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The comparison between people who identify themselves as Chinese, Dutch, and people of another ethnic group in the Netherlands: Are there differences in the extent to which they experience COVID-19-associated discrimination and what are its mental health effects?

Master Thesis Social Policy and Public Health

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Abstract

Introduction: There are signals that people with a Chinese appearance in the Netherlands experience discrimination due to the coronavirus, as the COVID-19 outbreak started in China. The aims of this study were threefold, by examining whether; 1) people who identify themselves as Chinese experience more COVID-19-associated discrimination and have poorer mental health compared with Dutch or people of another ethnic group; 2) COVID-19-associated discrimination mediates the relation between ethnic groups (Chinese, Dutch and other ethnic groups) and mental health; 3) 'importance to ethnic identity' is a moderator in the relation between COVID-19-associated discrimination and mental health.

Methods: Participants consisted of a convenience sample of residents aged ≥ 18 across the Netherlands ($n = 290$), by filling in a questionnaire. Regression analyses were conducted to analyze differences in COVID-19-associated discrimination and mental health between ethnic groups. Mediation analyses, using PROCESS, were performed to analyze COVID-19-associated discrimination in the relation between ethnic groups and mental health. Moderator analyses, using PROCESS, were conducted to analyze 'importance to ethnic identity' in the relation between COVID-19-associated discrimination and mental health.

Results: Participants who identified themselves as Chinese or another ethnic group experienced more COVID-19-associated discrimination compared with Dutch. Also, participants who identified themselves as Chinese or another ethnic group had poorer mental health compared with Dutch, partly mediated by COVID-19-associated discrimination. 'Importance to ethnic identity' did not significantly moderate the relation between COVID-19-associated discrimination and mental health.

Conclusion: Chinese and ethnic groups experience more COVID-19-associated discrimination and have poorer mental health compared with Dutch. Campaigns should raise awareness about COVID-19-associated discrimination against ethnic groups in the Netherlands and attention should be paid on the organizations Asian Raisins and Discriminatie.nl, where discrimination can be reported and that combats discrimination in society.

Keywords: COVID-19-associated discrimination, Chinese, East Asians, mental health, importance to ethnic identity, the Netherlands

Introduction

The coronavirus disease 2019 (COVID-19), declared as global pandemic by the World Health Organization (WHO) in March 2020, threatens global health and national economies

(Liu, Finch, Brenneke, Thomas, & Le, 2020). The first official announcement of the coronavirus was noted in China by the Wuhan Municipal Health Commission in December 2019 (Wang, Tang, & Wei, 2020). COVID-19 has a high human-to-human transmissibility and spread rapidly to other Chinese provinces as well as 213 other countries (Lin et al., 2020). Political discourse about COVID-19 started beginning 2020, when the first coronavirus deaths in Wuhan (China) were confirmed (Wang et al., 2020). Official documented deaths with COVID-19 reached 1 million in late September 2020 worldwide (Ioannidis, 2020). At that time, the number of COVID-19 infections was still rising, and the global pandemic had disrupted nearly every aspect of human social live, as national measures were taken to stop the spread of COVID-19 infections (CDC, 2020; Dhanani & Franz, 2020). Europe reported the largest decrease in new cases and deaths in May 2021, followed by South-East Asia (WHO, 2021). Despite a decreasing global trend in May 2021, COVID-19 infections and deaths remain high and significant increases have been observed in many other countries (WHO, 2021). Both the COVID-19 pandemic and its social response have caused a series of behavioural and social changes that may continue long after the pandemic is over and may have long-term health effects, including on mental health (Barouki et al., 2020).

A potential group of people who may experience long-term health effects from the COVID-19 pandemic are East Asians due to stigmatization and discrimination that has been activated by the outbreak (Dhanani & Franz, 2020; Misra, Le Goldman, & Yang, 2020). Experiencing race-based stigma and discrimination during infectious disease outbreaks may increase risk of mental health problems, especially when combined with outbreak-related stressors and potential traumatic experiences, such as witnessing and caring for severely ill people, substantial mortality, and bereavement, and experiencing feelings of uncertainty and insecurity (Misra et al., 2020; Shultz, Baingana, & Neria, 2015). Fear and anticipation of future stigmatization and discrimination due to the coronavirus may also contribute to greater anxiety and uncertainty both during and following the pandemic (Misra et al., 2020). Moreover, it can lead to stress, elevated depressive symptoms, and suicidal ideation (Van Daalen, Cobain, Franco, & Chowdhury, 2021).

The activation of COVID-19-associated discrimination against East Asians started when some media inappropriately labelled the coronavirus by race, using headlines as 'Chinese virus pandemonium' and even suggesting 'China kids stay at home', as the coronavirus started in China (Zheng, Goh, & Wen, 2020). Moreover, President Trump of the United States blamed in the media China for the global pandemic (Lasco, 2020) and called COVID-19 the 'Chinese virus' (Zheng et al., 2020). As the COVID-19 outbreak elicited growing media attention and

public interest around the world, such media reports can easily bring adverse effects to East Asians through exclusion; some members of the public may mistakenly believe that people with Asian appearance are to be avoided during and potentially after the COVID-19 pandemic (Zheng et al., 2020). Initial data suggests that East Asians now mainly experience discrimination due to people thinking that they might have the coronavirus (Liu & Finch, 2020; Misra et al., 2020).

In the Netherlands, anti-discrimination facilities (ADV's) received signals that people with Asian appearance are being discriminated because of the coronavirus even before COVID-19 infections were detected in the Netherlands (Discriminatie.nl, 2020). Often these were hidden racist statements by mocking them through 'jokes', 'humour' and 'satire' (Asian Raisins, n.d.). For example, in February 2020 the song 'prevention is better than Chinese' was heard on Radio 10 in the Netherlands, about which the ADV's eventually received more than 3.000 reports of discrimination (Discriminatie.nl, 2020). Since the spread of the coronavirus in the Netherlands, people with Asian appearance still experience COVID-19-associated discrimination. In many cases it concerns hostility (e.g., abuse) and other forms of intimidation (e.g., pursue and neglecting) (Asian Raisins, n.d.; Discriminatie.nl, 2020).

Previous studies indicated that East Asians experience COVID-19-associated discrimination due to people thinking they might have the coronavirus, as COVID-19 started in China (Liu & Finch, 2020; Zheng et al., 2020) and that discrimination may lead to poorer mental health, especially when facing a pandemic with outbreak-related stressors (Misra et al., 2020; Shultz et al., 2015). However, it is unknown whether Chinese experience more COVID-19-associated discrimination compared with Dutch and other ethnic groups in the Netherlands and how this affects their mental health. Therefore, the aim of this study is to get more knowledge about COVID-19-associated discrimination and its effect on mental health among ethnic groups (Chinese, Dutch, and other ethnic groups) in the Netherlands.

Existing research

According to scientists, the majority group uses their power to restrict subordinate groups' access to resources, resulting in gross systematic inequalities (Carter, Lau, Johnson, & Kirkinis, 2017; Freire, 1970). These forms of oppression are often based on ethnic/racial group membership (i.e., skin color or physical features) (Klonoff, & Landrine, 2000), which is called racism and discrimination (Marger, 2015). Studies showed that mostly ethnic/racial minorities, such as Blacks, East Asians, Hispanics, Latinas experience stigmatization and discrimination

(Dovidio, Gaertner, Niemann, & Snider, 2001; Krieger, Smith, Naishadham, Hartman, & Barbeau, 2005).

Regardless ethnicity, perceived discrimination is related with several negative health outcomes (i.e., physical and mental), with the largest effect for mental health outcomes, such as overall distress, depression, suicidal ideation, and anxiety (Broman, Mavaddat, & Hsu, 2000; Gale, Pieterse, Lee, Huynh, Powell, & Kirkinis, 2020; Hwang & Goto, 2008). The negative mental health outcomes were stronger for Blacks and East Asians (Gee, Ro, Shariff-Marco, & Chae, 2009; Sternthal, Slopen, & Williams, 2011).

The explanation of why ethnic/racial minorities experience stigmatization and discrimination has to do with perceived threat from majorities (Dhanani & Franz, 2020; Green et al., 2010). As ethnic/racial minorities are biased to be vulnerable to contracting infectious diseases, majority groups stigmatize and discriminate ethnic/racial groups (Dhanani & Franz, 2020; Green et al., 2010). For instance, as the Ebola virus disease outbreak in 2014 originated from West-Africa, African migrants experienced stigmatization and discrimination due to the Ebola virus (Siu, 2015). In addition, during the SARS outbreak in 2002 from China, East Asians were discriminated due to stereotypes that East Asians are 'dirty' and 'sick' (Eichelberger, 2007).

Now that there is a COVID-19 pandemic, originated from China, recent study indicated that East Asians still pose a threat to the physical and economic health of others and are therefore stigmatized and discriminated (Dhanani & Franz, 2020). Moreover, it was found that COVID-19-associated discrimination negatively impacts the mental health of East Asians during the COVID-19 pandemic (Liu et al., 2020). However, previous study found that a strong ethnic identity protects minorities from the negative effects of stigmatization and discrimination (Dovidio et al., 2001). A common group identity might mitigate the effects of factors associated with stigmatization, such as feelings of ethnic/racial distinctiveness, that would otherwise lead to lower levels of satisfaction or commitment (Dovidio et al., 2001). However, the study of Yip, Gee, and Takeuchi (2008) found a negative moderating effect of a strong ethnic identity between discrimination and mental health among East Asians.

Little is known about COVID-19-associated discrimination and mental health among ethnic groups, as only one study examined this (Liu et al., 2020). From the American study there is evidence that COVID-19-associated discrimination is linked to poorer mental health among ethnic groups (Liu et al., 2020). However, it is unknown how this is in European countries. Therefore, this study will focus on the effect of COVID-19-asscociated

discrimination on mental health among ethnic groups (Chinese, Dutch, and other ethnic groups) in the Netherlands.

Theoretical approach

Goffman (1963) developed the classical idea about stigmatization and discrimination. He defined stigmatization as an attribute, trait or disorder that is deeply discrediting and marks an individual as being unacceptably different from others. Based on this attribute, society stigmatize people and reduces their quality of life. Discrimination then occurs when stigmatization is acted on by concrete behaviors, such as exclusion and rejection (Goffman, 1963). Members of stigmatized groups are thus devalued and as result discriminated by being treated differently (LeBel, 2008). In this study, the concept COVID-19-associated discrimination will be used, as the questionnaire asks whether and how people feel treated differently by others during the COVID-19 pandemic.

Prejudice and discrimination are the result of negative attitudes/beliefs of an in-group towards an out-group (Allport, 1954). These attitudes work as defensive mechanism when in-group members feel threatened by an outgroup (Stephan & Stephan, 1996). The Integrated Threat Theory (ITT) (Stephan & Stephan, 1996; 2000) describes four types of threats that predict negative attitudes towards minorities: realistic and symbolic threats, intergroup anxiety, and negative stereotypes. Realistic threats create concerns about the survival of the in-group due to existence of an out-group, which leads to prejudice, whether the threat is true or not. Symbolic threat occurs when the ingroup feels its 'way of life' is threatened by the outgroup (Stephan & Stephan, 1996). As perceptions of cultural differences indirectly affect attitudes, symbolic threat results into prejudice towards outgroup members (Spencer-Rodgers & McGovern, 2002). Intergroup anxiety occurs when a person feels personally threatened during intergroup contact, which directly causes negative expressions towards out-group members (Stephan & Stephan 1996; 2000). Negative stereotypes are assumptions of an in-group about an out-group. In-group members are often afraid while having intergroup contact, which in turn lead to disliking out-group members (Croucher, Nguyen, & Rahmani, 2020). Perceiving a threat is thus already enough for in-group members to have and express negative attitudes, prejudice, and hate towards outgroup members (Croucher et al., 2020; Stephan & Stephan, 2000). Through the lens of the ITT, it might be that COVID-19-associated discrimination is activated by the in-group's perception that East Asians pose a threat to their physical and economic health as it originates from China (Dhanani & Franz, 2020).

A theory may explain why COVID-19-associated discrimination stronger negatively affects mental health for some than others. The Buffering Hypothesis posits that ethnic identity 'buffers' (protects) people from the potentially pathogenic influence of stressful events (Cohen & Wills, 1985). The Social Identity Theory (SIT) (Tajfel & Turner, 1986) explains this further: social identities for individual self-concepts and intergroup relations are widely recognized as important for human beings. Individuals focus on positive aspects of their in-group, which helps them to bolster their esteem. The more an individual identifies with a particular social group, the more invested the individual is in stressing the positive attributes of that group (Tajfel & Turner, 1986). In terms of ethnic identity, individuals who strongly identify with their ethnic identity, would be more committed to feeling good about their group, even when experiencing discrimination (Yip et al., 2008). If discrimination induces distress through an attack on one's self-concept, then ethnic identity might moderate discrimination by counterbalancing such an assault (Phinney, 1990; 1996; Yip et al., 2008). Therefore, one would expect Chinese with a strong ethnic identity to be buffered from negative mental health effects of COVID-19-associated discrimination.

On the other hand, the Exacerbating Hypothesis suggests that if ethnicity is important for one's identity, it is equally plausible that having a strong ethnic identity may exacerbate the effects of discrimination, resulting in poorer mental health (Yip et al., 2008). The Self-Categorization Theory (SCT) (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) explains this further: perceivers are both individuals and group members, which explains how and when people categorize themselves as individual and group member and examines the impact of this variability to self-perception ('I' and 'we') to understand the mind and behavior. According to the SCT people are more in tune with environmental cues that are relevant to an important aspect of their identity (Turner et al., 1987). In terms of ethnic identity, experiences of ethnic/racial discrimination might be such a relevant cue (Yip et al., 2008). Therefore, Chinese with a strong ethnic identity should not only report more, but also react more negatively to COVID-19-associated discrimination.

Research question

The current study focuses on COVID-19-associated discrimination and mental health among ethnic groups (Chinese, Dutch, and other ethnic groups) in the Netherlands. There is evidence that East Asians experience more COVID-19-associated discrimination and have poorer mental health compared with majorities (Liu et al., 2020). However, it is unclear how ethnic groups in the Netherlands differ in the extent to which they experience COVID-19-

associated discrimination and how it affects mental health. Therefore, this study will examine the differences in COVID-19-associated discrimination and mental health between Chinese, Dutch, and other ethnic groups in the Netherlands.

In this study the ITT, the Buffering Hypothesis and the Exacerbating Hypothesis will be used. The ITT might explain why some ethnic groups experience more COVID-19-associated discrimination than others. Several studies found an effect of discrimination on different mental health outcomes (Broman et al., 2000; Gale et al., 2020; Hwang & Goto, 2008). Therefore, mental health will be examined by depressive, hostile, and anxious emotions. The Buffering and Exacerbating Hypothesis contradict each other and assume an opposite effect of the concept 'importance to ethnic identity'. The Buffering Hypothesis states that a strong ethnic identity works as protect mechanism for the negative mental health effects of discrimination, while the Exacerbating Hypothesis states the opposite. Therefore, this study will examine whether and how 'importance to ethnic identity' affects the relation between COVID-19-associated discrimination and mental health.

The following research question will be examined: *To what extent do people of ethnic groups (Chinese, Dutch, and other ethnic groups) differ in the extent to which they experience COVID-19-associated discrimination in the Netherlands and how does this affect mental health?* Firstly, differences in experiences of COVID-19-associated discrimination and mental health between ethnic groups (Chinese, Dutch, and other ethnic groups) will be examined. Secondly, the association between COVID-19-associated discrimination and mental health will be examined. Subsequently, it will be examined whether COVID-19-associated discrimination mediates the relation between ethnic groups and mental health. Lastly, it will be examined whether 'importance to ethnic identity' moderates the relation between COVID-19-associated discrimination and mental health.

Based on existing research and theory, described above, the following hypotheses will be tested (see Figure 1):

(H1) It is expected that people who identify themselves as Chinese experience more COVID-19-associated discrimination (H1a) (Liu et al., 2020; Stephan & Stephan, 2000) and have poorer mental health (H1b) (Liu et al., 2020) compared with Dutch and people of other ethnic groups in the Netherlands.

(H2) It is expected that COVID-19-associated discrimination negatively affects mental health (H2a) (Liu et al., 2020), and mediates the relation between ethnic groups and mental health (H2b) (Broman et al., 2000).

(H3) Based on the Buffering Hypothesis, it is expected that a strong ethnic identity positively moderates the relation between COVID-19-associated discrimination and mental health (Yip et al., 2008).

(H4) Based on the Exacerbating Hypothesis, it is expected that a strong ethnic identity negatively moderates the relation between COVID-19-associated discrimination and mental health (Yip et al., 2008).
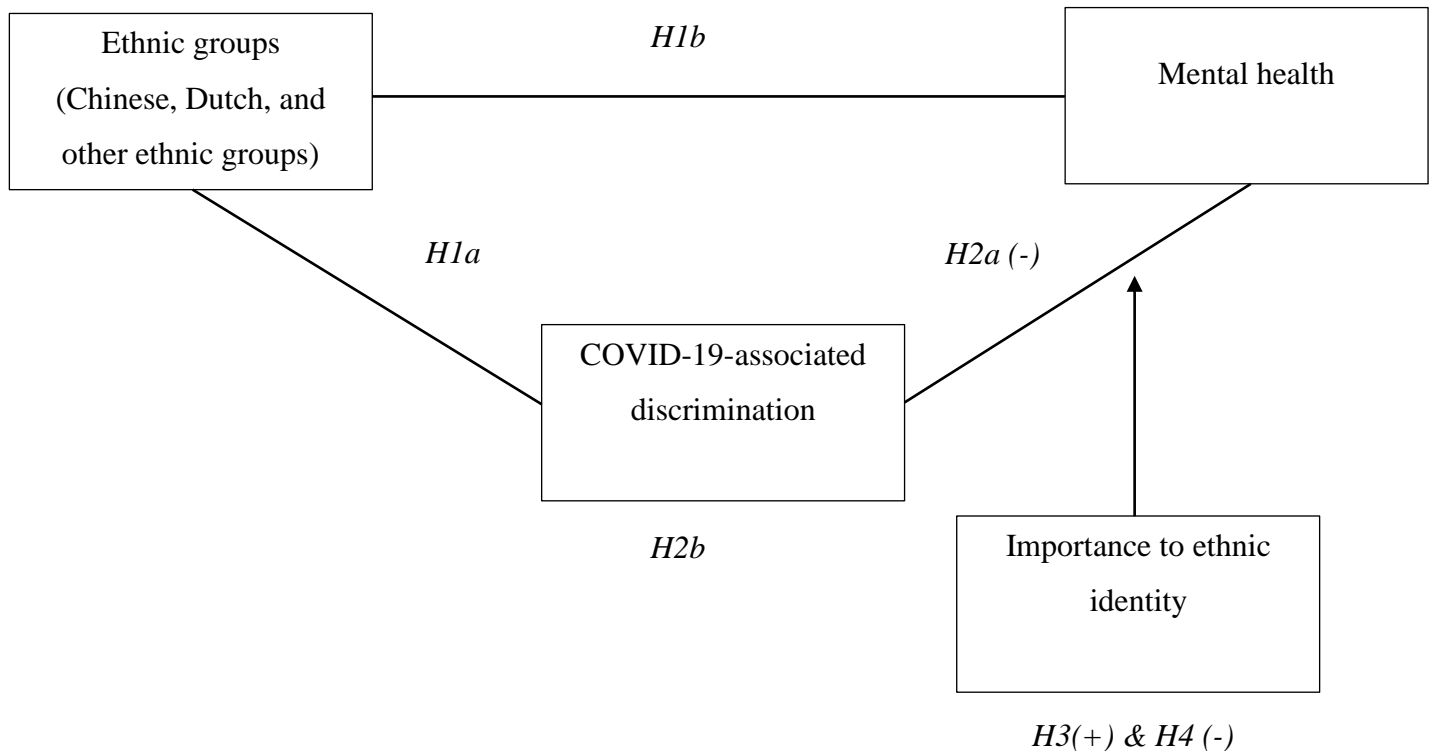

Figure 1. *Conceptual model.*

Research methods

Design

      Original data were collected by means of quantitative research method, through a questionnaire with multiple-choice questions. A lot of data can be obtained through a questionnaire, which is necessary to validate the hypotheses of this study. The researchers leading this research and made up the questionnaire are Dr. Tracy Cheung, Dr. Carlijn Kamphuis and Prof. Dr. John de Wit of the Interdisciplinary Social Science department of Utrecht University (UU). As from December 8, 2020, the questionnaire was distributed by emailing colleagues of the Interdisciplinary Social Science department, asking them to further share the link in their networks. The questionnaire was also distributed through social media (including LinkedIn, Facebook, and online expat forums), personal networks (via Facebook and WhatsApp) and the UU website: https://www.uu.nl/onderzoek/doe-mee-aan-onderzoek.

Between March 2 to 20, 2021, the questionnaire was advertised on Facebook, whereby the researchers paid for increasing its visibility and for distributing a Facebook post with a link to the questionnaire. The questionnaire took about 10-15 minutes to complete, was available in Dutch and English, and consisted of 45 questions. All people aged $\geq$ 18 and residing in the Netherlands could fill in the questionnaire. Participants were surveyed about discrimination experiences and mental health during the COVID-19 pandemic, fielded between December 8, 2020, and April 8, 2021.

