

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 what the effect of discrimination is on the attitude one holds toward their own ethnic background. The hypotheses for this were: 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.* I did this research by running an analysis, which consisted of a sample of Turkish, Moroccan and other non-western 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. But the effect was slightly positive. There were also no significant findings for the difference in effects between ethnicities. But the effect was more positive for Surinamese and Antillean respondents and the effect for Moroccans was negative.

Index

1. Introduction.....	3
2. Theoretical framework	5
3. Methods.....	11
3.1 Data.....	11
3.2 Operationalization	12
3.3 Analysis.....	14
4. Results.....	15
4.1 Descriptive statistics	15
4.2 Model evaluation.....	18
4.3 Hypothesis testing	21
5. Conclusion and discussion.....	23
Literature	26
Appendix 1	29
Appendix 2	47
Appendix 3	55

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. 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. This happens 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. This happens 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, which are Surinamese and Antillean. 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 whether a respondent is religious. 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. This 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 with a minority background 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 Haaften, 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. This results 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 non-western', 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 “other 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 immigrants 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.

For my paper I decided to delete the Dutch and other Western population from the dataset, because my research question does not involve Dutch citizens or western immigrants. I want to know about Moroccan, Turkish and other non-western migrants, these are mainly Surinamese and Antillean.

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. The Cronbach's alpha for this scale is 0.92, which is very high, meaning that it is a good scale to represent attitude.

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. The Cronbach's alpha is 0.81, which is quite high, meaning that it is a good scale.

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; and I put western and Dutch respondents in the category 'system missing', because those respondents are not of any relevance to my research question and hypothesis. 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 other non-western 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 variable w1fa63. For this question respondents were asked whether they were religious, with score 1; or not, with score 2. For the new variable I changed the name of the variable to 'religious' and I changed the scores to 0=yes and 1=no.

Interaction

For my paper I have used ethnicity as a moderator for the main effect between discrimination and attitude, so I have also made interaction variables between discrimination and the two dummy's. Before I did this, I centered discrimination. These variables are called 'discriminationXmoroccan' and 'discriminationXturkish'.

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, this is after deleting the Dutch and Western respondents and deleting the missing values. Firstly I discuss the univariate statistics in table 1. In table 1 I put the mean, median, the range and the frequencies of the variables. Secondly I discuss the bivariate statistics for the variables in table 2, 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 religious, in the model to look at those effects on attitude; secondly I added discrimination to the model; thirdly I added the moderator, which are the dummies for ethnicity; lastly I added the interaction variables.

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 interactions and the significances that come 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 all variables: attitude, discrimination, age, gender, religion and ethnicity. This table consists of the mean, the median and the minimum and maximum scores and the frequencies. I put the frequencies of the variables before I made dummies from them. For discrimination I used the variable version before I centered it. The mean for discrimination is 2.98, this is quite low, this means that averagely speaking the respondents barely experience any discrimination. There are way more respondents that are religious than there are respondents that are not religious, which possibly the result of the culture of the mainly Moroccan and Turkish population in the dataset. There are also more women than men represented in the analysis. 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	N	Mean	Median	Minimum	Maximum
Attitude	2100	13.48	13.00	1.00	17.00
Discrimination	2100	2.98	2.00	1.00	13.00
Age	2100	30.85	32.00	14.00	49.00
Gender	2100	1.53	2.00	1.00	2.00
Man	983				
Woman	1117				
Religious	2100	0.12	0.00	0.00	1.00
Yes	1846				
No	254				
Ethnicity	2100	0.63	1.00	0.00	2.00
Moroccan	956				
Turkish	956				
Other non-western	188				
Total	2100				

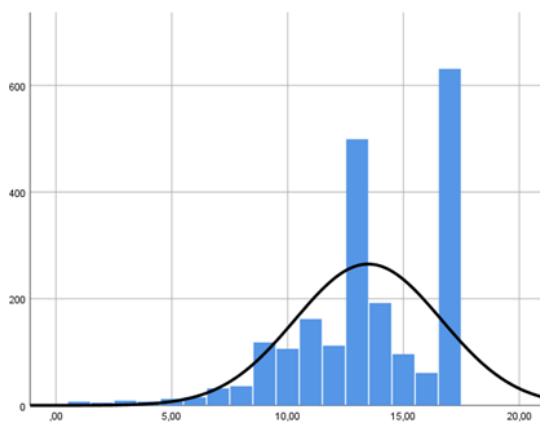


Figure 2: histogram for attitude.

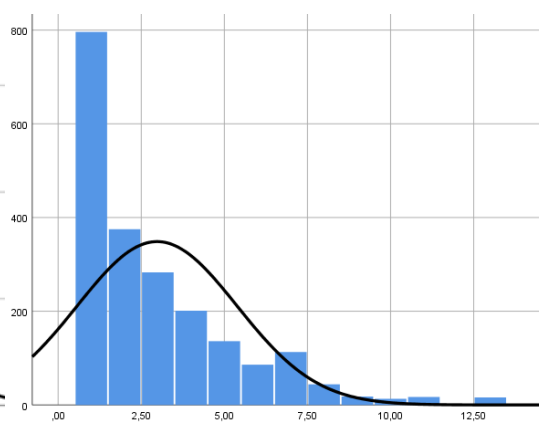


Figure 3: histogram for discrimination.

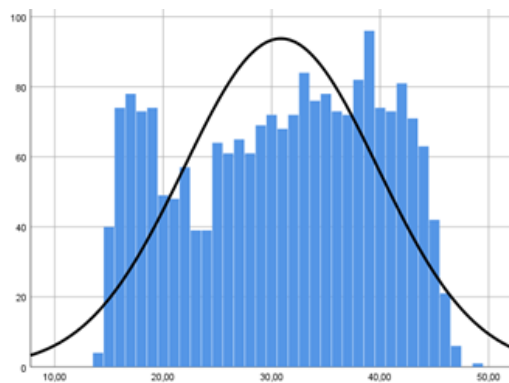


Figure 4: histogram for age.

Bivariate descriptives

In table 2 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 or a continuous and a dummy; 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 0.025, this is very low. The correlation between gender and discrimination is -0.230, which is quite high, this means that with a higher score on gender, discrimination is lower, so for women discrimination is actually lower, which is surprising. Furthermore ethnicity and religion correlate somewhat lowly with discrimination, which is also surprising. Moroccan and Turkish do not correlate highly with attitude, but religion has a high correlation with attitude, this means that these variables can predict attitude for a good part.

Table 2: correlations and other measures of association between the variables. In the upper triangle without the missing measures with an N of 2100.

