

Perceived sense of discrimination in relation to behavioral problems and psychological distress in Turkish immigrant adolescents.



Noortje Maas

n.a.b.maas@umail.leidenuniv.nl

S0522562

First reader: Drs. M.J.L. Prevo

Second reader: Prof. dr. J. Mesman

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Leiden University

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Abstract

This study was designed to test mediation and moderation models between sense of general or ethnic discrimination, psychological distress, and behavioral problems. The sample consisted of 68 first- and second generation Turkish-Dutch mothers and their 11- to 13- year old adolescent children. Sense of general or ethnic discrimination and psychological distress was measured by questionnaires filled out by the adolescents. A questionnaire about the child's behavioral problems was filled out by mother. It was found that young adolescents who perceived that they were being discriminated against also reported more psychological distress. Mothers of adolescents with more psychological distress reported more behavioral problems. An indirect effect between sense of general discrimination and behavioral problems, via the mediator psychological distress was found. No direct relation between sense of general discrimination and behavioral problems was found and no moderating role of psychological distress was found in the relation between discrimination and behavioral problems. Our study with third generation adolescents contributes to the information that was already available about sense of discrimination, psychological distress and behavioral problems in first- and second- generation adolescents, making it possible to compare between different generations.

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Introduction

Forty-one percent of the approximately two million non-western immigrants living in the Netherlands have reported to have experienced discrimination at least once in their life (Boog, Dinsbach, Van Donselaar & Rodrigues, 2009; Centraal Bureau voor de Statistiek [CBS], 2013). Adolescents who perceive that they are being discriminated against are at greater risk for lower self-esteem, more psychological and behavioral problems (Van Geel, 2009). Discrimination refers to the phenomenon that people in a social context have certain opinions, attitudes or behaviors that are excluding people or not treating them as equals because of their ethnicity, social status, religion, age or gender (Kessler, Mickelson & Williams, 1999; Schnittker & McLeod, 2005). Perceived discrimination is the subjective experience one has of being excluded or treated unequally in a social context (Todorova, Falcón, Lincoln & Price, 2010). How people deal with this can have an impact on their mental health and psychological distress (Schnittker & McLeod, 2005; William & Williams-Morris, 2000). There are various reasons for discrimination, but in multiethnic societies ethnic discrimination is a common phenomenon. Ethnic discrimination refers to differential treatment of people due to their ethnicity, their culture of origin, appearance, or language (Liang & Borders, 2012; Van Dijk, Agyemang, De Wit, & Hosper, 2010). Sense of discrimination might be experienced in different severity and on different levels, such as ethnic discrimination in institutions (e.g. receiving poor service at restaurants or being hassled by the police because of their ethnicity), educational contexts (e.g. getting a lower grade than deserved) or from peers (e.g. being called racially insulting names) (Fisher, Wallace, & Fenton, 2000; Vedder, Sam, & Liebkind, 2007). A survey conducted in the United States revealed that more than one third of the respondents had at least one experience with major lifetime discrimination, which might have occurred years ago, and for the great part affected the social economic position (i.e. not hired for a job or rejected for a loan, not only because of ethnicity) (Kessler et al., 1999). Over sixty percent of the respondents in this survey had experienced day-to-day discrimination (i.e., people often act as if you are inferior/ not smart/ dishonest often related to race or ethnicity).

Discrimination seems to be a big problem for ethnic minorities living in the Netherlands as well. The largest non-Western immigrant group living in the Netherlands consists of people with a Turkish background (Centraal Bureau voor de Statistiek [CBS], 2013). Based on the findings of the Racial Discrimination Monitor reported in 2009, 41 percent of Turkish-Dutch people have experienced ethnic discrimination at some point in their

lives (Boog et al., 2009). Adolescence is a confusing period in life in which youths go through a lot of developmental changes and experience considerable amounts of stress (Murad, Joung, Van Lenthe, Bengi-Arslan, & Crijnen, 2003). It is a period in which children develop their identity and self-concept (Greene, Way, & Pahl, 2006). When adolescents are being discriminated against during this developmental phase, the risk for behavioral and emotional problems increases (Davies & McKelvey, 1998). Given the increasing number of immigrants, not only living in the Netherlands but throughout the whole of Europe, it is important to investigate the factors that play a part in the relation between perceived discrimination by adolescents and their psychological well-being and health (Boswell, 2005). Perceived discrimination has a negative effect on both mental and physical health outcomes and can cause heightened psychological distress, low self-esteem and depress academic performances (Liang & Borders, 2012; Pascoe & Smart Richman, 2009; Steel, 1997; Thompson, 1996; Vedder et al., 2007). Furthermore, higher levels of aggression, anxiety, depression, and lower levels of social connectedness have been found in relation to perceived discrimination (Paradies, 2006; Van Dijk et al., 2010; Williams & Mohammed, 2009). Integrating in the host society, by maintaining some degree of their own culture whilst participating in the culture of the larger society, can make a person feel more socially connected and less discriminated against (Berry, 2001). This, in turn, may reduce the risk of problem behaviors (Sowa, Crijnen, Bengi-Arslan, & Verhulst, 2000). Perceived ethnic discrimination most likely has an unidirectional effect on psychological distress, indicating that discrimination might cause psychological distress (Sellers & Shelton, 2003), or increase already existent distress. Other longitudinal studies also found that perceiving discrimination can result in negative mental health outcomes (Paradies, 2006).