Participants and sampling

The panel consisted of a convenience and self-selection sample of residents aged $\geq$ 18 across the Netherlands. Moreover, snowball sampling was used to find more participants. A total of 406 participants (N = 406) filled in the questionnaire. However, not all participants completed the questionnaire items needed for the current analyses or were suitable for including in the analyses. In total, 116 participants were not included in the analyses, of which one participant was not aged $\geq$ 18, 12 participants did not identify themselves as man or women, three participants were visitors in the Netherlands and 106 participants did not complete the questionnaire items needed for the analyses. In short of the 406 participants who filled in the questionnaire, 290 participants were included in the analyses.

Ethical reflection

Before filling in the questionnaire, participants could click on a link with additional information about the research and rights of the participants. Participation was on voluntary basis. Participants could decide to take part in this questionnaire or decide to quit while filling in the questionnaire without adverse consequences. Participants remain completely anonymous, so their identities could not be traced. The data is treated confidentially and stored in a safe digital database from UU for at least 10 years in accordance with the guidelines of the Association of Cooperating Dutch Universities (VSNU). The data is also stored in DANS (Data Archiving and Network Services), so that it is preserved and can be used for future research. This does not mean, however, that they are freely accessible or visible to everyone (only by qualified researchers and supervised students from recognized institutions). This research was approved by the Faculty Ethics Review Committee (FETC) of the Faculty of Social Science of UU and is bounded by the guidelines of this FETC. At the bottom of the page participants could click on the button 'next', which implied that the participant would agree with the informed consent.

Data collection instruments

Independent variable: Participants who identified themselves as Chinese, Dutch, and other ethnic groups. A multiple-choice question in the questionnaire enabled participants to identify themselves to which ethnic group they belonged. Multiple answers were possible (i.e., Dutch, Turkish, Moroccan, Surinamese, Chinese and other, namely…).

The variable 'ethnic group' was created (1 = Dutch, 2 = Chinese, 3 = Chinese-Dutch, 4 = Turkish, 5 = Moroccan, 6 = Surinamese, 7 = other ethnic group, 8 = another ethnic group-Dutch, 9 = another ethnic group-Chinese-Dutch). As this variable still had many answer options, the variable 'ethnic group 3' was created (1 = Dutch, 2 = Chinese, 3 = another ethnic group). Participants who identified themselves as Chinese and Dutch or as Chinese, Dutch and another ethnic group were coded as Chinese. Participants who identified themselves as Dutch and another ethnic group were coded as another ethnic group.

Dependent/independent variable: COVID-19-associated discrimination. Two variables were created and analyzed, namely COVID-19-associated discrimination (CAD) and COVID-19-associated discrimination experiences (CADE). This study assessed CAD using a six-item scale adapted from the Everyday Discrimination Scale Short Version (Liu et al., 2020; Sternthal et al., 2011), ensued from the nine-item Everyday Discrimination Scale (Williams, Yu, Jackson, & Anderson, 1997), in which respondents indicated how often they experienced unfair treatment in their daily lives during the COVID-19 pandemic (e.g., "You are treated with less courtesy than other people are") (α = .858). In addition, based on a study about discrimination experiences among HIV-infected people (Liamputtong, 2013) seven discriminatory responses related to the coronavirus were added to the variable CADE (e.g., "People take extra hygienic measures after interacting with me") (α = .919). Responses were provided on a five-point Likert-scale ranging from 1 to 5 (1 = never) (5 = often). Mean scores for CAD and CADE were created by summing up the items and dividing it by the number of items.

This instrument was conceptualized as measuring self-reported experiences of discrimination during the COVID-19 pandemic. While self-reported experiences must be perceived, not all perceived experiences are necessarily reported, due to individuals' ability to report them (Krieger et al., 2005).

CAD and CADE were dependent variables when analyzing the differences in CAD(E) between ethnic groups and were independent variables when analyzing its effect on mental health.

Dependent variable: Mental health. Mental health was operationalized by three concepts, namely depressed, hostile, and anxious emotions. Based on the study of McCoy and Major (2003), participants completed a five-item measure of depressed (i.e., sad [reverse-scored], depressed [reverse-scored], confident, happy, satisfied) (α = .935) and hostile emotions (i.e., angry [reverse-scored], agitated [reverse-scored], irritated [reverse-scored], hostile [reverse-scored], and mad [reverse-scored]) (α = .951). Anxious emotions were composed of four items from the MAACL anxiety subscale (Major, Kaiser, & McCoy, 2003; Schmitt & Branscombe, 2002) (i.e., fearful [reverse-scored], worried [reverse-scored], calm, and secure) (α =.914). Responses were provided on a five-point Likert-scale 1 to 5 (1 = not at all) (5 = very much).

The Cronbach's alpha for the items of depressed, hostile, and anxious emotions combined was .974. Therefore, a mean score was created for the variable mental health. For the analyses, only the variable mental health was included.

Moderator: 'Importance to ethnic identity'. This study explored whether 'importance to ethnic identity' was a moderator in the relation between CAD(E) and mental health. As in the study of Yip et al. (2008) 'importance to ethnic identity' was measured by one statement: "(Depending on what the participant had entered in a previous question) … is an important part of who I am". Examples included 'my Asian appearance', 'my ethnic background', 'the province where I live' and 'my profession', which was measured on a seven-point Likert-scale 1 to 7 (1 = strongly disagree) (7 = strongly agree) (α = .907). A mean score was created for the variable 'importance to ethnic identity'.

Potential confounders: Gender, age, residence, work activities, and education level. Gender was obtained with a multiple-choice question, with four answer categories: 'male', 'female', 'other' and 'prefer not to disclose' (1 = male, 2 = female). Year of birth was obtained through an open-ended question, which was converted into age in years. Residing in the Netherlands was obtained by one question about how long the participant have lived in the Netherlands, with two answer options (1 = all my life, 2 = other, namely (how many years?)). A multiple-choice question about work activities with nine answer options was coded into three categories (1 = employed, 2 = unemployed, 3 = student). Education level was obtained by a multiple-choice question with eight answer options, coded into three categories (1 = low, 2 = medium, 3 = high).

Statistical analyses

Analyses were performed using IBM SPSS Statistics version 26. Before running the analyses, assumptions were checked (Appendix B). In addition, descriptive statistics were performed on all variables.

ANOVA tests were conducted to test whether ethnic groups (Chinese, Dutch, and other ethnic groups) differed in the extent of CAD(E) (Appendix C). In addition, Regression analyses were performed to test the differences again and to control for potential confounders. Subsequently, an ANOVA test was conducted to test whether ethnic groups (Chinese, Dutch, and other ethnic groups) differed in the extent of mental health. In addition, potential confounders were added to Regression analyses. Furthermore, Regression analyses were conducted to assess the relationship between CAD(E) and mental health, and to control for potential confounders. Subsequently, Mediation analyses were performed to test whether CAD(E) mediated the relation between ethnic groups and mental health. Lastly, Moderator analyses were conducted to test whether 'importance to ethnic identity' moderated the relation between CAD(E) and mental health.

Results

The sample

In total, 290 participants ($n = 290$) were included in the analyses. Characteristics of the sample are represented in Table 1. The mean age of the sample was 35.8 years ($SD = 14.3$). The sample consisted of 76 men (26.2%) and 214 women (73.8%). The average age was 37.1 ($SD = 14.2$) for the male and 35.3 ($SD = 14.4$) for the female participants. More than half (60.7%) of the participants were Dutch citizens. Half (50.3%) of the participants have lived in the Netherlands all their lives. Half (51.7%) of the participants indicated having a postgraduate degree as the highest level of education. Lastly, most (35.9%) participants were in full-time employment.

There were 25 (8.6%) participants who identified themselves as Chinese, 146 (50.3%) as Dutch and 119 (41.0%) as another ethnic group. Of the 25 participants who identified themselves as Chinese, 19 (6.6%) participants were born in China.

Most (39.3%) participants indicated to have no experiences of being treated differently by other people since the COVID-19 outbreak. However, eight (2.8%) participants indicated to have often experienced discrimination during the COVID-19 pandemic. Of the 176 (60.7%)

participants who experienced discrimination, 26 (9.0%) participants indicated that it was because of their Asian appearance.

Participants who identified themselves as Chinese experienced more COVID-19-associated discrimination compared with Dutch or participants of another ethnic group. Moreover, participants who identified themselves as Chinese had poorer mental health compared with Dutch, but not compared with participants of another ethnic group. In addition, participants who identified themselves as Chinese or another ethnic group attached more importance to their ethnic identity compared with Dutch.

Table 1

Sample characteristics by ethnic groups

	Ethnic groups			
Variable	Total sample ($n = 290$)	Chinese ($n = 25$)	Dutch ($n = 146$)	Other ethnic groups ($n = 119$)
Gender, % (n)				
Male	26.2 (76)	5.2 (15)	11.7 (34)	9.3 (27)
Female	73.8 (214)	3.4 (10)	38.6 (112)	31.7 (92)
Age in years, mean (*SD*)	35.8 (14.3)	30.4 (3.9)	35.2 (15.7)	37.6 (13.8)
Residing in NL, % (n)				
All my life	50.3 (146)	1.7 (5)	47.6 (138)	1.0 (3)
Not all my life	49.7 (144)	6.9 (20)	2.8 (8)	40.0 (116)
Work activities, % (n)				
Employed	55.9 (162)	5.2 (15)	25.2 (73)	25.5 (74)
Unemployed	15.5 (45)	.7 (2)	7.2 (21)	7.6 (22)
Student	28.6 (83)	2.8 (8)	17.9 (52)	7.9 (23)
Education, % (n)				
Low	.7 (2)	0 (0)	.3 (1)	.3 (1)
Medium	4.5 (13)	0 (0)	3.1 (9)	1.4 (4)
High	94.8 (275)	8.6 (25)	46.9 (136)	39.3 (114)
CAD, mean (*SD*)	1.669 (.762)	1.960 (.868)	1.524 (.638)	1.786 (.842)
CADE, mean (*SD*)	1.580 (.680)	1.892 (.829)	1.472 (.603)	1.646 (.712)
Mental health, mean (*SD*)	4.365 (1.580)	3.709 (1.490)	4.727 (1.508)	4.060 (.1.587)

| Importance to ethnic identity, mean (*SD*) | 5.917 (1.579) | 6.083 (1.828) | 4.000 (0) | 6.100 (1.294) |

Note. SD = Standard deviation, NL = the Netherlands, CAD = COVID-19-associated discrimination, CADE = COVID-19-associated discrimination experiences.

Note. CAD(E) and mental health: score range 1 to 5.

Differences in CAD(E) between ethnic groups (Chinese, Dutch, and other ethnic groups)

Regression analyses were conducted to test whether participants who identified themselves as Chinese experienced more CAD(E) compared with Dutch or participants of another ethnic group. Results indicated that the ethnic groups (Chinese, Dutch and other ethnic groups) differed significantly in CAD ($F(2, 287) = 6.076$, $p \leq .01$, $R^2 = .041$). The analyses revealed that participants who identified themselves as Chinese experienced significantly more CAD compared with Dutch ($b = -.436$, $t(287) = -2,691$, $p \leq .01$), but not compared with participants of another ethnic group ($b = -.174$, $t(287) = -1.058$, $p = .291$) (Table 2). Potential confounders were added to Regression analyses, in which being high educated was found to be a significant predictor. Similar results were found for CADE. However, there were no significant confounders.

Table 2

The effect of ethnic groups and predictors on CAD(E)

Variable	CAD			CADE		
	B	SE (B)	β	B	SE (B)	β
Model 1						
Constant (ref – Chinese group)	1.960	.150		1.892	.134	
Dutch group	-.436	.162	-.287**	-.420	.145	-.309**
Other ethnic groups	-.174	.165	-.113	-.247	.148	-.179
R^2	.041			.035		
Adjusted R^2	.034			.028		
Model 2						
Constant (ref – Chinese group)	2.862	.575		2.461	.520	
Dutch group	-.202	.221	-.133	-.358	.200	-.263

	B	SE	β	B	SE	β
Other ethnic groups	-.261	.170	-.169	-.290	.154	-.210
Gender female (ref – male)	-0.90	.103	-.052	-.090	.093	-.058
Age in years	-.1.557E-5	.004	.000	.002	.004	.041
Residing in NL not all my life (ref – all my life)	.313	.194	.206	.089	.175	.066
Work activities unemployed (ref – employed)	.209	.132	.099	.138	.119	.074
Work activities student (ref – employed)	-.192	.114	-.114	-.133	.103	-.088
Education level medium (ref – low)	-.775	.566	-.211	-.322	.511	-.098
Education level high (ref – low)	-1.071	.525	-.312*	-.632	.474	-.206
R^2	.105			.084		
Adjusted R^2	.076			.055		
Model 3						
Constant (ref – Chinese group)	2.433	.247				
Dutch group	-.468	.161	-.308**			
Other ethnic groups	-.194	.164	-.126			
Education level high (ref – low)	-.473	.198	-.138*			
R^2	.059					
Adjusted R^2	.050					

$* p \leq .05, ** p \leq .01.$

Note. CAD = COVID-19-associated discrimination, CADE = COVID-19-associated discrimination experiences, NL = the Netherlands.

Differences in mental health between ethnic groups (Chinese, Dutch, and other ethnic groups)

A One-way-ANOVA test was conducted to test whether participants who identified themselves as Chinese had poorer mental health compared with Dutch or participants of another ethnic group. Results indicated that there were significant differences between group means ($F(2, 287) = 8.631, p \leq .01$). A Bonferroni Post Hoc Test revealed that the mental health of participants who identified themselves as Chinese (M = 3.71, SD = 1.490) was significantly

poorer compared with Dutch (M = 4.73, *SD* = 1.508, *p* ≤ .01), but not compared with participants of another ethnic group (M = 4.06, *SD* = 1.587, *p* = .901). Potential confounders were added to Regression analyses, in which being unemployed was found to be a significant predictor (Table 3).

Table 3

The effect of ethnic groups and predictors on mental health

Variable	Mental health		
	B	SE (B)	*β*
Model 1			
Constant (ref – Chinese group)	4.395	1.192	
Dutch group	.637	.458	.202
Other ethnic groups	.590	.353	.184
Gender female (ref – male)	-.094	.213	-.026
Age in years	.004	.008	.040
Residing in NL not all my life (ref – all my life)	-.652	.401	-.207
Work activities unemployed (ref – employed)	-.726	.274	-.167**
Work activities student (ref – employed)	.145	.237	.041
Education level medium (ref – low)	-1.111	1.172	-.146
Education level high (ref – low)	-.249	1.088	-.035
R^2	.107		
Adjusted R^2	.078		
Model 2			
Constant (ref – Chinese group)	3.768	.304	
Dutch group	1.066	.329	.338**
Other ethnic groups	.430	.335	.134
Work activities unemployed (ref – employed)	-.745	.247	-.171**
R^2	.086		
Adjusted R^2	.076		

** $p ≤ .01$.

The association between CAD(E) and mental health

Regression analyses were conducted to test whether CAD(E) was negatively associated with mental health. Results indicated that there was a collective significant effect between CAD and mental health ($F(1, 288) = 189.111$, $p \leq .01$, $R^2 = .396$) (Table 4). CAD was negatively associated with mental health ($b = -1.306$, $t(288) = -13.752$, $p \leq .01$). Potential confounders were added to Regression analyses, in which not living your whole life in the Netherlands, being unemployed and being medium educated were significant predictors. Similar results were found for CADE.

Table 4

The effect of CAD(E) and predictors on mental health

Variable	Mental health					
	CAD			CADE		
	B	SE (B)	β	B	SE(B)	β
Model 1						
Constant (ref – mental health)	6.545	.174		6.775	.178	
CAD(E)	-1.306	.095	-.630**	-1.525	.103	-.657**
R^2	.396			.431		
Adjusted R^2	.394			.429		
Model 2						
Constant (ref – mental health)	8.349	.931		8.134	.887	
CAD(E)	-1.262	.098	-.608**	-1.479	.104	-.637**
Gender female (ref – male)	-.156	.164	-.044	-.205	.158	-.057
Age in years	.005	.006	.048	.008	.006	.070
Residing in NL not all my life (ref – all my life)	-.394	.148	-.125**	-.491	.140	-.156**
Work activities unemployed (ref – employed)	-.468	.219	-.107*	-.521	.210	-.120*
Work activities student (ref – employed)	-.096	.190	-.028	-.053	.182	-.015

Education level medium (ref – low)	-2.115	.937	-.278*	-1.602	.898	-.210
Education level high (ref – low)	-1.646	.872	-.231	-1.207	.835	-.169
R^2	.431			.474		
Adjusted R^2	.415			.459		
Model 3						
Constant (ref – mental health)	6.666	.177		6.947		
CAD(E)	-1.233	.097	-.590**	-1.450	.179	-.624**
Residing in NL not all my life (ref – all my life)	-.379	.146	-.120**	-.462	.103	-.146**
Work activities unemployed (ref – employed)	-.349	.199	-.080	-.400	.138	-.092*
Education level medium (ref – low)	-.371	.348	-.049	.461	.191	
R^2	.418			.455		
Adjusted R^2	.410					

* $p \leq .05$, ** $p \leq .01$.

Note. CAD = COVID-19-associated discrimination, CADE = COVID-19-associated discrimination experiences, NL = the Netherlands.

The mediating role of CAD(E) in the relation between ethnic groups and mental health

Mediation analyses, using PROCESS, were performed to test whether the relation between ethnic groups (Chinese, Dutch, and other ethnic groups) and mental health was mediated by CAD(E). The analyses revealed that there was a significant indirect effect of CAD in the relation between ethnic groups and mental health (Effect = -.170, 95% C.I. [-.279, -.049]) (Table 5). The mediator could account for roughly half of the total effect (Effect = -.339). Similar results were found for CADE.

Table 5

The mediating role of CAD(E) in the relation between ethnic groups and mental health

	CAD	CADE

Variable	B	SE (B)	t	B	SE (B)	t
Total effect model	-.339	.096	-3.549**	-.339	.096	-3.549**
Indirect effect on ethnic groups	.134	.046	2.877**	.090	.042	2.153*
Indirect effect on mental health	-1.271	.096	-13.279**	-1.489	.103	-14.477**
Direct effect	-.170	-.076	-2.218*	-.206	.073	-2.801**
R^2	.407			.446		

* $p \leq .05$, ** $p \leq .01$.

Note. CAD = COVID-19-associated discrimination, CADE = COVID-19-associated discrimination experiences.

The moderating role of 'importance to ethnic identity' in the relation between CAD(E) and mental health

Moderator analyses, using PROCESS, were conducted to test whether the relation between CAD(E) and mental health was moderated by 'importance to ethnic identity'. Results indicated no significant moderation effect of 'importance to ethnic identity' in the relation between CAD and mental health ($b = .141$, $t = .745$, $p = .478$), and between CADE and mental health ($b = .208$, t $= .815$, $p = .439$) (Table 6). However, scatterplots showed an interaction effect, but they were not significant (Appendix D).

Table 6

The moderating role of 'importance to ethnic identity' in the relation between CAD(E) and mental health

	Importance to ethnic identity					
	CAD			CADE		
Variable	B	SE (B)	t	B	SE (B)	t
Constant (ref – mental health)	2.547	.216		2.543	.227	
CAD(E)	-.525	.264	-1.991	-.512	.317	-1.615
Importance to ethnic identity	-.054	.148	-.362	-.080	.151	-.528
Interaction CAD(E) and importance to ethnic identity	.141	.190	.745	.208	.255	.815
R^2	.042			.055		

Note. CAD = COVID-19-associated discrimination, CADE = COVID-19-associated discrimination experiences.

Discussion

The findings of this study suggest that Chinese experience more COVID-19-associated discrimination compared with Dutch, but not compared with other ethnics group in the Netherlands. The latter was not in line with the expectations of this study, but was consistent with previous research (Liu et al., 2020). An explanation may be that there exist longstanding stereotypes associating ethnic groups with the spread of infectious diseases (O'Shea, Watson, Brown, & Fincher, 2020). COVID-19-associated discrimination against East Asians probably started as media attention on inappropriate Chinese culinary practices as a source of diseases paralleled to the coverage of the rise of COVID-19 from China as a global threat (Chen, Zhang, & Liu, 2020). According to the ITT, negative social media posts are enough for majorities to perceive all East Asians as dangerous and therefore express negative attitudes, prejudice, and hate towards them (Croucher et al., 2020).

Further, this study found that Chinese and other ethnic groups had poorer mental health compared with Dutch. Also, COVID-19-associated discrimination was negatively associated with mental health. These findings were in line with the expectations of this study and consistent with previous study (Liu et al., 2020). In addition, COVID-19-associated discrimination partially mediated the relation between ethnic groups and mental health. This was in line with the study of Broman et al. (2000), in which Blacks (African Americans) had more psychological distress when experiencing discrimination.