	ATTITUDE	DISCRIMI -NATION	MOROCCAN	TURKISH	AGE	GENDER	RELIGION
ATTITUDE	•	0.025 ^a	0.053 ^{a*}	0.015 ^a	-0.032 ^a	0.047 ^{a*}	-0.331 ^{a*}
DISCRIMINATION		•	0.042 ^a	-0.010 ^a	0.007 ^a	-0.230 ^{a*}	-0.027 ^a
MOROCCAN			•	0.836 ^{b*}	-0.061 ^{a*}	0.035 ^b	0.198 ^{b*}
TURKISH				•	0.077 ^{a*}	0.041 ^b	0.033 ^b
AGE					•	-0.091 ^{a*}	0.026 ^a
GENDER						•	0.024 ^b
RELIGION							•

a. Pearson correlation

b. Chi-squared spearman correlation

* significant with $p < 0.05$

4.2 Model evaluation

Model

The hierarchical regression is presented in table 8. In model 1 I added only the control variables, in model 2 I added the centered discrimination, in model 3 I added the dummies for ethnicity and in model 4 I added the interaction variables between the dummies and discrimination.

In model 1 you can see the effect of the control variables on attitude. These variables can predict 11.2% of attitude. This amount is quite a lot for the concept of attitude, which could be predicted by many other factors, because it is a big and quite broad concept. From model 1 you can deduce that women score higher on attitude than men ($b=0.239$). Similarly the slope for religious is quite highly negative and significant. This means that people with a religion have a more positive attitude toward their own ethnic background than people who are not religious.

In model 2 the centered variable for discrimination was added to the control variables as a predictor. This model is not necessarily better than the previous model. It predicts the same amount of attitude ($R\text{-squared}= 0.112$). Furthermore the $F\text{-change}$ value is 1.580 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 no actual added value to predict attitude compared to the model with only the control variables. Besides discrimination has a small slope value of 0.035, 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 0.2% more than model 2 ($R\text{-squared}=0.114$). The $F\text{-change}$ value is 1.349, 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 both have positive slopes, meaning that both Moroccan and Turkish respondents score higher on attitude than the other non-western respondents, this is the reference group. Furthermore these slopes are both significant.

In model 4 the interactions were added, this gives the complete model for the analysis. This model predicts 11.5% of attitude, which is quite high for a concept like attitude and it has an *F-change* value of 1.176 which is not significant, this means that there is no significant evidence that this model is better than model 3. Notably the slope for discrimination became somewhat higher after adding the interaction variable to the model, this means that the interaction does have an effect on the effect of discrimination on attitude, but the slope values for the interactions are not significant. This will be discussed more in paragraph 4.3.

Table 6: results for a hierarchical regression with attitude toward own ethnic background as the dependent variable; discrimination as an independent variable; age, gender and religion as control variables; and ethnicity as a moderator. (N=2100)

	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	13.718*	0.323	13.653*	0.327	13.417*	0.392	13.492*	0.396
Age	-0.007	0.007	-0.007	0.007	-0.008	0.007	-0.009	0.007
Gender (0=man, 1=woman)	0.239	0.131	0.278*	0.135	0.285*	0.135	0.275*	0.135
Religious (0=yes, 1=no)	-3.197*	0.200	-3.189*	0.200	-3.147*	0.210	-3.137*	0.210
Discrimination			0.035	0.028	0.035	0.028	0.133	0.100
Maroccan (0=no, 1=yes)					0.195*	0.251	0.161	0.254
Turkish (0=no, 1=yes)					0.352*	0.246	0.314	0.249
Discrimination*maroccan							-0.138	0.107
Discrimination*turkish							-0.073	0.108
<i>R-squared</i>	0.112		0.112		0.114		0.115	
<i>F-change</i>	87.852*		1.580		1.349		1.176	

*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 small 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, but the points are too scattered to satisfy 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 quite well, except for

2 peaks around -0.5 and 1.0. This is problematic for this assumption. The assumption for homoscedasticity is also checked with the scatterplot in figure 5, the points do not vary around the 0-point, the points are distributed more to the sides of the graph. None of the assumptions are satisfied, this might impact the conclusions of the analysis.

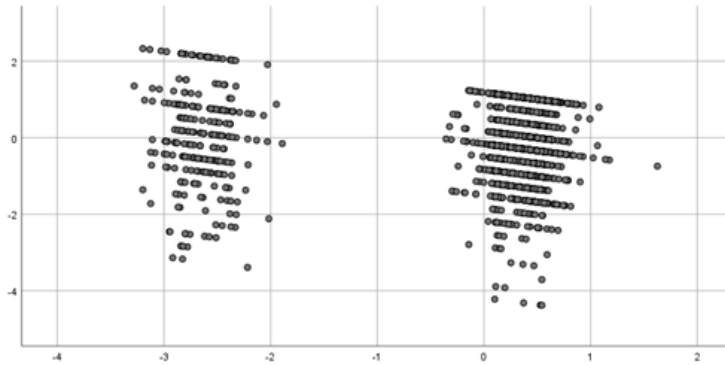


Figure 5: scatterplot of attitude with the predicted values on the x-axis and the residuals on the y-axis.

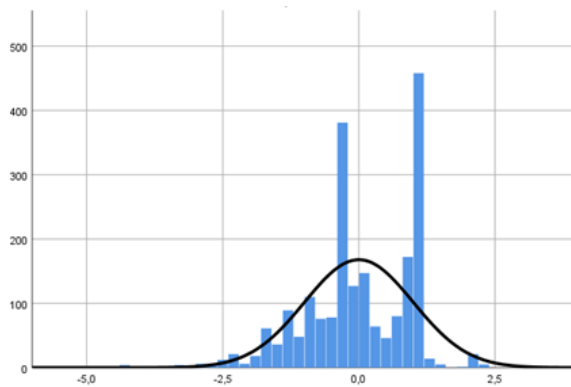


Figure 6: histogram for attitude.

Outliers

To deal with violations of the assumptions I checked for outliers and influential points. Based on figures 7 through 9 there are some outliers and influential points. Based on all figures case 5054 is an outlier, but also cases 308, 927, 4908 and 5022 are influential points according to two of these figures. These cases might impact the outcomes of the analyses.

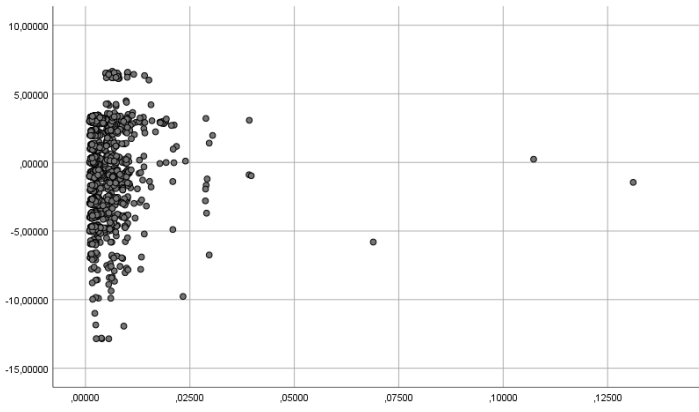


Figure 7: scatterplot for leverage set out against unstandardized residuals.