Children and adolescents from ethnic minorities face challenges that their native peers do not have to face, such as identifying with the host culture, learning the host language as well as their mother tongue and dealing with discriminating opinions, attitudes or behaviors expressed towards them (Davies & McKelvey, 1998; Yaman, Mesman, Van IJzendoorn, & Bakermans-Kranenburg, 2010). Not all studies on psychological well-being and the health of immigrant adolescents show the same finding that immigrant adolescents are at a disadvantage compared to their native peers. Some studies find more emotional and behavioral problems in non-migrant adolescents, and some studies find more problems in immigrant adolescents. One study from the United Kingdom, shows that immigrant children from Turkey, compared to their Turkish non-migrant peers and peers who had moved within Turkey, had more emotional dysregulation, internalizing and externalizing problems and less

social competence, even in preschool years (Daglar, Melhuish, & Barnes, 2011). Also in the Netherlands, Turkish immigrants reported more emotional and behavioral problems than their Dutch peers, and rated themselves significantly higher on anxious, depressed, withdrawn and internalizing problems (Janssen, Verhulst, Bengi-Arslan, Erol, Salter, & Crijnen, 2004). In addition, also the parents of Turkish immigrant adolescents reported more behavioral problems compared to the parents of Dutch adolescents on the Child Behavior Check List (Stevens, Pels, Bengi-Arslan, Verhulst, Vollebergh, & Crijnen, 2003). However, in contradiction to this, a study from Belgium showed that non-migrants reported higher levels of anxiety, hyperactivity and more externalizing problems compared to the migrant adolescents who had more trauma, peer problems and avoidance (Derluyn, Broekaert, & Schuyten, 2008). Additionally, in a study from Australia among immigrant adolescents and their non-immigrant peers it was found that non-immigrant adolescents scored higher on behavioral and emotional problems than their immigrant peers (Davies & McKelvey, 1998). Family intactness and socioeconomic status influenced these results.

Not only perceived discrimination but also the integration process that the families go through can cause health and behavioral problems in immigrant children (Yaman et al., 2010). Families migrating to a new country undergo a process of acculturation to the new country. A new balance has to be found between identifying oneself with their own culture and the culture of the host country. These changes can cause stress for migrants of the first generation (i.e. born in country of origin and migrated to host country), because they have to acculturate to the new country (Yaman et al., 2010). The second generation (i.e. born in host country with at least one parent from country of origin) can also experience stress because they feel like they are trapped between their parents' culture and the culture of the country they live in (Sodowsky & Meastas, 2000). These stresses can cause emotional instability and behavioral problems (Davies & McKelvey, 1998). In this study, adolescents with a Turkish background participated. In the Turkish culture it is expected of children to be dependent, obedient and to have conformity and respect for adults (Bengi-Arslan, Verhulst, van der Ende & Erol, 1997). It is common for adults to criticize, punish and threaten children, whereas praise is less common (Kâğıtçıbaşı, 1990). These criticisms, punishment and threats may in turn cause internalizing and behavioral problems (Bengi-Arslan et al., 1997; Stevens et al., 2003).

Besides having to acculturate to a new country, finding a well-paid job is more difficult for immigrants, especially for those who lack sufficient education or job experience (Aichberger et al., 2012; Dean & Wilson, 2009). Immigrant families have found to be at a greater risk for a lower socioeconomic status (SES) (Aichberger et al., 2012; Nazroo, 2003).

They often have low education, a low income and are more often unemployed. The distress caused by having a low SES can cause health problems and psychological distress for the parents (Gadalla, 2009). These effects caused by low SES can affect the quality of parenting which, in turn, can affect children's stress levels and may cause emotional and behavioral problems in youths (Emmen et al., 2013; Singh & Ghandour, 2012; Van Oort, Van der Ende, Wadsworth, Verhulst, & Achenbach, 2011).