Contrary to expectations and previous study (Yip et al., 2008) 'importance to ethnic identity' was not a significant moderator. However, the scatterplots showed that 'importance to ethnic identity' was associated with poorer mental health when experiencing COVID-19-associated discrimination. This effect was probably non-significant as the sample size was too small. But the scatterplots do show a negative relationship between COVID-19-associated discrimination and mental health when it is moderated by 'importance to ethnic identity', which would confirm the Exacerbating hypothesis of Yip et al. (2008).

Limitations and strengths

Findings from this study should be interpreted considering several limitations. First, the sample size was rather small ($n = 290$) and selective as the sample was highly educated and female. Therefore, the results obtained may be influenced and may not represent the actual situation in the population. Recent study suggests that women and low-educated are more likely

to experience COVID-19-associated discrimination compared with permanent residents (He, He, Zhou, Nie, & He, 2020). However, another study found that men were more affected by racial discrimination compared with women, in which Black and Asian men seem to suffer more psychologically from racial discrimination (Carter et al., 2017). In addition, in this study there were few Chinese participants ($n = 25$), while that was the main target group for this study. Moreover, this questionnaire was distributed before protests started against Asian hate in Amsterdam last April 2021 (NOS, 2021), which may have caused less reports of COVID-19-associated discrimination than perceived experiences of discrimination by Chinese, as Chinese have a cultural tendency in order not to cause problems (Asian Raisins, n.d.). Therefore, the findings of this study about COVID-19-associated discrimination and mental health among ethnic groups cannot be generalized to the situation in the Netherlands.

Second, this study aimed to examine whether people with Asian appearance experience more COVID-19-associated discrimination compared with people without Asian appearance. However, the questionnaire used for this study did not measure Asian appearance. Instead, the questionnaire measured how participants identified themselves, with the option 'Chinese' listed to include the target group of participants. This may have led that people with Asian appearance, but who did not identify as Chinese, to fill in the 'other, namely' option. In the 'other, namely' option, many participants filled in to identify with another Asian country. Therefore, the results should be interpreted with caution, knowing that the term 'Chinese' ensured that not all people with Asian appearance were included in the target group or in the analyses.

Further, the questionnaire was distributed during the second COVID-19 lockdown in the Netherlands. Previous study showed that people had poorer mental health during the first COVID-19 lockdown (Luijten et al., 2021). Therefore, the results obtained on mental health of ethnic groups may have been influenced by the COVID-19 lockdown. In other words, the mental health of ethnic groups may be poorer due to the COVID-19 lockdown. Consequently, there is no clear insight into the actual mental health of ethnic groups during the COVID-19 pandemic in the Netherlands, as the questionnaire was only distributed during the second COVID-19 lockdown.

Lastly, the ANOVA tests for differences in COVID-19-associated discrimination among ethnic groups showed that the Levene's test was significant, which means that the ethnic group sizes differ too much from each other. However, even with a relatively small sample and relatively small group of Chinese, there were significant results between Chinese and Dutch in COVID-19-associated discrimination. The results of this study are therefore probably an underestimation of what is really going on in the Netherlands.

Despite its limitations, this study also has some strengths. According to the author's knowledge, this is the first study that examined COVID-19-associated discrimination among ethnic groups in the Netherlands. With the raising cases of COVID-19 globally, so does discrimination and violence against those individuals and groups who are blamed for carrying and spreading the virus (Croucher et al., 2020). This study and future studies that focuses on COVID-19-associated discrimination against ethnic groups are therefore important to understand and address not only the human costs of the virus, but also the social costs.

Further, mental health was assessed by perceived depressive, hostile, and anxious emotions instead of mental illness as was done in the study of Brown et al. (2000). However, a recent study found that people without depressive, obsessive-compulsive or anxiety disorders showed greater increase in symptoms during the COVID-19 pandemic, while people with such disorders slightly decreased in symptoms (Pan et al., 2021). It is useful that this study investigates mental health through feelings of depressive, hostile, and anxious emotions, as the COVID-19 pandemic affects everyone. This study therefore contributes to the knowledge about mental health of ethnic groups during the COVID-19 pandemic.

Another contribution of this study is that COVID-19-associated discrimination was examined as mediator in the relationship between ethnic groups and mental health. By exploring this, more knowledge has been gained about why ethnic groups have poorer mental health. This was, in part, mediated by COVID-19-associated discrimination. More research on possible mediating roles between ethnic groups and mental health needs to be done to fully understand why ethnic groups have poorer mental health in the Netherlands.

Implications

This study has some implications for further research and policy making. Responses to the questionnaire and protests to Asian hate in Amsterdam (NOS, 2021), suggest that many more people experience often and to a serious extent COVID-19-associated discrimination. For this reason, more extensive research on Chinese and other ethnic groups needs to be done, in which the sample can be represented to the population of the Netherlands. Moreover, COVID-19-associated discrimination was operationalized as people's self-reported perception instead of direct observations. Qualitative research methods, such as observational research and in-depth interviews, could provide a more in-depth view of how Chinese and ethnic groups in the Netherlands experience COVID-19-associated discrimination and how this affects them.

Furthermore, 'importance to ethnic identity' was examined as moderator in the relation between COVID-19-associated discrimination and mental health. However, future studies should also focus on internal attribution as possible moderator, as the internal attribution

hypothesis of Major et al. (2003) posits that a strong feeling of internal attribution in interpreting events is associated with negative mental health outcomes.

In addition, the reported correlational relationships need further confirmation in stronger designs such as field experiments. As this study is a cross-sectional study, nothing can be stated about causality. Future, research should be conducted using longitudinal and experimental designs to examine potential causational relationships and its potential mediators and moderators.

As Chinese and ethnic groups experience more COVID-19-associated discrimination compared with Dutch, it is recommended to start campaigns about COVID-19-associated discrimination against ethnic groups, to raise awareness of the fact that ethnic groups are discriminated due to the COVID-19 outbreak, while discrimination is prohibited by law in the Netherlands. Moreover, attention should be paid on organizations such as Asian Raisins and Discriminatie.nl, where discrimination can be reported, and that urge governments, educational institutions, media, and individuals to eliminate racism and discrimination against East Asians in the Netherlands. According to Broekroelofs and Poerwoatmodjo (2021) reporting discrimination is not yet accessible enough. A solution would be to develop an app that makes it easier to report discrimination, precisely because of the 'fleeting' nature of discrimination on the street. Also, there is currently little involvement of East Asians in policy on migration in the Netherlands. However, the new generation wants to be actively involved in policy making (Broekroelofs & Poerwoatmodjo, 2021).

Concluding, Chinese and other ethnic groups in the Netherlands experience more COVID-19-associated discrimination and have, partly due to COVID-19-associated discrimination, poorer mental health compared with Dutch. This study wants to create awareness that East Asians in the Netherlands are severely discriminated due to the COVID-19 outbreak. Since the development of the COVID-19 pandemic is constantly changing and COVID-19-associated discrimination complaints of East Asians in the Netherlands are on the rise, it is necessary to develop effect strategies that aim to reduce COVID-19-associated discrimination against East Asians in the Netherlands, as well as monitoring the long-term effects of COVID-19-associated discrimination on the mental health of East Asians in the Netherlands.

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Appendix

Appendix A: Social and scientific relevance, interdisciplinarity

The COVID-19 pandemic and its social response have caused a series of behavioural and social changes that may continue long after the pandemic is over and may have long-term health effects, including on mental health (Barouki et al., 2020). A potential group of people who may experience long-term health effects from the COVID-19 pandemic are East Asians, due to stigmatization and discrimination that has been activated by the outbreak (Dhanani & Franz, 2020; Misra et al., 2020). Previous study only focussed on the relation between COVID-19-associated discrimination against East Asians and mental distress in America (Liu et al., 2020). However, ethnic/racial groups in the Netherlands also face COVID-19-associated discrimination (Asian Raisins, n.d.; Discriminatie.nl, 2020). Before this study, it was unknown to what extent East Asians in the Netherlands experience COVID-19-associated discrimination and how it affects their mental health. Therefore, this study aims to contribute knowledge about COVID-19-associated discrimination against Chinese in the Netherlands and its effects on mental health. Since there have been no previous studies at all on COVID-19-associated discrimination against racial/ethnic groups and its mental health effects in the Netherlands, the scientifical relevance is therefore that this study contributes to the knowledge about COVID-19-associated discrimination and its effect on mental health among ethnic/racial groups in the Netherlands, and to make recommendations for future studies about COVID-19-associated discrimination in the Netherlands. It is important to get insight in COVID-19-associated discrimination against Chinese and its effect on mental health in the Netherlands, so that solutions against COVID-19-associated discrimination can be made (i.e., campaigns, an app that makes it easier to report discrimination). The social relevance of this study is therefore that this study raises awareness on the magnitude of the societal problem in the Netherlands, and measures should be taken to combat COVID-19-associated discrimination against ethnic/racial groups, as it negatively affects the mental health of these ethnic/racial groups.

A theoretical framework with different insights from both social and psychological disciplines was used, to look at the causes and consequences of COVID-19-associated discrimination as interdisciplinary as possible. Although, the ITT, the Buffering Hypothesis and the Exacerbating Hypothesis all derives from Social Psychology they give different insights in why ethnic/racial groups are discriminated due to the COVID-19 outbreak, how ethnic/racial groups may react to COVID-19-associated discrimination, and how it affects mental health. The ITT may explain why some ethnic/racial groups are more perceived as threat to the physical and economic health of others during the COVID-19 pandemic than others, and therefore differ

in the extent to which they experience COVID-19-associated discrimination. The Buffering Hypothesis may explain how a strong ethnic identity can function as buffer against the negative effects of COVID-19-associated discrimination. However, the Exacerbating hypothesis derives from sociological insights, and may explain how a strong ethnic identity can exacerbate the negative effects of COVID-19-associated discrimination due to the way of interpreting social events.

Appendix B: Checking the assumptions for analyses

   Distribution statistics (i.e., Skewness and Kurtosis) on the variables CAD(E) and mental health indicated univariate normality (Skewness < 2; Kurtosis < 7) (Curran, West, & Finch, 1996). Scatterplots showed that there might be a linear relation between CAD(E) and mental health, in which CAD(E) was negatively associated with mental health. There were independent observations. The variables were significant on the Shapiro-Wilk's W test ($p \leq .01$). Thus, assumptions of normality were met for the variables CAD(E) and mental health among ethnic groups (Chinese, Dutch, and other ethnic groups). CAD(E) was right-skewed, indicating that participants generally experienced little COVID-19-associated discrimination. The variable mental health was left-skewed, indicating that participants generally had high levels of mental health. In the Q-Q plot, the dots were neatly on the line, which again indicated normality. P-P plots for the variables indicated that the residuals were normally distributed. The homoscedasticity plot indicated homoscedasticity.

   Spearman correlations were conducted as the variables were ranked values. The correlation analysis showed a significant negative association between CAD and mental health (r_S (289) = -.646, $p \leq .01$), and between CADE and mental health (r_S (289) = -.673, $p \leq .01$). Because the variables correlated significantly with each other, Regression analyses were performed.

   Assumptions were checked for the Regression analyses. No outliers were found in the boxplots of the dependent variables. The Standardized Residuals did exceed the critical value of 3 (Field, 2013). The maximum Standardized Residuals value was 3.885 for the relation between ethnic groups (Chinese, Dutch, and other ethnic groups) and CADE. The Mahalanobis Distance did not transgress the critical value of 14, calculated according to the rule of thumb (10 + (2 x k)) of Field (2013). The Cook's Distance did not transgress the critical value of 1. The Leverage showed that there were several influential cases, as the Leverage exceeded the maximum value of .031, calculated according to the rule of thumb (3 x (k x 1) / n) of Field (2013). The maximum Leverage value was .047 for the relation between CADE and mental health. However, the results were performed with outliers. High correlations between scales may indicate multicollinearity. Variance-inflation factors (VIF) were used to determine whether there was a problem with multicollinearity. A VIF value higher than 10 may indicate multicollinearity (Field, 2013). In this study the multicollinearity value was not exceeded, with the highest multicollinearity of VIF = 3. 396.

Appendix C: One-way-ANOVA tests for differences in CAD(E) between ethnic groups

One-way-ANOVA tests were conducted to test whether participants who identified themselves as Chinese significantly experienced more CAD(E) compared to Dutch or participants of another ethnic group. Because the Levene's test was significant ($p \leq .01$), the Brown-Forsythe was used. According to the Brown-Forsythe, the ethnic groups (Chinese, Dutch, and other ethnic groups) differed significantly from each other in CAD ($p \leq .01$) and CADE ($p \leq .05$).

Appendix D: Scatterplots of the possible moderator 'importance to ethnic identity' in the relation between CAD(E) and mental health
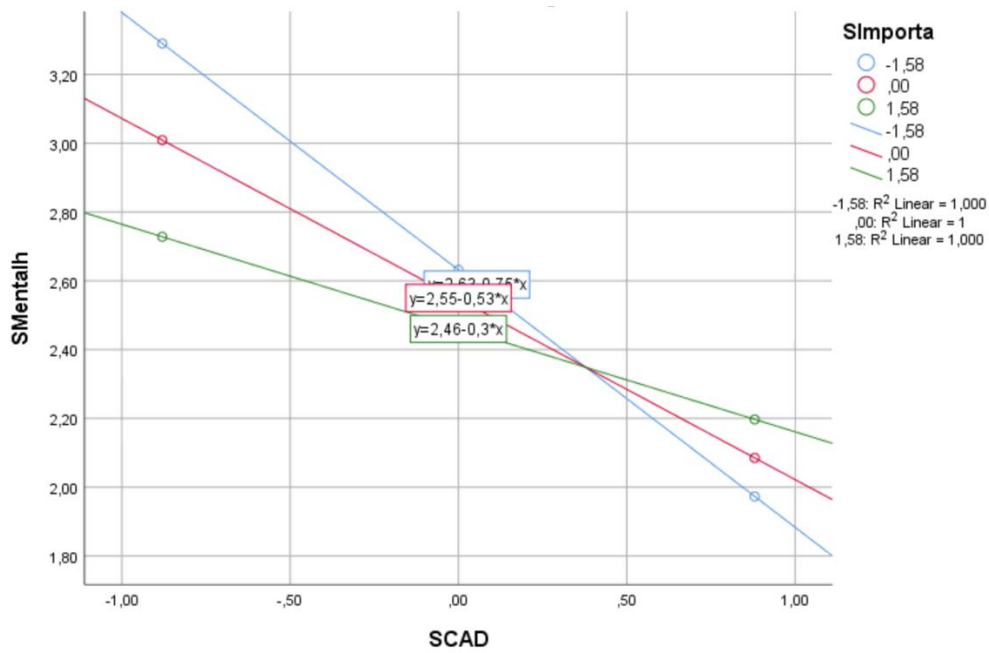
Figure 1. *Scatterplot of the possible moderator 'importance to ethnic identity' in the relation between CAD and mental health.*
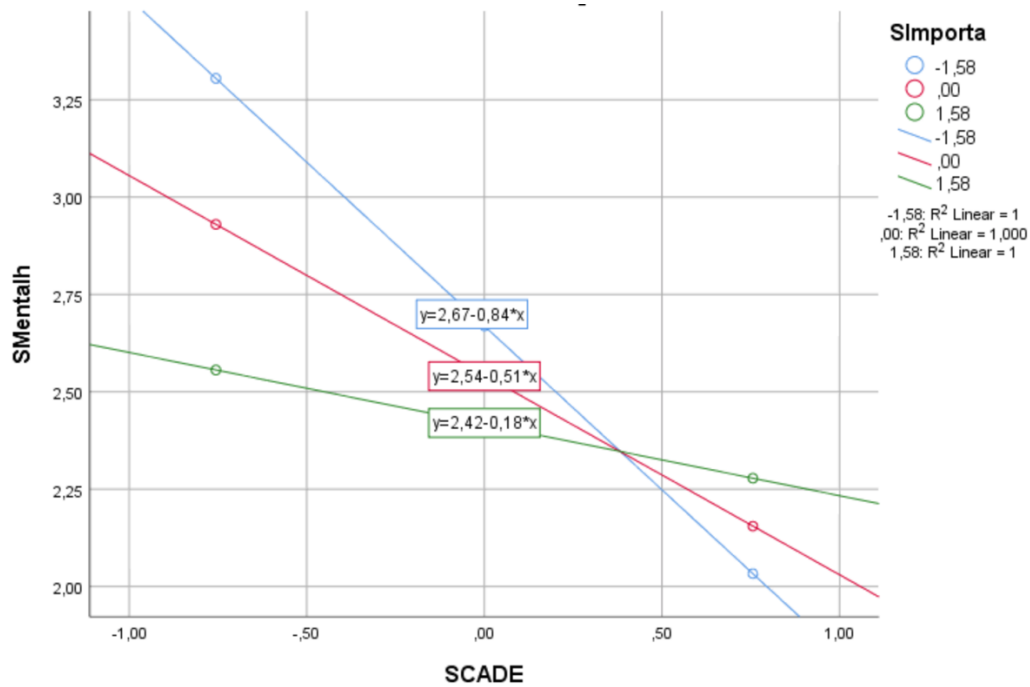
Figure 2. *Scatterplot of the possible moderator 'importance to ethnic identity' in the relation between CADE and mental health.*

Appendix E: Questionnaire about COVID-19-associated discrimination in the Netherlands (available in Dutch and English)

Informed Consent	
Ben je 18 jaar of ouder?	**Wil je deelnemen aan dit onderzoek?**
☐ Ja ☐ Nee	☐ Ja ☐ Nee

Ben je:

☐ Man

☐ Vrouw

☐ Anders

☐ Ik geef liever geen antwoord

Wat is je werksituatie?

☐ ik werk fulltime

☐ ik werk parttime

☐ ik werk onregelmatig

☐ ik ben (vervroegd) met pensioen (AOW, VUT, FPU)

☐ ik ben werkloos/werkzoekend (geregistreerd bij het UWV WERKbedrijf)

☐ ik ben arbeidsongeschikt (WAO, WAZ, WIA, Wajong)

☐ ik heb een bijstandsuitkering

☐ ik ben huisvrouw/huisman

☐ ik volg onderwijs/ik studeer

Wat is je geboortejaar? (bijvoorbeeld: 1988)

In welk land ben je geboren?
☐ Nederland   ☐ Ander land, namelijk: ……………

Ben je:

- ☐ Een Nederlands staatsburger
- ☐ Geen Nederlands staatsburger, maar wel definitief in Nederland gevestigd.
- ☐ Tijdelijk in Nederland voor werk.
- ☐ Tijdelijk in Nederland voor studie.
- ☐ Tijdelijk in Nederland voor vakantie, of omdat ik op bezoek ben bij iemand.

Hoe lang woon je al in Nederland?

- ☐ Mijn hele leven
- ☐ Anders, namelijk: ……….. jaren ……….. maanden

Tot welke bevolkingsgroep reken je jezelf? *(meerdere antwoorden mogelijk)*

- ☐ Nederlanders
- ☐ Turken
- ☐ Marokkanen
- ☐ Surinamers
- ☐ Chinezen
- ☐ Anders, namelijk …..

Wat is de hoogste opleiding die je hebt afgemaakt?

- ☐ geen opleiding (lager onderwijs niet afgemaakt)
- ☐ lager onderwijs (basisschool, speciaal basisonderwijs)
- ☐ lager of voorbereidend beroepsonderwijs (zoals ambachtsschool, huishoudschool, lts, leao, lhno, vmbo-b/k)
- ☐ middelbaar algemeen voortgezet onderwijs (zoals (m)ulo, mavo, vmbo-g/t, mbo-kort, mbo-1)
- ☐ middelbaar beroepsonderwijs en beroepsbegeleidend onderwijs (zoals vakopleidingen bakker of kapper, mbo-lang, mts, uts, meao, bol, bbl, inas, mbo-2, mbo-3, mbo-4)
- ☐ hoger algemeen en voorbereidend wetenschappelijk onderwijs (zoals hbs, mms, havo, vwo, atheneum, gymnasium)
- ☐ hoger beroepsonderwijs (zoals kweekschool, hbo, hts, heao, hbo-v, bacheloropleiding)
- ☐ wetenschappelijk onderwijs (universiteit, master, postdoctoraal, hbo-master)

In welke provincie van Nederland woon je?

- ☐ Drenthe
- ☐ Flevoland
- ☐ Friesland
- ☐ Gelderland
- ☐ Groningen
- ☐ Limburg
- ☐ Noord-Brabant
- ☐ Noord-Holland
- ☐ Overijssel
- ☐ Zuid-Holland
- ☐ Utrecht
- ☐ Zeeland

Sinds de uitbraak van het coronavirus moeten we op een andere manier met elkaar omgaan Door de overheidsmaatregelen mogen we elkaar bijvoorbeeld geen hand meer geven, moeten we 1,5 afstand houden en kunnen we niet of minder bij elkaar op bezoek. Los daarvan zijn er groepen mensen in Nederland die merken dat ze extra anders worden behandeld. Bijvoorbeeld dat mensen minder aardig tegen ze zijn, of extra vermijden. Méér dan bij andere mensen. Of je zelf ook het gevoel hebt dat je anders wordt behandeld sinds de uitbraak van het coronavirus, daar gaan de volgende vragen over.