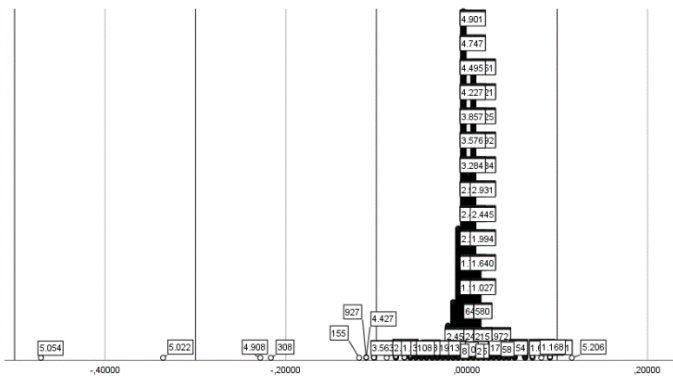


Figure 8: scatterplot for DFFIT values.

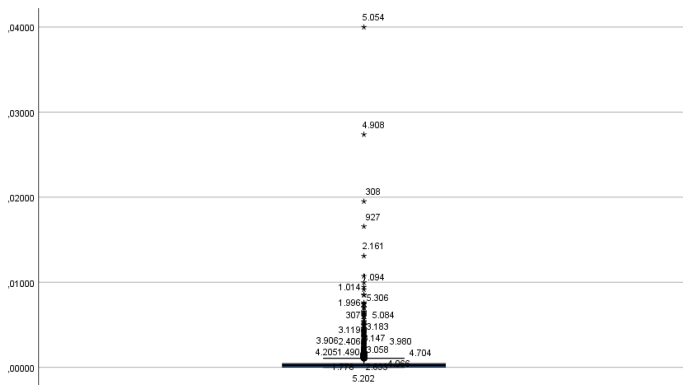


Figure 9: boxplot for cook's distance.

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 0.133, which is quite small on attitude, and is also not significant, which means this is no significant evidence for these hypotheses. The effect is positive, so it would comply more with the first hypothesis. None of the slopes of discrimination in the models are significant, so there is no significant evidence for these two hypotheses. However the effect of discrimination has gotten bigger in model 4 compared to the previous models.

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, this is the other non-western category, 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 are religious. Similarly I set the other variables to a constant of their mean values, so these are the respondents with the age 30.9. This made the equations as follows:

1. For non-western, where both dummies are 0: $13.492 - 0.009*30.9 + 0.275*0 - 3.137*0 + 0.133*Discrimination + 0.161*0 + 0.314*0 - 0.138*0 - 0.073*0 = 13.492 - 0.278 + 0.133*Discrimination = 13.214 + 0.133*Discrimination$
2. For Moroccan: $13.492 - 0.009*30.9 + 0.133*Discrimination + 0.161 - 0.138*Discrimination = 13.375 - 0.005*Discrimination$
3. For Turkish: $13.492 - 0.009*30.9 + 0.133*Discrimination + 0.314 - 0.073*Discrimination = 13.806 + 0.06*Discrimination$

These equations are displayed in figure 7 where the effect of discrimination on attitude for non-western respondent is the red line, the effect for Moroccans is the black line and the effect for Turks people is the yellow line. You can see that the red line has the most steep slope. This means that the Surinamese and Antillean respondents have the strongest effect of discrimination on attitude, this means that their attitude toward their own ethnic background is better, when they experience more discrimination. The black line has a negative slope, this means for Moroccan respondents that when they experience more discrimination, they feel less connected to their ethnic background. The effect of discrimination on attitude does differ for the different ethnicities. However from model 4 in table 6 you can tell that the interaction effects for the dummies are not significant. This means that this is no significant evidence for my third hypothesis, even though it does seem to be right according to figure 7.

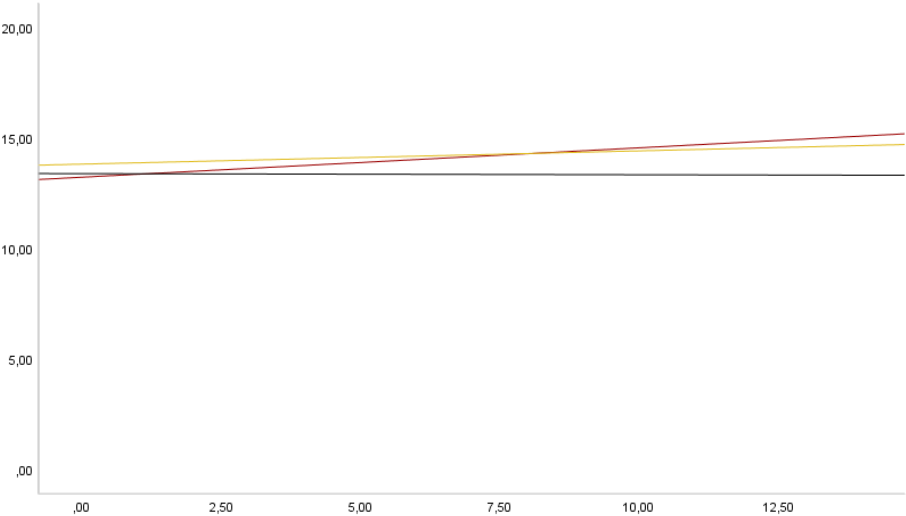


Figure 7: equation lines for every separate ethnicity with attitude on the y-axis an discrimination on the y-axis.

5. Conclusion and discussion

In this paper, the research question aimed to investigate the relationship between participants with a non-Dutch background their feelings toward their own ethnic background and their experiences of discrimination. Three hypotheses were formulated to look at these effects. The first hypothesis suggested that respondents 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 had a very small effect. This implies that experiencing discrimination did not significantly 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. For all theories, ethnic affirmation, disintegration, cognitive dissonance theory and social identity theory, I found support in literature (Verkuyten, 2007; Skrobaneck, 2009; Goldsmith et al., 2004; Perreault & Bourhis, 1998). So if all theories can be correct at the same time, but for every person a different theory works, it could be that the results cancel each other out, making it look like there is no effect. For future research this could be better sought out. However the effect is positive, this would mean that ethnic affirmation and disintegration have better support in this thesis than cognitive dissonance theory and social identity theory.

