

# Who is taking care of the elderly?

*Looking at facilitators and barriers in the relation between migration and care behaviour for elderly parents*



Imke Platenkamp

Student number: 6925871

Supervisor: Anna-Lena Hoh

Master Project SPPH

Date: June 28, 2021

Word count: 6980

## **Abstract**

This quantitative study explores to what extent filial obligation, expectations of parents, gender and education level strengthen or weaken caring behaviour for elderly parents for migrants and non-migrants. Previous models show a link between migration, filial obligation and care behaviour, but expectations of parents, gender and education have not been combined with migration as an predictor for care behaviour.

To check the hypotheses, data from the LISS panel has been used (N=234). Linear regression and hierarchical linear regression are used to analyze the data. From analyzing the data it can be concluded that being a migrant is positively linked with care behaviour. Only the interaction-effect of migration with expectations of parents was significant. Meaning that the other variables did not influence the relationship between migration and care behaviour. However, age, migration, filial obligation and expectations of parents are positive predictors for care behaviour.

To move towards a participatory society in which family care is emphasized. Policy and interventions could focus on migration, filial obligation, age and the expectations of parents. Since this study shows that these are the main predictors for more care behaviour, a qualitative research of these predictors is recommended to get a better understanding of the rationale for this.

*Care behaviour – Migration – Filial obligation – Gender – Expectations of parents*

## Introduction

After the Second World War there was a labour migration flow to the Netherlands. Due to rapid economic growth in the 50s and 60s, there was a shortage of low-skilled labour workers. This is the main reason behind the increasing immigration of Turkish and Moroccan men to the Netherlands (Jennissen, 2013). Due to the recession in 1973, the recruitment of labour migrants stopped in 1975. The expected decline in migration after the end of the recruitment of guest workers did not come caused by family reunification (Jennissen, 2013).

These Turkish and Moroccan labour migrants now all become elderly. The group of migrants over the age of 65 increased rapidly between 2000 and 2018. In the year of 2000 there were about 8000 Turkish and Moroccan aged over 65. In 2018, this was already 47 000 (CBS, 2018). The need for care often increases in the ageing process. Still, migrants make less use of (intra- or extramural) care compared to the native elderly (Schellingerhout, 2004). As stated by Monitor Langdurige Zorg (n.d.) intramural care concerns the care that clients receive during an uninterrupted stay in an institution, for example care in a nursing home or care home, institution for the disabled or institution for clients with long-term psychological problems. Extramural care concerns the care to clients who do not reside in an institution, it is care that the client receives by appointment from the care provider, or that the care provider delivers to the clients home (Monitor Langdurige Zorg, n.d.).

Furthermore, studies have shown that Moroccan and Turkish elderly make less use of intra and extramural care and welfare facilities (except for general practitioner care) than expected on the basis of their health status (Denktaş, 2011) The health of older migrants is generally worse than that of the elderly of native inhabitants. This applies to perceived health, mental health but also to chronic diseases (Verhagen, 2015). Instead of making use of intra or extramural care elderly migrants generally prefer family care. This preference exists from the elderly but also from their children (Verstappen & van den Broeke, 2018). Van Wieringen (2014) states when there is a need of care for elderly migrants, usually the family steps in, and in most cases the central caregiver is a daughter or a daughter in law. However, there is currently a transition phase. For children of these elderly migrants it is becoming increasingly difficult to combine caring for their parents with their own lives. Parents need more complex care, while these children live further away and have jobs and children of their own (Verstappen & van den Broeke, 2018).

Studies have shown that in Europe among migrants from Turkish and Moroccan origin there is more frequent contact and support exchange between adult children and their parents compared to non-migrant families (de Valk & Schans, 2008; Merz et al. 2009). Furthermore,

children with a migration background feel the obligation to support their older parents more strongly (De Valk & Schans, 2008; Merz et al. 2009). This could suggest that filial norms such as the obligation for support are stronger in these groups. Filial obligation is a social norm that involves individual attitudes and care behaviors towards elderly parents (Seelbach & Die, 1988). These attitudes include feelings of responsibility and affection, family orientation and the desire for reciprocity (Donorfio & Sheehan, 2001).

The Dutch government wants to move towards a participatory society in which individual and family care tasks are emphasized (Tweede Kamer, 2014). The idea is that elderly live longer independently in their own homes for a longer period, so intergenerational support and filial obligations becoming increasingly important (de Klerk, 2011). Children are expected to take more responsibility in taking care of their parents, given that the number of Turkish and Moroccan elderly is increasing as well (CBS, 2018). The insight in barriers and facilitators between migration and care behaviour among children of the elderly, can be helpful in policy making. Policy could focus on these facilitators to support care behaviour by family members. Most existing research focusses only on the expectations on filial obligation among migrant elderly and non-migrant elderly (Valk & Schans, 2008). There is little research on the caring behaviour amongst children of migrant and non-migrant elderly. For this reason, this thesis will try to remedy this gap in the literature by assessing the facilitators and barriers between migration and care behaviour.

### **Existing research**

Previous research on the relationship between filial obligation and attitudes on care behaviors have different outcomes. In a Canadian study by Chappell and Funk (2011) on the relationship between filial obligation and caring behaviors among three cultural groups (Caucasian-Canadians, Chinese-Canadians and Hong Kong-Chinese), there was only a relationship found between filial obligation and caring behaviors such as providing companionship, financial and emotional support for the Chinese-Canadian children. According to Aires et al. (2019) this study was replicated in Brazil to see if results differ in a Latin society, because in Latin societies there is a higher expectation that children will take care of their parents. In this mixed method research filial obligation was confirmed and had a relationship with financial and emotional support. The studies confirm that there are differences in filial obligation and the duty to care between cultural groups.

