russian, Somali and Kurdish origin adults living in Finland (Castaneda et al., submitted for publication; Castaneda, Rask, Koponen, Mölsä & Koskinen, 2012). These data provide a unique opportunity to study the association between discrimination and psychological and social well-being in a European setting among three major migrant groups.

In the end of 2012, there were almost 285,471 foreign-born persons living in Finland, which constitutes 5.3 per cent of the Finnish population (Ministry of the Interior, 2013). The largest migrant groups in Finland, as defined by country of birth, are migrants born in Russia and the former Soviet Union, Swedish- and Estonian-born migrants as well as migrants born in Somali, Iraq, China and Thailand. Russian-speaking migrants were included in the Maamu study as they are the largest migrant group in Finland, accounting for 23 per cent of all foreign-speakers. Somali origin migrants are the fourth largest migrant group in Finland, and the largest refugee and pre-dominantly Muslim-faith migrant group. Kurdish-speaking migrants are the sixth largest migrant group, and Iraqi and Iranian refugees have been among the largest quota refugee groups accepted to Finland in recent years. There is international research pointing out the vulnerability of Somalian immigrants as victims of ethnically motivated crime, assaults and threats or harassment in Finland (FRA, 2009). The picture arising from Russian immigrants in Finland is, however, rather different: according to the same study they are one of the minorities in the most favourable situation and have strong trust in the institutions of the host country.

The findings of the Maamu study demonstrate that mental health problems are particularly common among Russian women and Kurdish men and women: 25 per cent of Kurdish men and Russian women and as much as 50 per cent of Kurdish women reported current severe depressive or anxiety symptoms (Castaneda et al., 2012; Rask et al., manuscript in preparation). Between one-fourth and one-third of Russian, Somali and Kurdish origin adults report being treated impolitely or unrespectfully in Finland, with more than a fifth reporting verbal insults, mostly thought to be related with their ethnicity (Castaneda et al., 2012).

This study aims to examine the association between experienced discrimination and psychological and social well-being in Russian, Somali and Kurdish populations in Finland. We hypothesise that problems in different features of psychological and social well-being can be partly explained by experiences of discrimination in all the three ethnic groups, with those having experiences of discrimination also having mental health symptoms and decreased psychological and social well-being. Demonstrating these associations would be useful for developing clinical and social interventions, add to evidence for decision-making, and underline the need to promote non-discrimination and equality in society.

Methods

Study Design, Procedure and Participants

The study is based on the Finnish Migrant Health and Wellbeing Study (Maamu; Castaneda et al., submitted for publication; Castaneda et al., 2012), a comprehensive cross-sectional interview and health examination survey conducted in Finland in 2010–2012 by the National Institute for Health and Welfare. The original study sample was randomly selected from the national Population Register. Six big Finnish cities were first chosen to represent cities with the highest proportion of migrants (Helsinki, Espoo, Vantaa, Turku, Tampere and Vaasa), and the sample consisted of 3,000 adults aged between 18 to 64 years of Russian, Somali or Kurdish origin (1,000 persons per each ethnic group). The inclusion criteria for Russian origin migrants were birth place in Russia or the former Soviet Union and native language Russian or Finnish, for Somali origin migrants birth place in Somalia, and for Kurdish origin migrants birth place in Iran or Iraq and native language Kurdish. The inclusion criteria included residence in Finland for at least one year. Persons still living in reception centres did not meet the inclusion criteria.

The Maamu study consisted of a comprehensive interview (approx. 1.5 hours) and a standardised health examination (approx. 1 hour), with no fixed order. The structured interview included questions of background, physical health, experiences of discrimination and violence (including need to avoid places, feelings of worry about own safety, discrimination, trust towards institutions), health service use, dental health, manners of living, social well-being (including quality of life, loneliness), and working life, respectively. The health examination included various measurements of health, functional capacity and different kinds of symptoms (including mental health symptoms), respectively. A short interview was collected of those refusing the longer one. The fieldwork was conducted by trained bilingual personnel of Russian, Somali and Kurdish origin. The participation rate was 70.2 per cent (n = 702) for Russian origin, 51.2 per cent (n = 512) for Somali origin, and 63.2 per cent (n = 632) for Kurdish origin invitees, participating at least in one part of the study (interview and/or health examination and/or short interview). Data on discrimination and loneliness is available for participants who took part in at least the short interview (Russians n = 692, Somalis n = 489, Kurds n = 614), data on mental health symptoms is available for those who participated in the health examination (Russians n = 468, Somali n = 377, Kurds n = 515), and data on quality of life, feelings of

safety and trust towards society is available for those who participated in the interview (Russians $n = 529$, Somali $n = 346$, Kurds $n = 508$). Details on the methods have been reported elsewhere (Castaneda et al., submitted for publication; Castaneda et al., 2012).