Children who are about to make the transition from primary school to high school are going through educational but also social transitions. For immigrant children who, beside these transitions, might also experience discrimination, acculturation problems, stress and behavioral problems, this transition is extra challenging. The evidence from previous studies presented above shows that perceived discrimination in immigrant adolescents is closely related to their physical and emotional well-being. It is important to stay up to date and most studies referred to were done some ten years ago, with first and second generation children. At this time, second generation parents are having children, making them third generation. Studying this generation may make it possible to compare the results about discrimination, psychological stress and behavioral problems with the results of the second and first generation adolescents living in the Netherlands. With the results from this study, educators, parents and practitioners working with Turkish immigrant families with second or third generation adolescents can be informed about the challenges ethnic minority adolescents face and how to signal arising problems (Leyendecker, n.d.). Furthermore, the information acquired in this study about the influences of perceived discrimination on immigrant adolescents can be used to create interventions. These interventions are necessary to prevent the adolescents, who are about to make the transition to high school, from getting educational disadvantages, health- or behavioral problems caused by the discrimination perceived by them. Risk factors such as SES of the family could also play a role. By creating interventions, equal opportunities are provided for migrant children (Greene et al., 2006). Therefore, the first aim of this study is to better understand the relation between the perceived sense of ethnic and general discrimination and psychological distress. The second aim is to explore whether adolescents' perceived discrimination (either general or ethnic) is linked to behavioral problems, as reported by mothers. The third aim of this study is to test whether the potential relation between perceived discrimination (general or ethnic) and behavioral problems is moderated and/or mediated by the level of psychological distress. In case of moderation, the relation between perceived discrimination and behavioral problems will differ depending on the adolescent's psychological state (i.e., the absence or presence of psychological distress),

and in case of full or partial mediation psychological distress accounts for all or some of the observed relation between perceived discrimination and behavioral problems. Underlying possible influences of SES and immigrant generation of mother will be checked. Two mediating models are hypothesized:

1. The level of psychological distress in Turkish immigrant adolescents mediates the relation between their sense of *general* discrimination and behavioral problems.
2. The level of psychological distress in Turkish immigrant adolescents mediates the relation between their sense of *ethnic* discrimination and behavioral problems.

It is expected that a higher sense of discrimination has a direct effect on behavioral problems and that the relationship between a higher sense of general or ethnic discrimination and more behavioral problems can be partially or completely explained by high psychological distress. The other way around it is expected that the relationship between a low sense of discrimination and less behavioral problems can be partially or completely explained by low psychological distress.

Also, two moderating models are hypothesized:

3. The level of psychological distress in Turkish immigrant adolescents moderates the relation between their sense of *general* discrimination and behavioral problems.
4. The level of psychological distress in Turkish immigrant adolescents moderates the relation between their sense of *ethnic* discrimination and behavioral problems.

It is expected that the relation between a sense of ethnic/general discrimination and behavioral problems will be stronger for higher levels of psychological distress.

Methods

Sample

The data for the original study, the SIMCUR study (Social Integration of Migrant Children), were collected between 2010 and 2013 in three different countries: Norway, Germany and The Netherlands. The analyses reported in this thesis only use the data obtained in the Netherlands. The children who participated were in their last year of primary school in regular education, before making the transition to high school. The home visits used in this study were conducted in 2010 or 2011 in the second half of the school year. The participating families were Turkish immigrant families of which the mothers were either born in Turkey

(58.3%) and have lived in The Netherlands from before their 11th birthday, making them first generation mothers. Second generation mothers (41.7%) were born in the Netherlands, with at least one of their parents having been born in Turkey. All fathers also had a Turkish background, and 95.3 percent of the fathers were born in Turkey. By contacting local governments, addresses of Turkish families were obtained. The Turkish families that fitted the conditions received a letter with an information brochure about the research and an answer card asking if they wanted to participate or not. If the families did not reply, attempts were made to reach them by visiting these families at home. There was a maximum of three attempts to contact the families. If the families were reached, it was explained to them that participation would mean three home visits, one every year, each visit lasting about two to two and a half hours. If mothers wanted to participate, they signed a consent form. In total 454 families were reached of which, 72 consented to participate in this research, this is a response rate of 15.9%. Mothers and their children were asked to fill out two questionnaires, one before and one during the home visit and, if possible, fathers were asked to fill in a questionnaire as well.