These cultural differences in family bonds are also expected in the Netherlands between Turkish and Moroccan migrants and non-migrants. In western cultures are individual

autonomy and freedom to pursue personal interests more emphasized. In non- western cultures family obligation, filial piety and respect for the elderly are more important (Kwak & Berry, 2001). Most Turks and Moroccans in the Netherlands identify themselves as Muslims (De Valk & Liefbroer, 2007). The Islam is strongly emphasizing the importance of the family group and has specific prescriptions regarding marriage, family life and gender roles (Korteweg, 2008). It is expected that elderly parents with a migrant background have higher expectations of their adult children regarding filial obligations than native Dutch elderly do. It should be considered that children of this first generation of migrants grew up in the Netherlands, which means that their opinions may differ from those of their parents. The study of Kalmijn (2019) shows that Turkish and Moroccan second-generation migrants have more contact with their families but also have more conflict with their parents than Dutch non-migrants. The study also shows that if migrant children are more liberal in their values and behavior parents ties are weaker. However immigrants orient themselves to the culture and customs of their country of origin, because these offer a sense of security and identity in the new environment that immigrants are faced within the host country. Parents transmit these cultural orientations to their children who in turn are likely to internalize them (de Valk, 2006).

This is also seen on studies on filial obligations in the Netherlands: in a study conducted by de Valk and Schans (2008) immigrant background was found to be an important determinant of the perception of a child's obligations towards parents. Immigrant elders generally expected more weekly visits and care from their children, and more facilitation of co-residence to parents than was the case for the Dutch. This is also stated in a study from Dykstra and Fokkema (2007) in their research regarding filial obligation is found that both Western migrants and non-Western migrants, and the latter particularly if they are first-generation migrants, more strongly endorse filial norms than people of Dutch descent.

As mentioned before in migrant families usually a daughter or a daughter-in-law takes care of their elderly parents (van Wieringen, 2014) Research on family sociology shows that gender has an influence on family structure and family ties. A study that examines gender differences in elder care show that daughters are more likely than sons to be primary caregivers (Gerstel & Gallagher, 2001). Sarkisian and Gerstel (2004) draw attention to the fact that there are ethnic and racial differences in family support. Where Black men are very similar to white men in their support, black women are more likely than white women to be involved in exchange of practical help, but less likely to be involved in emotional support.

## Theory

### *Migration*

This study focuses on the difference between Turkish and Moroccan migrants and Dutch non-migrants. In literature a distinction is commonly made between individualistic and collectivist cultures, whereas individualists see themselves as autonomous and collectivists have the feeling they belong to a group (Nauck, 2007). North European countries as the Netherlands are typified as individualistic societies, but Mediterranean countries as Turkey and Morocco can be characterized as collectivist societies, with a patriarchal family structure (Dykstra & Fokkema, 2007). In this study there is a distinction made between Turkish and Moroccan migrants and Dutch non-migrants. Expected is that Turkish and Moroccan migrants feel more filial obligation than Dutch non-migrants due to this collectivist and individualistic cultures which is expected to influence their care behaviour.

### *Care behaviour*

As longevity is increased in the recent years, family caregiving has become increasingly common. Piercy and Chapman (2001) state that: 'despite persistent myths that families abandon their aged relatives to nursing homes and other care facilities, family members provide the majority of assistance needed by their dependent elders'(p.386). Care provided by family members differs substantially across situations. It can involve 'activities of daily living' (ADL), this includes feeding and bathing. But also 'instrumental activities of daily living' (IADL), such as transport, groceries and financial assistance (Miller et al., 2008).

### *Filial obligation*

Seelbach (1977) states that filial obligation are needs of the elderly that are often fulfilled through the expressions of filial responsibility, emphasizing duty, protection, and care. Filial responsibility is an attitude of personal responsibility toward the maintenance of parental well-being. In short, it refers to the obligation of adults to meet their parents' needs.

In most cultures, some care for elderly parents by adult children is expected, the motives of these adult children to take care of their parents may differ. The first motive can be the argument of reciprocity (Dykstra & Fokkema, 2007): Adult children owe something to their elderly parents because they have done so much for them. Examples are nurturing them, education, providing food, clothes and shelter. The idea that adult children owe their parents something in return can be viewed as commonsense moral belief (van den Hoven, 2006). A second motive can be parent's need as the basis for obligations (van Stuifbergen & van

Delden, 2011). This is in line with the principle of protecting vulnerable by Goodin (1985). Goodin (1985) says that “if one party is in a position of particular vulnerability to or dependency on another the other has strong responsibilities to protect the dependent party” (p.39). Parents are in this case the most vulnerable party to their children. A third motive can be filial obligation as an assumed promise. Conventional expatiations arise in certain social structures as nurturing relationships, filial obligation predicts adult children's helping behavior and perceived burden in caregiving (Blieszner & Mancini, 1987). This statement is important regarding this study because it makes the distinction between filial obligation as a feeling and actual care behaviour. In this study, therefore, filial obligation as a feeling will be used as a predictor for actual care behaviour as an outcome.

### *Expectations of parents*

Besides filial obligation, expectations of parents can be seen as an indicator for care behaviour. A study has shown that expectations towards care among family members have a predictive value for actual exchange of informal care (Klein Ikkink et al, 1999). Because these expectations are developed by cultural background and socio-structural circumstances in which people live (Dykstra & Fokkema, 2007), it is expected that migrant parents have higher expectations towards care from family members which will result in more care behaviour from migrants. Therefore expectations of parents are included in this analysis.

### *Gender*

Given that the traditional role of women is characterized as caring, gender can be considered as an important factor in the perception in care behaviour (van de Vijver, 2007). As a result of this it is often assumed that women are more willing to care for their parents. Because of this the role of gender in filial obligations should be considered in this research. Gilligan (1982) proposed that women prefer a more caring morality, one that is based on a high level of concern for interpersonal relationships and emotional sensitivity to the feelings of others. Theoretical perspectives across disciplinary traditions concur on the importance of gender for elder care. England (2005) states that care is a gendered ‘quintessentially female identified’ activity. Through socialization, men and women internalize that elder care is women’s natural responsibility (Cancian & Oliker, 2005). Taking care of their elderly parents could give women the feeling that they are a ‘good’ adult child to their parents (Raley et al. 2012). Furthermore, men and women have different ideas about the appropriate ways to assist their parents. Sons respond to requests for assistance, whereas daughters offer their help to their

parents (Matthews, 2002). It is expected that women show more care behaviour than men in this study.