Furthermore, the results did also not 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 does look like 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. This could mean that people get discriminated less, if they were more familiar with the majority group, just like the theory stated (Hagendoorn, 1995 & Verkuyten, 2000). But this effect is not significant. 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.

The answer to my research question 'For participants with a non-Dutch background, are their feelings toward their own ethnic background related to their experience of discrimination in different settings?' is that there has been no significant evidence found for my hypotheses. But the effects indicated a small effect that with more discrimination respondents felt closer to their ethnic background. The effects also indicated that Surinamese and Antillean respondents felt more connected to their background than Turkish and Moroccan respondents.

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 assumptions have not been met, this could have impacted the conclusions greatly. For future research the outliers should be deleted from the data before running the analyses again. Furthermore the average level of discrimination was low to begin with and the average level of attitude was high to begin with, so it was to be expected that any score on discrimination would result in a somewhat high score on attitude. But then the negative effect of discrimination on attitude for Moroccans should be noted, because this goes against these expectations, even though this was not a significant finding. 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. Table 5 shows the descriptive statistics of these variables.

Firstly I deleted all the Dutch and other western respondents out of the dataset. This happened after all original variables were analyzed in SPSS and after these variables were recoded or computed into the variables that I used for my analysis, but before analyzing these new variables. This is so I have a good overview of the statistics for the ethnicities that are of importance in my data, these are Moroccan, Turkish and other non-Western. I did this by putting all new variables in the regression and saving the residual statistics and computing those into a new variable called 'obs', with 0=system missing and 1= observed. After that I selected cases for when obs=1. But for the appendix to be well organized, I have put the operationalizations for each variable separately. The syntax for this is not supposed to be in the order that I have put it in this appendix, it should be after all the original variables and after changing them, but before analyzing them.

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 descriptive statistics for all the variables is used in the analysis. In table 7 you can see the frequency statistics for attitude. In figure 1 the distribution for attitude is

shown. In table 8 you can see the reliability analysis with the Cronbach's alpha for this scale, which is 0.915, which is high. This means that this scale is well represented by the items in it.

```
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.
```

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT attitude1
/METHOD=ENTER age gender religous discrimination_c ethnicity
/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.
```

```
DESCRIPTIVES VARIABLES=attitude1 age gender religous discrimination ethnicity
/STATISTICS=MEAN STDDEV MIN MAX.
```

```
FREQUENCIES VARIABLES=ethnicity gender religous attitude1 discrimination age
/NTILES=4
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN
/ORDER=ANALYSIS.
```

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

```
RELIABILITY
/VARIABLES=w1scg6a w1scg6b w1scg6c w1scg6d
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE
```

/SUMMARY=TOTAL.

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 in attitude.

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: descriptive table for all variables in the analysis.

		Statistics					
		ethnicity	gender	whether respondent is religious	attitude1	discrimination	age
N	Valid	2100	2100	2100	2100	2100	2100
	Missing	0	0	0	0	0	0
Mean		,6343	1,5319	,1210	13,4762	2,9757	30,8514
Median		1,0000	2,0000	,0000	13,0000	2,0000	32,0000
Std. Deviation		,64126	,49910	,32615	3,16166	2,40293	8,93312
Minimum		,00	1,00	,00	1,00	1,00	14,00
Maximum		2,00	2,00	1,00	17,00	13,00	49,00
Percentiles	25	,0000	1,0000	,0000	12,0000	1,0000	23,0000
	50	1,0000	2,0000	,0000	13,0000	2,0000	32,0000
	75	1,0000	2,0000	,0000	17,0000	4,0000	39,0000

Table 7: frequency table for attitude.

		attitude1			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	7	,3	,3	,3
	2,00	5	,2	,2	,6
	3,00	9	,4	,4	1,0
	4,00	7	,3	,3	1,3
	5,00	12	,6	,6	1,9
	6,00	15	,7	,7	2,6
	7,00	32	1,5	1,5	4,1
	8,00	36	1,7	1,7	5,9
	9,00	118	5,6	5,6	11,5
	10,00	106	5,0	5,0	16,5
	11,00	162	7,7	7,7	24,2
	12,00	112	5,3	5,3	29,6
	13,00	499	23,8	23,8	53,3
	14,00	192	9,1	9,1	62,5
	15,00	96	4,6	4,6	67,0
	16,00	61	2,9	2,9	70,0
	17,00	631	30,0	30,0	100,0
Total		2100	100,0	100,0	

Table 8: reliability analysis for attitude.

Reliability Statistics	
Cronbach's Alpha	N of Items
,915	4

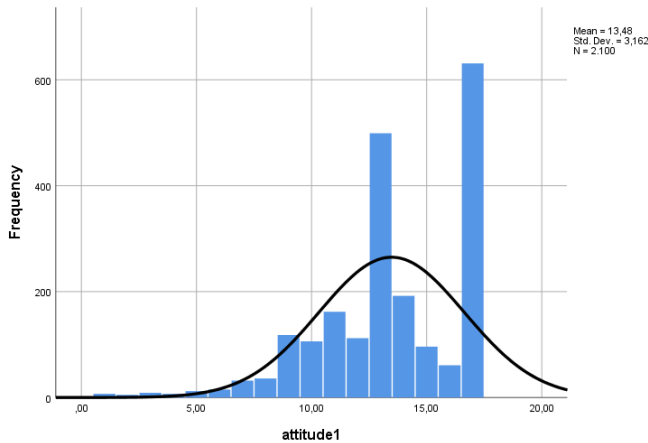


Figure 1: histogram for attitude.

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, the frequencies are shown in table 9 through 14. In table 15 you can see the descriptive statistics, where 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.

Before analyzing the new variable, I have deleted the Dutch and Western respondents from the dataset.

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 16 the frequencies for the new variable are shown and in figure 2 you can see the distribution of them and in table 6 in the attitude section the descriptive are shown. In table 17 you can see the reliability

analysis with the Cronbach's alpha for this scale, which is 0.813, which is high. This means that this scale is well represented by the items in it.

