

THE EFFECT OF DISCRIMINATION ON ONE'S ATTITUDE TOWARD THEIR OWN ETHNIC BACKGROUND

For participants with a non-Dutch background, are their feelings toward their own ethnic background related to their experience of discrimination in different settings?

Thesis
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Abstract

Discrimination happens in many ways and in many places, and it has many negative consequences. But it might also have a positive impact on the attitude one holds toward their own ethnic background according to ethnic affirmation and disintegration opposed to the cognitive dissonance theory and the social identity theory, that state it does have a negative impact on that attitude. This effect could also differ for different ethnicities. I researched this to find support for the contrasting theories. I did this research by running an analysis, which consisted of a sample of the Dutch population with a slight overrepresentation of Turkish and Moroccan people. From this analysis it was concluded that a higher level of experienced discrimination did not significantly correlate with a positive attitude, but also that a high level of experienced discrimination did not significantly correlate with a negative attitude. However it could be concluded that the effect of discrimination on attitude was more positive for Surinamese and Antillean respondents than for Turkish and Moroccan respondents, even though there was no significant proof of the effect of discrimination itself.

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1. Introduction

Discrimination happens everywhere, even without people noticing (Rodenborg & Boison, 2013). It is institutionalized in society, it is not always intentional to exclude certain ethnic minorities, but it happens anyway. For these people with an ethnic minority background, it could greatly impact their social identity. Someone's social identity is defined as how other people perceive them, so a positive social identity means that people look up to them or feel close to them or have a positive view of someone (Cárdenas & de la Sablonnière, 2020). An alternative definition is "that part of the individual's self-concept which derives from his (or her) knowledge of his (her) membership in a social group (or groups) together with the values and emotional significance attached to that membership" (Triandis, 1989, p. 507). People give great importance to their social identity and a big part of their social identity is formed by their personal network, which consists of the people that they frequently are in contact with, for example this can be coworkers, housemates and friends. People tend to have a network consisting of people that are similar to them, for example people that have the same ethnic background (Blau, 1977). The kind of contact someone has with their network has an impact on their social identity and their wellbeing. Close contact with their own ethnic background (Castillo & Destin, 2019), but also with other ethnicities (Allport, 1954) can positively impact their wellbeing, because they have a feeling of belonging and a feeling of being understood by shared experiences. This also happens with negative contact, like discrimination, with people outside their own ethnic background (Verkuyten, 2007).

In this thesis, discrimination will be defined as a set of negative practices by the majority group resulting in negative consequences for the ethnic minority groups (Feagin, 1992).

Discrimination can take on many forms, like not getting a job because of one's background; not being accepted in a sports association; being stereotyped and being treated badly based on those stereotypes; it can even take the form of being looked at judgmentally and being whispered about. This can also reach from active to passive discrimination. Active discrimination means that a person is willingly excluding or treating someone badly in another way than exclusion, for example being called

slurs and being physically assaulted, because of their ethnicity. Passive discrimination is unintentional and subtle, this form of discrimination is embedded in society, it is institutionalized (Rodenborg & Boison, 2013). Examples for this vary from being taught stereotypes about minorities and holding on to these and not knowing that those stereotypes are racist to ethnicities other than white not getting the right medicinal care, because white people have been set as the standard for precision medicine, even though Black people and Asian people and other ethnicities have different body types and should be treated differently in medicine (Geneviève et al., 2020).

Discrimination can have a big impact on someone's life, it can change their attitudes and their social identity in both directions. It could change in a way that they grow more attached toward their own ethnic background and it grows their sense of togetherness, because of shared experiences and a feeling of understanding and the feeling of being heard and seen (Skrobanek, 2009). Just as it can affirm their ethnic identity by confirming that the social norms and traditions they have are correct to them by comparing them to other cultures' social norms and traditions (Verkuyten, 2007).

On the other hand, it can also change in a way that people feel disconnected to or lose pride in their own ethnic background. I will explain this with the cognitive dissonance theory, which in short states that a person experiences a feeling of dissonance when cognitions do not conform to their held beliefs (Goldsmith et al., 2004) and the social identity theory, which states that everyone wants a positive social identity and to achieve this they seek comparison with the ethnic majority groups (Perreault & Bourhis, 1998). People with an ethnic minority background might feel like they deserve less than majority groups because of discrimination and they might comply with majority groups' norms thus discriminating against their own ethnic group to fit in with the majority group.

In this thesis, I want to research whether and how ethnic minorities' attitudes toward one's own ethnic background is impacted by being discriminated against. I want to look at this impact for different sizeable ethnic minorities in the Netherlands: Moroccan and Turkish. For comparison I also look at other non-western backgrounds. There is not a lot of literature on this specific effect of

discrimination on the attitude one holds toward their own ethnic background yet, that is why I think this will make a fine addition to the existing literature on the individual subjects, discrimination and attitude. However this research is relevant to find out to what extent discrimination has an impact on someone's attitude toward their own ethnic background. I use data about experienced discrimination in different settings, these will be discrimination in the workplace and with job interviews; discrimination at schools; discrimination within sport and social associations and clubs; and different treatment in public settings. This research will be controlled for age, gender and religion. The research model will be explained further in the theoretical framework chapter, which is displayed in figure 1. The research question that I will look at is: "For participants with a non-Dutch background, are their feelings toward their own ethnic background related to their experience of discrimination in different settings?"

2. Theoretical framework



Figure 1: research model

In this paper I will look at the experiences people with an ethnic minority background have endured in terms of active discrimination, such as exclusion from jobs, associations and different treatment in schools or in public. The definition for attitude I use is the degree to which people feel connected to their own ethnic background; the pride they feel to belong to their ethnic background; and whether their ethnic background is an important part of their identity. I will discuss two opposing views, that both have empirical evidence in literature. I do this to give a complete overview of the different aspects of social identity and with this overview I can consider which side is better based on the literature and the analysis I did.

Complementary ethnic identification

Ethnicity can be an important aspect of one's identity, just as a group's identity, and it is even more important for ethnic minorities because it gives people a sense of belonging and togetherness. There are two key mechanisms that explain why this sense of belonging and togetherness might grow after being discriminated against. The first mechanism is ethnic affirmation, which refers to the fact that the minorities' already existing ethnic identity and beliefs will be affirmed and enhanced after being discriminated against (Verkuyten, 2007). These ethnic identity and beliefs in this case consists of the cultural norms and traditions, which have clear and consistent boundaries and give clear purpose for the people of this ethnic minority. In case of interaction with a group with a completely different set of cultural norms and traditions, one will feel strongly connected to their own beliefs and thus will feel more united with their own ethnic background. They compare the cultural norms and traditions and feel more confident and comfortable with their own set of beliefs (Verkuyten, 2007).

The second mechanism is disintegration, which means that one tries to integrate but gets discriminated against resulting in them feeling excluded and not being able to integrate, which again results in them going back to other people from their own ethnic background and staying there, which then results in the growth of their sense of togetherness in the group (Skrobanek, 2009). Within a company a person with an ethnic minority background will be drawn to other minorities, because they have experienced the same kind of discrimination (Kosny, 2017). Furthermore, in the school context children of minorities get discriminated against in a way that teachers do not give them the same attention as other children (Feagin, 1992). This results in these children seeking out help from people with the same ethnic background, because those people are willing to help, this again resulting in the growth of the sense of togetherness. Moreover, in sport clubs and social associations people from different backgrounds get linked together to enjoy a shared hobby (van Haften, 2019). But discrimination can still occur within these associations. The effect of discrimination on their attitude toward their own background is again that they are more drawn to people from their own background. They also tend to play less sports and not even try to join any

associations after they have already been discriminated against (van Haaften, 2019). In all of these settings people with an ethnic minority background have a feeling of exclusion, resulting in them disintegrating and staying with people of the same background and growing their sense of togetherness.

Based on the two mechanisms I discussed in this paragraph I formulate my first hypothesis: *if people from an ethnic minority background experience discrimination, then their attitude is stronger and they have a positive connection to their own ethnic background.*

Competitive ethnic identification

In this paragraph I will discuss two theories that support the idea that discrimination can result in the spitefulness or distance a person feels toward their own ethnic background. The first theory is the cognitive dissonance theory, which states that a person experiences a feeling of dissonance when cognitions do not conform to their held beliefs (Goldsmith et al., 2004). These cognitions or experiences of discrimination contradict the belief that everyone should be treated fairly (Ozier et al., 2019). In addition, it is hard for people to decide how to attribute the discrimination, because there are alternative cognitions at play, they do not know whether the discrimination is even based on their ethnicity. People want to believe it is not and that they get treated equally to the ethnic majority, but the discriminatory cognitions lead them to think otherwise (Ozier et al., 2019). This contradiction gives people a feeling of discomfort, which they want to shift into comfort. To change this, they change their attitude and their behavior to match these cognitions, because they cannot change what they experience. They might lower their standards of what they think fair treatment is, which results in thinking that they are worth less because of their ethnic background and feeling less pride toward their own ethnic background. The feeling of dissonance is compared to a feeling of guilt and specifically the type of guilt that you experience when you feel responsible for a certain situation (Kenworthy et al., 2011). In the case of discrimination, this means that a person feels guilty for the cognitive contradiction triggered by discrimination, they feel responsible for this and might blame

their ethnic background for being discriminated against and thus feel disconnected from their background.

A second theory that supports the claim that discrimination results in a person's spitefulness or distance toward their own ethnic background is the social identity theory. This theory states that everyone wants a positive social identity and to achieve this they seek comparison with the ethnic majority groups, which could be in the form of behaviors. A way to achieve a positive social identity with the ethnic majority group is for the ethnic minority groups to comply with the discrimination against ethnic minority groups in favor of the majority groups, even if it is against their own group (Perreault & Bourhis, 1998). The ethnic minority groups behave in ways to comply with the majority groups' norms to satisfy their own individual interests, which is getting a better social identity. This way the minority groups will turn away from their own ethnic background and comply with the majority group's norms and go along with their discrimination toward their own ethnic minority group.