### *Education level*

Literature is ambiguous about the effect of education level on care behaviour. Some American studies point out the fact that the differences in care behaviour are not the result of cultural differences, but is the effect of socio economic resources (Glick & Hoock, 2002, Sarkisian et al. 2006). Mutran (1985) claimed that families from lower social economic classes have more traditional attitudes towards family and maintain higher levels of family support. As the educational level of persons with a migration background is lower than that of persons without a migration background (CPB, 2019). From this perspective we could state that people with a migration background rely more on family support than those without. However, Rossi and Rossi (1990) state that better educated people have stronger norms of obligation than the less educated. The explanation for this is that higher educated people want to do something in return to their parents for the investment that is made for them in the past. Nonetheless, there are different studies that point out that higher educated people live a more autonomous and individualistic life than people with a lower education level (Kohn, 1977, Felling et al, 2000).

### **Research question**

This study contributes to existing research on care behaviour between migrants and non-migrants. Because little research has been done within this subject, this study combines several models in relationship to care behaviour for elderly parents between migrants and non-migrants. The predictors taken into account are filial obligation, expectations of parents, gender and education level.

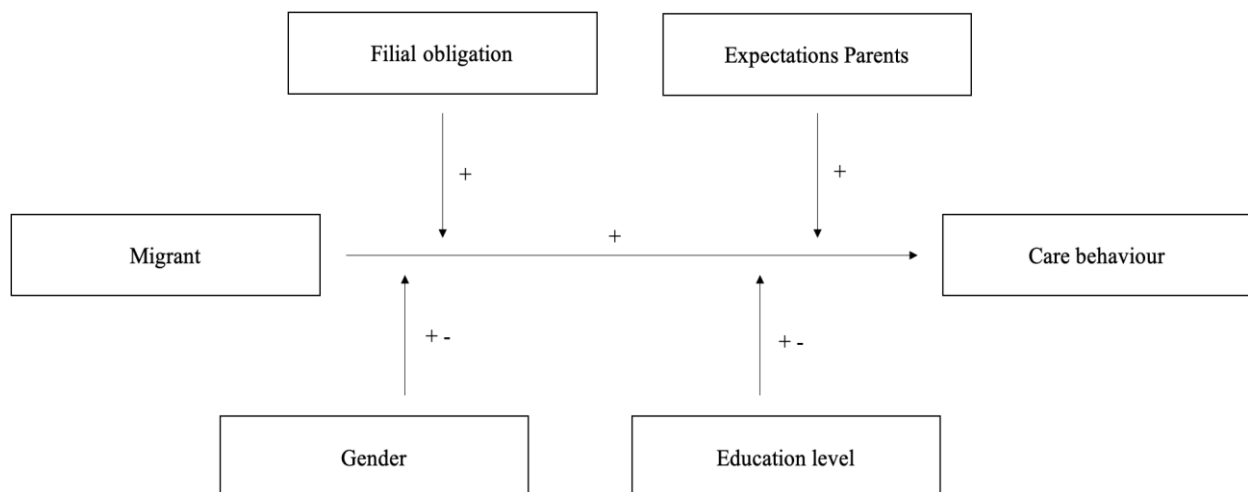
Based on existing research and literature the following research question is formulated: *'To what extent do filial obligation, expectations of parents, gender and education level strengthen or weaken caring behaviour for elderly parents by migrants and non-migrants?'*

In the literature, it can be seen that there might be multiple influences that can have an effect on the caring behaviour of both Turkish and Moroccan migrants. It can be expected that being a migrant predicts more care behaviour (H1). However, several factors might moderate this relationship. The first moderator might be filial obligation, which is expected to reinforce care



behaviour for migrants (H2). Secondly, expectations of parents might reinforce care behaviour for migrants (H3). The third moderator might be gender, which is expected to influence care behaviour for migrants (H4). Lastly, educational level might moderate the relationship between the variable migrant and care behaviour, as it is expected to influence it (H5). The main effect of migration on care behaviour and the possible moderators are visualized in the conceptual model in Figure 1.

*Figure 1: Conceptual model*



## Methods

This current study is quantitative in nature, since the study is focused on testing the strength of the relationship between migration, moderators and care behaviour. In this current study the Longitudinal Internet studies for the Social Sciences (LISS) panel was used. The LISS panel is a component of the Measurement and Experimentation in the Social Sciences (MESS) project. The aim of the MESS project is to facilitate testing new, innovative research techniques. It is freely accessible for academic researchers and focusing on fundamental research. The project aims at integrating various fields of study, such as economics, social, behavioral and (bio)medical sciences (Scherpenzeel & Das, 2010).

The LISS panel is active since October 2007 and all data are made available through the LISS data archive. The panel consists 5000 households in the Netherlands. These households are representative of the Dutch-speaking population in the Netherlands. The members of the panel complete an online questionnaire every month. As an incentive the panel members are paid of each completed questionnaire (Scherpenzeel & Das, 2010). In addition to the LISS panel there is an Immigrant panel. This panel was available from October

2010 up until December 2014. The Immigrant panel consisted of around 1600 households with a total number of 2400 individuals, of which 1100 of these households were of non-Dutch origin.

The dataset used in this study is retrieved from the LISS database. The variables that been used are conducted from the ‘background variables’ and the ‘about the care for elderly’ study.

### *Participants*

The participants in this study are Dutch, Moroccan and Turkish panel members from the LISS and LISS immigration panel. The participants are all aged 16 years and older. There were 329 (100%) household members selected for this study. A total of 93 (28.3%) did not respond. Of the requested households a total of 236 (71.7%) responded. There were 234 (71.1%) completed questionnaires and 2 (0.6%) of them were incomplete. The total number of participants in this study is (N= 234).

### *Data collection*

The data is collected from 3 till 25 November 2014 and was a single wave study. The collection method was an internet survey through the LISS panel and the LISS immigrant panel. A reminder was sent twice to non-respondents. As an incentive the panel members are paid for each completed questionnaire (Scherpenzeel & Das, 2010).

### *Measuring instruments and variables*

This study consists of two different datasets. One with background variables only which are called ‘background variables’ and one with main the variables called ‘about care for the elderly’. These two datasets are merged in such a way that coded observations and missing values are updated for each individual. The merged dataset is formatted for use in the current study. Missing observations for the dependent variable are dropped out. This resulted in a sample size of 234 individuals who had answered all the questions in the questionnaire. For analyzing the data different variables are combined into one variable to use as dependent and independent variables.