1. Word jij zelf weleens anders **behandeld door andere mensen** sinds de uitbraak van het coronavirus?

Nooit (1) − Vaak (5)

Mensen zijn bang van mij.

Mensen gedragen zich alsof ze denken dat ik niet slim ben.

Ik word met minder respect behandeld dan andere mensen.

Ik word lastig gevallen.

Ik word minder goed geholpen dan anderen in restaurants of winkels.

Hoe merk je dat mensen jou anders behandelen dan anderen?	
2. Mensen nemen *extra* hygiënemaatregelen na contact met mij.	*Nooit (1) − Vaak (5)*
3. Mensen houden *meer* afstand bij mij dan bij andere mensen.	*Nooit (1) − Vaak (5)*
4. Mensen vermijden mij *meer* dan andere mensen.	*Nooit (1) − Vaak (5)*
5. Mensen zijn onaardig tegen mij.	*Nooit (1) − Vaak (5)*
6. Mensen richten opzettelijk de aandacht op mij in het openbaar.	*Nooit (1) − Vaak (5)*
7. Mensen schrijven onaardige berichten op social media over mij, of over mensen zoals ik.	*Nooit (1) − Vaak (5)*
8. Anders, namelijk ………………………… (Hier kun je je ervaring opschrijven)	*Nooit (1) − Vaak (5)*

9. Hoe voelt het om sinds de uitbraak van het coronavirus anders te worden behandeld?

Dit maakt mij:

Verdrietig	1 (helemaal niet) - 5(heel erg)
Depressief	1 (helemaal niet) - 5(heel erg)
Zelfverzekerd	1 (helemaal niet) - 5(heel erg)
Blij	1 (helemaal niet) - 5(heel erg)
Tevreden	1 (helemaal niet) - 5(heel erg)
Boos	1 (helemaal niet) - 5(heel erg)
Gespannen	1 (helemaal niet) - 5(heel erg)
Geïrriteerd	1 (helemaal niet) - 5(heel erg)
Vijandig	1 (helemaal niet) - 5(heel erg)
Woedend	1 (helemaal niet) - 5(heel erg)
Angstig	1 (helemaal niet) - 5(heel erg)
Bezorgd	1 (helemaal niet) - 5(heel erg)

Kalm	1 (helemaal niet) - 5(heel erg)
Veilig	1 (helemaal niet) - 5(heel erg)

Bent je het met de volgende uitspraken eens?

10. Ik ben er zelf verantwoordelijk voor dat mensen mij nu anders behandelen.	1 (helemaal niet mee eens) - 5 (helemaal meen eens)
11. Het is mijn eigen schuld dat mensen mij nu anders behandelen.	1 (helemaal niet mee eens) - 5 (helemaal meen eens)
12. Het is mijn fout dat mensen mij nu anders behandelen.	1 (helemaal niet mee eens) - 5 (helemaal meen eens)
13. Dat mensen mij nu anders behandelen ligt meer **aan hen** dan aan mij	1 (helemaal niet mee eens) - 5 (helemaal meen eens)
14. Dat mensen mij nu anders behandelen komt door **hun** opvattingen of persoonlijkheid.	1 (helemaal niet mee eens) - 5 (helemaal meen eens)
15. Dat mensen mij nu anders behandelen ligt aan mij.	1 (helemaal niet mee eens) - 5 (helemaal meen eens)
16. Dat mensen mij nu anders behandelen komt door wie ik ben.	1 (helemaal niet mee eens) - 5 (helemaal meen eens)

17. Dat ik door mensen anders wordt behandeld sinds de uitbraak van het coronavirus heeft waarschijnlijk hiermee te maken: *(je kunt meerdere antwoorden aankruisen)*

- Mijn Aziatische uiterlijk.
- Mijn etnische achtergrond.
- De plaats of provincie waar ik woon.
- Mijn beroep.
- Ik ben recent in een risicogebied geweest.
- Ik heb symptomen van corona (bijvoorbeeld hoesten of niezen).

- Ik heb het coronavirus.

- Ik houd me niet zo goed aan het houden van 1,5 meter afstand.

- Ik draag een mondkapje.

- Een familielid heeft symptomen van corona.

- Ik ben recentelijk naar een plek of bijeenkomst met veel mensen geweest.

- Een andere reden, namelijk …………………………

18. ………. is een belangrijk onderdeel van wie ik ben [*wordt alleen weergegeven voor de eerste vier antwoorden van de voorgaande vraag, zoals hieronder*].

1 (helemaal niet mee eens) – 7 (helemaal mee eens)

Mijn Aziatische uiterlijk is een belangrijke weerspiegeling van wie ik ben. *1 (helemaal niet mee eens) – 7 (helemaal mee eens)*

Mijn etnische achtergrond is een belangrijke weerspiegeling van wie ik ben. *1 (helemaal niet mee eens) – 7 (helemaal mee eens)*

De plaats of provincie waar ik in woon is een belangrijke weerspiegeling van wie ik ben. *1 (helemaal niet mee eens) – 7 (helemaal mee eens)*

Mijn werk is een belangrijke weerspiegeling van wie ik ben. *1 (helemaal niet mee eens) – 7 (helemaal mee eens)*

De vorige vragen gingen over of je anders behandeld wordt sinds de uitbraak van het coronavirus. We willen je nog enkele vragen stellen over de tijd <u>vóórdat corona uitbrak</u>.

19. Werd je weleens anders **behandeld door andere mensen** *vóór* de uitbraak van het coronavirus?

Nooit (1) – Vaak (5)

20. Dat heeft waarschijnlijk te maken met: *(je mag meerdere antwoorden aankruisen)*

- Mijn Aziatische uiterlijk.

- Mijn etnische achtergrond.

- Mijn uiterlijk.

- Mijn geloof.

- Mijn seksuele voorkeur.

- De plaats of provincie waar ik woon.

- Mijn beroep.

- Anders, namelijk…………………………

Hoe merk je dat mensen jou anders behandelen dan anderen?

Mensen zijn bang van mij.	*Nooit (1) – Vaak (5)*
Mensen gedragen zich alsof ze denken dat ik niet slim ben.	
Ik word met minder respect behandeld dan andere mensen.	
Ik word lastig gevallen.	
Ik word minder goed geholpen dan anderen in restaurants of winkels.	

21. Anders, namelijk……………………………

    Nooit (1) – Vaak (5)

De vorige vragen gingen over de tijd voordat corona uitbrak. Nu volgen er weer enkele vragen over het nu, de huidige corona-tijd.

Cognitie

Denk je **zelf** weleens het volgende over **mensen met corona**?

22. Het is hun eigen schuld.

    (bijna) nooit (1) – (bijna) altijd (5)

23. Ze zouden zich moeten schamen.

    (bijna) nooit (1) – (bijna) altijd (5)

24. Ze zijn waardeloos.

    (bijna) nooit (1) – (bijna) altijd (5)

25. Ze hebben gekregen wat ze verdienen. *(bijna) nooit (1) – (bijna) altijd (5)*
Gevoel
Voel je **zelf** weleens het volgende bij **mensen met corona**?
26. Angst *(bijna) nooit (1) – (bijna) altijd (5)*
27. Walging *(bijna) nooit (1) – (bijna) altijd (5)*
28. Irritatie *(bijna) nooit (1) – (bijna) altijd (5)*
29. Medeleven *(bijna) nooit (1) – (bijna) altijd (5)*
Gedrag
30. Ben je sinds de uitbraak van het coronavirus bepaalde mensen anders **gaan behandelen**? *(bijna) nooit (1) – (bijna) altijd (5)*
Hoe **behandel je bepaalde mensen anders**?
31. Ik neem *extra* hygiënemaatregelen na contact met die mensen. *(bijna) nooit (1) – (bijna) altijd (5)*
32. Ik houd extra afstand bij die mensen. *(bijna) nooit (1) – (bijna) altijd (5)*
33. Ik vermijd die mensen *meer* dan andere mensen *(bijna) nooit (1) – (bijna) altijd (5)*

34. Ik ben onaardig tegen die mensen.

(bijna) nooit (1) – (bijna) altijd (5)

35. Ik richt opzettelijk de aandacht op hen in het openbaar.

(bijna) nooit (1) – (bijna) altijd (5)

36. Ik schrijf onaardige berichten op social media over dat soort mensen.

(bijna) nooit (1) – (bijna) altijd (5)

37. Anders, namelijk ……………………………

(bijna) nooit (1) – (bijna) altijd (5)

38. Dat ik bepaalde mensen anders behandel sinds de uitbraak van het coronavirus komt door:

(je mag meerdere antwoorden aankruisen)

- Hun Aziatische uiterlijk.
- Hun etnische achtergrond.
- De plaats of provincie waar ze wonen.
- Hun beroep.
- Doordat ze recent in een risicogebied zijn geweest.
- Omdat ze symptomen van corona hebben (bijvoorbeeld hoesten of niezen).
- Doordat ze het coronavirus hebben.
- Omdat ze niet goed 1,5m afstand houden.
- Omdat ze een mondkapje dragen.
- Omdat familie van hen symptomen van corona heeft.
- Omdat ze recent naar plekken met veel mensen zijn geweest.
- Een andere reden, namelijk …………………………

... Ten slotte nog een paar laatste vragen over corona in het algemeen en de gedragsregels (bijvoorbeeld 1,5m afstand houden).

Perceived susceptibility	
Hoe groot denk je dat de kans is dat je op een dag zelf corona krijgt?	*Heel klein (1) – heel groot (5)*
Perceived severity	
Hoe erg zou je het vinden als je corona krijgt?	*Helemaal niet erg (1) – heel erg (5)*
Perceived response efficacy	
Hoe effectief denk je dat de gedragsregels zijn die de overheid heeft opgelegd om de verspreiding van corona tegen te gaan? (bijv. 1,5m afstand houden, niezen/hoesten in de elleboog)	*Helemaal niet effectief (1) – heel effectief (5)*
Hoeveel vertrouwen heb je in de overheid wat betreft het omgaan met de corona-uitbraak?	*Helemaal geen vertrouwen (1) – Veel vertrouwen (5)*
Hoeveel vertrouwen heb je in de gezondheidszorg wat betreft het omgaan met de corona-uitbraak?	*Not at all confident (1) – Very confident (5)*
Perceived self-efficacy	
Hoe moeilijk of makkelijk is het voor jou om je te houden aan de gedragsregels? (bijv. 1,5m afstand houden, niezen/hoesten in de elleboog)	*Heel moeilijk (1) - heel makkelijk (5)*
Descriptive social norm	
In hoeverre houden andere mensen die belangrijk voor je zijn zich over het algemeen aan de gedragsregels om corona te voorkomen? (bijv. 1,5m afstand houden, niezen/hoesten in de elleboog)	*Helemaal niet consequent (1) – heel consequent (5)*
Personal importance/goal strength	
Hoe belangrijk is het voor jou om te voorkomen dat je corona krijgt?	*Heel onbelangrijk (1) – heel belangrijk (5)*

Appendix F: Syntax SPSS

```
* Encoding: UTF-8.


*Data openen.
GET
  FILE='U:\Master Thesis\COVID Research on Stigma_April 8_Maaike_2_encryptedWERKBESTAND.sav'
    PASSWORD='#{,q#d#N4y1|'.
DATASET NAME DataSet3 WINDOW=FRONT.


*Werkbestand opslaan.
SAVE OUTFILE='U:\Master Thesis\COVID Research on Stigma_April 8_Maaike_2_encryptedWERKBESTAND.sav'
  /COMPRESSED
  /PASSPROTECT  PASSWORD='/w#r/g#q8u1p'  ENCRYPTEDPW=YES.


*Deze variabelen worden later via de syntax gemaakt, maakt officieel niet deel uit van het originele databestand, maar zo heb ik hem ontvangen.
DELETE VARIABLES ethnicgroup TO ethnicgroup2.


*DATASCREENING.
*Inspectie van variabelen door te kijken naar variable view.


*DATACLEANING.


*Define Variable Properties.*Variabelen duidelijke namen geven.
RENAME VARIABLES ( CONSENT_1 = Informedconsent1 ).
RENAME VARIABLES ( CONSENT_2 = Informedconsent2 ).
RENAME VARIABLES ( CONSENT_3 = Informedconsent3 ).
RENAME VARIABLES (YOB = Yearofbirth).
RENAME VARIABLES ( Birthplace_NL = Birthplace1 ).
RENAME VARIABLES ( Citizenship2 = Citizenship2 ).
RENAME VARIABLES ( Citizenship2_2_TEXT = CitizenshipOther ).
RENAME VARIABLES ( Ethnicity_1 = Ethnicity1 ).
RENAME VARIABLES ( Ethnicity_2 = Ethnicity2 ).
RENAME VARIABLES ( Ethnicity_3 = Ethnicity3 ).
RENAME VARIABLES ( Ethnicity_4 = Ethnicity4 ).
RENAME VARIABLES ( Ethnicity_5 = Ethnicity5 ).
RENAME VARIABLES ( Ethnicity_6 = Ethnicity6 ).
RENAME VARIABLES ( Ethnicity_6_TEXT = EthnicityOther ).
RENAME VARIABLES ( Work = Workactivities ).
RENAME VARIABLES ( Edu = Educationlevel ).
RENAME VARIABLES ( Residence = Province ).


*Naam geven voor de independent variable COVID-19-associated Discrimination CAD).
RENAME VARIABLES ( Beh1 = CAD1 ).
RENAME VARIABLES ( Beh2a = CAD2 ).
RENAME VARIABLES ( Beh2b = CAD3 ).
RENAME VARIABLES ( Beh2c = CAD4 ).
RENAME VARIABLES ( Beh2d = CAD5 ).
RENAME VARIABLES ( Beh2e = CAD6 ).
RENAME VARIABLES ( Beh3a = CAD7 ).
RENAME VARIABLES ( Beh3b = CAD8 ).
RENAME VARIABLES ( Beh3c = CAD9 ).
RENAME VARIABLES ( Beh3d = CAD10 ).
RENAME VARIABLES ( Beh3e = CAD11 ).
RENAME VARIABLES ( Beh3f = CAD12 ).
RENAME VARIABLES ( Beh3g = CAD13 ).
RENAME VARIABLES ( Beh3gg = CADOther ).
```

*Naam geven voor dependent variable Mental health.
RENAME VARIABLES (Sad = Mentalhealth1).
RENAME VARIABLES (Depressed = Mentalhealth2).
RENAME VARIABLES (Confident = Mentalhealth3).
RENAME VARIABLES (Happy = Mentalhealth4).
RENAME VARIABLES (Satisfied = Mentalhealth5).
RENAME VARIABLES (Angry = Mentalhealth6).
RENAME VARIABLES (Agitated = Mentalhealth7).
RENAME VARIABLES (Irritated = Mentalhealth8).
RENAME VARIABLES (Hostile = Mentalhealth9).
RENAME VARIABLES (Mad = Mentalhealth10).
RENAME VARIABLES (Fearful = Mentalhealth11).
RENAME VARIABLES (Worried = Mentalhealth12).
RENAME VARIABLES (Calm = Mentalhealth13).
RENAME VARIABLES (Secure = Mentalhealth14).

*Naam geven voor moderator Internal Attribution.
RENAME VARIABLES (Attrib1 = InternalAttribution1).
RENAME VARIABLES (Attrib2 = InternalAttribution2).
RENAME VARIABLES (Attrib3 = InternalAttribution3).
RENAME VARIABLES (Atrrib4 = InternalAttribution4).
RENAME VARIABLES (Attrib5 = InternalAttribution5).
RENAME VARIABLES (Attrib6 = InternalAttribution6).
RENAME VARIABLES (Attrib7 = InternalAttribution7).

*Naam geven voor independent variable Asian and non-asian appearance.
RENAME VARIABLES (Attrib8_13 = Populationgroups1).
RENAME VARIABLES (Attrib8_14 = Populationgroups2).
RENAME VARIABLES (Attrib8_15 = Populationgroups3).
RENAME VARIABLES (Attrib8_16 = Populationgroups4).
RENAME VARIABLES (Attrib8_17 = Populationgroups5).
RENAME VARIABLES (Attrib8_18 = Populationgroups6).
RENAME VARIABLES (Attrib8_19 = Populationgroups7).
RENAME VARIABLES (Attrib8_20 = Populationgroups8).
RENAME VARIABLES (Attrib8_21 = Populationgroups9).
RENAME VARIABLES (Attrib8_22 = Populationgroups10).
RENAME VARIABLES (Attrib8_23 = Populationgroups11).
RENAME VARIABLES (Attrib8_24 = Populationgroups12).
RENAME VARIABLES (Attrib8_25 = Populationgroups13).
RENAME VARIABLES (Attrib8_25_TEXT = PopulationgroupsOther).

*Naam geven aan moderator conept Ethnic identity.
RENAME VARIABLES (Centrality1 = Ethnicidentity1).
RENAME VARIABLES (Centrality2 = Ethnicidentity2).
RENAME VARIABLES (Centrality3 = Ethnicidentity3).
RENAME VARIABLES (Centrality4 = Ethnicidentity4).

*Naam geven voor discrimination voor corona.
RENAME VARIABLES (PrevEncount1 = Prediscrimination1).
RENAME VARIABLES (PrevEncount3a = Prediscrimination2).
RENAME VARIABLES (PrevEncount3b = Prediscrimination3).
RENAME VARIABLES (PrevEncount3c = Prediscrimination4).
RENAME VARIABLES (PrevEncount3d = Prediscrimination5).
RENAME VARIABLES (PrevEncount3e = Prediscrimination6).

*Naam geven voor populatie groups voor corona.
RENAME VARIABLES (Attrib_PrevEcount_1 = Prepopulationgroups1).

RENAME VARIABLES (Attrib_PrevEcount_2 = Prepopulationgroups2).
RENAME VARIABLES (Attrib_PrevEcount_3 = Prepopulationgroups3).
RENAME VARIABLES (Attrib_PrevEcount_4 = Prepopulationgroups4).
RENAME VARIABLES (Attrib_PrevEcount_5 = Prepopulationgroups5).
RENAME VARIABLES (Attrib_PrevEcount_6 = Prepopulationgroups6).
RENAME VARIABLES (Attrib_PrevEcount_7 = Prepopulationgroups7).
RENAME VARIABLES (Attrib_PrevEcount_8 = Prepopulationgroups8).
RENAME VARIABLES (Attrib_PrevEcount_9 = Prepopulationgroups9).
RENAME VARIABLES (Attrib_PrevEcount_9_TEXT = PrepopulationgroupsOther).

*Naam geven voor andere mensen anders behandelen.
RENAME VARIABLES (Beh3 = Treatothers1).
RENAME VARIABLES (Beh3a.0 = Treatothers2).
RENAME VARIABLES (Beh3b.0 = Treatothers3).
RENAME VARIABLES (Beh3c.0 = Treatothers4).
RENAME VARIABLES (Beh3d.0 = Treatothers5).
RENAME VARIABLES (Beh3e.0 = Treatothers6).
RENAME VARIABLES (Beh3f.0 = Treatothers7).

*Naam geven voor reden voor mensen anders behandelen.
RENAME VARIABLES (Attrib_selfbehaviour_1 = TreatothersPopulationgroups1).
RENAME VARIABLES (Attrib_selfbehaviour_2 = TreatothersPopulationgroups2).
RENAME VARIABLES (Attrib_selfbehaviour_3 = TreatothersPopulationgroups3).
RENAME VARIABLES (Attrib_selfbehaviour_4 = TreatothersPopulationgroups4).
RENAME VARIABLES (Attrib_selfbehaviour_5 = TreatothersPopulationgroups5).
RENAME VARIABLES (Attrib_selfbehaviour_6 = TreatothersPopulationgroups6).
RENAME VARIABLES (Attrib_selfbehaviour_7 = TreatothersPopulationgroups7).
RENAME VARIABLES (Attrib_selfbehaviour_8 = TreatothersPopulationgroups8).
RENAME VARIABLES (Attrib_selfbehaviour_9 = TreatothersPopulationgroups9).
RENAME VARIABLES (Attrib_selfbehaviour_10 = TreatothersPopulationgroups10).
RENAME VARIABLES (Attrib_selfbehaviour_11 = TreatothersPopulationgroups11).
RENAME VARIABLES (Attrib_selfbehaviour_12 = TreatothersPopulationgroups12).
RENAME VARIABLES (Attrib_selfbehaviour_13 = TreatothersPopulationgroups13).

*naam geven voor corona in het algemeen en gedragsregels.
RENAME VARIABLES (HBM1 = Coronaingeneral1).
RENAME VARIABLES (HBM2 = Coronaingeneral2).
RENAME VARIABLES (HBM3 = Coronaingeneral3).
RENAME VARIABLES (HBM4 = Coronaingeneral4).
RENAME VARIABLES (HBM5 = Coronaingeneral5).
RENAME VARIABLES (HBM6 = Coronaingeneral6).
RENAME VARIABLES (HBM7 = Coronaingeneral7).
RENAME VARIABLES (HBM8 = Coronaingeneral8).