Of the 72 participating families, four children did not fill out the questionnaires. Beside these four respondents, eight respondents had missing data. These items were interpreted as an item-nonresponse, and therefore missing values were imputed by using the person mean substitution approach which calculates the mean of the items the respondent did fill out, making this the best prediction of the value (Downey & King, 1998). The remaining 68 children that participated in the study were between 11 and 13 years old ($M = 12.31$, $SD = 0.45$). In this sample 35 participants were girls (51.5%). The age of the mothers ranged between 30 and 46 ($M = 36.99$, $SD = 4.10$), the age of the fathers ranged between 31 and 49 ($M = 39.83$, $SD = 4.54$).

Procedure

Questionnaires were sent to families to be filled out by the mothers, fathers and adolescents, before the home visits took place. The home visits were performed by two research assistants. During these two hour visits the child participated in an interview, filled out a questionnaire and performed several computer tasks with one assistant. The mother was interviewed by the other assistant, and filled out a second questionnaire. Video recordings were made of mother-child interaction tasks.

Measures

In this thesis only the data obtained with the questionnaires answered by the mother and the adolescent are used.

Perceived discrimination: Two kinds of perceived discrimination by adolescents were measured, namely sense of general and sense of ethnic discrimination. Perceived sense of *general* discrimination was assessed with nine items from the Chronic Daily Discrimination Questionnaire (Kessler et al., 1999). Sense of general discrimination included items such as: ‘People act as if you are inferior’, ‘People act as if they are afraid of you’, ‘Treated with less respect than others’ and ‘You are called names or insulted’. Every item was scored on a 4-point Likert scale; (1) never, (2) almost never, (3) sometimes, and (4) often. This questionnaire is a very reliable measuring device with a Cronbach’s alpha of .82 in this sample.

The questionnaire for the International Comparative Study of Ethnocultural Youth (ICSEY) was used to measure sense of *ethnic* discrimination (Berry et al., 1993). The five items included statements such as: ‘I think Dutch people have behaved negatively towards people with a Turkish background’, ‘I feel like Dutch people have something against me’, and ‘I have been teased or insulted because of my Turkish background’. The response options for these items were scored on a 5-point Likert scale; (1) totally disagree, (2) somewhat disagree, (3) I don’t know, (4) somewhat agree, and (5) totally agree. The Cronbach’s alpha of the ICSEY in this sample is .72, which means that this scale was reliable.

Psychological distress: Psychological distress was assessed with a subscale of the Strengths and Difficulties Questionnaire (SDQ), reported by adolescents (Goodman, Meltzer, & Bailey, 1998). Five items were used to measure psychological distress such as: ‘I get a lot of headaches, stomach-aches, or sickness’, ‘I am often unhappy, down-hearted or tearful’, and ‘I have many fears. I am easily scared’. The response options were on a 3-point Likert scale: (1) not true, (2) somewhat true, and (3) certainly true. Cronbach’s alpha is .69 in this sample, which is reliable.

Behavioral problems: The conduct problems subscale of the Strengths and Difficulties Questionnaire (SDQ) reported by mothers was used to assess behavioral problems. Five items were used to measure behavioral problems such as: ‘Often has temper tantrums or hot tempers’, ‘Generally obedient, usually does what adults request’, and ‘Often fights with other children or bullies them’. The second item, which is a pro-social one, was recoded in line with the non-social items, so that a higher score would represent more problems (Goodman, 1997). The response options were the same options as for psychological distress on a 3-point Likert scale: (1) not true, (2) somewhat true, and (3) certainly true. During data-inspection, it was found that the five items that are supposed to measure behavioral problems had a Cronbach’s alpha of .29. Deleting any of the items did not lead to a large improvement of the reliability,

so the items were not found reliable to predict behavioral problems. Therefore these items were recoded into the dummy variables (0 = problem absent, 1 = problem present). One point per item was scored for every behavioral problem that mother reported, with a maximum score of five per child.

To control for socioeconomic status, this variable was made by combining the variable education level of mother and the variable household's total gross income. The latter had missing values which were therefore imputed by computing scores based on the scores each respondent had on the variables 'education level of mother', 'general discrimination', 'psychological distress', 'behavioral problems' and 'gender'. After imputing, the variable SES was made by first standardizing the scores on education level of mother and household's gross income and secondly by adding up these numbers.

Analyses

To answer the research questions, the data had to be suitable to use for the analyses. Therefore, a univariate and bivariate data inspection was done. The data were checked for normal distribution of the variables. One outlier was found on the independent variable, the analyses will be performed with and without this respondent to check the influence of this outlier.