### Dependent variable – Care behaviour

The dependent variable in this analysis is care behaviour. Care behaviour towards elderly parents is measured by this variable. Seven items about care behaviour for elderly parents

were combined to one scale variable. The question start with: To what extent do you help or support your parents with: household chores; transportation or groceries; financial matters; emotional problems; important decisions (e.g., about life and death); disease; personal care. The was measured by a 5-point Likert-scale ranging from 1 (not at all) to 5 (certainly). This scale was tested and proven to be reliable with a Cronbach's alpha of .896.

#### Independent variables -Migration

The independent variable is Migration. This variable is measured by the question: Origin: Dutch background; first generation foreign, non-western background; second generation, non-western background. The last two answer options have been combined to 'migrant'. This results in a dichotomous variable: migrant (0) and non-migrant (1). This study was conducted with Turkish, Moroccan and Dutch participants only. The variable migrant will therefore only include Turkish and Moroccan migrants.

#### Moderators - Filial obligation, expectation parents, gender, education level

Filial obligation was measured with three items on a 5-point Likert scale. The answer options were ranging from 1 (not at all) to 5 (certainly). The three items were: 'Do you feel responsible for your parents when they are sick?', 'Children should feel responsible for their parents' and 'Children should give emotional support to their parents'. This scale was tested and has proven to be reliable with a Cronbach's alpha of .775.

The variable expectations of parents is measured with two items. The two questions were: 'My parent(s) expect(ed) that their child(ren) take care of them when they are or were needy.' and 'For my parent(s) it is/was important that their child(ren) take care of them later.' The answer were measured with a 5-point Likert scale with answer options ranging from 1 (totally disagree) to 5 (totally agree). The scale was tested and proven reliable with a Cronbach's alpha of .929.

Gender is measured dichotomous with the answer options being female (0) and male (1). A dummy variable was created for this variable, in this way a regression analysis can be performed with it.

Level of education is measured by the six categories of Statistics Netherlands (CBS). The answer option ranges from 1 to 6 (1= primary school; 2= intermediate secondary education (VMBO); 3= higher secondary education/preparatory university education (HAVO/VWO); 4= intermediate vocational education (MBO); 5= higher vocational education (HBO); 6= university (WO)).

### Control variables - Age

Age is included in the model as a control variable to become aware of the relation between this variable and the dependent variable to prevent bias. Age is measured in years as a scale variable.

### *Analyses*

To test the different hypotheses in this study the data analyzing program SPSS (version 26) is used, with a significance level of  $\alpha = .05$ . The first step was executing a descriptive analyses to measure differences between the variables as well as a correlation analyses to test the relationship between the variables.

Prior to the analyses assumptions have been checked. Histograms and P-plots have been generated and showed the distribution of variables. The homoscedasticity, normality and linearity of the residues are checked in the scatterplots and P-plots. Additionally the VIF-scores have been checked on multicollinearity, so variables can be interpreted correctly.

To test the hypotheses in this study the model was run in a hierarchical regression in four steps. First the model was run with only age as a control variable to see if this was a significant predictor for care behavior. Second, migration was added to the model, to measure the effect of the independent variable. In step 3 the model was run separately with filial obligation, expectations of parents, gender and education level as main effects. In the last step, the interaction-effects were added to see if they are moderators in the model.

To measure which predictor is the strongest, a regression analyses with only the main predictors was run.

### *Data management*

This study is approved by the Ethics Committee of the Faculty of Social and Behavioral Sciences of Utrecht University. In this study a dataset of the LISS panel has been used. The LISS panel is working with methods which are in accordance with the guidelines developed by the Association of Universities in the Netherlands (VSNU) in Code of Conduct for use of personal data in scientific research. To get access to the LISS panel the researcher has signed an agreement to handle the data with care. In consideration to ethics informed consent should be given by participants. The participants of the LISS Data panel have given informed consent at the start of the panel. Only participants who give informed consent can participate in the panel. The dataset is stored on the secured online environment of Utrecht University.

## Results

### *Descriptive statistics*

This table presents the N, minimum, maximum and the standard deviation of the continuous variables, as well as the frequencies of the categorical variables (see Table 1). The sample (N=234) includes 92 migrants and 142 non-migrants, of which 122 of the participants were female and 112 were male.

*Table 1: Descriptives N,Min,Max,Mean and Standardized Deviation or Frequencies of all Variables*

Variable	N	Min	Max	M/Frequencies	STD. Deviation
Care Behaviour	234	1	5	3.65	.87
Filial Obligation	234	1	5	3.64	.86
Expectations Parents	234	1	5	3.37	1.44
Migrant	234	0	1	92 (39.3%)	-
Female	234	0	1	122 (52.1%)	-
Level of education	232	1	6	3.46	1.47
Age	234	17	88	44.66	16.46

### *Hypotheses testing*

First, the main hypothesis was tested with a linear regression analysis. The main hypothesis is *being migrant predicts more care behaviour (H1)*. Table 2 shows the results of the executed regression analysis with care behaviour as dependent variable and migration as an independent variable. This shows that there is a significant negative effect for 'migration' on 'care behaviour'  $F(1.232) = 21.02, p < .001$ . This can be interpreted as migrants showing more care behaviour than non-migrants. The main hypothesis can therefore be confirmed.

*Table 2: Regression Migration for Care Behaviour*

Variable	<b>B</b>	<b>SE</b>	<b>Beta</b>	<b>Sig.</b>	<b>R<sup>2</sup></b>
Migration (1 = non-migrant)	-.510	.111	-.288	<.001*	.83

Note: \*  $p < .05$

For answering hypothesis 2 till 5, four separate hierarchical regressions were run with care behaviour as dependent variable. The independent variables were filial obligation, expectations of parents, gender and education level. Because interaction-effects are tested, filial obligation, expectations of parents and education level are centered around their means to interpret the intercepts better.