```
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.
```

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT attitude1
/METHOD=ENTER age gender religious discrimination_c ethnicity
/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.
```

```
DESCRIPTIVES VARIABLES=attitude1 age gender religious discrimination ethnicity
/STATISTICS=MEAN STDDEV MIN MAX.
```

```
FREQUENCIES VARIABLES=ethnicity gender religious attitude1 discrimination age
/NTILES=4
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN
/ORDER=ANALYSIS.
```

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

```
RELIABILITY
/VARIABLES=w1scg9a w1scg9b w1scg9c w1scg9d w1scg9e w1scg9f
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE
/SUMMARY=TOTAL.
```

Table 9: 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 10: 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 11: 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 12: 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 13: 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 14: 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 15: 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 uitgaansgelegenheden, 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 16: frequency table for discrimination.

		discrimination			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1,00	796	37,9	37,9	37,9
	2,00	375	17,9	17,9	55,8
	3,00	283	13,5	13,5	69,2
	4,00	201	9,6	9,6	78,8
	5,00	136	6,5	6,5	85,3
	6,00	86	4,1	4,1	89,4
	7,00	113	5,4	5,4	94,8
	8,00	44	2,1	2,1	96,9
	9,00	18	,9	,9	97,7
	10,00	13	,6	,6	98,3
	11,00	17	,8	,8	99,1
	12,00	2	,1	,1	99,2
	13,00	16	,8	,8	100,0
	Total		2100	100,0	100,0

Table 17: reliability analysis for discrimination.

Reliability Statistics	
Cronbach's	
Alpha	N of Items
,813	6

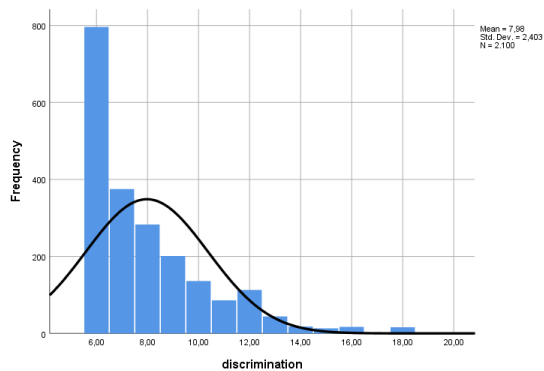


Figure 2: histogram for discrimination.

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 18 and 19.

For my paper I make a distinction between Moroccan, Turkish and non-western, and not between generations so I combined the categories in a way that 0= Moroccan; 1= Turkish; 2= non-western and I have deleted Dutch and Western. The frequencies and descriptives for this can be found in tables 20 and 6.

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

```
RECODE w1cethnic (1 thru 2=0) (3 thru 4=1) (5 thru 6=2) (ELSE=SYSMIS) INTO ethnicity.
EXECUTE.
```

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT attitude1
/METHOD=ENTER age gender religious discrimination_c ethnicity
/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.
```

```
DESCRIPTIVES VARIABLES=attitude1 age gender religious discrimination ethnicity
/STATISTICS=MEAN STDDEV MIN MAX.
```

```
FREQUENCIES VARIABLES=ethnicity gender religious attitude1 discrimination age
/NTILES=4
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN
/ORDER=ANALYSIS.
```


Table 18: 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 19: 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 20: frequency table for ethnicity.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	maroccan	956	45,5	45,5	45,5
	turkish	956	45,5	45,5	91,0
	other non-western	188	9,0	9,0	100,0
	Total	2100	100,0	100,0	

I made dummy variables for ethnicity, with non-western as a reference group, this is the syntax:

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

```
RECODE ethnicity (1=1) (ELSE=0) INTO turkish.  
VARIABLE LABELS turkish 'wheter the respondent is turkish'.  
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'. Firstly I deleted the Dutch and Western respondents from the dataset. Then I checked the new distribution of age for just Moroccan, Turkish and other non-western migrants is presented in figure 4 and table 21. The new descriptives for the variable are shown in table 6.

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

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

```
REGRESSION  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT attitude1  
/METHOD=ENTER age gender religous discrimination_c ethnicity  
/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.

```

```

DESCRIPTIVES VARIABLES=attitude1 age gender religious discrimination ethnicity
/STATISTICS=MEAN STDDEV MIN MAX.

```

```

FREQUENCIES VARIABLES=ethnicity gender religious attitude1 discrimination age
/NTILES=4
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN
/ORDER=ANALYSIS.

```

```

GRAPH
/HISTOGRAM(NORMAL)=age.

```

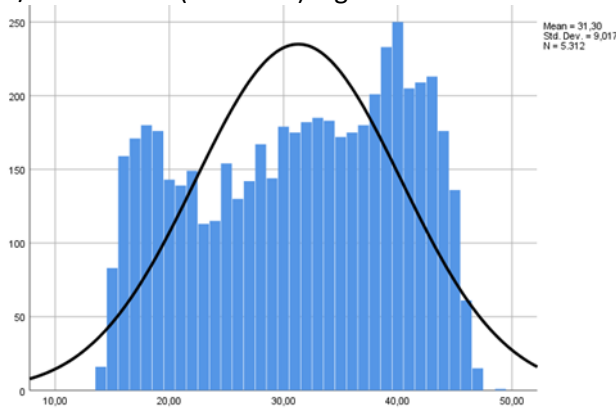


Figure 3: histogram for w1cage.

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

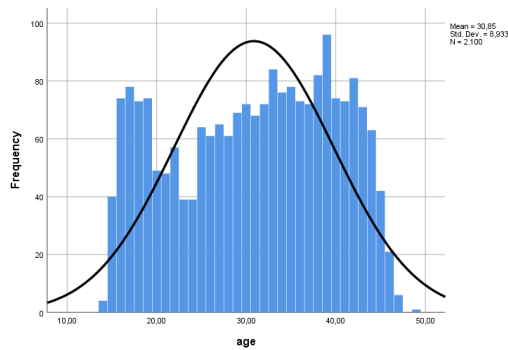


Figure 4: histogram for age.

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, women a little more than men.

For this variable I changed the name to gender. Firstly I deleted the Dutch and western respondents from the dataset before analyzing the new distribution of gender, the distribution changed after deleting some respondents, this is presented in tables 24 and 6.

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

```
COMPUTE gender=w1csex.
EXECUTE.
```

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT attitude1
  /METHOD=ENTER age gender religious discrimination_c ethnicity
  /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.

DESCRIPTIVES VARIABLES=attitude1 age gender religious discrimination ethnicity
/STATISTICS=MEAN STDDEV MIN MAX.

FREQUENCIES VARIABLES=ethnicity gender religious attitude1 discrimination age
/NTILES=4
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN
/ORDER=ANALYSIS.

Table 22: frequency table for w1csex.

		sample geslacht rp			Cumulative
		Frequency	Percent	Valid Percent	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 geslacht 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

Table 24: frequency table for gender.

		gender			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	man	983	46,8	46,8	46,8
	woman	1117	53,2	53,2	100,0
	Total	2100	100,0	100,0	

Religion

For religion I used variable w1fa63. The frequency table of this variable is in table 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.