The Maamu study was approved by the Coordinating Ethical Committee of the Helsinki and Uusimaa Hospital District, Finland. Participation was voluntary and approved with informed consent. Individual participants cannot be identified from the analysis.

Measurements

Discrimination

Experiences of discrimination were investigated in the interview and the short interview by asking 'Have you experienced the following things in your everyday life in Finland…' with the four following statements: 'You are not treated as politely as other people', 'You are not treated as respectfully as other people', 'You have been called names or insulted verbally' and 'You have been threatened or harassed'. Each was answered by 'yes' or 'no'. Based on these four statements a combined variable was formed to indicate any kind of experiences of discrimination: experienced discrimination was defined 'yes' if the respondent had answered 'yes' to any of the four questions.

Psychological Well-being

In this study we have included two dimensions of psychological well-being: mental health symptoms and quality of life.

Current mental health symptoms were investigated using the Hopkins Symptom Checklist-25 (HSCL-25; Derogatis, Lipman, Rickles, Uhlenhuth & Covi, 1974), which is a cross-culturally valid instrument (Hollifield et al., 2002). HSCL-25 is a self-administered questionnaire investigating current depressive and anxiety symptoms during the past week. It consists of 25 items (mental health symptoms) with a 4-point answering scale ranging from 1 (not at all) to 4 (extremely). The questionnaire was administered during the health examination. For illiterate participants, the questionnaire was filled in by interview. A continuous sum score was calculated, taking into account all of the 25 items, so that the score corresponded to the original rating scale of 1 to 4, and the sum score was classified into two categories with a cut-off of >1.75 (Nettelbladt, Hansson, Stefansson, Borgquist & Nordström, 1993), to indicate severe

depressive or anxiety symptoms. Participants with missing data for any of the 25 items were excluded.

Quality of life was asked in the interview using a single question from the EUROHIS-QOL (Power, 2003): 'How do you evaluate your quality of life?' It was answered with a 5-point rating scale ranging from 1 (very good) to 5 (very poor), and classified into two categories as follows: classes 'very good' and 'good' were combined into 'good quality of life', and 'not good but not poor', 'poor' and 'very poor' were combined into 'poor or neutral quality of life'.

Social Well-being

In this study we have included three dimensions of social well-being: loneliness, feelings of safety and trust towards society.

Feelings of loneliness were investigated in the interview and in the short interview by a single question 'Do you feel yourself lonely…' with a 4-point answering scale ranging from 1 (never) to 5 (all the time). It was dichotomised as follows: classes 'all the time' and 'quite often' were combined into 'frequent feelings of loneliness' and 'never', 'very rarely' and 'sometimes' were classified into 'no frequent feelings of loneliness'. This question has been previously used in health surveys (Berg, Mellström, Persson & Svanborg, 1981; Holmén, Ericsson, Andersson & Winblad, 1992; Jylhä & Aro, 1989; Van Baarsen, Snijders, Smit & Van Duijn, 2001).

Feelings of safety were assessed with two items: avoiding places and feelings of worry about own safety. Avoiding places due to migrant background was investigated in the interview by a single question 'Do you avoid certain places due to your migrant background?' and answered by 'yes' or 'no'. Feelings of worry about own safety were investigated in the interview by asking 'Are you worried about your safety…' in the following five places: 'at home', 'in the surrounding environment of your home', 'at work place or in school', 'on your way to your work place or school' and 'elsewhere'. Each was answered by 'yes' or 'no'. Based on these five questions a combination variable was formed to indicate any feelings of worry about own safety. Feeling worried about one's safety was defined 'yes' if the respondent had answered 'yes' to any of the five questions.

Feelings of trust towards different institutions were investigated in the interview by asking 'How much do you trust the following institutions and their actions?' with the following eight items: public health care, public social care, juridical system, government, police, municipal policymakers, social insurance institution and employment office. Each was answered with a 4-point answering scale ranging from 0 (not at all)

to 3 (completely). The variables were dichotomised as follows: classes 'not at all' and 'little' were combined into 'low trust' and 'quite a lot' and 'completely' were classified into 'high trust'.