Table 3 shows the executed hierarchical regression with migration and filial obligation as a moderator for care behaviour. Step 1 includes age as a control variable and shows that there is significant effect  $p=0.004$ . It accounted for 3.5% of the variance in care behaviour ( $R^2=.04$ ,  $F(1.232) = 8.50$ ,  $p=.004$ ). People lower in age showed more care behaviour than people higher in age. In step 2 migration was added, which presents that being a migrant predicts more care behaviour  $p<.001$  and accounted for an additional 5.8% ( $\Delta R^2 = .06$ ,  $\Delta F(1.231) = 14.69$ ,  $p<.001$ ). The third step showed that filial obligation is a significant predictor for care behaviour  $p<.001$ , and accounted for an additional 33.8% of the variance in care behaviour ( $\Delta R^2=.34$ ,  $\Delta F(1,230) = 136.60$ ,  $p<.001$ ). In step 4 the interaction effect between migration and filial obligation was added in the model. This showed that there was no significant interaction effect between migration and filial obligation  $p=.584$ , and accounted for an additional 1% ( $\Delta R^2= .00$   $\Delta F (1.229) = .30$   $p = .584$ ). This means migrants do not show more filial obligation and therefore show more care behaviour. Therefore the second hypotheses being: '*expectations of parents reinforce care behaviour for migrants*' (H2) is rejected.

Table 3: Results of hierarchical regression analyses predictor on care behaviour

Variables	B	SE	Beta	Sig.	R <sup>2</sup>
<i>Step 1</i>					.035
Age	-.010	.003	-.188	.004*	
<i>Step 2</i>					.093
Age	-.006	.003	-.105	.113	
Migration (1 = non-migrant)	-.450	.117	-.254	<.001*	
<i>Step 3</i>					.431
Age	-.004	.003	-.071	.181	
Migration (1 = non-migrant)	-.051	.099	-.029	.606	
Filial obligation	.630	0.54	.628	<.001*	
<i>Step 4</i>					.432
Age	-.004	.002	-.068	.201	
Migration (1 = non-migrant)	-.060	.101	-.034	.553	
Filial obligation	.596	.082	.594	<.001*	
Migration x filial obligation	.060	.109	.043	.584	

Note: \*  $p = <.05$

Table 4 presents an overview of the executed hierarchical regression with expectations of parents as a predictor for care behaviour. Step 1 and 2 show the same result as the first hierarchical regression. In step 3 the variable expectations of parents was added and this showed a significant positive effect  $p < .001$ , and accounted for an additional 5.1% of the variance in care behaviour ( $\Delta R^2 = .05$ ,  $\Delta F(1,231) = 13.61$ ,  $p = .001$ ). This means if parents have higher expectations of their children they show more care behaviour. In the fourth step the interaction effect between migration and expectations of parents was added, which was significant  $p = .015$ . This accounted for an additional 2.2% of variance in the model ( $\Delta R^2 = .02$ ,  $\Delta F(1,229) = 5.99$ ,  $p = .015$ ). Concluding expectations of parents are more important for migrants than non-migrants, and migrants therefore exhibit more care behaviour. The hypothesis '*filial obligation reinforce care behaviour for migrants*' (H3) is therefore be accepted.

Table 4: Results of hierarchical regression analyses predictor on care behaviour

Variables	B	SE	Beta	Sig.	R <sup>2</sup>
<i>Step 1</i>					.035
Age	-.010	.003	-.188	.004*	
<i>Step 2</i>					.093
Age	-.006	.003	-.105	.113	
Migration (1 = non-migrant)	-.450	.117	-.254	<.001*	
<i>Step 3</i>					.144
Age	-.008	.003	-.153	.021*	
Migration (1 = non-migrant)	-.286	.123	-.162	.020*	
Expectations parents	.145	0.39	.242	<.001*	
<i>Step 4</i>					.166
Age	-.007	.003	-.140	.033*	
Migration (1 = non-migrant)	-.241	.123	-.136	.051	
Expectations parents	.280	.068	.469	<.001*	
Migration x expectations parents	-.201	.082	-.266	.015*	

Note: \*  $p < .05$

Table 5 provides the results obtained from the hierarchical regression analyses run with the predictor gender. Both step 1 and 2 are the same as in the first hierarchical regression analysis. In step 3 the variable gender was added to the model, this effect was not significant  $p = .632$ , and explained an additional .01% variance in the model. ( $\Delta R^2 = .00$ ,  $\Delta F(1,230) = .229$ ,

$p=.632$ ). So gender has no significant influence on care behaviour. Because the main effect of gender is not significant for care behaviour the interaction effect tested in step 4 is not significant as well  $p=.877$ . There was no additional variance explained ( $\Delta R^2=.00$ ,  $\Delta F(1,229)=.024$ ,  $p=.877$ ). The interaction between migration and gender does not affect care behaviour, on the ground of this (H4) ‘*gender reinforces care behaviour for migrants*’ is rejected.

Table 5: Results of hierarchical regression analyses predictor on care behaviour

Variables	B	SE	Beta	Sig.	R <sup>2</sup>
<i>Step 1</i>					.035
Age	-.010	.003	-.188	.004*	
<i>Step 2</i>					.093
Age	-.006	.003	-.105	.113	
Migration (1 = non-migrant)	-.450	.117	-.254	<.001*	
<i>Step 3</i>					.094
Age	-.005	.004	-.096	.163	
Migration (1 = non-migrant)	-.460	.119	-.260	<.001*	
Gender (1 = male)	-.054	.113	-.031	.632	
<i>Step 4</i>					.094
Age	-.005	.004	-.096	.167	
Migration (1 = non-migrant)	-.443	.162	-.250	.007*	
Gender (1 = male)	-.034	.176	-.019	.848	
Migration x gender	-.035	.224	-.018	.877	

Note: \*  $p < .05$

Table 6 shows the results obtained from a hierarchical regression analysis with education level as a predictor for care behaviour. For this analysis step 1 and 2 are the same as in the first analyses. In step 3 education level is added to the model. This did not account for a significant result  $p=.126$ . It explained .09% of additional variance of the model ( $\Delta R^2=.01$ ,  $\Delta F(1,228)=2.36$ ,  $p=.126$ ). In step 4 the interaction effect between migration and education level was added to the model, which was not significant  $p=.766$ , and added .00% variance to the model ( $\Delta R^2=.00$ ,  $\Delta F(1,227)=.089$ ,  $p=.766$ ). The interaction between migration and education level does not influence care behaviour. Therefore, the hypothesis ‘*Education level surpresses care behaviour for migrants*’ (H5) is rejected.