Based on the theories I discussed in this paragraph I formulate my second hypothesis: *if people from an ethnic minority background experience discrimination, then they feel less connected and less proud toward their own ethnic background.*

Moderation effect

I chose to look at the differences in the effect between different ethnic minority groups, because the dataset that I used consisted of mainly Turkish and Moroccan migrants in the Netherlands it also had the category 'other', which consisted of people with other non-western backgrounds, like Antillean and Surinamese. The dataset made a distinction between these ethnic groups and it might be an interesting difference, because they have different cultures. They might have a different outlook on their connection to their own ethnic background and they have different experiences with discrimination in the first place. People with a non-western background have a more collectivistic culture than people with a western background, who have a more individualistic culture (Triandis,

1989). So Turkish, Moroccan, Surinamese and Antillean people have a more connected attitude toward their own ethnic background than Dutch people.

The people from the category “non-western”, like Antillean and Surinamese, are generally more familiar with the Dutch culture, because of the colonization history they have. Surinam and the Antilles were conquered by the Dutch in the Dutch Golden Ages, this was in the 17th century, they were colonized mainly for spice trade and slavery. Slavery was abolished in 1863 in Surinam and Surinam has been an independent country since 1975, but is still very familiar with the Dutch culture and the Antilles have been a part of the Kingdom of the Netherlands since 1954. This history went on for longer than the history Moroccans and Turks have with the Netherlands. The Moroccans and Turks started migrating at the end of the 20th century to find work and are less familiar with the Dutch culture (van de Vijver & Arends-Tóth, 2009). This familiarity could impact the way that their attitude toward their own ethnic background changes due to discrimination. Based on the ethnic hierarchy theory and cultural distance it is stated that people from a certain ethnicity like others more if they are from a similar ethnicity (Hagendoorn, 1995 & Verkuyten, 2000), this means that Dutch people like Surinamese and Antillean immigrant more than Turkish and Moroccan immigrants, because they are more similar in culture. If people are less liked they get discriminated against more (Verkuyten, 2000), so Turkish and Moroccan people get discriminated against more. However, due to the cognitive dissonance theory (Goldsmith et al., 2004), Surinamese and Antillean people do not expect to be discriminated against, but when it does happen, these cognitions go against their earlier beliefs and thus their attitude toward their own grows positively.

This is why I think ethnic background is a good moderator for the effect of discrimination on the attitudes people have on their own ethnic background. The hypothesis I set for the moderator is: *the effect of discrimination on attitude is more for Surinamese and Antillean people opposed to Turkish and Moroccan people.*

Control variables

For control variables I chose age, gender and religion. Firstly, I chose age, because I think generational differences might impact the attitude people have on their own ethnic background (Fox et al., 2021). Another reason why I used age as a control variable is that in the dataset that I used participants' age only varies between the ages 15 until 45. This means that the distribution of age is skewed, that way it might impact the main effect between discrimination and one's attitude toward their own ethnic background and that's why I want to control for it. Secondly, I chose gender as a control variable, because women and men also get discriminated against in other ways, women also experience gender discrimination. Furthermore it is expected of women to be more responsible for maintaining the ties they have to their network, which in this case is their ethnic background (van de Vijver & Arends-Tóth, 2009). This way it could impact the main effect and that's why I want to control for it. Lastly, I chose to control for religion, because within religions people have certain beliefs and certain traditions that impact the attitude one has toward their own ethnic background. In some religions people share a stronger collective solidarity than others, in which they feel a strong kinship to one another from their religion (Maliepaard et al., 2015).

The three hypotheses I worked out are: 1. *If people from an ethnic minority background experience discrimination, then their attitude is stronger and they have a positive connection to their own ethnic background.*; 2. *If people from an ethnic minority background experience discrimination, then their attitude is that they feel less connected and less proud toward their own ethnic background.*; and 3. *The effect of discrimination on attitude is more for Surinamese and Antillean people opposed to Turkish and Moroccan people.*

3. Methods

3.1 data

I used data from the NELLS survey dataset (De Graaf et al., 2010). The purpose of this study is to gain knowledge on three themes: social cohesion, norms and values, and inequality. This survey is done in the Netherlands in 35 municipalities in three waves each three years apart, with the first wave being done from December 2008 until May of 2010. The survey is done to give universities data to do more research in order to explain sociological problems. In collecting the data, a random sample of 35 municipalities was selected, stratified by region and degree of urbanization. The four largest cities in the Netherlands were added to these municipalities, because of the large proportions of ethnic minorities in the largest cities. Second, participants were randomly selected from the population registry based on their age (15–45), country of birth and parents' country of birth, note that the youngest participant was 14 and the oldest was 49. The survey questionnaire consists of face-to-face interviews and a self-completion questionnaire. The data also consists of constructed and administrative variables. The questions are structured and closed, this way it is easy to process the amount of data.

The response for the survey was about 50% for all ethnicities. 5312 respondents were interviewed, of which 2335 were minorities. The non-response was mainly to the survey being too long for some people, because it covers many subjects and it gets quite specific, so it takes some time to answer all the questions. Besides, it was more difficult to reach enough minorities that wanted to cooperate than Dutch people. There was a high full cooperation percentage of the people that were reached in the first place around 85%. The non-response for the variable attitude was 55.4%. The non-response for the variable discrimination is 55.5%. There is no non-response for the variables ethnicity, age and gender, because these variables are constructed or administrative variables. There is no non-response possible for those variables, because they consist of information that was already known before the survey. The non-response for religion is 0%, because I recoded the missing into the

category 'no religion', because the amount of missing data was the same amount of respondents that answered that they didn't follow a religion in question w1fa63.

For my paper I didn't make a different selection of the sample. I am interested in the different ethnicities and I don't make a distinction between different ages or different genders, I want to know the impact of discrimination on attitude for all ages and all genders, even though those variables can have an impact on the effects, so I control for them.

3.2 Operationalization

Attitude

The concept of the attitude toward their own ethnic background is covered in the self completion questionnaire as question G6. The question asked is 'can you say to the extent in which you agree with these statements? With ethnic background we mean the country in which you or one or both of your parents are born.' There were 4 statements about which people could answer five degrees to which they agreed to the statement, these were: 1. Very much agree; 2. Agree; 3. Neutral; 4. Disagree; or 5. Very much disagree. The statements were: a. I am proud of my ethnic background; b. I strongly identify with my ethnic background; c. I feel very connected to my ethnic background; and d. my ethnic background is an important part of me. In the database this question has the variable name w1scg6a until w1scg6d. '

For my paper I combined these items within this question about respondents' attitudes into one variable called 'attitude'. This is a scale variable based on the average scores of the items. I also mirrored the variable, because I wanted a higher score to mean that the respondent's attitude toward their own ethnic background is stronger and they feel more connected. The new scores are now on an interval basis and 1 means very much disagree and 5 means very much agree.

Discrimination

The concept of discrimination is covered in the self completion questionnaire as question G9. The question asked is 'have you experienced discrimination based on your ethnic background in any of these settings?'. Then there were 6 situations stated, about which the people could answer three

options: 1. No, never; 2. Yes, once or twice; or 3. Yes, many times. These 6 situations were: a. during a job interview; b. at work; c. at school, during class; d. on the street, in shops or in public transit; e. in an association, club or sport; and f. in the nightlife, in clubs. In the database this question has the variable name, w1scg9a until w1scg9f.

I combined these items within the question about discrimination into one variable called 'discrimination'. This is a scale variable based on the average scores of the items. The scores of this variable are now on an interval basis, but a higher score still means that a respondent has experienced more discrimination. A score of 1 still means that a respondent never experienced discrimination and 3 still means that a respondent experienced discrimination many times.

Ethnicity

For the ethnic background the variable w1cethnic is used in the database. The categories for this variable consist of 1. Moroccan first generation; 2. Moroccan second generation; 3. Turkish first generation; 4. Turkish second generation; 5. Non-Western first generation; 6. Non-Western second generation; 7. Western first generation; 8. Western second generation; and 9. Dutch origin.

For my paper I don't make a distinction between generational aspects in the analysis, so I changed the categories in this variable to 0. Moroccan; 1. Turkish; 2. Non-western; 3. Western; 4. Dutch. The non-western category consists mainly of Surinamese and Antillean people, which I refer to in my third hypothesis. I changed the variable name to 'ethnicity'. I made dummy variables for these answer categories, which means that those variables answer the question if a respondent has that ethnicity with a score of 1 or that the respondent does not belong to that ethnicity with a score of 0. If a respondent answers 0 on all the dummy variables, he has a Dutch ethnicity, this is the reference group.

Age

For age the variable w1cage is used. The ages vary from 14 to 49. This is a continuous variable. I changed the name of this variable to 'age'.

Gender

For gender the variable w1csex is used. The scores for this variable are 1. Man and 2. Woman. For my paper I only changed the name of the variable into 'gender'.

Religion

For religion I used the variables w1fa63 and w1fa64. For question w1fa63 respondents were asked whether they were religious, with score 1; or not, with score 2. With question w1fa64 respondents were asked what religion they belong to. This question was only asked to the people that answered yes to the question w1fa63. The scores are 1= roman catholic; 2= protestant formerly reformed; 3= protestant reformed; 4= protestant Lutherans; 5= other protestant; 6= Islam Suniti; 7= Islam Shiites; 8= other Islam; 9= Jewish; 10= Hinduism; 11= Buddhism.

For the new variable I made, I wanted to include the category 'no religion', which was not included in w1fa64. There are 2106 people without religion concluding from w1fa63. There are 2108 missing from w1fa64. These scores are about the same amount, so I set the system missing from w1fa64 to the category 'no religion' in the new variable 'religion'. Furthermore I changed the categories in the variable to 0= roman catholic; 1= protestant; 2= Islam; 3= Jewish; 4= Hinduism; 5= Buddhism; 6= other and 7= no religion. I made dummy variables for these answer categories, which means that those variables answer the question if a respondent belongs to that religion with a score of 1 or that the respondent does not belong to that religion with a score of 0. If a respondent answers 0 on all the dummy variables, he has no religion, this is the reference group.

Interaction

For my paper I have used ethnicity as a moderator for the main effect between discrimination and attitude, so I have also made an interaction variable between discrimination and ethnicity. Before I did this, I centered discrimination. This variable is called 'discriminationXethnicity'.

3.3 Analysis

In the first section of the result paragraph I discuss the descriptive statistics for each variable that I used for my analysis. Firstly discuss the univariate statistics in tables 1 through 4. In table 1 I put the

mean, mode and the range of the continuous variables and I put the frequencies for ethnicity in table 2 and for gender in table 3 and for religion in table 4. Secondly I discuss the bivariate statistics for the variables in table 5, to check to what degree the variables correlate with each other.