*Passende Labels maken.
VARIABLE LABELS Informedconsent1'ONLINE DECLARATION OF CONSENT'.
VARIABLE LABELS Informedconsent3 'ONLINE DECLARATION OF CONSENT'.
VARIABLE LABELS Birthplace2 '[Other] In which country were you born in?'.
VARIABLE LABELS Citizenship1 'What are you (Citizen)?'.
VARIABLE LABELS Citizenship2 'How long have you lived in The Netherlands?'.
VARIABLE LABELS CitizenshipOther '[Other, namely (how many years?)] How long have you lived in The Netherlands?'.
VARIABLE LABELS Ethnicity1 'You consider yourself as Dutch'.
VARIABLE LABELS Ethnicity2 'You consider yourself as Turkish'.
VARIABLE LABELS Ethnicity3 'You consider yourself as Moroccan'.
VARIABLE LABELS Ethnicity4 'You consider yourself as Surinamese'.
VARIABLE LABELS Ethnicity5 'You consider yourself as Chinese'.
VARIABLE LABELS Ethnicity6 'You consider yourself as other, namely...'.
VARIABLE LABELS EthnicityOther '[Other, namely...] Describe how you consider yourself.'.

VARIABLE LABELS CAD1 'I have been treated more differently by other people, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS CAD2 'I have been treated with less respect than other people, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS CAD3 'I have received poorer service than others at restaurants or stores, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS CAD4 'People act afraid of me, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS CAD5 'I have been harassed, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS CAD6 'People act as if they think you are not smart, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS CADOther '[Other] Describe experiences of being treated differently.'.

VARIABLE LABELS Populationgroups1 '[Not applicable] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups2 '[I have an Asian appearance] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups3 '[Of my ethnic background] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups4 '[Of the place / province where I live] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups5 '[Of my profession, namely...] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups6 '[I have recently been abroad in a potential risk area] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups7 '[I have symptoms of the Coronva virus (for example, a cold or a cough)] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups8 '[I have the Corona virus] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups9 '[I do not sufficiently practice social distancing measures] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups10 '[I wear a mouth/face mask] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups11 '[One of my family members has symptoms of the Corona virus] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups12 '[I have been to places with many people or where many people have been recently] More specifically, people are treating me differently because...'.

VARIABLE LABELS Populationgroups13 '[Other reasons, namely...] More specifically, people are treating me differently because...'.

VARIABLE LABELS PopulationgroupsOther '[Other reasons, namely...] More specifically, people are treating me differently because...'.

VARIABLE LABELS Prediscrimination1 'I have been treated more differently by other people, before the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Prediscrimination2 'People act afraid of me, before the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Prediscrimination3 'People act as if they think I am not smart, before the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Prediscrimination4 'I have been treated with less courtesy/respect than other people, before the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Prediscrimination5 'I have been harassed, before the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Prediscrimination6 'I have received poorer service than others at restaurant / store, before the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Prepopulationgroups1 '[Not applicable] If so, this is because...'.

VARIABLE LABELS Prepopulationgroups2 '[I have an Asian appearance] If so, this is because...'.

VARIABLE LABELS Prepopulationgroups3 '[Of my ethnic background] If so, this is because...'.

VARIABLE LABELS Prepopulationgroups4 '[Of my appearance] If so, this is because...'.

VARIABLE LABELS Prepopulationgroups5 '[Choice Of my religion] If so, this is because...'.

VARIABLE LABELS Prepopulationgroups6 '[Choice Of my sexuality] If so, this is because...'.

VARIABLE LABELS Prepopulationgroups7 '[Choice Of the place / province where I live] If so, this is because...'.

VARIABLE LABELS Prepopulationgroups8 '[Choice Of my profession] If so, this is because...'.

VARIABLE LABELS Prepopulationgroups9 '[Of other reasons, namely...] If so, this is because...'.

VARIABLE LABELS PrepopulationgroupsOther '[Of other reasons, namely...] If so, this is because...'.

VARIABLE LABELS Treatothers1 'I have interacted differently with others, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Treatothers2 'I am taking extra hygienic measures after interacting with them, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Treatothers3 'I am keeping extra distance with them, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Treatothers4 'I am avoiding them more than others, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Treatothers5 'I am reacting anti-socially towards them, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Treatothers6 'I am deliberately drawing attention to them in public, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS Treatothers7 'I am posting disapproving remarks and messages on social media to reprimand them and people like them, since the arrival of the COVID-19 outbreak.'.

VARIABLE LABELS TreatothersPopulationgroups1 '[Not applicable] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups2 '[They have an Asian appearance] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups3 '[Of their ethnic background] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups4 '[Of the place / province where they live] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups5 '[Of their profession] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups6 '[They have recently been abroad in a potential risk area] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups7 '[They have symptoms of the Corona virus (for example, a cold or cough)] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups8 '[They have the Corona virus] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups9 '[They do not sufficiently practice social distancing measures] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups10 '[They wear a mouth/face mask] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups11 '[One of their family members has symptoms of the Corona virus] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups12 '[They come to places with many people or where many people have been recently] More specifically, you are treating others differently because ...'.

VARIABLE LABELS TreatothersPopulationgroups13 '[Other reasons, namely...] More specifically, you are treating others differently because ...'.

*Value labels geven.
VALUE LABELS Ethnicity1
0 'Not Dutch'
1 'Dutch'.
VALUE LABELS Ethnicity2
0 'Not Turkish'
1 'Turkish'.
VALUE LABELS Ethnicity3
0 'Not Moroccan'
1 'Moroccan'.
VALUE LABELS Ethnicity4
0 'Not Surinamese'
1 'Surinamese'.
VALUE LABELS Ethnicity5
0 'Not Chinese'
1 'Chinese'.
VALUE LABELS Ethnicity6
0 'Not other'
1 'Other, namely...'.

VALUE LABELS CAD1
1 'Never'
2 ''
3 ''
4 ''
5 'Often'.
VALUE LABELS CAD2
1 'Never'
2 ''
3 ''
4 ''
5 'Often'.
VALUE LABELS CAD3
1 'Never'
2 ''
3 ''
4 ''
5 'Often'.
VALUE LABELS CAD4
1 'Never'
2 ''
3 ''

4 "

5 'Often'.

VALUE LABELS CAD5

1 'Never'

2 "

3 "

4 "

5 'Often'.

VALUE LABELS CAD6

1 'Never'

2 "

3 "

4 "

5 'Often'.

VALUE LABELS CAD7

1 'Never'

2 "

3 "

4 "

5 'Often'.

VALUE LABELS CAD8

1 'Never'

2 "

3 "

4 "

5 'Often'.

VALUE LABELS CAD9

1 'Never'

2 "

3 "

4 "

5 'Often'.

VALUE LABELS CAD10

1 'Never'

2 "

3 "

4 "

5 'Often'.

VALUE LABELS CAD11

1 'Never'

2 "

3 "

4 "

5 'Often'.

VALUE LABELS CAD12

1 'Never'

2 "

3 "

4 "

5 'Often'.

VALUE LABELS CAD13

1 'Never'

2 "

3 "

4 "

5 'Often'.

VALUE LABELS Mentalhealth1

1 'Not at all'

2 ''

3 ''

4 ''

5 'Extremely'

6 'Not applicable'.

VALUE LABELS Mentalhealth2

1 'Not at all'

2 ''

3 ''

4 ''

5 'Extremely'

6 'Not applicable'.

VALUE LABELS Mentalhealth3

1 'Not at all'

2 ''

3 ''

4 ''

5 'Extremely'

6 'Not applicable'.

VALUE LABELS Mentalhealth4

1 'Not at all'

2 ''

3 ''

4 ''

5 'Extremely'

6 'Not applicable'.

VALUE LABELS Mentalhealth5

1 'Not at all'

2 ''

3 ''

4 ''

5 'Extremely'

6 'Not applicable'.

VALUE LABELS Mentalhealth6

1 'Not at all'

2 ''

3 ''

4 ''

5 'Extremely'

6 'Not applicable'.

VALUE LABELS Mentalhealth7

1 'Not at all'

2 ''

3 ''

4 ''

5 'Extremely'

6 'Not applicable'.

VALUE LABELS Mentalhealth8

1 'Not at all'

2 ''

3 ''

4 ''

5 'Extremely'

6 'Not applicable'.

VALUE LABELS Mentalhealth9

1 'Not at all'

2 ''

3 "
4 "
5 'Extremely'
6 'Not applicable'.
VALUE LABELS Mentalhealth10
1 'Not at all'
2 "
3 "
4 "
5 'Extremely'
6 'Not applicable'.
VALUE LABELS Mentalhealth11
1 'Not at all'
2 "
3 "
4 "
5 'Extremely'
6 'Not applicable'.
VALUE LABELS Mentalhealth12
1 'Not at all'
2 "
3 "
4 "
5 'Extremely'
6 'Not applicable'.
VALUE LABELS Mentalhealth13
1 'Not at all'
2 "
3 "
4 "
5 'Extremely'
6 'Not applicable'.
VALUE LABELS Mentalhealth14
1 'Not at all'
2 "
3 "
4 "
5 'Extremely'
6 'Not applicable'.

VALUE LABELS InternalAttribution1
1 'Strongly disagree'
2 "
3 "
4 "
5 'Strongly agree'
6 'Not applicable'.
VALUE LABELS InternalAttribution2
1 'Strongly disagree'
2 "
3 "
4 "
5 'Strongly agree'
6 'Not applicable'.
VALUE LABELS InternalAttribution3
1 'Strongly disagree'
2 "
3 "

4 "

5 'Strongly agree'

6 'Not applicable'.

VALUE LABELS InternalAttribution4

1 'Strongly disagree'

2 "

3 "

4 "

5 'Strongly agree'

6 'Not applicable'.

VALUE LABELS InternalAttribution5

1 'Strongly disagree'

2 "

3 "

4 "

5 'Strongly agree'

6 'Not applicable'.

VALUE LABELS InternalAttribution6

1 'Strongly disagree'

2 "

3 "

4 "

5 'Strongly agree'

6 'Not applicable'.

VALUE LABELS InternalAttribution7

1 'Strongly disagree'

2 "

3 "

4 "

5 'Strongly agree'

6 'Not applicable'.

VALUE LABELS Populationgroups1

0 'Applicable'

1 'Not applicable'.

VALUE LABELS Populationgroups2

0 'Not because I have an Asian appearance'

1 'I have an Asian appearance'.

VALUE LABELS Populationgroups3

0 'Not because of an ethnic background'

1 'Of my ethnic background'.

VALUE LABELS Populationgroups4

0 'Not because of the place / province where i live'

1 'Of the place / province where I live'.

VALUE LABELS Populationgroups5

0 'Not because of my profession'

1 'Of my profession, namely...'.

VALUE LABELS Populationgroups6

0 'Not because I have recently been abroad in a potential risk area'

1 'I have recently been abroad in a potential risk area'.

VALUE LABELS Populationgroups7

0 'Not because I have symptoms of the Corona virus'

1 'I have symptoms of the Corona virus (for example, a cold or a cough)'.

VALUE LABELS Populationgroups8

0 'Not because I have the Corona virus'

1 'I have the Corona virus'.

VALUE LABELS Populationgroups9

0 'Not because I do not sufficiently practice social distancing measures'

4 "

1 'I do not sufficiently practice social distancing measures'.

VALUE LABELS Populationgroups10

0 'Not because I wear a mouth / face mask'

1 'I wear a mouth / face mask'.

VALUE LABELS Populationgroups11

0 'Not because one of my family members has symptoms of the Corona virus'

1 'One of my family members has symptoms of the Corona virus'.

VALUE LABELS Populationgroups12

0 'Not because I have been to places with many people or where many people have been recently'

1 'I have been to places with many people or where many people have been recently'.

VALUE LABELS Populationgroups13

0 'Not because of other reasons'

1 'Of other reasons, namely...'.

VALUE LABELS Ethnicidentity1

1 'Strongly disagree'

2 ''

3 ''

4 ''

5 'Strongly agree'.

VALUE LABELS Ethnicidentity2

1 'Strongly disagree'

2 ''

3 ''

4 ''

5 'Strongly agree'.

VALUE LABELS Ethnicidentity3

1 'Strongly disagree'

2 ''

3 ''

4 ''

5 'Strongly agree'.

VALUE LABELS Ethnicidentity4

1 'Strongly disagree'

2 ''

3 ''

4 ''

5 'Strongly agree'.

VALUE LABELS Prediscrimination1

1 'Never'

2 ''

3 ''

4 ''

5 'Often'.

VALUE LABELS Prediscrimination2

1 'Never'

2 ''

3 ''

4 ''

5 'Often'.

VALUE LABELS Prediscrimination3

1 'Never'

2 ''

3 ''

4 ''

5 'Often'.

VALUE LABELS Prediscrimination4

1 'Never'
2 ''
3 ''
4 ''
5 'Often'.
VALUE LABELS Prediscrimination5
1 'Never'
2 ''
3 ''
4 ''
5 'Often'.
VALUE LABELS Prediscrimination6
1 'Never'
2 ''
3 ''
4 ''
5 'Often'.

VALUE LABELS Prepopulationgroups1
0 'Applicable'
1 'Not applicable'.
VALUE LABELS Prepopulationgroups2
0 'Not because I have an Asian appearance'
1 'I have an Asian appearance'.
VALUE LABELS Prepopulationgroups3
0 'Not because of my ethnic background '
1 'Of my ethnic background'.
VALUE LABELS Prepopulationgroups4
0 'Not because of my appearance '
1 'Of my appearance'.
VALUE LABELS Prepopulationgroups5
0 'Not because of my relegion'
1 'Of my religion'.
VALUE LABELS Prepopulationgroups6
0 'Not because of my sexuality'
1 'Of my sexuality'.
VALUE LABELS Prepopulationgroups7
0 'Not because of the place / province where I live'
1 'Of the place / province where I live'.
VALUE LABELS Prepopulationgroups8
0 'Not because of my profession'
1 'Of my profession'.
VALUE LABELS Prepopulationgroups9
0 'Not because of other reasons'
1 'Of other reasons, namely...'.

VALUE LABELS Treatothers1
1 'Never'
2 ''
3 ''
4 ''
5 'Often'.
VALUE LABELS Treatothers2
1 'Never'
2 ''
3 ''
4 ''
5 'Often'.

2 ''

VALUE LABELS Treatothers3

1 'Never'

2 ''

3 ''

4 ''

5 'Often'.

VALUE LABELS Treatothers4

1 'Never'

2 ''

3 ''

4 ''

5 'Often'.

VALUE LABELS Treatothers5

1 'Never'

2 ''

3 ''

4 ''

5 'Often'.

VALUE LABELS Treatothers6

1 'Never'

2 ''

3 ''

4 ''

5 'Often'.

VALUE LABELS Treatothers7

1 'Never'

2 ''

3 ''

4 ''

5 'Often'.

VALUE LABELS TreatothersPopulationgroups1

0 'Applicable'

1 'Not applicable'.

VALUE LABELS TreatothersPopulationgroups2

0 'Not because they have an Asian appearance'

1 'They have an Asian appearance'.

VALUE LABELS TreatothersPopulationgroups3

0 'Not because of their ethnic background'

1 'Of their ethnic background'.

VALUE LABELS TreatothersPopulationgroups4

0 'Not because of the place / province where they live'

1 'Of the place / province where they live'.

VALUE LABELS TreatothersPopulationgroups5

0 'Not because of their profession'

1 'Of their profession'.

VALUE LABELS TreatothersPopulationgroups6

0 'Not because they have recently been abroad in a potential risk area'

1 'They have recently been abroad in a potential risk area'.

VALUE LABELS TreatothersPopulationgroups7

0 'Not because they have symptoms of the Corona virus'

1 'They have symptoms of the Corona virus (for example, a cold or cough)'.

VALUE LABELS TreatothersPopulationgroups8

0 'Not because they have the Corona virus'

1 'They have the Corona virus'.

VALUE LABELS TreatothersPopulationgroups9

0 'Not because they do not sufficiently practice social distancing measures'

1 'They do not sufficiently practice social distancing measures'.

VALUE LABELS TreatothersPopulationgroups10

0 'Not because they wear a mouth / face mask'

1 'They wear a mouth / face mask'.

VALUE LABELS TreatothersPopulationgroups11

0 'Not because one of their family members has symptoms of the corona virus'

1 'One of their family members has symptoms of the corona virus'.

VALUE LABELS TreatothersPopulationgroups12

0 'Not because they come to places with many people or where many people have been recently'

1 'They come to places with many people or where many people have been recently'.

VALUE LABELS TreatothersPopulationgroups13

0 'Not because of other reasons'

1 'Of other reasons, namely...'.

VALUE LABELS Coronaingeneral1

1 'Very small'

2 ''

3 ''

4 ''

5 'Very high'.

VALUE LABELS Coronaingeneral2

1 'Not at all severe'

2 ''

3 ''

4''

5 'Very severe'.

VALUE LABELS Coronaingeneral3

1 'Not at all effective'

2 ''

3 ''

4 ''

5 'Very effective'.

VALUE LABELS Coronaingeneral4

1 'Not at all confident'

2 ''

3 ''

4 ''

5 'Very confident'.

VALUE LABELS Coronaingeneral5

1 'Not at all confident'

2 ''

3 ''

4 ''

5 'Very confident'.

VALUE LABELS Coronaingeneral6

1 'Very difficult'

2 ''

3 ''

4 ''

5 'Very easy'.

VALUE LABELS Coronaingeneral7

1 'Not at all'

2 ''

3 ''

4 ''

5 'Very consistently'.

VALUE LABELS Coronaingeneral8

1 'Very unimportant'

2 ''

3 "
4 "
5 'Very important'.

*RESPONDENTNUMMER TOEVOEGEN.
*Geef iedereen een uniek respondentennummer.
COMPUTE Respondentnummer=$casenum.
EXECUTE.
Formats Respondentnummer (F8.0).
VARIABLE LABELS Respondentnummer 'Respondentnummer'.

*DECIMALEN AANPASSEN.
*Decimalen aanpassen. *Alleen voor year of birth waren er onnodig twee decimalen achter de komma's.
Formats Yearofbirth (F8.0).

*OMPOLEN.
*Mental health ompolen, degene die omgepoold moeten worden zijn: mentalhealth1, mentalhealth2, mentalhealth6, mentalhealth7, mentalhealth8, mentalhealth9, mentalhealth10, mentalhealth11, mentalhealth12.
*een hoge score betekent dus goede mentale gezondheid en lage score betekent slechte mentale gezondheid.
RECODE Mentalhealth1 Mentalhealth2 Mentalhealth6 Mentalhealth7 Mentalhealth8 Mentalhealth9
    Mentalhealth10 Mentalhealth11 Mentalhealth12 (1=5) (2=4) (3=3) (4=2) (5=1) (6=6).
EXECUTE.

*Value labels aanpassen van de mentalhealth die omgepoold zijn.
VALUE LABELS Mentalhealth1
1 'Extremely'
2 "
3 "
4 "
5 'Not at all'
6 'Not applicable'.
VALUE LABELS Mentalhealth2
1 'Extremely'
2 "
3 "
4 "
5 'Not at all'
6 'Not applicable'.
VALUE LABELS Mentalhealth6
1 'Extremely'
2 "
3 "
4 "
5 'Not at all'
6 'Not applicable'.
VALUE LABELS Mentalhealth7
1 'Extremely'
2 "
3 "
4 "
5 'Not at all'
6 'Not applicable'.
VALUE LABELS Mentalhealth8
1 'Extremely'
2 "
3 "
4 "
5 'Not at all'

6 'Not applicable'.

VALUE LABELS Mentalhealth9

1 'Extremely'

2 "

3 "

4 "

5 'Not at all'

6 'Not applicable'.

VALUE LABELS Mentalhealth10

1 'Extremely'

2 "

3 "

4 "

5 'Not at all'

6 'Not applicable'.

VALUE LABELS Mentalhealth11

1 'Extremely'

2 "

3 "

4 "

5 'Not at all'

6 'Not applicable'.

VALUE LABELS Mentalhealth12

1 'Extremely'

2 "

3 "

4 "

5 'Not at all'

6 'Not applicable'.

*OMPOLEN.

*Internal attribution. *Internalattribution4 en internalattribution5 moet omgepoold worden, want deze stelling zegt dat het aan zichzelf ligt ipv aan een ander.

RECODE InternalAttribution4 InternalAttribution5 (1=5) (2=4) (3=3) (4=2) (5=1) (6=6).

EXECUTE.

*Value labels van internalattribution4 en internalattribution5 aanpassen.

VALUE LABELS InternalAttribution4

1 'Strongly agree'

2 "

3 "

4 "

5 'Strongly disagree'

6 'Not applicable'.

VALUE LABELS InternalAttribution5

1 'Strongly agree'

2 "

3 "

4 "

5 'Strongly disagree'

6 'Not applicable'.

*CORRECTE MEETNIVEAU.

*Het correcte meetniveau aangeven.

*Voor introductie/persoonlijke vragen.

VARIABLE LEVEL Informedconsent1 TO Informedconsent3 (NOMINAL).

VARIABLE LEVEL Gender (NOMINAL).