Statistical Analyses

Age-adjusted prevalence and means were calculated in the ethnic groups using predicted margins (Graubard & Korn, 1999). Inverse probability weights (IPW) (Robins, Rotnitzky & Zhao, 1994) calculated with age group, gender, ethnic group, municipality and marital status were used to reduce bias due to non-response and produce estimates for means and percentages that are representative of Russian, Somali and Kurdish migrants in Finland. The population sizes were relatively small, and a significant proportion of the total population was included in the sample, and thus the finite population correction (Lehtonen & Pahkinen, 2004) was applied in all analyses.

Logistic regression analyses were conducted to investigate the associations between experienced discrimination and mental health symptoms, quality of life, loneliness, feelings of safety and trust towards society, separately for the three ethnic groups. The dichotomised variable of experiences of discrimination was defined as an independent variable. The dichotomised variables of mental health symptoms, quality of life, loneliness, avoiding places due to immigrant background, worry about own safety, trust towards public health care, trust towards public social care, trust towards juridical system, trust towards government, trust towards police, trust towards municipal policymakers, trust towards social insurance institution and trust towards employment office were defined as dependent variables, each in a separate logistic regression model. Age (as classified into 18–29, 30–44 and 45–64 years of age), gender and education (high school yes versus no) were adjusted for in the regression analyses.

All analyses were conducted using SAS 9.3/SUDAAN 11.0.0 software, which takes the sampling design into account. The three ethnic groups were not compared with each other in any part of the analyses.

Results

The main characteristics of the study population are presented in Table 1.

The associations between experienced discrimination and psychological and social well-being are presented in Table 2. Discrimination

Table 1. Demographic and Migration Related Characteristics of the Study Populations (%)[1]

	Russian (n = 468–692)[2]	Somali (n = 377–489)[2]	Kurdish (n = 515–614)[2]
Gender: Women	61.6	57.2	43.1
Age 18–29	27.5	40.1	36.7
Age 30–44	33.5	39.3	42.1
Age 45–64	39.0	20.6	21.2
High school graduate[3]	77.5	28.0	42.9
Time in Finland (mean)	12.1	12.0	10.9
Refugee or asylum seeker	0.9	73.3	75.6
Experienced discrimination	41.7	36.6	38.3
Mental health symptoms	17.1	8.5	32.9
Good quality of life	84.0	95.8	74.2
Frequent feelings of loneliness	5.7	6.4	21.8
Avoiding places due to immigrant background	6.8	26.4	30.0
Worried about own safety	16.32	13.01	13.28
Trust in public health care	64.8	82.3	75.5
Trust in public social care	80.6	82.5	69.4
Trust in juridical system	81.7	83.4	74.6
Trust in the government	69.5	82.9	76.0
Trust in the police	86.9	83.6	74.9
Trust in municipal policymakers	81.4	88.0	79.5
Trust in social insurance institution	84.2	90.2	84.4
Trust in employment office	68.0	85.2	67.8

Source: Authors' own.

Notes: [1]Weighted and age-adjusted prevalence (weighted and age-adjusted mean for time lived in Finland; only weighted prevalence for age),
[2]Number of participants ranging whether each characteristic was measured in the interview and/or health examination and/or short interview,
[3]Has completed high school or part of high school in any country.

increased the odds for mental health symptoms for Russian and Kurdish migrants, but not for Somalis. Similarly, discrimination decreased the odds for good quality of life among Russians and Kurds, but not for Somalis. For frequent feelings of loneliness, discrimination increased the odds among Kurdish migrants, but not for Russians or Somalis.

Table 2. Association between Discrimination and Psychological and Social Well-being[1]

	Russian	Somali	Kurdish
	OR (95% CI)	OR (95% CI)	OR (95% CI)
Psychological well-being			
Mental health symptoms			
Discrimination: Yes	**2.50 (1.40–4.45)**	1.43 (0.53–3.87)	**2.04 (1.35–3.06)**
Discrimination: No	1.00	1.00	1.00
Good quality of life			
Discrimination: Yes	**0.42 (0.25–0.70)**	1.53 (0.40–5.84)	**0.65 (0.44–0.96)**
Discrimination: No	1.00	1.00	
Social well-being			
Frequent feelings of loneliness			
Discrimination: Yes	1.75 (0.74–4.11)	0.71 (0.25–2.02)	**1.75 (1.17–2.61)**
Discrimination: No	1.00	1.00	1.00
Feelings of safety			
Avoiding places due to migrant background			
Discrimination: Yes	**6.62 (2.60–16.89)**	**3.76 (2.04–6.92)**	**2.78 (1.91–4.05)**
Discrimination: No	1.00	1.00	1.00