In the second section of the results I discuss the model evaluation, in which I check whether the complete model is a good enough model to predict to what degree respondents feel connected to their own ethnic background. To do so I first ran a hierarchical multiple linear regression in SPSS and then I looked at different model statistics, which are shown in table 6. For the hierarchical regression I first put the control variables, age, gender and the dummies for religion, in the model to look at those effects on attitude; secondly I added discrimination to the model; thirdly I added the moderator, the dummies for ethnicity; lastly I added the interaction variable.

In the third section of the results paragraph I test my hypothesis. For the first 2 hypotheses I check whether the effect of discrimination on attitude is 0 and whether that finding is significant, for this I look at model 4. For my last hypothesis I want to know if a person's ethnicity is a moderator for the effect of discrimination on attitude. I test this in the complete model by looking at the score of the interaction and the significance that comes with it, this is shown in model 4 in table 6.

4. Results

4.1 Descriptive statistics

Univariate descriptives

In table 1 I put descriptive statistics for attitude, discrimination and age. This table consists of the mean, the mode and the minimum and maximum scores. For discrimination I used the variable version before I centered it. The mean for discrimination is 2.88, this is quite low, this means that averagely speaking the respondents barely experience any discrimination, furthermore the mode for discrimination is 1, this means that this score is the most frequently answered by the respondents. This score means that they answered that they have never been discriminated against in any setting. In figure 2 I put the histogram for the distribution of the scores of attitude. You can see that this

variable is skewed to the left, meaning that most respondents scored more on the right side of the distribution and have a more positive attitude toward their own ethnic background. In figure 3 I put the histogram for discrimination, this distribution is skewed to the right, most respondents answered that they have barely experienced any discrimination. The distribution of age in figure 3 is quite random, all ages between 14 and 49 are represented.

Table 1: descriptive statistics for the continuous variables.

Variable	Mean	Mode	Minimum	Maximum
Attitude	13.27	17.00	1.00	17.00
Discrimination	2.88	1.00	1.00	13.00
Age	31.30	40.00	14.00	49.00

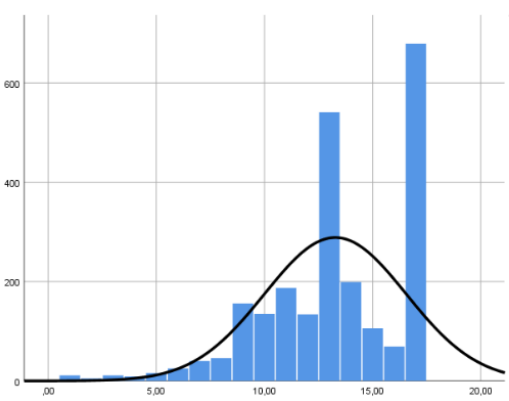


Figure 2: histogram for attitude.

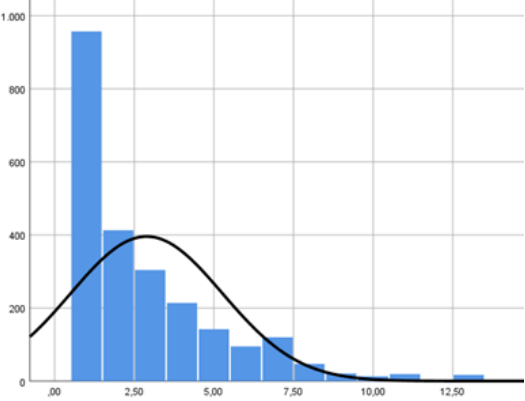


Figure 3: histogram for discrimination.

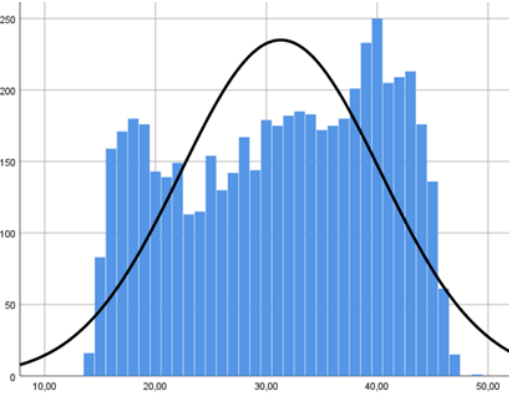


Figure 4: histogram for age.

I put the frequency distribution for the categorical variables in table 2, 3 and 4 before making dummies of them. In table 2 I put the frequencies for ethnicity. Most respondents are Dutch and there are also a lot of Moroccan and Turkish respondents, this is because the dataset consists of a representative sample of the Dutch population, which consists of many Dutch people and also many Moroccan and Turkish people. In table 2 I put the frequencies for gender, both male and female respondents are represented enough, women are represented a bit more than men. In table 4 I put the frequencies for religion. Most respondents are Muslims or do not believe in any religion, the other religions are fairly underrepresented.

Table 2: frequency table for ethnicity.

Categories	N
Moroccan	1164
Turkish	1137
Non-western	226
Western	229
Dutch	2556
Total	5312

Table 3: frequency table for gender.

Categories	N
Men	2508
Women	2804
Total	5312

Table 4: frequency table for religion.

Categories	N
Roman Catholic	490
Protestant	396
Islam	2150
Jewish	4
Hindu	17
Buddhist	12
Other	135
No religion	2108
Totaal	5312

Bivariate descriptives

In table 5 I put the measures of association between the variables with different measures of association, because each gives a more fitting measure. I chose Pearson correlation for the association between two continuous variables; ANOVA eta correlation for the association between a continuous and a categorical variable and Chi-squared Spearman correlation for the association between two categorical variables. I will only discuss the measures of the variables after deleting the missing values, because for my regression I also use these variables without missing values, so I can analyze the results better. The correlation between attitude and discrimination is 0.063, this is very low. The correlation between gender and discrimination is 0.220, which is quite high, this could be because women get discriminated against more than men. Furthermore ethnicity ($r=0.150$) and religion ($r=0.134$) correlate somewhat highly with discrimination, this is because people usually get discriminated against based on their ethnicity or religion. Ethnicity ($r=0.216$) and religion ($r=0.377$) have a high correlation with attitude, this means that these variables can predict attitude for a good part. Religion and ethnicity have a correlation of 0.234, which is quite high, this is because people from certain ethnicities generally have the same religion.

Table 5: correlations and other measures of association between the variables. In the lower triangle for the variables with missing measures and in the upper triangle without the missing measures with an N of 2335.

	attitude	discrimi -nation	ethnicity	age	gender	religion
attitude	•	0.063*	0.216**	0.049*	0.057*	0.377**
discrimination	0.063*	•	0.150**	0.012*	0.220*	0.134**
ethnicity	0.212**	0.152**	•	0.087**	0.019***	0.234***
age	0.050*	0.015*	0.074**	•	0.079*	0.074**
gender	0.061*	0.224*	0.006***	0.017*	•	0.047***
religion	0.380**	0.136**	0.297***	0.097**	0.058***	•

* Pearson correlation

** ANOVA eta correlation

*** Chi-squared spearman correlation

4.2 Model evaluation

Model

The hierarchical regression is presented in table 6. In model 1 I added only the control variables, in model 2 I added discrimination, in model 3 I added the dummies for ethnicity and in model 4 I added the interaction between ethnicity and discrimination.

In model 1 you can see the effect of the control variables on attitude. These variables can predict 14.5% of attitude. This amount is quite a lot for the concept of attitude, which could be predicted by many other factors. From model 1 you can deduce that women score higher on attitude than men ($b=0.309$). Similarly, all the dummy variables for religion have positive slopes, which means that when a respondent scores a 1 instead of a 0, their score on attitude goes up. This means that people with a religion have a more positive attitude toward their own ethnic background than people without a religion, which is used as the reference group. Furthermore most of these slopes are significant, except for the dummy whether a respondent is Jewish.

In model 2 the centered variable for discrimination was added to the control variables as a predictor. This model is only slightly better than the previous model. It only predicts 0.2% more ($R\text{-squared}= 0.147$). Furthermore the $F\text{-change}$ value is 3.719 and is not significant, which means there is

no significant evidence that this model is better than model 1. This suggests that discrimination has a small added value to predict attitude compared to the model with only the control variables. Besides discrimination has a small slope value of 0.053, which is also not significant, this means that the value of attitude only rises by 0.053 points, when discrimination rises with 1 and when all other variables stay constant.

In model 3 the dummy variables for ethnicity were added. This model can predict 0.3% more than model 2 ($R\text{-squared}=0.150$). The $F\text{-change}$ value is 2.367, which is low and it is also not significant, this means that there is no significant evidence that this model is better than the previous model. The dummy variables for ethnicity all have positive slopes, meaning that they all score higher on attitude than Dutch respondents, this is the reference group. Furthermore these slopes are all significant.

In model 4 the interaction was added, this is the complete model for the analysis. This model predicts 15.2% of attitude, which is quite high and it has an $F\text{-change}$ value of 4.803, which is significant, this means that there is significant evidence that this model is better than model 3. Notably the slope for discrimination became negative instead of positive after adding the interaction variable to the model, this means that the interaction does have an effect on the effect of discrimination on attitude, this will be discussed more in paragraph 4.3.