Correlations were computed to explore the strength of the relationships between the independent variables and the dependent variable. As a condition for mediation, the variables sense of general and ethnic discrimination have to be related to the dependent variable, behavioral problems, and they have to be related to the mediator, psychological distress. Subsequently, the mediator psychological distress has to be related to the dependent variable behavioral problems. To check for alterations of the relationships between the variables after entering the mediating variable, a linear regression with the predictor sense of discrimination, and the mediator psychological distress, as independent variables and, behavioral problems as dependent variable was done in SPSS. As a rule, when sense of (general/ethnic) discrimination is no longer related to behavioral problems after entering the mediator psychological distress in the equation, there is complete mediation. If there is a reduction of the regression weight for sense of (general/ethnic) discrimination but it is still significant, there is only partial mediation by psychological distress. Multicollinearity was checked by looking if both predictors are significant in the regression analyses. If not, the correlations of both predictors were checked.

To test for moderation, both independent variables - sense of (general/ethnic) discrimination and psychological distress - were recoded into new centered variables and an interaction term of these variables was computed. First, a linear regression with the two independent variables (sense of general/ethnic discrimination and psychological distress) and the dependent variable was done, to check if the model was significant and whether or not the independent variables had a significant effect on the dependent variable. Second, the two independent variables and the interaction term were entered as predictors in a linear regression with the dependent variable to test for moderation. If the interaction term was significant, psychological distress was a moderator in the relation between sense of (general/ethnic) discrimination and behavioral problems, which means that the effect of sense of discrimination on behavioral problems differs for different levels of psychological distress.

To check whether the social economic status (SES) of families affected the scores on the main variables, general discrimination, psychological distress and behavioral problems, the mediation and moderation analyses were done while controlling for SES. The variable SES was entered into the regression models as an extra predictor to see if this affected the associations between the variables.

To check for the effect of the immigrant generation of the child on the reported sense of general discrimination, an independent-samples t-test was conducted to compare sense of general discrimination for children of first- and second-generation mothers. First, the mothers' immigrant generation was recoded into two groups. Mothers who were born in Turkey and moved to the Netherlands thereafter were coded as first generation, and mothers who were born in the Netherlands were coded as second generation, making the children respectively second and third generation. If a significant difference was found, the mean scores on general discrimination differed for children of mothers from the first and the second generation.

Results

Preliminary analyses

Sense of ethnic discrimination, sense of general discrimination, psychological distress, and behavioral problems were evaluated for deviations from normality. The variable ethnic discrimination was not normally distributed due to a very right-sided skewed distribution of the following three items; 'I don't feel accepted by Dutch people', 'I have been teased or insulted because of my Turkish background' and 'I have been threatened or attacked because of my Turkish background'. Therefore, the ethnic discrimination variable was not included in further analyses. However, we did check for associations between the sense of ethnic

discrimination items and the sense of general discrimination. Correlations between the five items measuring sense of ethnic discrimination and the variable sense of general discrimination were computed to check if there were associations between certain sense of ethnic discrimination items and sense of general discrimination. Because three of the five items were not normally distributed, the non-parametric Spearman's correlation was used. The two items 'I feel like Dutch people have something against me', $r = .44, p < .001$, and 'I have been teased or insulted because of my Turkish background', $r = .46, p < .001$, were significantly associated with sense of general discrimination. These results indicate that people who scored high on one of these two ethnic discrimination items, also scored high on the sense of general discrimination variable. The correlations were checked before and after excluding two respondents with outlying scores on the two ethnic discrimination items, however no significant change in the correlations was found.

The other three variables, sense of general discrimination, psychological distress and behavioral problems, were normally distributed. Means, standard deviations and correlations of the main variables are presented in Table 1. SES was significantly associated with the variables psychological distress and behavioral problems, therefore the regressions have been done while controlling for SES. Removing outliers from the analyses did not change the results. No multicollinearity was found between the independent variables.

Tests of mediation and moderation

To test the requirements of mediation, correlations between the independent variable sense of general discrimination, the mediating variable psychological distress and the dependent variable behavioral problems were computed. The correlations in Table 1 show that the independent variable, sense of general discrimination, was not associated with the dependent variable, behavioral problems. Sense of general discrimination was moderately associated with psychological distress, showing that respondents who experienced more general discrimination, also experienced more psychological distress. Also, psychological distress was moderately associated with behavioral problems, indicating that respondents with higher scores on psychological distress, had more behavioral problems as reported by mother. A linear regression analysis was conducted in which the dependent variable, behavioral problems, was regressed on the independent variables, sense of general discrimination, and psychological distress. In line with the correlational analyses, sense of general discrimination did not significantly predict behavioral problems, $\beta = .19, p = .12$. Sense of general discrimination however did significantly predict the mediator, psychological distress, $\beta = .44,$