(Table 2 Continued)

(Table 2 Continued)

	Russian	Somali	Kurdish
Worried about own safety			
Discrimination: Yes	**3.00 (1.70–5.27)**	**10.18 (4.53–22.88)**	**3.92 (2.32–6.63)**
Discrimination: No	1.00	1.00	1.00
Feelings of high trust			
Trust in public health care			
Discrimination: Yes	**0.41 (0.27–0.62)**	**0.42 (0.22–0.81)**	**0.39 (0.27–0.59)**
Discrimination: No	1.00	1.00	1.00
Trust in public social care			
Discrimination: Yes	**0.30 (0.17–0.51)**	**0.46 (0.22–0.93)**	**0.32 (0.22–0.47)**
Discrimination: No	1.00	1.00	1.00
Trust in juridical system			
Discrimination: Yes	**0.26 (0.15–0.44)**	**0.45 (0.22–0.91)**	**0.34 (0.22–0.53)**
Discrimination: No	1.00	1.00	1.00
Trust in the government			
Discrimination: Yes	**0.35 (0.22–0.56)**	**0.18 (0.08–0.40)**	**0.34 (0.22–0.53)**
Discrimination: No	1.00	1.00	1.00
Trust in the police			
Discrimination: Yes	**0.40 (0.22–0.74)**	**0.22 (0.11–0.43)**	**0.28 (0.18–0.42)**
Discrimination: No	1.00	1.00	1.00

Trust in municipal policymakers			
Discrimination: Yes	**0.25 (0.14–0.43)**	**0.28 (0.14–0.59)**	**0.29 (0.18–0.46)**
Discrimination: No	1.00	1.00	1.00
Trust in social insurance institution			
Discrimination: Yes	**0.39 (0.23–0.68)**	0.50 (0.22–1.14)	**0.26 (0.16–0.44)**
Discrimination: No	1.00	1.00	1.00
Trust in employment office			
Discrimination: Yes	**0.43 (0.28–0.67)**	**0.32 (0.16–0.63)**	**0.35 (0.24–0.51)**
Discrimination: No	1.00	1.00	1.00

Source: Authors' own.

Notes: OR = odds ratio, bolded ORs represent significant associations. 95% CI = 95% confidence interval.

[1] Weighted and adjusted for age, gender and education.

Discrimination increased the odds for avoiding certain places due to migrant background and feelings of worry about own safety in all of the three migrant groups. Discrimination decreased the odds for trust towards all of the eight institutions included in the study among Russian and Kurdish migrants. Among Somalis, discrimination decreased the odds for trust towards all the institutions except for the social insurance institution.

Discussion

Our results demonstrate that experienced discrimination has a consistent association with feelings of unsafety and low trust towards different institutions in society in all of the studied migrant groups. Among Russian and Kurdish migrants, discrimination is also linked with mental health symptoms and poor quality of life, whereas this association was not evident among Somalis. The least consistent association was found between discrimination and loneliness, with Kurds being the only group where discrimination associated with frequent feelings on loneliness.

Discrimination and psychological well-being

Our results demonstrating an association between discrimination and psychological well-being among Russian and Kurdish migrants are consistent with previous research. Borell et al. (2010) reported a consistent relationship between discrimination and poor health outcomes, including mental health. Broudy et al. (2007) demonstrated that ethnic discrimination was associated with higher levels of negative mood and more intense negative social interactions.

The missing association between discrimination and mental health symptoms among Somalis raises some important questions. This may be due to the fact that mental health symptoms among Somalis were found to be rather rare in the Maamu study in comparison to the other migrant groups (Rask et al., manuscript in preparation; Rask et al., 2015). Mölsä, Hjelde and Tiilikainen (2010) have suggested that this tendency may reflect the severe social stigma related to mental disorders in the Somali community. Hence, the missing association between discrimination and mental health among Somalis in the present study may be explained by the low prevalence of mental health symptoms and its consequence of lacking statistical power. Similar tendency may be evident regarding the results of quality of life, since as much as 96 per cent of the Somalis reported good quality of life (Castaneda et al., 2012).