Table 6: results for a hierarchical regression with attitude toward own ethnic background as dependent variable; discrimination as independent variable; age, gender and religion as control variables; and ethnicity as moderator. (N=2335)

	Model 1		Model 2		Model 3		Model 4	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Constant	10.372*	0.343	10.220*	0.352	8.579*	0.738	8.466*	0.740
Age	-0.009	0.007	-0.009	0.007	-0.010	0.007	-0.010	0.007
Gender (0=man, 1=woman)	0.309*	0.127	0.364*	0.130	0.360*	0.130	0.350*	0.130
Catholic (0=no, 1=yes)	2.206*	0.379	2.220*	0.378	2.296*	0.389	2.312*	0.389
Protestant (0=no, 1=yes)	1.950*	0.568	1.973*	0.568	1.997*	0.570	2.018*	0.570
Islam (0=no, 1=yes)	3.346*	0.173	3.313*	0.174	3.234*	0.205	3.196*	0.205
Jewish (0=no, 1=yes)	1.574	1.527	1.636	1.526	1.760	1.529	1.742	1.528
Hindu (0=no, 1=yes)	3.035*	0.858	3.047*	0.857	2.920*	0.881	2.982*	0.880
Buddhist (0=no, 1=yes)	3.669*	1.761	3.686*	1.760	3.555*	1.770	3.600*	1.768
Other (0=no, 1=yes)	2.416*	0.425	2.397*	0.425	2.481*	0.426	2.390*	0.427
Discrimination			0.053	0.027	0.049	0.028	-0.003	0.037
Maroccan (0=no, 1=yes)					1.670*	0.684	1.938*	0.695
Turkish (0=no, 1=yes)					1.849*	0.681	1.989*	0.683
Non-western (0=no, 1=yes)					1.791*	0.703	1.821*	0.703
Western (0=no, 1=yes)					1.493*	0.697	1.547*	0.696
Discrimination*ethnicity							0.072*	0.033
<i>R-squared</i>	0.145		0.147		0.150		0.152	
<i>F-change</i>	43.939*		3.719		2.367		4.803*	

*significant with $p < 0.05$

Assumptions

The assumption of linearity is checked with the scatterplot in figure 5, you can tell from this graph that there is a linear effect, you can fit a line in the middle of the graph that goes from upper left to a little more down on the right side. This satisfies the assumption. The assumption of normality is checked with the histogram in figure 6, you can tell that the distribution looks quite normal. Most values follow the normal distribution line, except for 2 peaks around -0.5 and 1.0. This might be problematic for this assumption. The assumption for homoscedasticity is also checked with the

scatterplot in figure 5, the points all vary around the 0-line, the points are little more under the 0-line, but this is fine for the assumption.

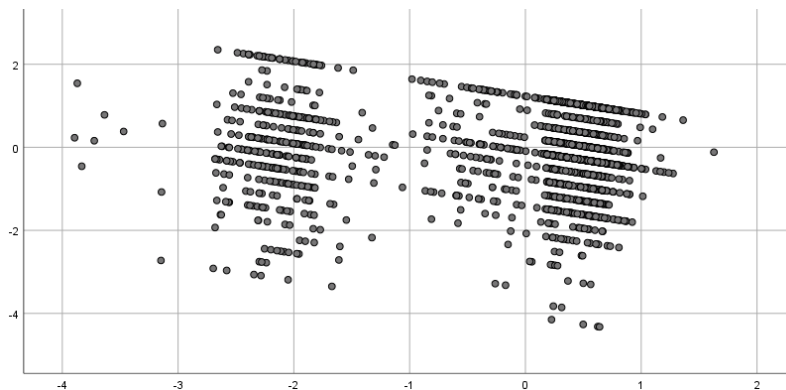


Figure 5: scatterplot of attitude with the predicted values on the x-axis and the residuals on the y-axis

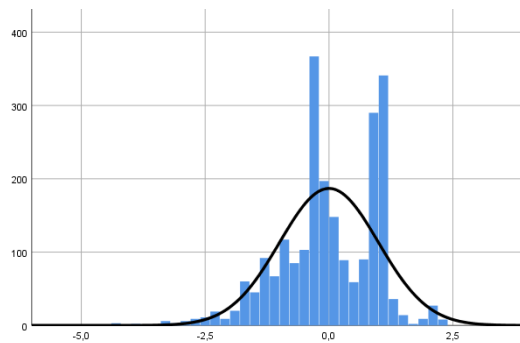


Figure 6: histogram for attitude

4.3 Hypothesis testing

Main hypotheses

The first hypotheses I set for this thesis are: if people from an ethnic minority background experience discrimination, then their attitude is stronger and they have a positive connection to their own ethnic background; and if people from an ethnic minority background experience discrimination, then their attitude is that they feel less connected and less proud toward their own ethnic background.

To check these hypotheses I look at the slope of discrimination in model 4 in table 6. This value is -0.003 and is not significant, which means this is no significant evidence for my hypotheses. Furthermore the effect of discrimination on attitude is very small and has changed in every model, it varies around 0, which means there is no effect. None of the slopes of discrimination in the models are significant, so there is no significant evidence for any of the hypotheses.

Moderator hypothesis

The third hypothesis I set for my thesis is about whether discrimination has a more positive effect on attitude for Surinamese and Antillean people opposed to Turkish and Moroccan people. To see how different the effects are for the different ethnicities I calculate the different slopes for discrimination, while controlling for the other variables.

To look at the different equations for the different ethnicities I set the dummies to 0, meaning I check for the effects for the reference groups, these are the male respondents that do not believe in any religion. Similarly I set the other variables to a constant of their mean values, so these respondents with the age 31.3. This made the equations as follows:

1. For ethnicity=0 (Moroccan): $8.466 - 0.010*31.30 - 0.003*Discrimination + 1.938 + 0.072*(discrimination*ethnicity) = 10.091 - 0.003*Discrimination$
2. For ethnicity=1 (Turkish): $8.466 - 0.010*31.30 - 0.003*Discrimination + 1.989 + 0.072*(discrimination*ethnicity) = 10.142 + 0.069*Discrimination$
3. For ethnicity=2 (non-western): $8.466 - 0.010*31.30 - 0.003*Discrimination + 1.821 + 0.071*(discrimination*ethnicity) = 9.974 + 0.139*Discrimination$
4. For ethnicity=3 (western): $8.466 - 0.010*31.30 - 0.003*Discrimination + 1.547 + 0.072*(discrimination*ethnicity) = 9.7 + 0.213*Discrimination$
5. For ethnicity=4 (Dutch): $8.466 - 0.010*31.30 - 0.003*Discrimination + 0.072*(discrimination*ethnicity) = 8.153 + 0.288*Discrimination$

These equations are displayed in figure 7 where the effect of discrimination on attitude for Moroccans is the black line, the effect for Turks is the green line, the effect for other non-western people is the blue line, the effect for western people is the red line, and the effect for Dutch people is the yellow line. You can see that the red and yellow lines have the steepest slopes, so Dutch and other western people have the strongest positive effect of discrimination on attitude. Furthermore there is not much of a distinction between Moroccan and Turkish versus Surinamese and Antillean.

From this figure I can still conclude that the slopes are all different, so the effect of discrimination on attitude does indeed differ per ethnicity. From model 4 in table 6 you can see that the interaction score is significant, which means that there is significant evidence for the moderator having an effect on the effect of discrimination on attitude, or in other words it is significant evidence for the hypothesis. But it should be noted that even though the slopes of discrimination differ, the effect of discrimination itself is not significant.

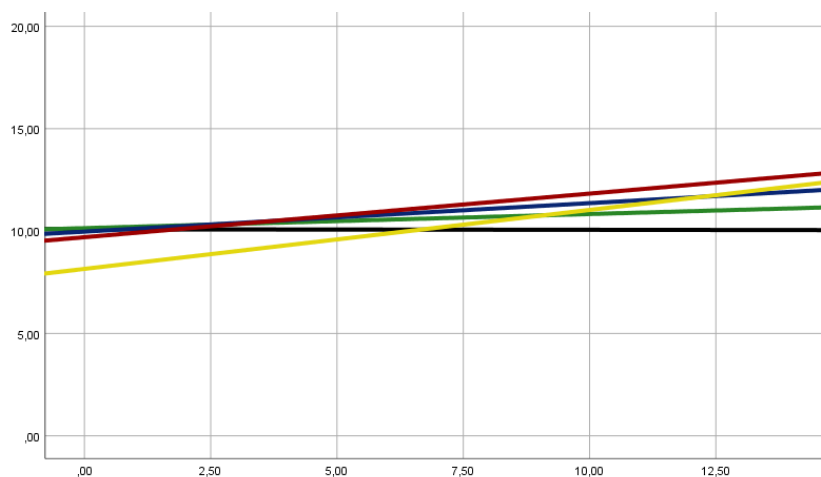


Figure 7: equation lines for every separate ethnicity with attitude on the y-axis and discrimination on the x-axis

5. Conclusion and discussion

In this paper, the research question aimed to investigate the relationship between participants with a non-Dutch background and their feelings toward their own ethnic background in relation to their experiences of discrimination, but also compared to people with a Dutch background. Three hypotheses were formulated to look at these effects. The first hypothesis suggested that individuals from an ethnic minority background who experience discrimination would exhibit a stronger positive connection to their own ethnic background. The second hypothesis stated that individuals from an ethnic minority background who face discrimination would feel less connected and less proud of their own ethnic background. The third hypothesis stated that the effect of discrimination on attitude would be more positive for Surinamese and Antillean participants compared to Turkish and Moroccan participants.

After analyzing the results, it was found that the first two hypotheses did not have significant effects and also very small effects. This implies that experiencing discrimination did not lead to stronger positive attitudes or decreased attitude toward their own ethnic background. The case could be that both hypotheses are true and cancel each other out, thus making it seem that the effect is close to 0.00. However, for all ethnic groups, except Moroccan, the effect is positive, even though the overall effect of discrimination seems negative in table 6, but this is only true for one ethnic group.

However, the results did reveal a significant effect for the third hypothesis, indicating that the relationship between discrimination and attitude differed between the different ethnicities that were represented in this research. From the research it can be concluded that Surinamese and Antillean people feel more connected to and feel more pride for their own ethnic background as an effect of being discriminated against. Further analysis of this effect could be conducted to better understand the deeper factors that could predict the attitude that one has toward their own ethnic background.

These findings contribute to the growing body of research on the relationship between ethnic background, experiences of discrimination, and attitudes toward their own ethnic background. It highlights the complexity and nuance involved in understanding the impact of discrimination on individuals with a non-Dutch background in the Netherlands. For future research the individual effects of discrimination on attitude for each ethnicity separately could be examined.

However there are a few notable limitations to this research. The average level of discrimination is low, because the dataset mainly consists of Dutch people, who do not get discriminated against as much as ethnic minorities, this could have impacted the analysis I did. In future research the Dutch respondents could be excluded from the dataset. Secondly the respondents already had a positive attitude toward their own ethnic background to begin with, this could also have impacted my analysis. Moreover on average, the respondents already did not experience a high level of discrimination, this could have impacted the analysis together with the high overall score on attitude. The research could be done again, but this time for every ethnicity

separately to check for the different levels of discrimination and attitude and other control variables could be chosen. Lastly discrimination might have a different effect on attitude per generation, because the dataset made a distinction between two generations per ethnicity. This might be interesting to look at in upcoming research, because later generation immigrants are usually more integrated and definitely have a different outlook on culture (Remennick, 2012).