I changed the name of the variable to 'religious'. With a score of 0= yes and a score 1= no. Secondly I deleted the Dutch and western respondents from the dataset, the statistics of the new variable with deleted respondents is presented in tables 27 and 6.

```
FREQUENCIES VARIABLES= w1fa63
  /NTILES=4
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MODE
  /ORDER=ANALYSIS.
```

```
DESCRIPTIVES VARIABLES=w1fa63
  /STATISTICS=MEAN STDDEV MIN MAX.
```

```
RECODE w1fa63 (1=0) (2=1) INTO religious.
VARIABLE LABELS religious 'wheter respondent is religious'.
EXECUTE.
```

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT attitude1
  /METHOD=ENTER age gender religious discrimination_c ethnicity
  /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.
```

```
DESCRIPTIVES VARIABLES=attitude1 age gender religious discrimination ethnicity
  /STATISTICS=MEAN STDDEV MIN MAX.
```

```
FREQUENCIES VARIABLES=ethnicity gender religious attitude1 discrimination age
  /NTILES=4
```

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

Table 25: frequency table for w1fa63.

**we willen nu een paar vragen stellen over godsdienst en politiek.
reken 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 26: descriptive statistics for w1fa63.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
we willen nu een paar vragen stellen over godsdienst en politiek. reken u zichz	5311	1	2	1,40	,489
Valid N (listwise)	5311				

Table 27: frequency table for religion.

whether respondent is religious

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	1846	87,9	87,9	87,9
	no	254	12,1	12,1	100,0
	Total	2100	100,0	100,0	

Interaction

For my analysis I added an interaction to see the effect of someone their ethnicity on the main effect between discrimination and attitude.

COMPUTE discrimination_c=discrimination - 2.9757.
EXECUTE.

COMPUTE discriminationXmoroccan=discrimination_c * moroccan.
EXECUTE.

COMPUTE discriminationXturkish=discrimination_c * turkish.
EXECUTE.

Appendix 2

Bivariate analyses

For this part of the analysis I looked at 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 or a continuous and a dummy, shown in table 1; and Chi-squared Spearman correlation for the association between two categorical variables, shown in tables 2 through 7. 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 0.025, this is very low. The correlation between gender and discrimination is -0.230, which is quite high, this could be because women get discriminated against more than men. Furthermore ethnicity and religion correlate somewhat lowly with discrimination. Moroccan and Turkish do not correlate highly with attitude, but religion has a high correlation with attitude, this means that this variables can predict attitude for a good part. Shown in table 1 is the direction of the correlations.

CORRELATIONS

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

CROSSTABS

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

CROSSTABS

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

CROSSTABS

```
/TABLES=gender BY turkish  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ PHI CORR
```



```
/CELLS=COUNT  
/COUNT ROUND CELL.
```

CROSSTABS

```
/TABLES=religous BY moroccan  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ PHI CORR  
/CELLS=COUNT  
/COUNT ROUND CELL.
```

CROSSTABS

```
/TABLES=religous BY turkish  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ PHI CORR  
/CELLS=COUNT  
/COUNT ROUND CELL.
```

CROSSTABS

```
/TABLES=moroccan BY turkish  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ PHI CORR  
/CELLS=COUNT  
/COUNT ROUND CELL.
```

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

Correlations

		attitude1	discrimination	age	gender	whether the respondent is religious	whether the respondent is moroccan	whether the respondent is turkish
attitude1	Pearson Correlation	1	,025	-,032	,047*	-,331**	,053*	,015
	Sig. (2-tailed)		,246	,140	,030	,000	,015	,491
	N	2100	2100	2100	2100	2100	2100	2100
discrimination	Pearson Correlation	,025	1	,007	-,230**	-,027	,042	-,010
	Sig. (2-tailed)	,246		,764	,000	,212	,053	,638
	N	2100	2100	2100	2100	2100	2100	2100
age	Pearson Correlation	-,032	,007	1	-,091**	,026	-,061**	,077**
	Sig. (2-tailed)	,140	,764		,000	,237	,005	,000
	N	2100	2100	2100	2100	2100	2100	2100
gender	Pearson Correlation	,047*	-,230**	-,091**	1	-,024	,035	-,041
	Sig. (2-tailed)	,030	,000	,000		,277	,104	,059
	N	2100	2100	2100	2100	2100	2100	2100
whether respondent is religious	Pearson Correlation	-,331**	-,027	,026	-,024	1	-,198**	,033
	Sig. (2-tailed)	,000	,212	,237	,277		,000	,127
	N	2100	2100	2100	2100	2100	2100	2100
whether the respondent is moroccan	Pearson Correlation	,053*	,042	-,061**	,035	-,198**	1	-,836**
	Sig. (2-tailed)	,015	,053	,005	,104	,000		,000
	N	2100	2100	2100	2100	2100	2100	2100
whether the respondent is turkish	Pearson Correlation	,015	-,010	,077**	-,041	,033	-,836**	1
	Sig. (2-tailed)	,491	,638	,000	,059	,127	,000	
	N	2100	2100	2100	2100	2100	2100	2100

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2: association measure between gender and religious.

Symmetric Measures

		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Nominal by Nominal	Phi	-,024			,277
	Cramer's V	,024			,277
Interval by Interval	Pearson's R	-,024	,022	-1,087	,277 ^c
Ordinal by Ordinal	Spearman Correlation	-,024	,022	-1,087	,277 ^c
N of Valid Cases		2100			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Table 3: association measure between gender and Moroccan.

Symmetric Measures

		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Nominal by Nominal	Phi	,035			,104
	Cramer's V	,035			,104
Interval by Interval	Pearson's R	,035	,022	1,625	,104 ^c
Ordinal by Ordinal	Spearman Correlation	,035	,022	1,625	,104 ^c
N of Valid Cases		2100			

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

Table 4: association measure between gender and Turkish.

Symmetric Measures

		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Nominal by Nominal	Phi	-,041			,059
	Cramer's V	,041			,059
Interval by Interval	Pearson's R	-,041	,022	-1,889	,059 ^c
Ordinal by Ordinal	Spearman Correlation	-,041	,022	-1,889	,059 ^c
N of Valid Cases		2100			

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

Table 5: association measure between religious and Moroccan.

Symmetric Measures

		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Nominal by Nominal	Phi	-,198			,000
	Cramer's V	,198			,000
Interval by Interval	Pearson's R	-,198	,018	-9,268	,000 ^c
Ordinal by Ordinal	Spearman Correlation	-,198	,018	-9,268	,000 ^c
N of Valid Cases		2100			

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

Table 6: association measure between religious and Turkish.

		Symmetric Measures			
		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Nominal by Nominal	Phi	,033			,127
	Cramer's V	,033			,127
Interval by Interval	Pearson's R	,033	,022	1,528	,127 ^c
Ordinal by Ordinal	Spearman Correlation	,033	,022	1,528	,127 ^c
N of Valid Cases		2100			

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

Table 7: association measure between Moroccan and Turkish.

		Symmetric Measures			
		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Nominal by Nominal	Phi	-,836			,000
	Cramer's V	,836			,000
Interval by Interval	Pearson's R	-,836	,010	-69,690	,000 ^c
Ordinal by Ordinal	Spearman Correlation	-,836	,010	-69,690	,000 ^c
N of Valid Cases		2100			

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

Multivariate analyses

The hierarchical regression is presented in table 8. In model 1 I added only the control variables, in model 2 I added the centered discrimination, in model 3 I added the dummies for ethnicity and in model 4 I added the interaction variables between the dummies and discrimination.

In model 1 you can see the effect of the control variables on attitude. These variables can predict 11.2% of attitude. This amount is quite a lot for the concept of attitude, which could be predicted by many other factors, because it is a big and quite broad concept. From model 1 you can deduce that women score higher on attitude than men ($b=0.239$). Similarly the slope for religious is

quite highly negative and significant. This means that people with a religion have a more positive attitude toward their own ethnic background than people who are not religious.

In model 2 the centered variable for discrimination was added to the control variables as a predictor. This model is not necessarily better than the previous model. It predicts the same amount of attitude ($R\text{-squared}= 0.112$). Furthermore the $F\text{-change}$ value is 1.580 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 no actual added value to predict attitude compared to the model with only the control variables. Besides discrimination has a small slope value of 0.035, 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 0.2% more than model 2 ($R\text{-squared}=0.114$). The $F\text{-change}$ value is 1.349, 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 both have positive slopes, meaning that both Moroccan and Turkish respondents score higher on attitude than the other non-western respondents, this is the reference group. Furthermore these slopes are both significant.

In model 4 the interactions were added, this gives the complete model for the analysis. This model predicts 11.5% of attitude, which is quite high for a concept like attitude and it has an $F\text{-change}$ value of 1.176 which is not significant, this means that there is no significant evidence that this model is better than model 3. Notably the slope for discrimination became somewhat higher after adding the interaction variable to the model, this means that the interaction does have an effect on the effect of discrimination on attitude, but the slope values for the interactions are not significant.

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