Table 6: Results of hierarchical regression analyses predictor on care behaviour

Variables	B	SE	Beta	Sig.	R <sup>2</sup>
<i>Step 1</i>					.035
Age	-.010	.003	-.188	.004*	
<i>Step 2</i>					.093
Age	-.006	.003	-.105	.113	
Migration (1 = non-migrant)	-.450	.117	-.254	<.001*	
<i>Step 3</i>					.104
Age	-.006	.004	-.124	.066	
Migration (1 = non-migrant)	-.418	.119	-.236	<.001*	
Education level	-.057	.037	-.098	.126	
<i>Step 4</i>					.105
Age	-.007	.004	-.137	.063	
Migration (1 = non-migrant)	-.418	.119	-.236	<.001*	
Education level	-.045	.057	-.076	.436	
Migration x education level	-.023	.076	-.029	.766	

Note: \*  $p < .05$

Since only the interaction effect between the variables ‘migration’ and ‘expectations of parents’ are significant, a regression analysis has been run to see which significant main effect is the strongest predictor for care behaviour. Looking at the standardized coefficients in table 7, it revealed that filial obligation ( $\beta=.61, p<.001$ ) is the strongest predictor for care behaviour. The second strongest predictor is migration ( $\beta=-.25, p<.001$ ) and the third is age ( $\beta=-.19, p=.004$ ). Expectations of parents is the least strong predictor for care behaviour ( $\beta=.07, p=.003$ ).

Table 7: Regression analyses with main predictors for care behaviour

Variables	B	SE	Beta	Sig.	R <sup>2</sup>
Age	-.010	.003	-.188	.004*	.44
Migration (1 = non-migrant)	-.450	.117	-.254	<.001*	
Filial obligation	-.609	.056	.608	<.001*	
Expectations parents	.044	.033	.074	.003*	

Note: \*  $p < .05$

### *Additional analyses*

As an additional analysis, the model was run separately with only migrants and non-migrants (see table 1 and 2 in appendix). In the model with only migrants, filial obligation ( $\beta = 0.63, p < .001$ ) increases the level of care behaviour. However a higher education level ( $\beta = -.13, p = .05$ ) decreases the likelihood of care behaviour. In the model with non-migrants only filial obligation was a significant predictor ( $\beta = .52, p < .001$ ). From this can be concluded that for both groups more filial obligation leads to more care behaviour.

## **Discussion**

In this study the barriers and facilitators between migration and care behaviour have been examined. The aim of this study was to explore whether filial obligation, expectations of parents, gender and education level affects the relation between migration and care behaviour and to investigate which predictor is the strongest. This contributes to existing research where the link between migration, filial obligation and care behaviour has been made (Aires et al., 2019; Chappell & Funk, 2011). However gender (England, 2005; Gilligan, 1982), education level (Mutran, 1985; Rossi & Rossi, 1990) and expectations of parents (Klein Ikkink et al., 1999) are only linked to care behaviour but the link with migration has not been made in these previous models. As intergenerational support is becoming increasingly important (de Klerk, 2011). And the numbers of Turkish and Moroccan elderly are rising (CBS, 2018). An insight in barriers and facilitators between migration and care behaviour is important.

The first hypothesis, stating that being migrant predicts more care behaviour than being a non-migrant, can be accepted. The Turkish and Moroccan migrants do show more care behaviour than non-migrants. This is in line with preceding research that showed that being a migrant is a predictor for more care behaviour than non-migrants (Aires, 2019). Even though migrants show more care behaviour, filial obligation, gender and education level do not strengthen or weaken the effect between migration and care behaviour as an outcome. An explanation for this might be that these migrant children are more liberal in their values and behaviour making results comparable to non-migrants which could explain the not significant interaction effects (Kalmijn, 2019).

Only the interaction effect in the third hypothesis: expectations of parents reinforce care behaviour for migrants (H3) can be confirmed. Therefore, it can be said that parents' expectations weigh more heavily on migrants than non-migrants when it comes to care behaviour. The expectations of parents towards care among family members have predictive

value for exchange of care (Klein Ikkink et al., 1999). This in combination with the fact that expectations are developed by cultural background, could offer an explanation of this significant interaction effect between migration and parents expectations in relation with care behaviour (Dykstra & Fokkema, 2007). Since only one interaction-effect was found hypothesis 2, 4 and 5 can be rejected.

Disregarding the non-significant interaction-effects, age, migration, filial obligation and expectations of parents are significant main-effects for care behaviour. This outcome is supported by previous models of Dykstra and Fokkema (2007) where value patterns as education level, ethnicity and age show an influence on care behaviour. Filial obligation is the strongest predictor for care behaviour. This could be explained by the psychological reason that we want to live up to our own expectations and therefore obligation is a self-conscious motivation (Tomasello, 2020). This means that the feeling of obligation to take care of your family members will eventually lead to actual care behaviour because you want to fulfill your own expectations. The second strongest predictor for care behaviour is migration. The Turkish and Moroccan migrants in this study show more care behaviour than non-migrants. This is in line with what was expected, as Turkish and Moroccan migrants are coming from a more collectivist society where you belong to the group and taking care of each other is considered more important (Nauck, 2007). The third strongest effect on care behaviour was age. Age was included as a control variable but was found to have a significant effect on care behaviour. The effect of age was negative: persons lower in age showed more care behaviour. The least strong significant predictor for care behaviour was expectations of parents.

Additional analyses showed that when the two groups were run separately, for the Turkish and Moroccan migrants filial obligation and education level were significant predictors, whereas for non-migrants only filial obligation was a significant predictor. Based on these findings it can be concluded that for both Turkish and Moroccan migrants and non-migrants filial obligation is the greatest predictor for care behaviour to elderly parents.

### *Limitations*

A limitation of this study might be that no official scale has been used to measure filial obligation. An advantage of certified scales is that they have been broadly tested. A reliable scale to test filial obligation is that of Hamon and Blieszner (1990). This scale is tested on

reliability and validity. Because no certified scale is used, the external validity might not be sufficient. However a reliability and comprehensive PCA test have been carried out to confirm that the scale encloses all the facets of filial obligation.