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Appendix 1

Attitude

The variables that I use for attitude are w1scg6a, w1scg6b, w1scg6c and w1scg6d. These questions each consists of an aspect that gives an answer to the question whether a respondent agrees to statements about how they feel toward their own ethnic background. The answer option vary from 1= very much agree to 5= very much disagree. In table 5 you can see that the means of these variables are all around the score of 2, which means that the average score is that people agree to the statements about their attitude. In tables 1, 2, 3 and 4 you can see that most answer indeed vary between very much agree, agree and neutral. For my paper I computed a different variable out of these four variables named 'attitude'. I also mirrored this variable in the way that a higher score means a more positive attitude toward their own ethnic background. In table 6 you can see the frequencies within the new variable attitude. You can see now that the higher scores are more frequently answered. In table 7 you can see the descriptive statistics for attitude, the mean score is 4.07.

```
FREQUENCIES VARIABLES=w1scg6a w1scg6b w1scg6c w1scg6d
/NTILES=4
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MODE
/ORDER=ANALYSIS.
```

```
COMPUTE attitude=(w1scg6a + w1scg6b + w1scg6c + w1scg6d).
EXECUTE.
```

```
COMPUTE attitude1=21 - attitude.
EXECUTE.
```

```
FREQUENCIES VARIABLES=attitude1
/NTILES=4
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MODE
/ORDER=ANALYSIS.
```

```
GRAPH
/HISTOGRAM(NORMAL)=attitude1.
```

Table 1: the frequency table for w1scg6a.

ik ben trots op mijn etnische achtergrond

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	zeer mee eens	1221	23,0	50,9	50,9
	mee eens	880	16,6	36,7	87,6
	neutraal	251	4,7	10,5	98,1
	mee oneens	33	,6	1,4	99,5
	zeer mee oneens	13	,2	,5	100,0
	Total	2398	45,1	100,0	
Missing	System	2914	54,9		
Total		5312	100,0		

Table 2: the frequency table for w1scg6b.

ik identificeer me sterk met mijn etnische groep

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	zeer mee eens	796	15,0	33,3	33,3
	mee eens	903	17,0	37,8	71,0
	neutraal	516	9,7	21,6	92,6
	mee oneens	133	2,5	5,6	98,2
	zeer mee oneens	44	,8	1,8	100,0
	Total	2392	45,0	100,0	
Missing	System	2920	55,0		
Total		5312	100,0		

Table 3: the frequency table for w1scg6c.

ik voel me echt verbonden met mijn etnische groep

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	zeer mee eens	777	14,6	32,5	32,5
	mee eens	867	16,3	36,3	68,8
	neutraal	553	10,4	23,1	91,9
	mee oneens	139	2,6	5,8	97,7
	zeer mee oneens	55	1,0	2,3	100,0
	Total	2391	45,0	100,0	
Missing	System	2921	55,0		
Total		5312	100,0		

Table 4: the frequency table for w1scg6d.

mijn etnische identiteit is een belangrijk deel van mezelf

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	zeer mee eens	869	16,4	36,5	36,5
	mee eens	960	18,1	40,3	76,8
	neutraal	417	7,9	17,5	94,4
	mee oneens	94	1,8	3,9	98,3
	zeer mee oneens	40	,8	1,7	100,0
	Total	2380	44,8	100,0	
Missing	System	2932	55,2		
Total		5312	100,0		

Table 5: the descriptives table for the variables.

Statistics

		ik ben trots op mijn etnische achtergrond	ik identificeer me sterk met mijn etnische groep	ik voel me echt verbonden met mijn etnische groep	mijn etnische identiteit is een belangrijk deel van mezelf
N	Valid	2398	2392	2391	2380
	Missing	2914	2920	2921	2932
Mean		1,64	2,05	2,09	1,94
Mode		1	2	2	2
Std. Deviation		,767	,967	,994	,920
Minimum		1	1	1	1
Maximum		5	5	5	5
Percentiles	25	1,00	1,00	1,00	1,00
	50	1,00	2,00	2,00	2,00
	75	2,00	3,00	3,00	2,00

Table 6: frequency table for attitude.

the attitude a person feels toward their own ethnic background

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	11	,2	,5	,5
	2,00	5	,1	,2	,7
	3,00	11	,2	,5	1,1
	4,00	9	,2	,4	1,5
	5,00	16	,3	,7	2,2
	6,00	25	,5	1,1	3,3
	7,00	40	,8	1,7	4,9
	8,00	46	,9	1,9	6,9
	9,00	156	2,9	6,6	13,5
	10,00	135	2,5	5,7	19,2
	11,00	187	3,5	7,9	27,1
	12,00	134	2,5	5,7	32,7
	13,00	541	10,2	22,8	55,6
	14,00	199	3,7	8,4	64,0
	15,00	106	2,0	4,5	68,4
	16,00	69	1,3	2,9	71,3
	17,00	679	12,8	28,7	100,0
	Total	2369	44,6	100,0	
Missing	System	2943	55,4		
Total		5312	100,0		

Table 7: the attitude a person feels toward their own ethnic background

N	Valid	2369
	Missing	2943
Mean		13,2727
Median		13,0000
Mode		17,00
Std. Deviation		3,27394
Minimum		1,00
Maximum		17,00
Percentiles	25	11,0000
	50	13,0000
	75	17,0000

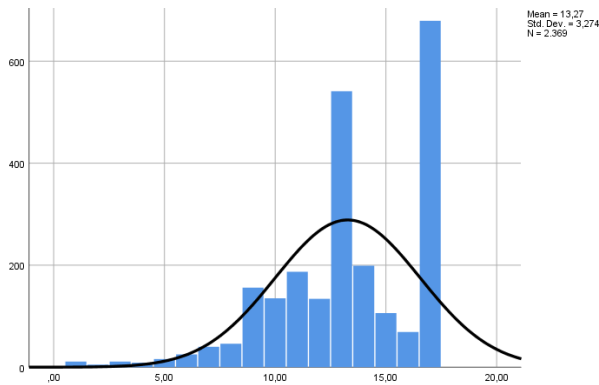


Figure 1: histogram for attitude.

Discrimination

The variables I use for discrimination are w1sc9a, w1scg9b, w1scg9c, w1scg9d, w1scg9e and w1scg9f.

These items each describe a different setting in which a person can be discriminated. These questions have three answer options with 1= never being discriminated against and 2= being discriminated against on occasion and 3= being discriminated against a lot. In table 14 you can see the mean for all item is between 1 and 2, so the most respondent have experienced little to no discrimination in any of the settings. For my paper I want to combine these items into one variable. In this new variable, named discrimination, a score of 1= no, never and 2= yes, sometimes and 3= yes, often. In table 15 and 16 you can see the frequencies for the variable discrimination and the descriptive statistics for discrimination. The mean for discrimination is 1.31.

```
FREQUENCIES VARIABLES=w1scg9a w1scg9b w1scg9c w1scg9d w1scg9e w1scg9f
/NTILES=4
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MODE
/ORDER=ANALYSIS.
```

```
COMPUTE discrimination=(w1scg9a + w1scg9c + w1scg9d + w1scg9b + w1scg9e + w1scg9f).
EXECUTE.
```

```
FREQUENCIES VARIABLES=discrimination
/NTILES=4
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MODE
/ORDER=ANALYSIS.
```

GRAPH

/HISTOGRAM(NORMAL)=discrimination.

Table 8: frequency table for w1scg9a.

discriminatie: bij het solliciteren naar een baan of stageplek

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	nee, nooit	1649	31,0	69,0	69,0
	ja, een enkele keer	588	11,1	24,6	93,6
	ja, redelijk vaak	152	2,9	6,4	100,0
	Total	2389	45,0	100,0	
Missing	System	2923	55,0		
Total		5312	100,0		

Table 9: frequency table for w1scg9b.

discriminatie: op uw werk

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	nee, nooit	1760	33,1	73,8	73,8
	ja, een enkele keer	508	9,6	21,3	95,1
	ja, redelijk vaak	116	2,2	4,9	100,0
	Total	2384	44,9	100,0	
Missing	System	2928	55,1		
Total		5312	100,0		

Table 10: frequency table for w1scg9c.

discriminatie: op school, in de les

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	nee, nooit	1826	34,4	76,5	76,5
	ja, een enkele keer	483	9,1	20,2	96,7
	ja, redelijk vaak	78	1,5	3,3	100,0
	Total	2387	44,9	100,0	
Missing	System	2925	55,1		
Total		5312	100,0		

Table 11: frequency table for w1scg9d.

discriminatie: op straat, in winkels, in het openbaar vervoer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	nee, nooit	1427	26,9	59,5	59,5
	ja, een enkele keer	830	15,6	34,6	94,1
	ja, redelijk vaak	141	2,7	5,9	100,0
	Total	2398	45,1	100,0	
Missing	System	2914	54,9		
Total		5312	100,0		

Table 12: frequency table for w1scg9e.

discriminatie: op vereniging, club, sporten

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	nee, nooit	2058	38,7	86,3	86,3
	ja, een enkele keer	274	5,2	11,5	97,8
	ja, redelijk vaak	52	1,0	2,2	100,0
	Total	2384	44,9	100,0	
Missing	System	2928	55,1		
Total		5312	100,0		

Table 13: frequency table for w1scg9f.

discriminatie: op vereniging, club, sporten

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	nee, nooit	2058	38,7	86,3	86,3
	ja, een enkele keer	274	5,2	11,5	97,8
	ja, redelijk vaak	52	1,0	2,2	100,0
	Total	2384	44,9	100,0	
Missing	System	2928	55,1		
Total		5312	100,0		

Table 14: descriptive statistics for discrimination.