```

/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT attitude1
/METHOD=ENTER age gender religious
/METHOD=ENTER discrimination_c
/METHOD=ENTER moroccan turkish
/METHOD=ENTER discriminationXmoroccan discriminationXturkish
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE ZPRED MAHAL COOK LEVER ZRESID DFBETA DFFIT.

```

Table 8: results for a hierarchical regression with attitude toward own ethnic background as the dependent variable; discrimination as an independent variable; age, gender and religion as control variables; and ethnicity as a moderator. (N=2100)

	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	13.718*	0.323	13.653*	0.327	13.417*	0.392	13.492*	0.396
Age	-0.007	0.007	-0.007	0.007	-0.008	0.007	-0.009	0.007
Gender (0=man, 1=woman)	0.239	0.131	0.278*	0.135	0.285*	0.135	0.275*	0.135
Religious (0=yes, 1=no)	-3.197*	0.200	-3.189*	0.200	-3.147*	0.210	-3.137*	0.210
Discrimination			0.035	0.028	0.035	0.028	0.133	0.100
Maroccan (0=no, 1=yes)					0.195*	0.251	0.161	0.254
Turkish (0=no, 1=yes)					0.352*	0.246	0.314	0.249
Discrimination*maroccan							-0.138	0.107
Discrimination*turkish							-0.073	0.108
<i>R-squared</i>	0.112		0.112		0.114		0.115	
<i>F-change</i>	87.852*		1.580		1.349		1.176	

*significant with $p < 0.05$

Table 9: model summary for the hierarchical regression.

Model Summary ^e									
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	,334 ^a	,112	,110	2,98199	,112	87,852	3	2096	,000
2	,335 ^b	,112	,111	2,98158	,001	1,580	1	2095	,209
3	,337 ^c	,114	,111	2,98108	,001	1,349	2	2093	,260
4	,338 ^d	,115	,111	2,98083	,001	1,176	2	2091	,309

- a. Predictors: (Constant), whether respondent is religious, gender, age
 b. Predictors: (Constant), whether respondent is religious, gender, age, discrimination_c
 c. Predictors: (Constant), whether respondent is religious, gender, age, discrimination_c, whether the respondent is turkish, whether the respondent is moroccan
 d. Predictors: (Constant), whether respondent is religious, gender, age, discrimination_c, whether the respondent is turkish, whether the respondent is moroccan, discriminationXturkish, discriminationXmoroccan
 e. Dependent Variable: attitude1

Table 10: ANOVA results for the hierarchical regression.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2343,613	3	781,204	87,852	,000 ^b
	Residual	18638,197	2096	8,892		
	Total	20981,810	2099			
2	Regression	2357,660	4	589,415	66,302	,000 ^c
	Residual	18624,150	2095	8,890		
	Total	20981,810	2099			
3	Regression	2381,634	6	396,939	44,666	,000 ^d
	Residual	18600,176	2093	8,887		
	Total	20981,810	2099			
4	Regression	2402,540	8	300,318	33,799	,000 ^e
	Residual	18579,269	2091	8,885		
	Total	20981,810	2099			

- a. Dependent Variable: attitude1
 b. Predictors: (Constant), whether respondent is religious, gender, age
 c. Predictors: (Constant), whether respondent is religious, gender, age, discrimination_c
 d. Predictors: (Constant), whether respondent is religious, gender, age, discrimination_c, whether the respondent is turkish, whether the respondent is moroccan
 e. Predictors: (Constant), whether respondent is religious, gender, age, discrimination_c, whether the respondent is turkish, whether the respondent is moroccan, discriminationXturkish, discriminationXmoroccan