$p < .001$, this also being in line with the correlational analysis. The mediator, psychological distress, significantly predicted behavioral problems, $\beta = .36$, $p = .007$, which is also in line with the correlational analysis. Upon entering the mediator, psychological distress, the relation between the independent variable sense of general discrimination and the dependent variable behavioral problem was lowered, $\beta = .03$, $p = .82$. This relation was not significant to start with and remained non-significant after entering the mediator. Results show that there is no direct effect between the independent variable and the dependent variable, but a Sobel test confirmed an indirect effect between sense of general discrimination and behavior problems, via the mediator psychological distress ($z = 2.47$, $p = .013$). When controlling for SES in this mediation analyses, only minor changes were found, ($\beta = .19$, $p = .12$; $\beta = .44$, $p < .01$). The relationship between sense of general discrimination and behavioral problems remained non-significant.

To test the moderation hypothesis, an interaction term was computed for the variables sense of general discrimination and psychological distress by first centering the scores on these variables and secondly multiplying these scores with one another. The regression analysis used to test mediation showed that sense of general discrimination did not predict behavioral problems, but psychological distress did, $\beta = .36$, $p = .007$. When adding the interaction term into the linear regression, results showed that there was no significant interaction, $\beta = -.12$, $p = .34$. Psychological distress did not moderate the relation between sense of general discrimination and behavioral problems. The absence or presence of psychological distress does not affect the relation between sense of general discrimination and behavioral problems. When controlling for SES, results still showed no significant interaction, $\beta = -.11$, $p = .37$.

Controlling for the underlying influences of immigrant generation of mother

An independent-samples t-test was conducted to compare sense of general discrimination for first- and second- generation mothers. There was no statistically significant difference in the sense of general discrimination scores for the children of first generation mothers ($M = 14.09$, $SD = 4.56$), and second generation mothers ($M = 12.75$, $SD = 4.21$), $t(66) = 1.23$, $p = .22$.

Table 1
Correlations and descriptive statistics

	<i>M</i>	(<i>SD</i>)	Range	1.	2.	3.	4.
1. Behavioral problems	1.29	(1.08)	0-4	-			
2. Psychological distress	7.52	(2.13)	5-13	.37**	-		
3. Sense of general discrimination	13.54	(4.44)	9-24	.19	.44***	-	
4. SES	0	(1.66)	-3.29-3.96	-.28*	-.30*	-.02	-

* $p < .05$.

** $p < .01$

*** $p < .001$

$N = 68$

Discussion

This study tested mediation and moderation models between sense of general discrimination, psychological distress, and behavioral problems in a sample of second- and third- generation 11- to 13-year-old children from Turkish immigrant families. Our results indicate that young adolescents who perceive that they are being discriminated against also report more psychological distress and mothers of adolescents with more psychological distress report more behavioral problems. An indirect effect between sense of general discrimination and behavioral problems, via the mediator psychological distress was found. No direct relation between sense of general discrimination and behavioral problems was found. No moderating role of psychological distress was found in the relation between discrimination and behavioral problems. Controlling for the socioeconomic status of the families did not change the associations. No differences in sense of general discrimination scores for adolescents of first- and second- generation were found.

The first aim of this study was to look at the relationship between perceived sense of discrimination and psychological distress in young adolescents. The results show that adolescents who feel they are being discriminated against, also report higher levels of psychological distress. This is consistent with the results of previous studies about the relation between perceived sense of discrimination and mental health outcomes (Paradies, 2006; Van

Geel, 2009). Although previous research suggests that the effect of discrimination on psychological distress could be unidirectional, meaning that the discrimination experienced by the adolescents is thought to cause more psychological distress, it is also possible that the stress experienced by adolescents causes them to interpret certain behavior towards them personally as negative and discriminating (Paradies, 2006; Sellers & Shelton, 2003). The second aim was to explore whether adolescents' perceived sense of discrimination was related to behavioral problems as reported by their mothers. The results show that perceived sense of general discrimination was not significantly associated with behavioral problems. This is inconsistent with previous research, in which an association between perceived sense of general discrimination and behavioral problems in adolescents was found (Davies & McKelvey, 1998; Van Geel, 2009). However, the children in these previous studies were slightly older and were first- or second-generation immigrants. The fact that no significant association between sense of general discrimination and behavioral problems was found in our sample can be of importance for scientists and practitioners working with immigrant families. There might be differences between the second- and third-generation immigrants at the end of primary school as studied here and the first- and second-generation immigrants of older adolescent ages in earlier studies, when it comes to the association between sense of discrimination and behavioral problems. A reason for the absence of this association in our sample, could be that adolescents might have found a way to deal with the negativity of discrimination towards them, because their parents before them experienced it and taught them how to respond to this, thereby preventing the negative experiences to have consequences such as behavioral problems. It is also possible that the adolescents who perceive discrimination do not express this in an externalizing manner, through behavioral problems like we have assessed here, but more in an internalizing way, by experiencing more psychological distress (Davies & McKelvey, 1998; Yaman et al., 2010). In contrast, it could be that the association between sense of discrimination and behavioral problems is absent because few problem behaviors were reported by mothers. This could be due to the fact that mothers might have given socially desirable answers and therefore underreported their children's actual problem behavior. Possibly, the adolescents in our sample actually do not show much problem behavior, this is inconsistent with previous research (Derluyn et al., 2008; Van Geel, 2009).