VARIABLE LEVEL Birthplace1 TO Citizenship2 (NOMINAL).

VARIABLE LEVEL CitizenshipOther (SCALE).

VARIABLE LEVEL Ethnicity1 TO Workactivities (NOMINAL).

VARIABLE LEVEL Educationlevel (ORDINAL).

VARIABLE LEVEL Province (NOMINAL).

VARIABLE LEVEL CAD1 TO CAD13 (ORDINAL).

VARIABLE LEVEL Mentalhealth1 TO InternalAttribution7 (ORDINAL).

VARIABLE LEVEL Populationgroups1 TO Populationgroups13 (NOMINAL).

VARIABLE LEVEL Ethnicidentity1 TO Prediscrimination6 (ORDINAL).

VARIABLE LEVEL Prepopulationgroups1 TO Prepopulationgroups9 (NOMINAL).

VARIABLE LEVEL Treatothers1 TO Treatothers7 (ORDINAL).

VARIABLE LEVEL TreatothersPopulationgroups1 TO TreatothersPopulationgroups13 (NOMINAL).

VARIABLE LEVEL Coronaingeneral1 TO Coronaingeneral8 (ORDINAL).

VARIABLE LEVEL Respondentnummer (NOMINAL).

*DESCRIPTIVES EN FREQUENCIES VAN ALLE CONSTRUCTEN EN ALLE PARTICIPANTEN NOG VOOR SELECTIE.

*Insepctie van variabelen met DESCRIPTIVE STATISTICS.

*Om te kijken of er nog eventuele fouten in zitten.

DESCRIPTIVES VARIABLES=StartDate Informedconsent1 Informedconsent2 Informedconsent3 Gender

Yearofbirth Birthplace1 Birthplace2 Citizenship1 Citizenship2 Ethnicity1 Ethnicity2 Ethnicity3

Ethnicity4 Ethnicity5 Ethnicity6 Workactivities Educationlevel Province CAD1 CAD2 CAD3 CAD4 CAD5

CAD6 CAD7 CAD8 CAD9 CAD10 CAD11 CAD12 CAD13 Mentalhealth1 Mentalhealth2 Mentalhealth3 Mentalhealth4

Mentalhealth5 Mentalhealth6 Mentalhealth7 Mentalhealth8 Mentalhealth9 Mentalhealth10 Mentalhealth11

Mentalhealth12 Mentalhealth13 Mentalhealth14 InternalAttribution1 InternalAttribution2

InternalAttribution3 InternalAttribution4 InternalAttribution5 InternalAttribution6

InternalAttribution7 Populationgroups1 Populationgroups2 Populationgroups3 Populationgroups4

Populationgroups5 Populationgroups6 Populationgroups7 Populationgroups8 Populationgroups9

Populationgroups10 Populationgroups11 Populationgroups12 Populationgroups13 Ethnicidentity1

Ethnicidentity2 Ethnicidentity3 Ethnicidentity4 Prediscrimination1 Prediscrimination2

Prediscrimination3 Prediscrimination4 Prediscrimination5 Prediscrimination6 Prepopulationgroups1

Prepopulationgroups2 Prepopulationgroups3 Prepopulationgroups4 Prepopulationgroups5

Prepopulationgroups6 Prepopulationgroups7 Prepopulationgroups8 Prepopulationgroups9 Treatothers1

Treatothers2 Treatothers3 Treatothers4 Treatothers5 Treatothers6 Treatothers7

TreatothersPopulationgroups1 TreatothersPopulationgroups2 TreatothersPopulationgroups3

TreatothersPopulationgroups4 TreatothersPopulationgroups5 TreatothersPopulationgroups6

TreatothersPopulationgroups7 TreatothersPopulationgroups8 TreatothersPopulationgroups9

TreatothersPopulationgroups10 TreatothersPopulationgroups11 TreatothersPopulationgroups12

TreatothersPopulationgroups13 Coronaingeneral1 Coronaingeneral2 Coronaingeneral3 Coronaingeneral4

Coronaingeneral5 Coronaingeneral6 Coronaingeneral7 Coronaingeneral8 Respondentnummer

/STATISTICS=MEAN STDDEV MIN MAX.

*[Other] In which country you were born, getallen aanpassen voor Zambia en Zimbabwe, want die value getalle kloppen niet. *Springt nu van 193 naar 580 en daarna naar 1357 ipv 193, 194, 195.

VALUE LABELS Birthplace2

1 'Afghanistan'

2 'Albania'

3 'Algeria'

4 'Andorra'

5 'Angola'

6 'Antigua and Barbuda'

7 'Argentina'

8 'Armenia'

9 'Australia'

10 'Austria'

11 'Azerbaijan'

12 'Bahamas'

13 'Bahrain'

14 'Bangladesh'

15 'Barbados'

16 'Belarus'

17 'Belgium'

18 'Belize'

19 'Benin'

20 'Bhutan'

21'Bolivia'

22 'Bosnia and Herzegovina'

23 'Botswana'

24 'Brazil'

25 'Brunei Darussalam'

26 'Bulgaria'

27 'Burkina Faso'

28 'Burundi'

29 'Cambodia'

30 'Cameroon'

31 'Canada'

32 'Cape Verde'

33 'Central African Republic'

34 'Chad'

35 'Chile'

36 'China'

37 'Colombia'

38 'Comoros'

39 'Congo, Republic of the...'

40 'Costa Rica'

41 'Côte dIvoire'

42 'Croatia'

43 'Cuba'

44 'Cyprus'

45 'Czech Republic'

46 'Democratic Peoples Republic of Korea'

47 'Democratic Republic of the Congo'

48 'Denmark'

49 'Djibouti'

50 'Dominica'

51'Dominican Republic'

52 'Ecuador'

53 'Egypt'

54 'El Salvador'

55 'Equatorial Guinea'

56 'Eritrea'

57 'Estonia'

58 'Ethiopia'

59 'Fiji'

60 'Finland'

61 'France'

62 'Gabon'

63 'Gambia'

64 'Georgia'

65 'Germany'

66 'Ghana'

67 'Greece'

68 'Grenada'

69 'Guatemala'

70 'Guinea'

71 'Guinea-Bissau'

72 'Guyana'

73 'Haiti'

74 'Honduras'

75 'Hong Kong (S.A.R.)'

76 'Hungary'

77 'Iceland'

78 'India'

79 'Indonesia'

80 'Iran, Islamic Republic of...'

81 'Iraq'

82 'Ireland'

83 'Israel'

84 'Italy'

85 'Jamaica'

86 'Japan'

87 'Jordan'

88 'Kazakhstan'

89 'Kenya'

90 'Kiribati'

91 'Kuwait'

92 'Kyrgyzstan'

93 'Lao Peoples Democratic Republic'

94 'Latvia'

95 'Lebanon'

96 'Lesotho'

97 'Liberia'

98 'Libyan Arab Jamahiriya'

99 'Liechtenstein'

100 'Lithuania'

101 'Luxembourg'

102 'Madagascar'

103 'Malawi'

104 'Malaysia'

105 'Maldives'

106 'Mali'

107 'Malta'

108 'Marshall Islands'

109 'Mauritania'

110 'Mauritius'

111 'Mexico'

112 'Micronesia, Federated States of...'

113 'Monaco'

114 'Mongolia'

115 'Montenegro'

116 'Morocco'

117 'Mozambique'

118 'Myanmar'

119 'Namibia'

120 'Nauru'

121 'Nepal'

122 'the Netherlands'

123 'New Zealand'

124 'Nicaragua'

125 'Niger'

126 'Nigeria'

127 'North Korea'

128 'Norway'

129 'Oman'

130 'Pakistan'

131 'Palau'

132 'Panama'

133 'Papua New Guinea'

134 'Paraguay'

135 'Peru'

136 'Philippines'

137 'Poland'

138 'Portugal'

139 'Qatar'

140 'Republic of Korea'

141 'Republic of Moldova'

142 'Romania'

143 'Russian Federation'

144 'Rwanda'

145 'Saint Kitts and Nevis'

146 'Saint Lucia'

147 'Saint Vincent and the Grenadines'

148 'Samoa'

149 'San Marino'

150 'Sao Tome and Principe'

151 'Saudi Arabia'

152 'Senegal'

153 'Serbia'

154 'Seychelles'

155 'Sierra Leone'

156 'Singapore'

157 'Slovakia'

158 'Slovenia'

159 'Solomon Islands'

160 'Somalia'

161 'South Africa'

162 'South Korea'

163 'Spain'

164 'Sri Lanka'

165 'Sudan'

166 'Suriname'

167 'Swaziland'

168 'Sweden'

169 'Switzerland'

170 'Syrian Arab Republic'

171 'Tajikistan'

172 'Thailand'

173 'The former Yugoslav Republic of Macedonia'

174 'Timor-Leste'

175 'Togo'

176 'Tonga'

177 'Trinidad and Tobago'

178 'Tunisia'

179 'Turkey'

180 'Turkmenistan'

181 'Tuvalu'

182 'Uganda'

183 'Ukraine'

184 'United Arab Emirates'

185 'United Kingdom of Great Britain and Northern Ireland'

186 'United Republic of Tanzania'

187 'United States of America'

188 'Uruguay'

189 'Uzbekistan'

190 'Vanuatu'

191 'Venezuela, Bolivarian Republic of...'

192 'Viet Nam'

193 'Yemen'

194 'Zambia'

195 'Zimbabwe'.

Execute.

*Frequentietabellen op vragen van alle constructen.

FREQUENCIES VARIABLES=StartDate UserLanguage Informedconsent1 Informedconsent2 Informedconsent3

   Gender Yearofbirth Birthplace1 Birthplace2 Citizenship1 Citizenship2 CitizenshipOther Ethnicity1

   Ethnicity2 Ethnicity3 Ethnicity4 Ethnicity5 Ethnicity6 EthnicityOther Workactivities Educationlevel

   Province CAD1 CAD2 CAD3 CAD4 CAD5 CAD6 CAD7 CAD8 CAD9 CAD10 CAD11 CAD12 CAD13 CADOther

   Mentalhealth1 Mentalhealth2 Mentalhealth3 Mentalhealth4 Mentalhealth5 Mentalhealth6 Mentalhealth7

   Mentalhealth8 Mentalhealth9 Mentalhealth10 Mentalhealth11 Mentalhealth12 Mentalhealth13

   Mentalhealth14 InternalAttribution1 InternalAttribution2 InternalAttribution3 InternalAttribution4

   InternalAttribution5 InternalAttribution6 InternalAttribution7 Populationgroups1 Populationgroups2

   Populationgroups3 Populationgroups4 Populationgroups5 Populationgroups6 Populationgroups7

   Populationgroups8 Populationgroups9 Populationgroups10 Populationgroups11 Populationgroups12

   Populationgroups13 PopulationgroupsOther Ethnicidentity1 Ethnicidentity2 Ethnicidentity3

   Ethnicidentity4 Prediscrimination1 Prediscrimination2 Prediscrimination3 Prediscrimination4

   Prediscrimination5 Prediscrimination6 Prepopulationgroups1 Prepopulationgroups2

   Prepopulationgroups3 Prepopulationgroups4 Prepopulationgroups5 Prepopulationgroups6

   Prepopulationgroups7 Prepopulationgroups8 Prepopulationgroups9 PrepopulationgroupsOther

   Treatothers1 Treatothers2 Treatothers3 Treatothers4 Treatothers5 Treatothers6 Treatothers7

   TreatothersPopulationgroups1 TreatothersPopulationgroups2 TreatothersPopulationgroups3

   TreatothersPopulationgroups4 TreatothersPopulationgroups5 TreatothersPopulationgroups6

   TreatothersPopulationgroups7 TreatothersPopulationgroups8 TreatothersPopulationgroups9

   TreatothersPopulationgroups10 TreatothersPopulationgroups11 TreatothersPopulationgroups12

   TreatothersPopulationgroups13 Coronaingeneral1 Coronaingeneral2 Coronaingeneral3 Coronaingeneral4

   Coronaingeneral5 Coronaingeneral6 Coronaingeneral7 Coronaingeneral8

 /ORDER=ANALYSIS.

*Missings definieren.Via recode into same variable --> old new values --> missings, heb ik alle system missings voor CAD en Mentalhealth de waarde 0

gegeven.

RECODE CAD1 CAD2 CAD3 CAD4 CAD5 CAD6 CAD7 CAD8 CAD9 CAD10 CAD11 CAD12 CAD13 Mentalhealth1

   Mentalhealth2 Mentalhealth3 Mentalhealth4 Mentalhealth5 Mentalhealth6 Mentalhealth7 Mentalhealth8

   Mentalhealth9 Mentalhealth10 Mentalhealth11 Mentalhealth12 Mentalhealth13 Mentalhealth14 (SYSMIS=0).

EXECUTE.

*Nu wordt participanten selecteren gemakkelijker. *want ik wil dat elke participant die 0/missing value heeft bij een vraag over CAD of Mentalhealth eruit

halen.

*Data --> Select cases --> Into different.

USE ALL.

COMPUTE filter_$=((CAD1 ~= 0 & CAD2 ~= 0 & CAD3 ~= 0 & CAD4 ~= 0 & CAD5 ~= 0 & CAD6 ~= 0 & CAD7 ~=

   0 & CAD8 ~= 0 & CAD9 ~= 0 & CAD10 ~= 0 & CAD11 ~= 0 & CAD12 ~= 0 & CAD13 ~= 0 & Mentalhealth1 ~= 0

   & Mentalhealth2 ~= 0 & Mentalhealth3 ~= 0 & Mentalhealth4 ~= 0 & Mentalhealth5 ~= 0 & Mentalhealth6

   ~= 0 & Mentalhealth7 ~= 0 & Mentalhealth8 ~= 0 & Mentalhealth9 ~= 0 & Mentalhealth10 ~= 0 &

   Mentalhealth11 ~= 0 & Mentalhealth12 ~= 0 & Mentalhealth13 ~= 0 & Mentalhealth14 ~= 0 & Gender ~=

   3 & Gender ~= 4 & Citizenship1 ~= 5)).

VARIABLE LABELS filter_$ '(CAD1 ~= 0 & CAD2 ~= 0 & CAD3 ~= 0 & CAD4 ~= 0 & CAD5 ~= 0 & CAD6 ~= 0 '+

   '& CAD7 ~= 0 & CAD8 ~= 0 & CAD9 ~= 0 & CAD10 ~= 0 & CAD11 ~= 0 & CAD12 ~= 0 & CAD13 ~= 0 & '+

   'Mentalhealth1 ~= 0 & Mentalhealth2 ~= 0 & Mentalhealth3 ~= 0 & Mentalhealth4 ~=... (FILTER)'.

VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.

FORMATS filter_$ (f1.0).

FILTER BY filter_$.

EXECUTE.

*participanten die eruit zijn, zijn mensen die gestopt zijn met het invullen van de vragenlijst, mensen die gender 3 of 4 hebben en aangaven een visitor te zijn, en de persoon die nog geen 18 jaar oud was is er ook uitgehaald, want die kon ook niet meer verder met het invullen van de vragenlijst.

VARIABLE LABELS filter_$ 'Participanten uit analyse halen die zijn gestopt, gender 3 of 4 of een visitor zijn'.
RENAME VARIABLES (filter_$ = SelectieParticipanten).

*Frequentietabellen voor constructen die belangrijk zijn om wat te weten over de participantengroep.
FREQUENCIES VARIABLES=Informedconsent2 Gender Ethnicity1 Ethnicity2 Ethnicity3 Ethnicity4 Ethnicity5
    Ethnicity6 EthnicityOther CAD1
  /ORDER=ANALYSIS.

*er zitten geen Marokkaanse mensen in de sample (Ethnicity3 = 406 missings).
*er zitten geen Surinaamse mensen in de sample (Ethnicity4 = 406 missings).

*METHODS ETHNIC GROUPS.
*Frequentietabellen voor ethnische groepen.
FREQUENCIES VARIABLES= Ethnicity1 Ethnicity2 Ethnicity3 Ethnicity4 Ethnicity5
    Ethnicity6 EthnicityOther
  /ORDER=ANALYSIS.

CROSSTABS Ethnicity1 by Ethnicity5.

CROSSTABS Ethnicity1 by Ethnicity6.

CROSSTABS Ethnicity1 by Ethnicity5 by Ethnicity6.

*Nieuwe variabele aanmaken, ethnic groups, waarbij combi's van ethnic identity mogelijk is.
if Ethnicity1=1 Ethnicgroup=1.
if Ethnicity5=1 Ethnicgroup=2.
if Ethnicity1=1 & Ethnicity5=1 Ethnicgroup=3.
if Ethnicity6=1 Ethnicgroup=7.
if Ethnicity2=1 Ethnicgroup=4.
if Ethnicity3=1 Ethnicgroup=5.
if Ethnicity4=1 Ethnicgroup=6.
if Ethnicity1=1 & Ethnicity6=1 Ethnicgroup=8.
if Ethnicity1=1 & Ethnicity5=1 & Ethnicity6=1 Ethnicgroup=9.
variable labels Ethnicgroup 'You consider yourself [ethnic background]'.
value labels Ethnicgroup 1 'Dutch' 2 'Chinese' 3 'Chinese-Dutch' 4 'Turkish' 5 'Moroccan' 6 'Surinamese' 7 'Other' 8 'Other-Dutch' 9'Other-Chinese-Dutch'.
execute.

Formats Ethnicgroup (F8.0).
frequencies Ethnicgroup.

** Voor de analyses is het niet handig om een variabele met zoveel antwoordcategorieen te hebben. Dus hercoderen.
recode Ethnicgroup (1=1) (2=2) (3=2) (9=2) (4=3) (7=3) (8=3) (else=sysmis) into Ethnicgroup3.
variable labels Ethnicgroup3 'You consider yourself [ethnic background, gehercodeerd] '.
value labels Ethnicgroup3 1 'Dutch' 2 'Chinese' 3 'Other'.
execute.
frequencies Ethnicgroup Ethnicgroup3.

Formats Ethnicgroup3 (F8.0).
crosstabs Ethnicgroup by Ethnicgroup3
/cells count column.

*Dummy variabelen voor ethnicgroup 3.
RECODE Ethnicgroup3 (1=1) (ELSE=0) INTO Ethnicgroup3DUMMYDutch.
VARIABLE LABELS Ethnicgroup3DUMMYDutch 'Dutch =1, Rest =0'.
EXECUTE.

RECODE Ethnicgroup3 (3=1) (ELSE=0) INTO Ethnicgroup3DUMMYother.
VARIABLE LABELS Ethnicgroup3DUMMYother ' Other=1, Rest =0'.
EXECUTE.

RECODE Ethnicgroup3 (2=1) (ELSE=0) INTO Ethnicgroup3DUMMYChinese.
VARIABLE LABELS Ethnicgroup3DUMMYChinese ' Chinese=1, Rest =0'.
EXECUTE.

*METHODS CAD(E).
*CAD scale uit Liu et al., 2020--> from the Everyday Discrimiantion scale Williams et al., 1997 --> dan zouden er 6 items van de 9 items worden gebruikt.
*Distribution statistics, shows the possible values for a variable and how often they occur.*wat is de kans dat je CAD meemaakt?.*Hoe groter de waarde
skeweness en Kurtosis, hoe groter de kans dat het niet normaal verdeeld is.
*Skeweness en Kurtosis voor alle items los --> normaliteit testen.
*Analyse --> descriptive statistics --> frequencies.
FREQUENCIES VARIABLES=CAD1 CAD2 CAD3 CAD4 CAD5 CAD6
 /FORMAT=NOTABLE
 /STATISTICS=SKEWNESS SESKEW KURTOSIS SEKURT
 /HISTOGRAM NORMAL
 /ORDER=ANALYSIS.

*OF.

*CADE.
FREQUENCIES VARIABLES=CAD1 CAD2 CAD3 CAD4 CAD5 CAD6 CAD7 CAD8 CAD9 CAD10 CAD11 CAD12 CAD13
 /FORMAT=NOTABLE
 /STATISTICS=SKEWNESS SESKEW KURTOSIS SEKURT
 /HISTOGRAM NORMAL
 /ORDER=ANALYSIS.
*over het algemeen items indicated univariate normality (skeweness < 2 en Kurtosis < 7 (see Curran, West, & Finch, 1996)).

*factoranalys:Analyze --> Dimension reduction --> factor --> select items --> KMO & Barlett's test, correlation matrix, coefficients, determinants,
 scree plot, value <1, Oblimin, rotated solution, display correlation matrix, supress small coefficients.
*Factoranalyse CAD.
FACTOR
 /VARIABLES CAD1 CAD2 CAD3 CAD4 CAD5 CAD6
 /MISSING LISTWISE
 /ANALYSIS CAD1 CAD2 CAD3 CAD4 CAD5 CAD6
 /PRINT INITIAL CORRELATION DET KMO EXTRACTION ROTATION FSCORE
 /FORMAT BLANK(.40)
 /PLOT EIGEN
 /CRITERIA MINEIGEN(1) ITERATE(25)
 /EXTRACTION PC
 /CRITERIA ITERATE(25) DELTA(0)
 /ROTATION OBLIMIN
 /METHOD=CORRELATION.