Most of the research investigating the association between discrimination and psychological well-being has been conducted in cross-sectional study settings, in which the relationship of cause and effect cannot be established. In their meta-analysis Schmitt et al. (2014) reviewed both cross-sectional studies and longitudinal studies to address the causal effects of perceived discrimination on psychological well-being. The findings of the longitudinal studies supported the hypothesis that perceived discrimination has a causal effect on well-being. Based on all the previous findings, we hypothesise that there may be a bidirectional, mutually reinforcing relationship between discrimination and mental health and well-being. On the one hand, feelings of discrimination and not feeling welcome or good enough may harm a person's psychological well-being. On the other hand, when feeling psychologically unstable or unwell, one tends to see the messages from others more negatively. Thus, being exposed to ethnic discrimination may influence the way people view themselves and their life situations, making it more likely that individuals will appraise new situations as threatening and harmful, adding to their overall stress burden.

Discrimination and social well-being

The link between experienced discrimination and feeling unsafe and decreased trust towards different institutions in society was strong and consistent in the present study, throughout the different measures and ethnic groups. These associations have not been investigated much previously. Phongsavan, Chey, Bauman, Brooks and Silove (2006) demonstrated that having higher levels of trust and feeling safe are consistently associated with low levels of psychological distress, also after adjusting for socio-demographic characteristics and health conditions. Similarly, Ziersch, Baum, MacDougall and Putland (2005) demonstrated that perceived neighbourhood safety was associated with mental health. Although causal relations cannot be demonstrated, our findings portray the severity of discrimination: experienced discrimination is significantly associated with feelings of unsafety and avoiding places due to migrant background. Experiences of discrimination may even lead to migrants having to avoid certain public places. As defined by Gilson (2003), trust is essentially a psychological state offering both micro-level and macro-level benefits for the wider society. Experienced discrimination, perhaps leading to lower trust towards the society, is an essential topic to attend to.

The association between discrimination and loneliness, which was evident for the Kurds but missing for Russians and Somalis, may be

explained by the social relations of the participants. If social interaction occurs within members of the same ethnic group, and if these contacts are frequent and meaningful, these individual may be less likely to experience frequent feelings of loneliness. Experiences of discrimination, on the other hand, are more likely explained by the amount of contacts the individual has outside his or her own ethnic group, for example, at work, school or outside the home. An interesting topic for future research is to investigate whether experienced discrimination differs by employment status. As with Somalis regarding mental health symptoms, the missing association between discrimination and feelings of loneliness among Russian and Somalian migrants in the present study may also be explained by the low prevalence of those feeling themselves frequently lonely in the Russian and Somali groups (approx. 6 per cent; Castaneda et al., 2012), leading to insufficient power in the statistical analyses.

Strengths and Limitations

Important strengths of our study are the population-based study design and the relatively high participation rate compared to other migrant health studies. Another advantage is that we have analysed the three migrant groups separately instead of reporting our results together for migrants of different origin or for large geographical areas. Novelty is also the context of Northern Europe. Importantly, we used various outcome measures of social well-being, including feelings of safety and trust towards different institutions of the society that have previously been investigated less frequently. In addition, cross-cultural assessments have shown good validity of the HSCL-25 and the EUROHIS (Bean, Derluyn, Eurelings-Bontekoe, Broekaert & Spinhoven, 2007; Hollifield et al., 2002; Schmidt, Mühlan & Power, 2005).

There are also some limitations. Not all the used instruments and questions have been validated or evaluated in cross-cultural settings. In addition, various forms of experienced discrimination were measured with questions of binary answers (yes versus no), which leaves some aspects of experienced discrimination out. As in all cross-sectional studies, no causal relations of discrimination and mental health or social well-being can be shown. Another limitation is that although the participation rate was satisfactory, non-response may have caused bias in the results, especially for Somalis among whom the participation rate was lowest.

Conclusions

Our findings demonstrate that perceived discrimination is an essential threat to the psychological and social well-being of Russian, Somali and Kurdish origin migrants in Finland. The integration of migrants is a difficult task without receptive and unprejudiced attitudes in the society. Non-discrimination and equal opportunity should be ensured to promote the psychological and social well-being of migrants, and further enhance integration of migrants in the new host country. Future studies should investigate more of the moderating and mediating effects there exist in the link between discrimination and psychological and social well-being.

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