The third aim of this study was to test whether psychological distress mediated or moderated the potential relation between perceived sense of discrimination and behavioral problems. Although our results show that sense of general discrimination was not associated

with behavioral problems, we did find an indirect relation between discrimination and behavioral problems. Adolescents with a higher sense of general discrimination reported more psychological distress and mothers of adolescents with higher psychological distress reported more behavioral problems. Previous research has shown that more discrimination is related to higher levels of psychological distress (Sellers, Caldwell, Schmeelk-Cone & Zimmerman, 2003), and that adolescents with higher levels of psychological distress engage in more antisocial behaviors (Schmeelk-Cone & Zimmerman, 2003). Possibly, not everyone who experiences discrimination shows more behavioral problems but sense of discrimination could be the reason someone might experience more emotional problems such as stress. This experienced stress might increase the behavioral problems, therefore psychological distress might be a pathway by which sense of discrimination affects a person's behavior (Sellers et al., 2003). We did not find psychological distress to moderate the relation between sense of general discrimination and behavioral problems, indicating that the relation between sense of discrimination and behavioral problems did not vary for different levels of psychological distress. Few adolescents reported sense of general discrimination. This might be a reason for the absence of the association and could be caused by the fact that our respondents were relatively young. As they were young adolescents, they might not have encountered discrimination (Verkuyten, 2002).

Despite the contributions made by this study, some limitations should be noted. First, there were problems with the measuring of behavioral problems of the adolescents. This concept was measured by using the conduct problems subscale of the Strengths and Difficulties Questionnaire (SDQ), reported by mother (Goodman, 1997). This questionnaire has been translated into as many as 68 languages and has been validated internationally. In previous research the items of the parent-reported SDQ were found to reliably measure behavioral problems (Achenbach et al., 2008). It is therefore remarkable that, in our sample, the items were not reliable to measure behavioral problems and a sum score had to be used. Reasons for the problems with this variable could be that the amount of behavioral problems reported was low. Religion and culture may play a role here, in the way that Turkish children might show few behavioral problems because they do not want to shame their families' reputation (Van Geel, 2009). Also, the scores on behavioral problems could have been low because our sample was not a clinical sample, therefore the chance of children showing problem behavior was low. Another reason for these scores could be that there were behavioral problems in this group, but that the amount of behavioral problems was underreported by mothers (Stevens et al., 2003). Mothers could either be unaware of their

children's problem behavior or they could be giving socially desirable answers, meaning that they were unwilling to report negatively about their children in general. Mothers might feel that they, as a Turkish immigrant group, are being looked down upon by society and therefore want to create a more positive image of their group (Davies & McKelvey, 1998; Stevens et al., 2003). Therefore, in future research, it would be advisable to use more instruments to measure behavioral problems, such as the Teacher's Report Form (TRF) filled out by the teacher about the child's behavior (Achenbach, 1991).

A second limitation is that three of the five items measuring sense of ethnic discrimination were very skewed to the right. Most adolescents reported that they totally disagreed with the statements about ethnic discrimination, indicating that they did not feel they had experienced ethnic discrimination. Therefore this variable could not be used in this study and only the hypothesis with sense of general discrimination could be tested. The low scores on sense of ethnic discrimination found in this Turkish immigrant adolescent sample are inconsistent with previous research in which children of the first- and second-generation were found to perceive discrimination based on their Turkish background (Van Geel, 2009; Verkuyten, 2002). Low ethnic discrimination ratings could be due to the fact that the children in this study did not experience discrimination, possibly because of their young age (Verkuyten, 2002). Two items in the sense of ethnic discrimination scale were significantly associated with sense of general discrimination, which indicates that adolescents who have a higher sense of general discrimination also feel more teased and insulted and have the feeling that people have something against them, because of their Turkish background. This could mean that some of the adolescents that reported not to feel discriminated against because of their Turkish background, did sense that people had something against them and treated them differently but did not feel this had anything to do with their ethnic background.