RELIABILITY
 /VARIABLES=CAD1 CAD2 CAD3 CAD4 CAD5 CAD6
 /SCALE('ALL VARIABLES') ALL
 /MODEL=ALPHA
 /STATISTICS=SCALE
 /SUMMARY=TOTAL.
* a= 0,859, dus goed.

*Compute variable voor SCAD aanmaken.
COMPUTE SCAD=(CAD1 + CAD2 + CAD3 + CAD4 + CAD5 + CAD6) / 6.
EXECUTE.

VARIABLE LABELS SCAD 'SchaalscoreCAD'.
Formats SCAD (F8.0).

*Skeweness en Kurtosis voor schaalscore CAD.
FREQUENCIES VARIABLES=SCAD
 /FORMAT=NOTABLE
 /STATISTICS=SKEWNESS SESKEW KURTOSIS SEKURT
 /HISTOGRAM NORMAL
 /ORDER=ANALYSIS.
*Overschrijdt niet de grens: Skeweness= 1,394 en Kurtosis= 1,293/ mean = 1,67, SD= 0,762.

*OF.

*Factoranalyse voor CADE.
FACTOR
 /VARIABLES CAD1 CAD2 CAD3 CAD4 CAD5 CAD6 CAD7 CAD8 CAD9 CAD10 CAD11 CAD12 CAD13
 /MISSING LISTWISE
 /ANALYSIS CAD1 CAD2 CAD3 CAD4 CAD5 CAD6 CAD7 CAD8 CAD9 CAD10 CAD11 CAD12 CAD13
 /PRINT INITIAL CORRELATION DET KMO EXTRACTION ROTATION FSCORE
 /FORMAT BLANK(.40)
 /PLOT EIGEN
 /CRITERIA MINEIGEN(1) ITERATE(25)
 /EXTRACTION PC
 /CRITERIA ITERATE(25) DELTA(0)
 /ROTATION OBLIMIN
 /METHOD=CORRELATION.

*Betrouwbaarheidsanalyse. *Scale --> reliability test --> scale if item deleted and scale.
RELIABILITY
 /VARIABLES=CAD1 CAD2 CAD3 CAD4 CAD5 CAD6 CAD7 CAD8 CAD9 CAD10 CAD11 CAD12 CAD13
 /SCALE('ALL VARIABLES') ALL
 /MODEL=ALPHA
 /STATISTICS=SCALE
 /SUMMARY=TOTAL.
*Cronbach's alpha is 0,919, dus goed.

*Compute variable voor SCADE aanmaken.
COMPUTE SCADE=(CAD1 + CAD2 + CAD3 + CAD4 + CAD5 + CAD6 + CAD7 + CAD8 + CAD9 + CAD10 +
   CAD11 + CAD12 + CAD13) / 13.
EXECUTE.

VARIABLE LABELS SCADE 'SchaalscoreCADE'.
Formats SCADE (F8.0).

*Skeweness en Kurtosis voor schaalscore CADE.
FREQUENCIES VARIABLES=SCADE
 /FORMAT=NOTABLE
 /STATISTICS=SKEWNESS SESKEW KURTOSIS SEKURT
 /HISTOGRAM NORMAL
 /ORDER=ANALYSIS.
*Overschrijdt niet de grens: Skeweness 1,461 en Kurtosis 1,441/ mean = 1,58 en SD = 0,68.

*METHODS MENTAL HEALTH.
*Depressive emotion zijn sad (reversed score), depressed (reveresed score), confident, happy, satisfied.
*Hostile emotion (angry, agitated, irritated, hostile, mad --> allemaal reversed scored.
*Anxious emotion measures, from the MAACL anxiety subscale (Crocker et al., and Schmitt and Brandscombe): Fearful (reversed coded), worried (reversed score), calm and secure. (Major, Kaiser, McCoy, 2003).

```
FREQUENCIES VARIABLES=Mentalhealth1 Mentalhealth2 Mentalhealth3 Mentalhealth4 Mentalhealth5
    Mentalhealth6 Mentalhealth7 Mentalhealth8 Mentalhealth9 Mentalhealth10 Mentalhealth11
    Mentalhealth12 Mentalhealth13 Mentalhealth14
  /STATISTICS=SKEWNESS SESKEW KURTOSIS SEKURT
  /HISTOGRAM NORMAL
  /ORDER=ANALYSIS.
*Geen een items overschrijden de grenswaarden.


*Depressed emotion.
FACTOR
  /VARIABLES Mentalhealth1 Mentalhealth2 Mentalhealth3 Mentalhealth4 Mentalhealth5
  /MISSING LISTWISE
  /ANALYSIS Mentalhealth1 Mentalhealth2 Mentalhealth3 Mentalhealth4 Mentalhealth5
  /PRINT INITIAL CORRELATION DET KMO EXTRACTION ROTATION FSCORE
  /FORMAT BLANK(.40)
  /PLOT EIGEN
  /CRITERIA MINEIGEN(1) ITERATE(25)
  /EXTRACTION PC
  /CRITERIA ITERATE(25) DELTA(0)
  /ROTATION OBLIMIN
  /METHOD=CORRELATION.
*1 factor.


*Betrouwbaarheidsanalyse.
RELIABILITY
  /VARIABLES=Mentalhealth1 Mentalhealth2 Mentalhealth3 Mentalhealth4 Mentalhealth5
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA
  /SUMMARY=TOTAL.
* a = .936.


*Schaalscore voor mental health maken.
COMPUTE SDepressive=(Mentalhealth1 + Mentalhealth2 + Mentalhealth3 + Mentalhealth4 +
    Mentalhealth5) / 5.
EXECUTE.


VARIABLE LABELS SDepressive 'SchaalscoreDepressive'.
Formats SDepressive (F8.0).


FREQUENCIES VARIABLES=SDepressive
  /FORMAT=NOTABLE
  /STATISTICS=SKEWNESS SESKEW KURTOSIS SEKURT
  /HISTOGRAM NORMAL
  /ORDER=ANALYSIS.
*Skeweness -.161, Kurtosis = -1.666, Mean =  4.12, SD = 1.811.


*hostile emotion.
FACTOR
  /VARIABLES Mentalhealth6 Mentalhealth7 Mentalhealth8 Mentalhealth9 Mentalhealth10
  /MISSING LISTWISE
  /ANALYSIS Mentalhealth6 Mentalhealth7 Mentalhealth8 Mentalhealth9 Mentalhealth10
  /PRINT INITIAL CORRELATION DET KMO EXTRACTION ROTATION FSCORE
  /FORMAT BLANK(.40)
  /PLOT EIGEN
  /CRITERIA MINEIGEN(1) ITERATE(25)
  /EXTRACTION PC
  /CRITERIA ITERATE(25) DELTA(0)
```

```
 /ROTATION OBLIMIN
 /METHOD=CORRELATION.

RELIABILITY
 /VARIABLES=Mentalhealth6 Mentalhealth7 Mentalhealth8 Mentalhealth9 Mentalhealth10
 /SCALE('ALL VARIABLES') ALL
 /MODEL=ALPHA
 /SUMMARY=TOTAL.
*a= .951.


*Schaalscore voor Hostile.
COMPUTE SHostile=(Mentalhealth6 + Mentalhealth7 + Mentalhealth8 + Mentalhealth9 +
   Mentalhealth10) / 5.
EXECUTE.


VARIABLE LABELS SHostile 'SchaalscoreHostile'.
Formats SHostile (F8.0).


FREQUENCIES VARIABLES=SHostile
 /FORMAT=NOTABLE
 /STATISTICS=SKEWNESS SESKEW KURTOSIS SEKURT
 /HISTOGRAM NORMAL
 /ORDER=ANALYSIS.
*Skeweness = -.588, Kurtosis -.972, Mean = 4.64, SD = 1.428.


*Anxious emotion.
FACTOR
 /VARIABLES Mentalhealth11 Mentalhealth12 Mentalhealth13 Mentalhealth14
 /MISSING LISTWISE
 /ANALYSIS Mentalhealth11 Mentalhealth12 Mentalhealth13 Mentalhealth14
 /PRINT INITIAL CORRELATION DET KMO EXTRACTION ROTATION FSCORE
 /FORMAT BLANK(.40)
 /PLOT EIGEN
 /CRITERIA MINEIGEN(1) ITERATE(25)
 /EXTRACTION PC
 /CRITERIA ITERATE(25) DELTA(0)
 /ROTATION OBLIMIN
 /METHOD=CORRELATION.


RELIABILITY
 /VARIABLES=Mentalhealth11 Mentalhealth12 Mentalhealth13 Mentalhealth14
 /SCALE('ALL VARIABLES') ALL
 /MODEL=ALPHA
 /SUMMARY=TOTAL.
*a = .913.


*Schaalscore voor Anxious.
COMPUTE SAnxious=(Mentalhealth11 + Mentalhealth12 + Mentalhealth13 + Mentalhealth14) / 4.
EXECUTE.


VARIABLE LABELS SAnxious 'SchaalscoreAnxious'.
Formats SAnxious (F8.0).


FREQUENCIES VARIABLES=SAnxious
 /FORMAT=NOTABLE
 /STATISTICS=SKEWNESS SESKEW KURTOSIS SEKURT
 /HISTOGRAM NORMAL
 /ORDER=ANALYSIS.
```

*Skeweness = -.297, Kurtosis = -1.471, Mean = 4.32   SD = 1.674.

*Factoranalyse voor mentalhealth.
FACTOR
  /VARIABLES Mentalhealth1 Mentalhealth2 Mentalhealth3 Mentalhealth4 Mentalhealth5 Mentalhealth6
    Mentalhealth7 Mentalhealth8 Mentalhealth9 Mentalhealth10 Mentalhealth11 Mentalhealth12
    Mentalhealth13 Mentalhealth14
  /MISSING LISTWISE
  /ANALYSIS Mentalhealth1 Mentalhealth2 Mentalhealth3 Mentalhealth4 Mentalhealth5 Mentalhealth6
    Mentalhealth7 Mentalhealth8 Mentalhealth9 Mentalhealth10 Mentalhealth11 Mentalhealth12
    Mentalhealth13 Mentalhealth14
  /PRINT INITIAL CORRELATION DET KMO EXTRACTION ROTATION FSCORE
  /FORMAT BLANK(.40)
  /PLOT EIGEN
  /CRITERIA MINEIGEN(1) ITERATE(25)
  /EXTRACTION PC
  /CRITERIA ITERATE(25) DELTA(0)
  /ROTATION OBLIMIN
  /METHOD=CORRELATION.

*Betrouwbaarheidsanalyse voor mentalhealth.
RELIABILITY
  /VARIABLES=Mentalhealth1 Mentalhealth2 Mentalhealth3 Mentalhealth4 Mentalhealth5 Mentalhealth6
    Mentalhealth7 Mentalhealth8 Mentalhealth9 Mentalhealth10 Mentalhealth11 Mentalhealth12
    Mentalhealth13 Mentalhealth14
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA
  /STATISTICS=SCALE
  /SUMMARY=TOTAL.
*a= .974.

*Schaalscore maken voor mental health.
COMPUTE SMentalhealth=(Mentalhealth1 + Mentalhealth2 + Mentalhealth3 + Mentalhealth4 +
    Mentalhealth5 + Mentalhealth6 + Mentalhealth7 + Mentalhealth8 + Mentalhealth9 + Mentalhealth10 +
    Mentalhealth11 + Mentalhealth12 + Mentalhealth13 + Mentalhealth14) / 14.
EXECUTE.
Formats SMentalhealth (F8.0).

VARIABLE LABELS SMentalhealth 'SchaalscoreMentalhealth'.

FREQUENCIES VARIABLES=SMentalhealth
  /FORMAT=NOTABLE
  /STATISTICS=SKEWNESS SESKEW KURTOSIS SEKURT
  /HISTOGRAM NORMAL
  /ORDER=ANALYSIS.
*Skeweness = -.233 en Kurtosis = -1,522, Mean 4.37, SD = 1.58.

*METHODS MODERATOR ETHNIC IDENTITY.
*Factor analyse voor Importance to Ethnic identity, bestaat uit asian appearance en ethnic background.
FACTOR
  /VARIABLES Ethnicidentity1 Ethnicidentity2
  /MISSING PAIRWISE
  /ANALYSIS Ethnicidentity1 Ethnicidentity2
  /PRINT INITIAL CORRELATION KMO EXTRACTION ROTATION FSCORE
  /FORMAT SORT BLANK(.10)
  /PLOT EIGEN
  /CRITERIA MINEIGEN(1) ITERATE(25)
  /EXTRACTION PC

```
 /CRITERIA ITERATE(25)
 /ROTATION VARIMAX
 /METHOD=CORRELATION.


RELIABILITY
 /VARIABLES=Ethnicidentity1 Ethnicidentity2
 /SCALE('Importance to ethnic identity') ALL
 /MODEL=ALPHA
 /STATISTICS=DESCRIPTIVE SCALE
 /SUMMARY=TOTAL.
* Cronbach's alpha .907


*SImportanceEthnicIdentity.
COMPUTE SImportanceEthnicIdentity=(Ethnicidentity1 + Ethnicidentity2 / 2).
EXECUTE.


VARIABLE LABELS SImportanceEthnicIdentity 'Schaalscore Importance to Ethnic Identity'.
Formats SImportanceEthnicIdentity (F8.0).


*METHODE POTENTIAL CONFOUNDERS.
*Dummy voor gender.
RECODE Gender (1=0) (2=1) INTO GenderDummyVrouw.
VARIABLE LABELS  GenderDummyVrouw 'Vrouw = 1, Male = 0'.
EXECUTE.


*Leeftijd.
*Frequentietabellen voor Leeftijd --> in deze vragenlijst is er naar geboortejaar gevraagd ipv leeftijd, dus ik ga eerst leeftijd van elke participant berekenen.
FREQUENCIES VARIABLES=Yearofbirth
 /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE
 /BARCHART FREQ
 /ORDER=ANALYSIS.
*Transform --> compute variable.
*Eerst leeftijd van alle participanten uitgerekend.
COMPUTE FormDate = 2021.
Execute.


VARIABLE LEVEL FormDate (SCALE).
VARIABLE LABELS Formdate 'Datum van die dag als referentiepunt om leeftijd te berekenen'.


COMPUTE Age = (FormDate-Yearofbirth).
EXECUTE.


VARIABLE LEVEL Age (SCALE).
VARIABLE LABELS Age 'Leeftijd'.


*Dummy Citizenship2.
RECODE Citizenship2 (1=0) (2=1) INTO Citizenship2DUMMYandersnamelijk.
VARIABLE LABELS  Citizenship2DUMMYandersnamelijk 'andersnamelijk = 1, hele leven = 0'.
EXECUTE.


*Workactivities hercoderen.
recode Workactivities (1=1) (2=1) (3=1) (4=2) (5=2) (6=2) (7=2) (8=2) (9=3) (else=sysmis) into WorkactivitiesHER.
variable labels WorkactivitiesHER 'werkactiviteiten werkend, niet-werkend, student'.
value labels WorkactivitiesHER 1 'Werkend' 2 'niet-werkend' 3'student'.
execute.
FREQUENCIES WorkactivitiesHER.


Formats WorkactivitiesHER (F8.0).
```

```
*Dummy workactivities.
RECODE WorkactivitiesHER (2=1) (ELSE=0) INTO WorkactivitiesDUMMYnietwerkend.
VARIABLE LABELS  WorkactivitiesDUMMYnietwerkend 'nietwerkend=1, rest =0'.
EXECUTE.


RECODE WorkactivitiesHER (3=1) (ELSE=0) INTO WorkactivitiesDUMMYstudent.
VARIABLE LABELS  WorkactivitiesDUMMYstudent 'student=1, rest =0'.
EXECUTE.


*Education level hercoderen.
recode Educationlevel (1=1) (2=1) (3=2) (4=2) (5=2) (6=3) (7=3) (8=3) (else=sysmis) into EducationlevelHER.
variable labels EducationlevelHER 'laag, midden, hoog opgeleid'.
value labels EducationlevelHER 1 'laag opgeleid' 2 'midden opgeleid' 3'hoog opgeleid'.
execute.
FREQUENCIES EducationlevelHER.


Formats EducationlevelHER (F8.0).
VARIABLE LEVEL EducationlevelHER (ORDINAL).


*Dummy education level.
RECODE EducationlevelHER (2=1) (ELSE=0) INTO EducationlevelDUMMYMidden.
VARIABLE LABELS  EducationlevelDUMMYMidden 'Middenopgeleid = 1, rest =0'.
EXECUTE.


RECODE EducationlevelHER (3=1) (ELSE=0) INTO EducationlevelDUMMYHoog.
VARIABLE LABELS  EducationlevelDUMMYHoog 'Hoogopgeleid = 1, rest =0'.
EXECUTE.


*RESULTS SAMPLES.
*Participants and sampling.
*Aantal participanten dat meegenomen wordt naar de analyse.
FREQUENCIES VARIABLES=SelectieParticipanten
 /STATISTICS=STDDEV MINIMUM MAXIMUM
 /ORDER=ANALYSIS.


*Frequentietabel AGE.
FREQUENCIES VARIABLES=Age
 /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE
 /ORDER=ANALYSIS.


OUTPUT MODIFY
 /REPORT PRINTREPORT=NO
 /SELECT TABLES
 /IF COMMANDS=[LAST]
 /TABLECELLS SELECT=[BODY] SELECTCONDITION=ALL FORMAT="F.1" APPLYTO=CELL.
*Gemiddelde leeftijd bekijken met 1 decimaal want het gaat om leeftijd.
*Mean = 35.8.


*Gender.
FREQUENCIES VARIABLES=Gender
 /ORDER=ANALYSIS.


*Age per Gender bekijken.
CROSSTABS
 /TABLES=Gender BY Age
 /FORMAT=AVALUE TABLES
 /CELLS=COUNT
```

```
  /COUNT ROUND CELL.
*Gemiddelde leeftijd per geslacht bekijken.
*Custom tables --> analyse --> tables --> custom tables --> ok.
CTABLES
  /VLABELS VARIABLES=Gender Age DISPLAY=LABEL
  /TABLE Gender [C] BY Age [S][MEAN, STDDEV]
  /CATEGORIES VARIABLES=Gender ORDER=A KEY=VALUE EMPTY=INCLUDE
  /CRITERIA CILEVEL=95.


OUTPUT MODIFY
  /REPORT PRINTREPORT=NO
  /SELECT TABLES
  /IF COMMANDS=[LAST]
  /TABLECELLS SELECT=[BODY] SELECTCONDITION=ALL FORMAT="F.1" APPLYTO=CELL.


*Age voor descriptive tabel, afronden 1 decimaal.
* Custom Tables.
CTABLES
  /VLABELS VARIABLES=Age DISPLAY=LABEL
  /TABLE Age [S][MEAN F40.1, STDDEV F40.1]
  /CRITERIA CILEVEL=95.


*Frequentietabel burgerschap.
FREQUENCIES VARIABLES=Citizenship1
  /ORDER=ANALYSIS.
*aantal staatsburgerschap.



*Frequentietabellen hoe lang woon je al in Nederland.
FREQUENCIES VARIABLES=Citizenship2 CitizenshipOther
  /ORDER=ANALYSIS.
*De helft woont al zijn hele leven in Nederland.


FREQUENCIES VARIABLES=Province
  /ORDER=ANALYSIS.
*de meesten wonen in provincie Utrecht.


*Frequentietabel werkactiviteiten.
FREQUENCIES VARIABLES=Educationlevel
  /ORDER=ANALYSIS.
*de meesten postgraduate education.


*Frequentietabel werkactivteiten.
FREQUENCIES VARIABLES=Workactivities
  /ORDER=ANALYSIS.
*de meesten fulltime employment.


FREQUENCIES VARIABLES=Ethnicgroup3
  /STATISTICS=STDDEV MEAN MEDIAN MODE
  /ORDER=ANALYSIS.


*Als beschrijvende variabelen opschrijven hoeveel participanten er in China geboren zijn.
*Er is namelijk een verschil in hoeveel mensen zich als chinees identificeren en hoeveel er in China geboren zijn.
*Frequentietabel geboorteland.
FREQUENCIES VARIABLES=Birthplace1 Birthplace2
  /ORDER=ANALYSIS.
*aantal participanten geboren in China.
```

*Frequentietabel hoeveel mensen CAD ervaringen.
FREQUENCIES VARIABLES=CAD1 CAD2 CAD3 CAD4 CAD5 CAD6 CAD7 CAD8 CAD9 CAD10 CAD11 CAD12 CAD13 CADOther
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE
  /ORDER=ANALYSIS.
*De meesten geven aan nooit ervaren te hebben anders te worden behandelt sind de corona crisis.

*Dummy variabele voor discriminatie, zodat ik kan kijken hoeveel mensen wel discriminatie ervaren.
RECODE CAD1 (1=0) (ELSE=1) INTO CAD1Dummydiscriminatie.
VARIABLE LABELS CAD1Dummydiscriminatie 'Ervaren discriminatie'.
EXECUTE.

*Frequentie discriminatie.
FREQUENCIES VARIABLES=CAD1Dummydiscriminatie
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE
  /ORDER=ANALYSIS.