Another limitation is the operationalization of the variable migration. The dataset only contained an option between being a migrant or not. The codebook indicates that there were Dutch, Turkish and Moroccan participants involved in this study. Making a distinction between Turkish and Moroccan migrants could have made the research results even more specific, which could lead to more internal validity.

This study gave insight in the relation between migration and care behaviour and the factors that influence this relation. However, the sample of this study was small with N=234 which consists of 92 migrant (Turkish and Moroccan) participants and 142 non-migrants (Native Dutch). This small sample could have influenced the results, interaction effects could have not become visible. This could give limitations to the generalizability of this sample, which limits the external validity.

#### *Implications and recommendations*

This study contributes to the scientific knowledge on care behaviour and the facilitating and limiting predictors for Turkish and Moroccan migrants and non-migrants. As the Dutch government wants to move to a participatory society (Tweede Kamer, 2014) these insights could be helpful to increase intergenerational support. As migration, filial obligation, expectations of parents and age are significant predictors in this study for care behaviour towards elderly parents, policy and interventions could focus on these predictors to increase care behaviour among both migrants and non-migrants. In this study is only focused on migrants with a Turkish or Moroccan background. However the group of Surinamese and Antillean elderly is also increasing, it is therefore advisable to include this group of migrants in future research (CBS, 2018). To give more insight in the rationale behind the predictors a qualitative study is recommended. The significant predictors in this study could support this qualitative study, by giving a research base.

#### *Conclusion*

To conclude, this current study shows that being a Turkish or Moroccan migrant leads to more care behaviour towards elderly parents. Despite the fact that only expectations of parents is a significant influence on care behaviour for migrants, this study gives an insight into the predictors of care behaviour for both migrants and non-migrants with filial obligation

as the greatest predictor for care behaviour. Intergenerational support becomes increasingly important because elderly are living longer independently in their own homes for a longer period of time (de Klerk, 2011). With migration, filial obligation, expectations of parents and age as the most important predictors for care behaviour towards elderly parents future care services and support could be arranged for this.

## References

- Aires, M., Pizzol, F. L. F. D., Bierhals, C. C. B. K., Mocellin, D., Fuhrmann, A. C., Santos, N. O. D., ... & Paskulin, L. M. G. (2019). Filial responsibility in care for elderly parents: a mixed study. *Acta Paulista de Enfermagem*, 32(6), 691-699.
- Blieszner, R., & Mancini, J.A. (1987). Enduring ties: Older adults' parental role and responsibilities. *Family Relations: An interdisciplinary Journal of Applied Family Studies*, 36(2), 176–180.
- Cancian, Francesca M., Olicker, Stacey J. (2000). *Caring and Gender*. Thousand Oaks, CA: Pine Forge Press.
- CBS. (2018). Statline: Prognose bevolking; geslacht, leeftijd en migratieachtergrond, 2018–2060 Retrieved from:  
<http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=83784NED&D1=0&D2=0&D3=112-120&D4=0&D5=3-4&D6=22&HDR=T,G3,G2,G1,G4&STB=G5&VW=T>.
- Chappell, N., & Funk, L. (2012). Filial responsibility: Does it matter for care-giving behaviours? *Ageing and Society*, 32(7), 1128-1146. doi:10.1017/S0144686X11000821
- CPB. (2019, juni). *Inkomensongelijkheid naar migratieachtergrond*.  
[https://www.cpb.nl/sites/default/files/omnidownload/cpb-policy-brief-2019-06-inkomensongelijkheid-naar-migratieachtergrond\\_0.pdf](https://www.cpb.nl/sites/default/files/omnidownload/cpb-policy-brief-2019-06-inkomensongelijkheid-naar-migratieachtergrond_0.pdf)
- de Klerk, M. (2011). *Zorg in de laatste jaren*. Sociaal en Cultureel Planbureau.  
<https://www.narcis.nl/publication/RecordID/oai:scp.nl:dcba0340-1029-43ea-b07c-b73fa79dc7d6>
- England, P. (2005). “Emerging Theories of Care Work.” *Annual Review of Sociology* 31:381–99.

- De Valk, H. A. G., Schans, D. (2008). “‘They Ought To Do This for Their Parents’: Perceptions of Filial Obligations among Immigrant and Dutch Older People.” *Ageing & Society* 28: 49–66. doi:10.1017/s0144686X07006307.
- De Valk, H. A., & Liefbroer, A. C. (2007). Timing preferences for women’s family-life transitions: Intergenerational transmission among migrants and Dutch. *Journal of Marriage and Family*, 69(1), 190-206.
- De Valk, H.A.G. (2006). Pathways into adulthood: a comparative study on family life transitions among migrant and Dutch youth. Thela Thesis. Utrecht: ICS dissertation 124.
- Denktaş, S. (2011). Health and Health Care Use of Elderly Immigrants in the Netherlands. Proefschrift, Erasmus Universiteit Rotterdam.
- Donorfio, L. M., & Sheehan, N. W. (2001). Relationship dynamics between aging mothers and caregiving daughters: Filial expectations and responsibilities. *Journal of Adult Development*, 8(1), 39-49.
- Dykstra, P.A., Fokkema, T. (2007). Persoonlijke zorgnormen: bereidheid te geven én te ontvangen. In Blijvend in balans. Een toekomstverkenning van informele zorg, ed.
- Gerstel, N., & Gallagher, S. (2001). Men's caregiving: Gender and the contingent character of care. *Gender & Society*, 15, 197–217.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge: Harvard University Press
- Glick, J. E., & Van Hook, J. (2002). Parents' coresidence with adult children: Can immigration explain racial and ethnic variation?. *Journal of Marriage and Family*, 64(1), 240-253.
- Goodin, R.E. (1985). *Protecting the vulnerable. A reanalysis of our social responsibilities*. Chicago: The University of Chicago Press.

Jennissen, R. P. W. (2013). De instroom van buitenlandse arbeiders en de migratiegeschiedenis van Nederland na 1945. *Justitiële verkenningen*, 39(6), 9.