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 small 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, but the points are too scattered to satisfy 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 quite well, except for 2 peaks around -0.5 and 1.0. This is problematic for this assumption. The assumption for homoscedasticity is also checked with the scatterplot in figure 1, the points do not vary around the 0-point, the points are distributed more to the sides of the graph. None of the assumptions are satisfied, this might impact the conclusions of the analysis.

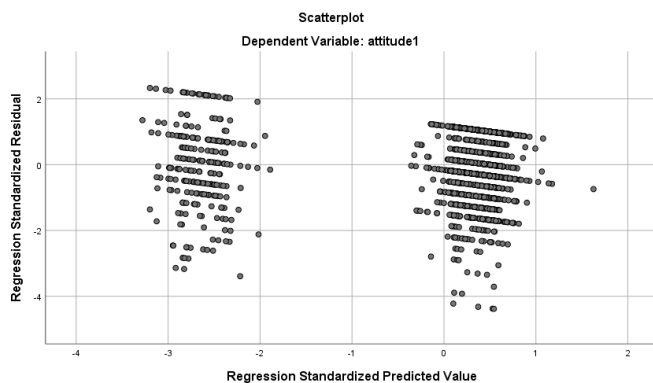


Figure 1: scatterplot of attitude with the predicted values on the x-axis and the residuals on the y-axis.

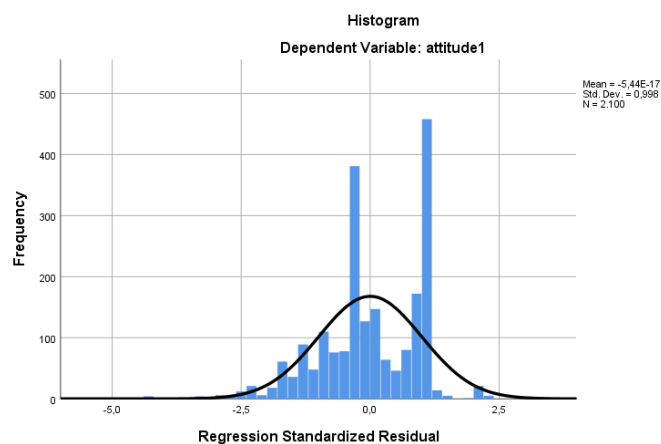


Figure 2: histogram for attitude.

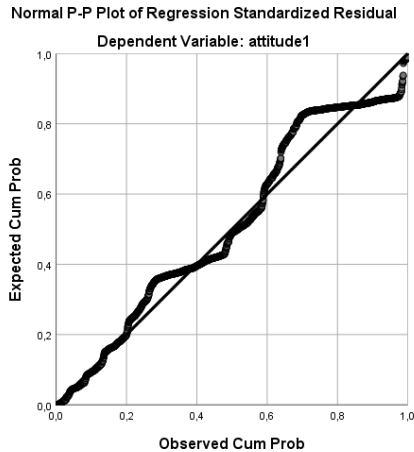


Figure 3: normal plot.

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 4, you can see here that there are 3 cases that have a much higher value for leverage, these are cases 212, 5022 and 5054. The mean score for leverage is 0.004, which is shown in table 1. Usually an influential point is three times the mean score of the leverage, which would be 0.012, but then too many points would be influential, so I chose to name the 3 biggest outliers and to check for other ways to identify outliers. Thirdly I checked the DFFIT values for these cases, where a case is influential when it scores higher than 0.123, which is the case for about 8 cases shown in figure 5, these are cases 155, 308, 927, 4427, 4908, 5022, 5054 and 5206. I also made a boxplot for the cook's distance values in figure 6, here you can see a few outliers on this measure for influential values, these are cases 308, 927, 2161, 4908 and 5054.

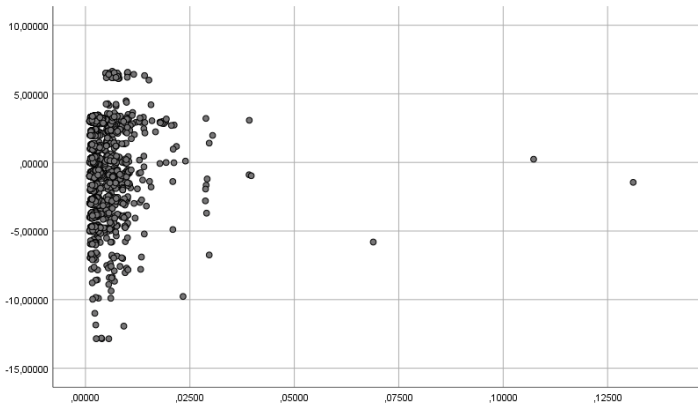


Figure 4: scatterplot for leverage set out against unstandardized residuals.

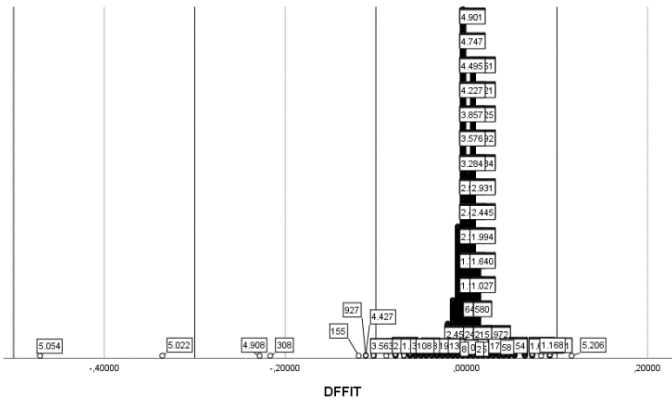


Figure 5: scatterplot for DFFIT values.

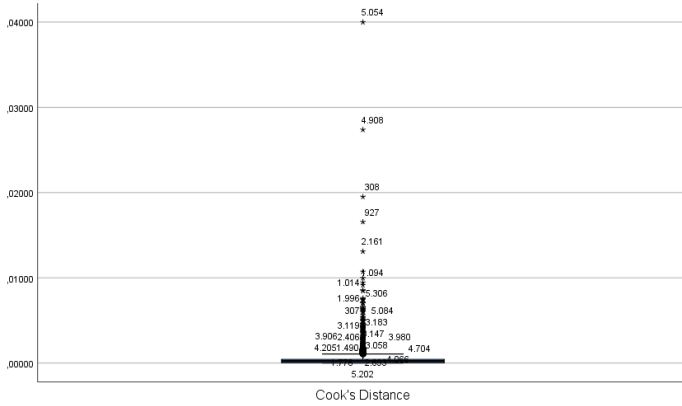


Figure 6: boxplot for cook's distance.

Table 1: the mean score of leverage.

Descriptive Statistics		
	N	Mean
Centered Leverage Value	2100	,0038095
Valid N (listwise)	2100	

```

REGRESSION
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/STATISTICS COEFF OUTS R ANOVA CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN

```

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/METHOD=ENTER age gender religious
/METHOD=ENTER discrimination_c
/METHOD=ENTER moroccan turkish
/METHOD=ENTER discriminationXmoroccan discriminationXturkish
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE ZPRED MAHAL COOK LEVER ZRESID DFBETA DFFIT.
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GRAPH

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/MISSING=LISTWISE.
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DESCRIPTIVES VARIABLES=LEV_1

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/STATISTICS=MEAN.
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/DISPLAY DOT=ASYMMETRIC.
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/COMPARE VARIABLE
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/PLOT=BOXPLOT
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/STATISTICS=NONE
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/NOTOTAL
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/MISSING=LISTWISE.
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