		Statistics					
		discriminatie: bij het solliciteren naar een baan of stageplek	discriminatie: op uw werk	discriminatie: op school, in de les	discriminatie: op straat, in winkels, in het openbaar vervoer	discriminatie: op vereniging, club, sporten	discriminatie: bij uitgaansgelegen- heden, discotheken, clubs etc.
N	Valid	2389	2384	2387	2398	2384	2378
	Missing	2923	2928	2925	2914	2928	2934
Mean		1,37	1,31	1,27	1,46	1,16	1,32
Mode		1	1	1	1	1	1
Std. Deviation		,601	,558	,511	,605	,421	,598
Minimum		1	1	1	1	1	1
Maximum		3	3	3	3	3	3
Percentiles	25	1,00	1,00	1,00	1,00	1,00	1,00
	50	1,00	1,00	1,00	1,00	1,00	1,00
	75	2,00	2,00	1,00	2,00	1,00	1,00

Table 15: frequency table for discrimination.

the amount of discrimination a person has experienced

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	957	18,0	40,5	40,5
	2,00	413	7,8	17,5	58,0
	3,00	304	5,7	12,9	70,8
	4,00	214	4,0	9,1	79,9
	5,00	142	2,7	6,0	85,9
	6,00	95	1,8	4,0	89,9
	7,00	120	2,3	5,1	95,0
	8,00	47	,9	2,0	97,0
	9,00	21	,4	,9	97,8
	10,00	13	,2	,5	98,4
	11,00	19	,4	,8	99,2
	12,00	2	,0	,1	99,3
	13,00	17	,3	,7	100,0
	Total		2364	44,5	100,0
Missing	System	2948	55,5		
Total		5312	100,0		

Table 16: descriptive statistics for discrimination.

Statistics

the amount of discrimination a person has experienced

N	Valid	2364
	Missing	2948
Mean		2,8849
Mode		1,00
Std. Deviation		2,38246
Minimum		1,00
Maximum		13,00
Percentiles	25	1,0000
	50	2,0000
	75	4,0000

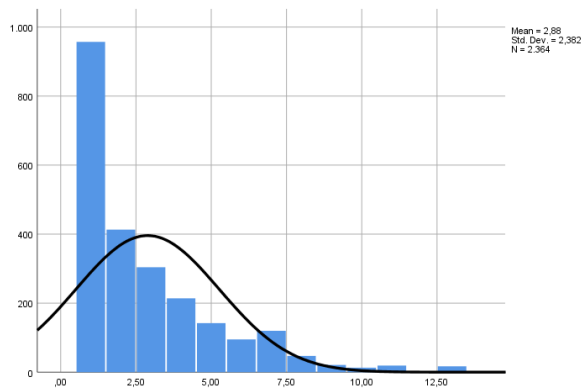


Figure 2: histogram for discrimination.

Ethnicity

For ethnicity I use variable w1cethnic. The scores for this variable are 1= Moroccan first generation; 2= Moroccan second generation; 3= Turkish first generation; 4= Turkish second generation; 5= non western first generation; 6= non western second generation; 7=western first generation; 8= western second generation; 9= Dutch. For the frequencies and descriptives in table 17 and 18. For my paper I make a distinction between Moroccan, Turkish, western, non-western and Dutch, and not between generations so I combined the categories in a way that 0= Moroccan; 1= turkish; 2= non-western; 3= western; and 4= dutch. the frequencies and descriptives for this can be found in tables 19 and 20. In table 20 you can see that the mode is 4, which means that the most people in this dataset are Dutch

and after that Moroccan and Turkish people are the most represented in the dataset, western and non-western are barely represented.

```
FREQUENCIES VARIABLES=w1cethnic
  /NTILES=4
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MODE
  /ORDER=ANALYSIS.
```

```
RECODE w1cethnic (9=4) (1 thru 2=0) (3 thru 4=1) (5 thru 6=2) (7 thru 8=3) INTO ethnicity.
EXECUTE.
```

```
FREQUENCIES VARIABLES=ethnicity
  /NTILES=4
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MODE
  /ORDER=ANALYSIS.
```

Table 17: the frequency table for ethnicity.

**Ethnicity (by self-reported countries of birth, definition Statistics
Netherland**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Moroccan, 1st gen	740	13,9	13,9	13,9
	Moroccan, 2nd gen	424	8,0	8,0	21,9
	Turkish, 1st gen	736	13,9	13,9	35,8
	Turkish, 2nd gen	401	7,5	7,5	43,3
	Non West, 1st gen	147	2,8	2,8	46,1
	Non West, 2nd gen	79	1,5	1,5	47,6
	West, 1st gen	93	1,8	1,8	49,3
	West, 2nd gen	136	2,6	2,6	51,9
	Dutch	2556	48,1	48,1	100,0
	Total	5312	100,0	100,0	

Table 18: descriptive statistics for ethnicity.

Statistics

Ethnicity (by self-reported countries of birth, definition Statistics Netherland

N	Valid	5312
	Missing	0
Mean		5,90
Mode		9
Std. Deviation		3,283
Minimum		1
Maximum		9
Percentiles	25	3,00
	50	8,00
	75	9,00

Table 19: frequency table for ethnicity.

		ethnicity			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	moroccan	1164	21,9	21,9	21,9
	turkish	1137	21,4	21,4	43,3
	non-western	226	4,3	4,3	47,6
	western	229	4,3	4,3	51,9
	dutch	2556	48,1	48,1	100,0
	Total	5312	100,0	100,0	

Table 20: descriptive statistics for ethnicity.

Statistics

ethnicity

N	Valid	5312
	Missing	0
Mean		2,3532
Mode		4,00
Std. Deviation		1,71295
Minimum		,00
Maximum		4,00
Percentiles	25	1,0000
	50	3,0000
	75	4,0000

I made dummy variables for ethnicity, this is the syntax:

```
RECODE ethnicity (0=1) (ELSE=0) INTO ethnic_moroccan.  
VARIABLE LABELS ethnic_moroccan 'wheter the respondent is moroccan'.  
EXECUTE.
```

```
RECODE ethnicity (1=1) (ELSE=0) INTO ethnic_turkish.  
VARIABLE LABELS ethnic_turkish 'whether respondent is turkish'.  
EXECUTE.
```

```
RECODE ethnicity (2=1) (ELSE=0) INTO ethnic_non_western.  
VARIABLE LABELS ethnic_non_western 'whether respondent is non-western'.  
EXECUTE.
```

```
RECODE ethnicity (3=1) (ELSE=0) INTO ethnic_western.  
VARIABLE LABELS ethnic_western 'whether respondent is western'.  
EXECUTE.
```

Age

To check for age I used the variable w1cage. The scores of this variable vary between 14 and 49.

Table 21 shows the descriptive statistics for this variable and figure 1 shows the histogram for this variable. You can see that age is quite evenly distributed, all ages are represented, except the age 49, which is only represented once in the dataset. For my paper I only want to change the name of this variable to 'age'. The syntax for this is:

```
FREQUENCIES VARIABLES=w1cage  
/FORMAT=NOTABLE  
/NTILES=4  
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE  
/HISTOGRAM  
/ORDER=ANALYSIS.
```

```
COMPUTE age=w1cage.  
EXECUTE
```

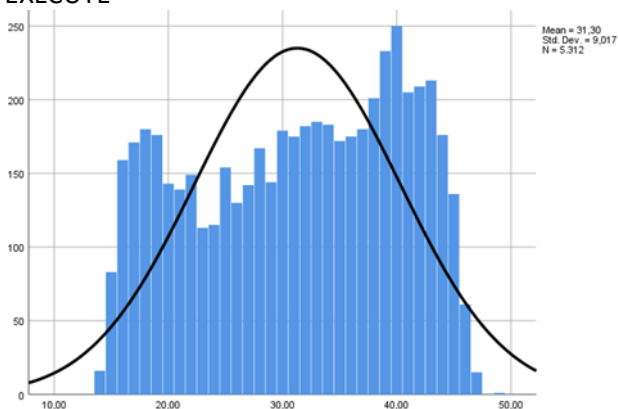


Figure 3: histogram for w1cage

Table 21: descriptive statistics for w1cage.

Statistics		
age at time of interview		
N	Valid	5312
	Missing	0
Mean		31,30
Median		32,00
Mode		40
Std. Deviation		9,017
Minimum		14
Maximum		49
Percentiles	25	23,00
	50	32,00
	75	39,00

Gender

For gender I use the variable w1csex. The scores for this variable are 1= man and 2= woman. From table 22 and 23 you can see that both men and woman are fairly represented, woman a little more than men. For this variable I want to change the name to gender, this way the distribution is still the same. The syntax is:

```
FREQUENCIES VARIABLES=w1csex
  /NTILES=4
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MODE
  /ORDER=ANALYSIS.
COMPUTE gender=w1csex.
EXECUTE.
```

Table 22: frequency table for w1csex.

		sample geslacht rp			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	man	2508	47,2	47,2	47,2
	vrouw	2804	52,8	52,8	100,0
	Total	5312	100,0	100,0	

Table 23: descriptive statistics for w1csex.

Statistics		
sample geschlacht rp		
N	Valid	5312
	Missing	0
Mean		1,53
Mode		2
Std. Deviation		,499
Minimum		1
Maximum		2
Percentiles	25	1,00
	50	2,00
	75	2,00

Religion

For religion I used the variables w1fa63 and w1fa64. The frequency tables of these variables are table 24 and 25. In table 26 you can see the descriptive statistics for these variables. For question w1fa63 respondents were asked whether they were religious, with score 1 or not, with score 2. With question w1fa64 respondents were asked to what religion they belong. This question was only asked to the people that answered yes to the question w1fa63. The scores are 1= roman catholic; 2= protestant formerly reformed; 3= protestant reformed; 4= protestant Lutherans; 5= other protestant; 6= Islam Suniti; 7= Islam Shiites; 8= other Islam; 9= Jewish; 10= Hinduism; 11= Buddhism. For the new variable I made, I wanted to include the category 'no religion', which was not included in w1fa64. There are 2106 people without religion concluding from w1fa63. There are 2108 missing from w1fa64. These scores are about the same amount, so I set the system missing from w1fa64 to the category 'no religion' in the new variable 'religion'. Furthermore I changed the categories in the variable to 0= roman catholic; 1= protestant; 2= Islam; 3= Jewish; 4= Hinduism; 5= Buddhism; 6= other and 7= no religion. By doing this the frequency table and descriptives for the variable changes, these are presented in table 27 and 28. You can see from table 27 that most people in the dataset belong to the islam.