*Frequentietabel van de mensen die CAD ervaren, hoeveel denken dat dat komt door Aziatisch uiterlijk.
FREQUENCIES VARIABLES=Populationgroups1 Populationgroups2 Populationgroups3 Populationgroups4
    Populationgroups5 Populationgroups6 Populationgroups7 Populationgroups8 Populationgroups9
    Populationgroups10 Populationgroups11 Populationgroups12 Populationgroups13 PopulationgroupsOther
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE
  /ORDER=ANALYSIS.
*26 participanten denken dat ze anders worden behandelt sinds de corona crisis, door hun aziatisch uiterlijk.

*RESULTS DESCRIPTIVES TABEL.
*gemiddelde leeftijd per ethnische groep.
* Custom Tables.
CTABLES
  /VLABELS VARIABLES=Age Ethnicgroup3 DISPLAY=LABEL
  /TABLE Age [MEAN COMMA40.1, STDDEV COMMA40.1] BY Ethnicgroup3
  /CATEGORIES VARIABLES=Ethnicgroup3 ORDER=A KEY=VALUE EMPTY=INCLUDE
  /CRITERIA CILEVEL=95.

*aantal mannen en vrouwen per ethnische groep.
* Custom Tables.
CTABLES
  /VLABELS VARIABLES=Gender Ethnicgroup3 DISPLAY=LABEL
  /TABLE Gender [C][COUNT F40.0, TABLEPCT.COUNT PCT40.1] BY Ethnicgroup3 [C]
  /SLABELS POSITION=ROW
  /CATEGORIES VARIABLES=Gender [1, 2] EMPTY=INCLUDE TOTAL=YES POSITION=AFTER
  /CATEGORIES VARIABLES=Ethnicgroup3 ORDER=A KEY=VALUE EMPTY=INCLUDE
  /CRITERIA CILEVEL=95.

*CAD Total voor descriptives tabel.
* Custom Tables.
CTABLES
  /VLABELS VARIABLES=SCAD DISPLAY=LABEL
  /TABLE SCAD [MEAN COMMA40.3, STDDEV COMMA40.3]
  /CRITERIA CILEVEL=95.
*aantal CAD ervaringen per ethnische groep.
* Custom Tables.
CTABLES
  /VLABELS VARIABLES=SCAD Ethnicgroup3 DISPLAY=LABEL
  /TABLE SCAD [MEAN DOT40.3, STDDEV COMMA40.3] BY Ethnicgroup3
  /SLABELS POSITION=ROW
  /CATEGORIES VARIABLES=Ethnicgroup3 ORDER=A KEY=VALUE EMPTY=INCLUDE
  /CRITERIA CILEVEL=95.

*CADE Total voor descriptives tabel.
* Custom Tables.
CTABLES
 /VLABELS VARIABLES=SCADE DISPLAY=LABEL
 /TABLE SCADE [MEAN COMMA40.3, STDDEV COMMA40.3]
 /CRITERIA CILEVEL=95.

*Aantal CADE ervaringen per ethnische groep.
* Custom Tables.
CTABLES
 /VLABELS VARIABLES=SCADE Ethnicgroup3 DISPLAY=LABEL
 /TABLE SCADE [MEAN COMMA40.3, STDDEV COMMA40.3] BY Ethnicgroup3 [C]
 /SLABELS POSITION=ROW
 /CATEGORIES VARIABLES=Ethnicgroup3 ORDER=A KEY=VALUE EMPTY=INCLUDE
 /CRITERIA CILEVEL=95.

*Mental health Total descriptives voor tabel.
* Custom Tables.
CTABLES
 /VLABELS VARIABLES=SMentalhealth DISPLAY=LABEL
 /TABLE SMentalhealth [MEAN COMMA40.3, STDDEV COMMA40.3]
 /CRITERIA CILEVEL=95.
*mentale gezondheid per ethnische groep.
* Custom Tables.
CTABLES
 /VLABELS VARIABLES=SMentalhealth Ethnicgroup3 DISPLAY=LABEL
 /TABLE SMentalhealth [MEAN COMMA40.3, STDDEV COMMA40.3] BY Ethnicgroup3 [C]
 /SLABELS POSITION=ROW
 /CATEGORIES VARIABLES=Ethnicgroup3 ORDER=A KEY=VALUE EMPTY=INCLUDE
 /CRITERIA CILEVEL=95.

*citizenship2 per ethnische groep.
* Custom Tables.
CTABLES
 /VLABELS VARIABLES=Citizenship2 Ethnicgroup3 DISPLAY=LABEL
 /TABLE Citizenship2 [COUNT F40.0, TABLEPCT.COUNT PCT40.1] BY Ethnicgroup3
 /SLABELS POSITION=ROW
 /CATEGORIES VARIABLES=Citizenship2 Ethnicgroup3 ORDER=A KEY=VALUE EMPTY=INCLUDE
 /CRITERIA CILEVEL=95.

*Workactivities Total voor in descriptives table.
* Custom Tables.
CTABLES
 /VLABELS VARIABLES=WorkactivitiesHER DISPLAY=LABEL
 /TABLE WorkactivitiesHER [COUNT F40.0, TABLEPCT.COUNT PCT40.1]
 /CATEGORIES VARIABLES=WorkactivitiesHER ORDER=A KEY=VALUE EMPTY=INCLUDE
 /CRITERIA CILEVEL=95.
*per ethnische groep.
* Custom Tables.
CTABLES
 /VLABELS VARIABLES=WorkactivitiesHER Ethnicgroup3 DISPLAY=LABEL
 /TABLE WorkactivitiesHER [COUNT F40.0, TABLEPCT.COUNT PCT40.1] BY Ethnicgroup3
 /SLABELS POSITION=ROW
 /CATEGORIES VARIABLES=WorkactivitiesHER Ethnicgroup3 ORDER=A KEY=VALUE EMPTY=INCLUDE
 /CRITERIA CILEVEL=95.

*education Total voor descriptives tabel.
* Custom Tables.

```
CTABLES
 /VLABELS VARIABLES=EducationlevelHER DISPLAY=LABEL
 /TABLE EducationlevelHER [COUNT F40.0, TABLEPCT.COUNT PCT40.1]
 /CATEGORIES VARIABLES=EducationlevelHER ORDER=A KEY=VALUE EMPTY=INCLUDE
 /CRITERIA CILEVEL=95.
*per ethnische groep.
* Custom Tables.
CTABLES
 /VLABELS VARIABLES=EducationlevelHER Ethnicgroup3 DISPLAY=LABEL
 /TABLE EducationlevelHER BY Ethnicgroup3 [C][COUNT F40.0, TABLEPCT.COUNT PCT40.1]
 /SLABELS POSITION=ROW
 /CATEGORIES VARIABLES=EducationlevelHER Ethnicgroup3 ORDER=A KEY=VALUE EMPTY=INCLUDE
 /CRITERIA CILEVEL=95.


*importance to ethnic identity voor descriptives table.
* Custom Tables.
CTABLES
 /VLABELS VARIABLES=SImportanceEthnicIdentity DISPLAY=LABEL
 /TABLE SImportanceEthnicIdentity [MEAN COMMA40.3, STDDEV COMMA40.3]
 /CRITERIA CILEVEL=95.


* Custom Tables.
CTABLES
 /VLABELS VARIABLES=SImportanceEthnicIdentity Ethnicgroup3 DISPLAY=LABEL
 /TABLE SImportanceEthnicIdentity [S][MEAN COMMA40.3, STDDEV COMMA40.3] BY Ethnicgroup3
 /CATEGORIES VARIABLES=Ethnicgroup3 ORDER=A KEY=VALUE EMPTY=INCLUDE
 /CRITERIA CILEVEL=95.


*ASSUMPTIONS.
*Scatterplot van CAD en Mental health om te kijken of er een linear verband kan bestaan.
*CAD en Mentalhealth.
* Chart Builder.
GGRAPH
 /GRAPHDATASET NAME="graphdataset" VARIABLES=SCAD SMentalhealth MISSING=LISTWISE REPORTMISSING=NO
 /GRAPHSPEC SOURCE=INLINE
 /FITLINE TOTAL=YES.
BEGIN GPL
 SOURCE: s=userSource(id("graphdataset"))
 DATA: SCAD=col(source(s), name("SCAD"))
 DATA: SMentalhealth=col(source(s), name("SMentalhealth"))
 GUIDE: axis(dim(1), label("SchaalscoreCAD"))
 GUIDE: axis(dim(2), label("SchaalscoreMentalhealth"))
 GUIDE: text.title(label("Simple Scatter with Fit Line of SchaalscoreMentalhealth by ",
   "SchaalscoreCAD"))
 ELEMENT: point(position(SCAD*SMentalhealth))
END GPL.
*Hoe meer CAD hoe slechter de mental Health.
*R2.


*SCADE en SMentalhealth.
* Chart Builder.
GGRAPH
 /GRAPHDATASET NAME="graphdataset" VARIABLES=SCADE SMentalhealth MISSING=LISTWISE REPORTMISSING=NO
 /GRAPHSPEC SOURCE=INLINE
 /FITLINE TOTAL=YES.
BEGIN GPL
 SOURCE: s=userSource(id("graphdataset"))
 DATA: SCADE=col(source(s), name("SCADE"))
```

```
  DATA: SMentalhealth=col(source(s), name("SMentalhealth"))
  GUIDE: axis(dim(1), label("SchaalscoreCADE"))
  GUIDE: axis(dim(2), label("SchaalscoreMentalhealth"))
  GUIDE: text.title(label("Simple Scatter with Fit Line of SchaalscoreMentalhealth by ",
    "SchaalscoreCADE"))
  ELEMENT: point(position(SCADE*SMentalhealth))
END GPL.
*R2.


*Test of steekproef normaal verdeeld is.
*Shapiro Wilk test.
EXAMINE VARIABLES=SCAD SCADE SMentalhealth BY Ethnicgroup3
  /PLOT BOXPLOT STEMLEAF HISTOGRAM NPPLOT
  /COMPARE GROUPS
  /STATISTICS DESCRIPTIVES EXTREME
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.
*Alles significicant, dus aangenomen dat steekproef normaal verdeeld is.
*Wel een beetje Rechts-skewed bij CAD en CADE, en Left-skewed bij mental health..
*Normal 1-plots ook normaal verdeeld, want punten liggen op de lijn.


*Histogram normaal verdeling.
GRAPH
  /HISTOGRAM(NORMAL)=SCAD.


GRAPH
  /HISTOGRAM(NORMAL)=SCADE.


GRAPH
  /HISTOGRAM(NORMAL)=SMentalhealth.


*Residuen normaliteit testen.
PPLOT
  /VARIABLES=SCAD SCADE SMentalhealth
  /NOLOG
  /NOSTANDARDIZE
  /TYPE=P-P
  /FRACTION=BLOM
  /TIES=MEAN
  /DIST=NORMAL.


*Homoscedasticiteit checken.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SMentalhealth
  /METHOD=ENTER SCAD
  /SCATTERPLOT=(SMentalhealth ,*ZRESID).


REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SMentalhealth
```

```
  /METHOD=ENTER SCADE
  /SCATTERPLOT=(SMentalhealth ,*ZRESID).
```

*Spearman correlatie: is er een verband tussen CAD en mental health.
*Analyze --> correlatie --> bivariate --> spearman.
*CAD6items & mental health.
NONPAR CORR
  /VARIABLES=SCAD SMentalhealth
  /PRINT=SPEARMAN TWOTAIL NOSIG
  /MISSING=PAIRWISE.
*Significant two-tailed (0,01 level), correlation coefficient -.646.

*OF.

*CADE & Mental health.
NONPAR CORR
  /VARIABLES=SCADE SMentalhealth
  /PRINT=SPEARMAN TWOTAIL NOSIG
  /MISSING=PAIRWISE.
*Significant two-tailed (0,01 level), correlation coefficient -.673.

*Assumptions Regression analyses Outliers.
  EXAMINE VARIABLES=SCAD
  /PLOT BOXPLOT STEMLEAF
  /COMPARE VARIABLES
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.
*geen outliers.

*OF.

* voor vergelijken groepen op CADE.
EXAMINE VARIABLES=SCADE
  /PLOT BOXPLOT STEMLEAF
  /COMPARE VARIABLES
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.
*geen outliers.

EXAMINE VARIABLES=SMentalhealth
  /PLOT BOXPLOT STEMLEAF
  /COMPARE VARIABLES
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.
*geen outliers.

*RESULTS.
*ANOVA analyse om de drie groepen te vergelijken in CAD/CADE.
ONEWAY SCAD BY Ethnicgroup3
  /STATISTICS HOMOGENEITY BROWNFORSYTHE
  /PLOT MEANS
  /MISSING ANALYSIS
```

/POSTHOC=BTUKEY BONFERRONI ALPHA(0.05).


ONEWAY SCADE BY Ethnicgroup3
  /STATISTICS HOMOGENEITY BROWNFORSYTHE
  /PLOT MEANS
  /MISSING ANALYSIS
  /POSTHOC=BTUKEY BONFERRONI ALPHA(0.05).
*Levene's test significant dus kijken naar Brown-Forsythe en daarna Regression analyses.


*REGRESSIE analyse.
*CAD.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SCAD
  /METHOD=ENTER Ethnicgroup3DUMMYDutch Ethnicgroup3DUMMYother
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
  /SAVE MAHAL COOK LEVER.


*ref Dutch group, om even te bekijken.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SCAD
  /METHOD=ENTER Ethnicgroup3DUMMYChinese Ethnicgroup3DUMMYother
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
  /SAVE MAHAL COOK LEVER.


*Potential confounders CAD.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SCAD
  /METHOD=ENTER Ethnicgroup3DUMMYDutch Ethnicgroup3DUMMYother
  /METHOD=ENTER GenderDummyVrouw Age Citizenship2DUMMYandersnamelijk WorkactivitiesDUMMYnietwerkend
    WorkactivitiesDUMMYstudent EducationlevelDUMMYMidden EducationlevelDUMMYHoog
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
  /SAVE MAHAL COOK LEVER.
*alleen hoogopgeleid een potential confounder.


*confouner hoogopgeleid in drie predictor model CAD.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)

```
  /NOORIGIN
  /DEPENDENT SCAD
  /METHOD=ENTER Ethnicgroup3DUMMYDutch Ethnicgroup3DUMMYother
  /METHOD=ENTER EducationlevelDUMMYHoog
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
  /SAVE MAHAL COOK LEVER.


*CADE.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SCADE
  /METHOD=ENTER Ethnicgroup3DUMMYDutch Ethnicgroup3DUMMYother
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
  /SAVE MAHAL COOK LEVER.


*Referentie groep dutch om even te bekijken.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SCADE
  /METHOD=ENTER Ethnicgroup3DUMMYChinese Ethnicgroup3DUMMYother
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
  /SAVE MAHAL COOK LEVER.


*potential confounders.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SCADE
  /METHOD=ENTER Ethnicgroup3DUMMYDutch Ethnicgroup3DUMMYother
  /METHOD=ENTER GenderDummyVrouw Age Citizenship2DUMMYandersnamelijk WorkactivitiesDUMMYnietwerkend
    WorkactivitiesDUMMYstudent EducationlevelDUMMYMidden EducationlevelDUMMYHoog
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
  /SAVE MAHAL COOK LEVER.


*ANOVA drie ethnische groepen en Mentale gezondheid.
ONEWAY SMentalhealth BY Ethnicgroup3
  /STATISTICS DESCRIPTIVES HOMOGENEITY BROWNFORSYTHE
  /PLOT MEANS
  /MISSING ANALYSIS
  /POSTHOC=BTUKEY BONFERRONI ALPHA(0.05).


*potential confounders.
REGRESSION
```

/DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT SMentalhealth
 /METHOD=ENTER Ethnicgroup3DUMMYDutch Ethnicgroup3DUMMYother
 /METHOD=ENTER GenderDummyVrouw Age Citizenship2DUMMYandersnamelijk WorkactivitiesDUMMYnietwerkend
  WorkactivitiesDUMMYstudent EducationlevelDUMMYMidden EducationlevelDUMMYHoog
 /SCATTERPLOT=(*ZRESID ,*ZPRED)
 /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
 /SAVE MAHAL COOK LEVER.
*non-employed significant.

*alleen non-employed als confounder.
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT SMentalhealth
 /METHOD=ENTER Ethnicgroup3DUMMYDutch Ethnicgroup3DUMMYother
 /METHOD=ENTER WorkactivitiesDUMMYnietwerkend
 /SCATTERPLOT=(*ZRESID ,*ZPRED)
 /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
 /SAVE MAHAL COOK LEVER.

*REGRESSIE ANALYSES CAD EN MENTALHEALTH.
*CAD en Mentalhealth.
REGRESSION
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT SMentalhealth
 /METHOD=ENTER SCAD
 /SCATTERPLOT=(*ZRESID ,*ZPRED)
 /RESIDUALS NORMPROB(ZRESID)
 /SAVE MAHAL COOK.
*significant.

*potential confounders.
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT SMentalhealth
 /METHOD=ENTER SCAD
 /METHOD=ENTER GenderDummyVrouw Age Citizenship2DUMMYandersnamelijk WorkactivitiesDUMMYnietwerkend
  WorkactivitiesDUMMYstudent EducationlevelDUMMYMidden EducationlevelDUMMYHoog
 /SCATTERPLOT=(*ZRESID ,*ZPRED)
 /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
 /SAVE MAHAL COOK LEVER.

*met alleen signficiante potential confounders.

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SMentalhealth
  /METHOD=ENTER SCAD
  /METHOD=ENTER Citizenship2DUMMYandersnamelijk WorkactivitiesDUMMYnietwerkend
   EducationlevelDUMMYMidden
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
  /SAVE MAHAL COOK LEVER.


*CADE en Mental health.
  REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SMentalhealth
  /METHOD=ENTER SCADE
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS NORMPROB(ZRESID)
  /SAVE MAHAL COOK.
*Significant.


*potential confounders.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SMentalhealth
  /METHOD=ENTER SCADE
  /METHOD=ENTER GenderDummyVrouw Age Citizenship2DUMMYandersnamelijk WorkactivitiesDUMMYnietwerkend
   WorkactivitiesDUMMYstudent EducationlevelDUMMYMidden EducationlevelDUMMYHoog
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
  /SAVE MAHAL COOK LEVER.


*alleen significante confounders.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT SMentalhealth
  /METHOD=ENTER SCADE
  /METHOD=ENTER Citizenship2DUMMYandersnamelijk WorkactivitiesDUMMYnietwerkend
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
  /SAVE MAHAL COOK LEVER.


DELETE VARIABLES MAH_1 TO LEV_13.
```

*MEDIATION ANALYSE VAN CAD tussen ethnische groepen en mentale gezondheid.

*Analyze, Regression, Process, Y variabele = mental health, X = ethnicgroup 3, mediator = SCAD, model number 4, bootrstrapsample 1000, options: laatste 5 aanvinken, 3 decimals, probe interactions always, -1SD, mean 1SD, ok.

*CAD als mediator via Process.

*Hetzelfde voor CADE, als mediator via Process.

*Moderatore analyse via PROCESS.

*model number 1, en bootstrap number 5000.

*SCAD.

*Data for visualizing the conditional effect of the focal predictor:

*Paste text below into a SPSS syntax window and execute to produce plot.

```
DATA LIST FREE/
  SCAD    SImporta  SMentalh  .
BEGIN DATA.
    -,880   -1,579   3,290
     ,000   -1,579   2,632
     ,880   -1,579   1,973
    -,880    ,000    3,009
     ,000    ,000    2,547
     ,880    ,000    2,085
    -,880   1,579    2,728
     ,000   1,579    2,463
     ,880   1,579    2,197
END DATA.
GRAPH/SCATTERPLOT=
  SCAD   WITH   SMentalh BY    SImporta .
```

*moderator importance to ethnic identity in relatie tussen CADE en mental health.

*SCADE.

```
DATA LIST FREE/
  SCADE    SImporta  SMentalh  .
BEGIN DATA.
    -,756   -1,579   3,305
     ,000   -1,579   2,669
     ,756   -1,579   2,033
    -,756    ,000    2,930
     ,000    ,000    2,543
     ,756    ,000    2,155
    -,756   1,579    2,556
     ,000   1,579    2,417
     ,756   1,579    2,278
END DATA.
GRAPH/SCATTERPLOT=
  SCADE   WITH   SMentalh BY    SImporta .
```

*Dit waren alle statistische analyses die ik heb uitgevoerd.

*opgeslagen output.

```
OUTPUT SAVE NAME=Document1
 OUTFILE='\\soliscom.uu.nl\users\5929601\Master '+
   'Thesis\MasterThesisMaaikedenBakkerOutputFinal27-06-2021.spv'
 LOCK=NO.
```

*opgeslagen werkbestand.

SAVE OUTFILE='\\soliscom.uu.nl\users\5929601\Master Thesis\MasterThesisMaaikedenBakkerWerkbestandFinal27-06-2021.sav'
 /COMPRESSED
 /PASSPROTECT PASSWORD=',{#q/d#M;J1p' ENCRYPTEDPW=YES.