Third, the sample size of this study is small. Not all local governments that were originally contacted to collect addresses of Turkish families were willing to participate. Of the contact information acquired, 454 families were eventually reached, of which only 72 (16%) consented to participate. This is a low response rate, compared to other studies (Baruch & Holtom, 2008). The low response rate possibly makes this sample less representative of the general Turkish population in the Netherlands. On top of that, four participants did not completely fill out the questionnaires, causing an extra drop-out. To test the representativeness of this sample, it would have been interesting to check why the mothers chose not to participate, unfortunately we do not have this information. It is possible that particularly mothers of adolescents with behavioral problems did not want to participate,

making our sample less representative. We have made an effort to make our sample as representative as possible by including municipalities from different regions of the Netherlands with both large and small Turkish immigrant populations. Different kinds of families were included, both from villages and cities, richer and poorer neighborhoods and high- and low-income families. In comparison to the Turkish-Dutch population, the average family total gross income in our sample was slightly below average (Centraal Bureau voor de Statistiek [CBS], 2013). Our sample was also different from the population based on education levels of mother, in our sample 7.4 percent of the mothers were highly educated compared to 24.1 percent of the Turkish immigrant woman in the Netherlands (Huijnk, Gijssberts & Dagevos, 2014), this may have resulted in lower representativeness of the general Turkish population making our results less generalizable. Finally, it was attempted to recruit a control group. With such a control group it would have been possible to compare Turkish-Dutch and Dutch children in terms of education level of mother, household's total gross income, psychological distress and behavioral problems. Unfortunately, it was not possible to match Dutch respondents to our Turkish-Dutch respondents.

In future research, it is needed to use longitudinal data to investigate a possible causal relationship between sense of discrimination and psychological distress. The adolescents participating in this study have been followed for three years in a row between 2010 and 2013. Therefore, the data to test the causal relationship is existent, but has not been used in the study reported in this thesis. Besides this, it would be interesting to see how these three variables develop over time and if the prevalence of the sense of discrimination, psychological distress and behavioral problems will increase or diminish. Furthermore, future research could benefit from taking into account where the respondents lived. It might make a difference in the acculturation process and for the experience of discrimination whether adolescents are growing up in a large city amongst mostly people with the same ethnic background or in a rural area where they interact more with native adolescents (Leyendecker, Schölmerich, & Çıtlak, 2006). Further research is needed to study the differences and similarities between different immigrant groups, such as immigrants from Morocco or the Netherlands Antilles with the Turkish adolescents studied here. Comparing perceived sense of discrimination, psychological distress and behavioral problems between these groups could provide insight in what the different ethnic minorities living in the Netherlands experience. There might be diversities between these ethnic groups in how discrimination, in the form of expressing negative opinions, attitudes or behaviors towards someone due to their ethnic background, affects psychological distress and behavioral problems.

To my knowledge, that what we have studied here, namely if there is a mediation and moderation effect of psychological distress on the relation between sense of discrimination and behavioral problems, has not been tested before in a sample like the one we have studied. Previous studies were done with a similar age group of Turkish-Dutch children in the Netherlands but no study was done before with children of the third immigrant generation, making this study unique (Janssen et al., 2004; Murad et al, 2003; Van Geel, 2009). With our new information about third-generation adolescents, comparisons can be made between children of different ages and from different immigrant generations. The presence or absence of sense of discrimination, psychological distress and behavioral problems can be studied and the relations between these variables in different immigrant generations can be compared. Possibly, lower problem scores will be found in later generations because they are more integrated in society and the acculturation gap is smaller (Yaman et al., 2010). On the contrary, it can also be that later generations are worse off than younger generations, which is a phenomenon called the immigrant paradox (Suárez-Orozco, Rhodes & Milburn, 2009).

Overall, our findings indicate that adolescents who perceive that they are being discriminated against on a general level, also report more psychological distress and mothers of adolescents with more psychological distress report more behavioral problems. This is an important result emphasizing the need for educators, parents and practitioners working with Turkish immigrant families to be aware of the risks for emotional and behavioral problems for immigrant-background adolescents. Society and advocates who want to put an end to discrimination should never stop their attempts to decrease discrimination against ethnic minorities. People should be more aware that expressing negative opinions, attitudes or behaviors towards Turkish adolescents, because someone differs from them, can cause these adolescents to experience more psychological distress which in turn can cause more behavioral problems. Interventions should be designed that aim at Turkish families with young adolescents that perceive sense of discrimination, experience more psychological distress or show more behavioral problems to prevent these adolescent from getting health- or behavioral problems.

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