FREQUENCIES VARIABLES=w1fa63 w1fa64

```

/NTILES=4
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MODE
/ORDER=ANALYSIS.

```

RECODE w1fa64 (1=0) (9=3) (10=4) (11=5) (2 thru 5=1) (6 thru 8=2) (12 thru 31=6) INTO religion.
EXECUTE.

RECODE religion (SYSMIS=7).
EXECUTE.

```

FREQUENCIES VARIABLES=religion
/NTILES=4

```

```

/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE
/ORDER=ANALYSIS.

```

Table 24: frequency table for w1fa63.

we willen nu een paar vragen stellen over godsdienst en politiek.

reket u zichz

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ja	3205	60,3	60,3	60,3
	nee	2106	39,6	39,7	100,0
	Total	5311	100,0	100,0	
Missing	System	1	,0		
Total		5312	100,0		

Table 25: frequency table for w1fa64.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	rooms katholiek	490	9,2	15,3	15,3
	protestantse kerk nederland (voorheen hervormd)	198	3,7	6,2	21,5
	protestantse kerk nederland (voorheen gereformeerd)	125	2,4	3,9	25,4
	protestantse kerk nederland (voorheen luthers)	6	,1	,2	25,6
	overig protestant	67	1,3	2,1	27,7
	islam sunitisch	1138	21,4	35,5	63,2
	islam shiitisch	62	1,2	1,9	65,1
	islam overig	950	17,9	29,7	94,8
	jodendom	4	,1	,1	94,9
	hindoeïsme	17	,3	,5	95,4
	boeddhisme	12	,2	,4	95,8
	anders, nl.	135	2,5	4,2	100,0
	Total	3204	60,3	100,0	
	Missing	System	2108	39,7	
Total		5312	100,0		

Table 26: descriptive statistic for religion.

		Statistics	
		we willen nu een paar vragen stellen over godsdienst en politiek. rekent u zichzelf	welke godsdienst is dat?
N	Valid	5311	3204
	Missing	1	2108
Mean		1,40	6,51
Mode		1	6
Std. Deviation		,489	5,532
Minimum		1	1
Maximum		2	30
Percentiles	25	1,00	3,00
	50	1,00	6,00
	75	2,00	8,00

Table 27: frequency table for religion.

		religion			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	roman catholic	490	9,2	9,2	9,2
	protestant	396	7,5	7,5	16,7
	islam	2150	40,5	40,5	57,2
	jewish	4	,1	,1	57,2
	hinduism	17	,3	,3	57,5
	buddhism	12	,2	,2	57,8
	other	135	2,5	2,5	60,3
	no religion	2108	39,7	39,7	100,0
	Total	5312	100,0	100,0	

Table 28: descriptive statistics for religion.

Statistics		
religion		
N	Valid	5312
	Missing	0
Mean		3,8407
Median		2,0000
Mode		2,00
Std. Deviation		2,72361
Minimum		,00
Maximum		7,00
Percentiles	25	2,0000
	50	2,0000
	75	7,0000

For religion i made dummy variables, this is the syntax:

```
RECODE religion (0=1) (ELSE=0) INTO religion_catholic.
VARIABLE LABELS religion_catholic 'whether respondent is catholic'.
EXECUTE.
```

```
RECODE religion (1=1) (ELSE=0) INTO religion_protestant.
VARIABLE LABELS religion_protestant 'whether respondent is protestant'.
EXECUTE.
```

```
RECODE religion (2=1) (ELSE=0) INTO religion_islam.
VARIABLE LABELS religion_islam 'whether respondent is islam'.
EXECUTE.
```

```
RECODE religion (3=1) (ELSE=0) INTO religion_jewish.
```

```
VARIABLE LABELS religion_jewish 'whether respondent is jewish'.  
EXECUTE.
```

```
RECODE religion (4=1) (ELSE=0) INTO religion_hindu.  
VARIABLE LABELS religion_hindu 'whether respondent is hindu'.  
EXECUTE.
```

```
RECODE religion (5=1) (ELSE=0) INTO religion_buddhism.  
VARIABLE LABELS religion_buddhism 'whether respondent is buddhist'.  
EXECUTE.
```

```
RECODE religion (6=1) (ELSE=0) INTO religion_other.  
VARIABLE LABELS religion_other 'whether respondent has another religion'.  
EXECUTE.
```

Interaction

```
COMPUTE discrimination_c=discrimination - 1.3142.  
EXECUTE.
```

```
COMPUTE discriminationXethnicity=discrimination_c * ethnicity.  
EXECUTE.
```


Appendix 2

Bivariate analyses

In table 5 I put the measures of association between the variables with different measures of association, because each gives a more fitting measure. I chose Pearson correlation for the association between two continuous variables; ANOVA eta correlation for the association between a continuous and a categorical variable ;and Chi-squared Spearman correlation for the association between two categorical variables. I will only discuss the measures of the variables after deleting the missing values, because for my regression I also use these variables without missing values, so I can analyze the results better. The correlation between attitude and discrimination is 0.063, this is very low. The correlation between gender and discrimination is 0.220, which is quite high, this could be because women get discriminated against more than men. Furthermore ethnicity ($r=0.150$) and religion ($r=0.134$) correlate somewhat highly with discrimination, this is because people usually get discriminated against based on their ethnicity or religion. Ethnicity ($r=0.216$) and religion ($r=0.377$) have a high correlation with attitude, this means that these variables can predict attitude for a good part. Religion and ethnicity have a correlation of 0.234, which is quite high, this is because people from certain ethnicities generally have the same religion.

CORRELATIONS

```
/VARIABLES=attitude1 discrimination age gender  
/PRINT=TWOTAIL NOSIG  
/MISSING=PAIRWISE.
```

CROSSTABS

```
/TABLES=ethnicity BY gender  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ CORR  
/CELLS=COUNT  
/COUNT ROUND CELL.
```

CROSSTABS

```
/TABLES=ethnicity BY religion  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ CORR  
/CELLS=COUNT  
/COUNT ROUND CELL.
```

CROSSTABS

```
/TABLES=gender BY religion  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ CORR  
/CELLS=COUNT  
/COUNT ROUND CELL.
```

MEANS TABLES=attitude1 discrimination age BY religion ethnicity

```
/CELLS=MEAN COUNT STDDEV  
/STATISTICS ANOVA.
```

REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT attitude1  
/METHOD=ENTER ethnic_moroccan ethnic_turkish ethnic_non_western ethnic_western age  
gender  
religion_catholic religion_protestant religion_islam religion_jewish religion_hindu  
religion_buddhism religion_other discrimination_c discriminationXethnicity  
/SAVE RESID.
```

```
RECODE RES_1 (SYSMIS=0) (ELSE=1) INTO obs.  
EXECUTE.
```

USE ALL.

```
COMPUTE filter_$=(obs = 1).  
VARIABLE LABELS filter_$ 'obs = 1 (FILTER)'.  
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.  
FORMATS filter_$ (f1.0).  
FILTER BY filter_$.  
EXECUTE.
```

CORRELATIONS

```
/VARIABLES=attitude1 discrimination age gender  
/PRINT=TWOTAIL NOSIG  
/MISSING=PAIRWISE.
```

CROSSTABS

```
/TABLES=ethnicity BY gender  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ CORR  
/CELLS=COUNT  
/COUNT ROUND CELL.
```

CROSSTABS

```
/TABLES=ethnicity BY religion  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ CORR  
/CELLS=COUNT
```

/COUNT ROUND CELL.

CROSSTABS

/TABLES=gender BY religion

/FORMAT=AVALUE TABLES

/STATISTICS=CHISQ CORR

/CELLS=COUNT

/COUNT ROUND CELL.

MEANS TABLES=attitude1 discrimination age BY religion ethnicity

/CELLS=MEAN COUNT STDDEV

/STATISTICS ANOVA.

Table 1: correlation and measures of association between the variables.

	ATTITUDE	DISCRIMI -NATION	ETHNICITY	AGE	GENDER	RELIGION
ATTITUDE	•	0.063*	0.216**	0.049*	0.057*	0.377**
DISCRIMINATION	0.063*	•	0.150**	0.012*	0.220*	0.134**
ETHNICITY	0.212**	0.152**	•	0.087**	0.019***	0.234***
AGE	0.050*	0.015*	0.074**	•	0.079*	0.074**
GENDER	0.061*	0.224*	0.006***	0.017*	•	0.047***
RELIGION	0.380**	0.136**	0.297***	0.097**	0.058***	•

*Pearson correlation

** ANOVA eta correlation

*** Chi-squared spearman correlation

Multivariate analyses

The hierarchical regression is presented in table 2. In model 1 I added only the control variables, in model 2 I added discrimination, in model 3 I added the dummies for ethnicity and in model 4 I added the interaction between ethnicity and discrimination.

In model 1 you can see the effect of the control variables on attitude. These variables can predict 14.5% of attitude. This amount is quite a lot for the concept of attitude, which could be predicted by many other factors. From model 1 you can deduce that women score higher on attitude than men ($b=0.309$). Similarly, all the dummy variables for religion have positive slopes, which means that when a respondent scores a 1 instead of a 0, their score on attitude goes up. This means that

people with a religion have a more positive attitude toward their own ethnic background than people without a religion, which is used as the reference group. Furthermore most of these slopes are significant, except for the dummy whether a respondent is Jewish.

In model 2 the centered variable for discrimination was added to the control variables as a predictor. This model is only slightly better than the previous model. It only predicts 0.2% more ($R\text{-squared}= 0.147$). furthermore the $F\text{-change}$ value is 3.719 and is not significant, which means there is no significant evidence that this model is better than model 1. So you can see here that discrimination has a small added value to predict attitude compared to the model with only the control variables. Besides discrimination has a small slope value of 0.053, which is also not significant, this means that the value of attitude only rises by 0.053 points, when discrimination rises with 1 and when all other variables stay constant.

In model 3 the dummy variables for ethnicity were added. This model can predict 0.3% more than model 2 ($R\text{-squared}=0.150$). The $F\text{-change}$ value is 2.367, which is low and it is also not significant, this means that there is no significant evidence that this model is better than the previous model. The dummy variables for ethnicity all have positive slopes, meaning that they all score higher on attitude than Dutch respondents, this is the reference group. Furthermore these slopes are all significant.

In model 4 the interaction was added, this is the complete model for the analysis. This model predicts 15.2% of attitude, which is quite high and it has an $F\text{-change}$ value of 4.803, which is significant, this means that there is significant evidence that this model is better than model 3. Notably the slope for discrimination became negative instead of positive after adding the interaction variable to the model, this means that the interaction does have an effect on the effect of discrimination on attitude.

```
REGRESSION  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA CHANGE ZPP
```

```

/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT attitude1
/METHOD=ENTER age gender religion_catholic religion_protestant religion_islam religion_jewish
religion_hindu religion_buddhism religion_other
/METHOD=ENTER discrimination_c
/METHOD=ENTER ethnic_moroccan ethnic_turkish ethnic_non_western ethnic_western
/METHOD=ENTER discriminationXethnicity
/PARTIALPLOT ALL
/SCATTERPLOT=(*ZRESID , *ZPRED)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE PRED ZPRED COOK LEVER RESID ZRESID DFBETA SDBETA DFFIT SDFIT.

```

Table 2: hierarchical regression models.

	Model 1		Model 2		Model 3		Model 4	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Constant	10.372*	0.343	10.220*	0.352	8.579*	0.738	8.466*	0.740
Age	-0.009	0.007	-0.009	0.007	-0.010	0.007	-0.010	0.007
Gender (0=man, 1=woman)	0.309*	0.127	0.364*	0.130	0.360*	0.130	0.350*	0.130
Catholic (0=no, 1=yes)	2.206*	0.379	2.220*	0.378	2.296*	0.389	2.312*	0.389
Protestant (0=no, 1=yes)	1.950*	0.568	1.973*	0.568	1.997*	0.570	2.018*	0.570
Islam (0=no, 1=yes)	3.346*	0.173	3.313*	0.174	3.234*	0.205	3.196*	0.205
Jewish (0=no, 1=yes)	1.574	1.527	1.636	1.526	1.760	1.529	1.742	1.528
Hindu (0=no, 1=yes)	3.035*	0.858	3.047*	0.857	2.920*	0.881	2.982*	0.880
Buddhist (0=no, 1=yes)	3.669*	1.761	3.686*	1.760	3.555*	1.770	3.600*	1.768
Other (0=no, 1=yes)	2.416*	0.425	2.397*	0.425	2.481*	0.426	2.390*	0.427
Discrimination			0.053	0.027	0.049	0.028	-0.003	0.037
Maroccan (0=no, 1=yes)					1.670*	0.684	1.938*	0.695
Turkish (0=no, 1=yes)					1.849*	0.681	1.989*	0.683
Non-western (0=no, 1=yes)					1.791*	0.703	1.821*	0.703
Western (0=no, 1=yes)					1.493*	0.697	1.547*	0.696
Discrimination*ethnicity							0.072*	0.033
<i>R-squared</i>	0.145		0.147		0.150		0.152	
<i>F-change</i>	43.939*		3.719		2.367		4.803*	

*significant with $p < 0.05$

Table 3: model summary for the hierarchical regression

Model Summary ^a									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	,381 ^a	,145	,142	3,03623	,145	43,939	9	2325	,000
2	,383 ^b	,147	,143	3,03446	,001	3,719	1	2324	,054
3	,388 ^c	,150	,145	3,03090	,003	2,367	4	2320	,051
4	,390 ^d	,152	,146	3,02841	,002	4,803	1	2319	,029

Table 4: ANOVA results for the hierarchical regression

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3645,548	9	405,061	43,939	,000 ^b
	Residual	21433,510	2325	9,219		
	Total	25079,058	2334			
2	Regression	3679,796	10	367,980	39,963	,000 ^c
	Residual	21399,262	2324	9,208		
	Total	25079,058	2334			
3	Regression	3766,785	14	269,056	29,289	,000 ^d
	Residual	21312,273	2320	9,186		
	Total	25079,058	2334			
4	Regression	3810,835	15	254,056	27,701	,000 ^e
	Residual	21268,223	2319	9,171		
	Total	25079,058	2334			

Appendix 3

Assumptions

The assumption of linearity is checked with the scatterplot in figure 1, you can tell from this graph that there is a linear effect, you can fit a line in the middle of the graph that goes from upper left to a little more down on the right side. This satisfies the assumption. The assumption of normality is checked with the histogram in figure 2, you can tell that the distribution looks quite normal. Most values follow the normal distribution line, except for 2 peaks around -0.5 and 1.0. This might be problematic for this assumption. The assumption for homoscedasticity is also checked with the scatterplot in figure 1, the points all vary around the 0-line, the point are little more under the 0-line, but this is fine for the assumption.

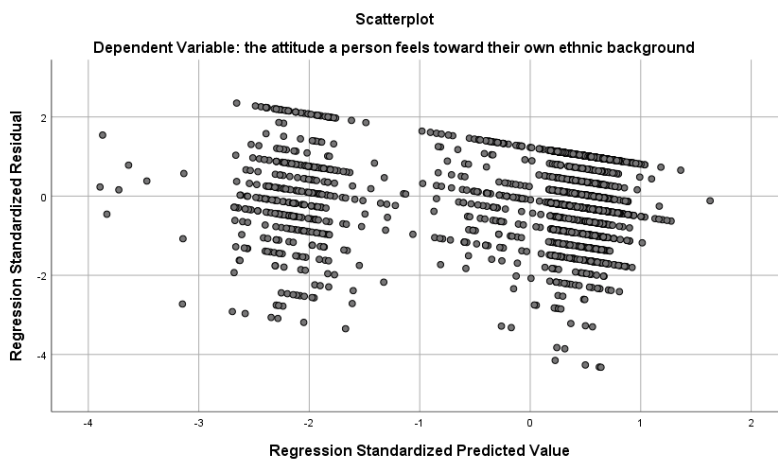


figure 1: scatterplot of attitude with the predicted values on the x-axis and the residuals on the y-axis

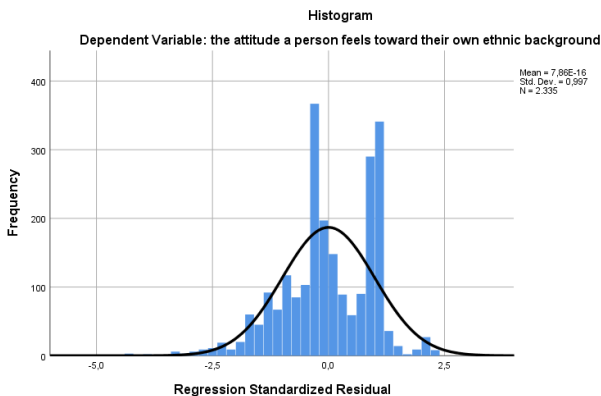


figure 2: histogram for attitude

Outliers

To check for outliers I firstly looked at figure 1, because all values should be between -3 and 3 in this scatterplot. You can tell there are some values lower than -3 on the residuals and on the predictions. This means that some of these points could be outliers. Secondly I checked the leverage values in figure 3, you can see here that there are 7 cases that have a much higher value for leverage, these are cases 1030, 2318, 2417, 2421, 2647, 2694 and 2697. Thirdly I checked the DFFIT values for these cases, where a case is influential when it scores higher than 0.160, which is the case for none of these cases, but is for 15 other cases. For those cases I looked at the DFBeta values, which is also influential with a score higher than 0.160, but none of the cases that are influential according to DFBeta match the ones that are influential according to DFFIT. I also made a boxplot for the cook's distance values in figure 4, here you can see a few outliers on this measure for influential values, these are also not the same as the influential points according to the ones in figure 3. I have chosen not to label any cases as outliers, because none of the influential cases are influential for more than one outlier measure.

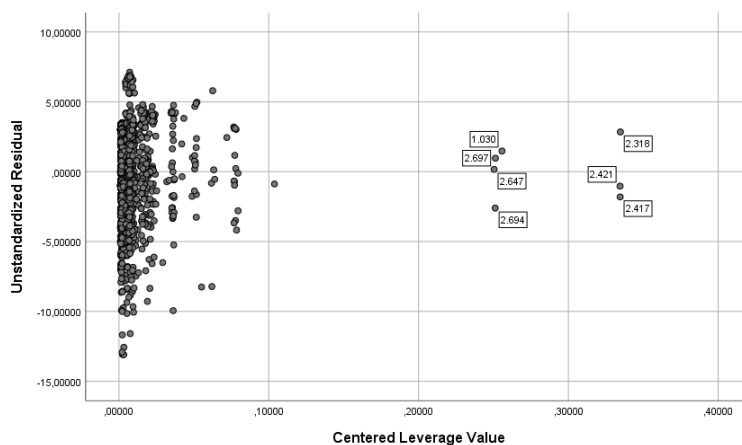


figure 3: scatterplot for leverage

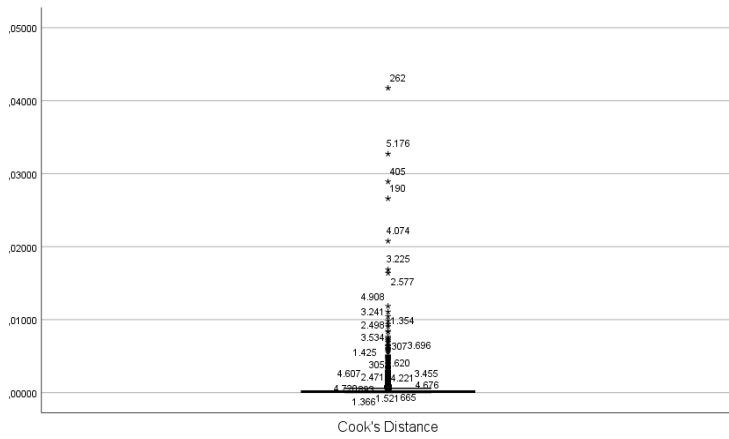


figure 4: boxplot for cook's distance

GRAPH

```
/SCATTERPLOT(BIVAR)=LEV_1 WITH RES_2
/MISSING=LISTWISE.
```

EXAMINE VARIABLES=COO_1

```
/COMPARE VARIABLE
/PLOT=BOXPLOT
/STATISTICS=NONE
/NOTOTAL
/MISSING=LISTWISE.
```