Kalmijn, M. (2019). Contact and conflict between adult children and their parents in immigrant families: is integration problematic for family relationships?. *Journal of Ethnic and Migration Studies*, 45(9), 1419-1438

Klein Ikkink, K., Van Tilburg, T.G., Knipscheer, K.C.P.M. (1999). “Perceived instrumental support exchanges in relationships between elderly parents and their adult children: Normative and structural explanations”, *Journal of Marriage and the Family*, 61(4), pp. 831-844.

Korteweg, A. C. (2008). The Sharia debate in Ontario: Gender, Islam, and representations of Muslim women’s agency. *Gender & Society*, 22, 434–454.

Kwak, K., & Berry, J. W. (2001). Generational differences in acculturation among Asian families in Canada: A comparison of Vietnamese, Korean, and East Indian groups. *International Journal of Psychology*, 36, 152–162.

Matthews, S.H. (2002). *Sisters and Brothers/Daughters and Sons: Meeting the Needs of Old Parents*. Bloomington, IN: Unlimited.

Merz, E.-M., Özeke-Kocabas, E., Oort, F. J., & Schuengel, C. (2009). Intergenerational family solidarity: Value differences between immigrant groups and generations. *Journal of Family Psychology*, 23(3), 291–300. <https://doi.org/10.1037/a0015819>

Miller, K. I., Shoemaker, M. M., Willyard, J., & Addison, P. (2008). Providing care for elderly parents: A structural approach to family caregiver identity. *Journal of Family Communication*, 8(1), 19-43.

Monitor langdurige zorg. (n.d.). Ministerie van Volksgezondheid Welzijn En Sport. Retrieved March 10, 2021, from <https://www.monitorlangdurigezorg.nl/begrippen/intramurale-zorg>



Mutran, E. (1985). Intergenerational family support among blacks and whites: Response to culture or to socioeconomic differences. *Journal of Gerontology*, 40(3), 382-389.

Nauck, B. (2007). Value of children and the framing of fertility: Results from a cross-cultural comparative survey in 10 societies. *European sociological review*, 23(5), 615-629.

Piercy, K. W., & Chapman, J. G. (2001). Adopting the caregiver role: A family legacy. *Family Relations*, 50, 386–393.

Raley, S., Bianchi, S.M., Wang, W. (2012). “When Do Fathers Care? Mothers’ Economic Contribution and Fathers’ Involvement in Childcare.” *American Journal of Sociology* 117(5):1422–59.

Sarkisian, N., & Gerstel, N. (2004). Kin support among Blacks and Whites: Race and family organization. *American Sociological Review*, 69, 812–837.

Sarkisian, N., Gerena, M., & Gerstel, N. (2006). Extended family ties among Mexicans, Puerto Ricans, and Whites: Superintegration or disintegration?. *Family Relations*, 55(3), 331-344.

Tomasello, M. (2020). The moral psychology of obligation. *Behavioral and Brain Sciences*, 43, E56. doi:10.1017/S0140525X19001742

Tweede Kamer. (2014, 2 juli). *Van verzorgingsstaat naar participatiesamenleving*. Tweede Kamer der Staten-Generaal.

[https://www.tweedekamer.nl/kamerstukken/plenaire\\_verslagen/kamer\\_in\\_het\\_kort/verzorgingsstaat](https://www.tweedekamer.nl/kamerstukken/plenaire_verslagen/kamer_in_het_kort/verzorgingsstaat)

Schellinghouth, R. (2004). Gezondheid en welzijn van allochtone ouderen. Retrieved from: <https://www.narcis.nl/publication/RecordID/oai:scp.nl:3e1aca05-a85f-4273-b69d-8218fe174a62>

Seelbach, W. C. (1977). Gender differences in expectations for filial responsibility. *The Gerontologist*, 17, 421-425.

Stuifbergen, M.C., Van Delden, J.J.M. (2011) Filial obligations to elderly parents: a duty to care?. *Med Health Care and Philos* 14, 63–71. <https://doi.org/10.1007/s11019-010-9290-z>

Van den Hoven, M. (2006). A claim for reasonable morality. Commonsense morality in the debate on the limits of morality [dissertation]. Utrecht University, Utrecht (NL).

van de Vijver, F.J.R. (2007) Cultural and Gender Differences in Gender-Role Beliefs, Sharing Household Task and Child-Care Responsibilities, and Well-Being Among Immigrants and Majority Members in The Netherlands. *Sex Roles* 57, 813–824.  
<https://doi.org/10.1007/s11199-007-9316-z>

Van Wieringen, J. (2014). Wie zorgt voor oudere migranten? De rol van mantelzorgers, sleutel figuren, professionals, gemeenten en ouderen zelf. Utrecht: Pharos Expertisecentrum voor gezondheidsverschillen.

Verhagen, I. (2015). Community health workers: Bridging the gap between health needs of immigrant elderly and health-and welfare services in the Netherlands. Proefschrift, Universiteit Utrecht.

Verstappen, C., & Van Den Broeke, J. (2018). Transitie van familie­zorg naar gedeelde zorg. *Geron*, 20(2), 11-14.

## Appendix

*Table 1: Regression analyses with of each variable predicting care behaviour with only migrants*

Variables	<b>B</b>	<b>SE</b>	<b>Beta</b>	<b>Sig.</b>	<b>R<sup>2</sup></b>
Age	-.004	.003	-.092	.191	.44
Filial obligation	.655	.067	.634	<.001*	
Expectations parents	.017	.038	.032	.645	
Education level	-.074	.038	-.130	.050*	
Gender	-.053	.108	-.033	.628	

Noot: \* p = < .05

*Table 2: Regression analyses with of each variable predicting care behaviour with only non-migrants*

Variables	<b>B</b>	<b>SE</b>	<b>Beta</b>	<b>Sig.</b>	<b>R<sup>2</sup></b>
Age	-.007	.007	-.091	.342	.44
Filial obligation	.535	.109	.520	<.001*	
Expectations parents	.072	.078	.103	.359	
Education level	-.050	.052	-.089	.333	
Gender	.068	.170	0.39	.690	

Noot: \* p = < .05

## Syntax

\* Encoding: UTF-8.

GET

FILE='/Users/imkeplatenkamp/Documents/Master SPPH/Key Issues + thesis  
'/Data/lu14a\_EN\_1.0p.sav'.

DATASET NAME DataSet1 WINDOW=FRONT.

\*\*\*DATA VOORBEREIDEN\*\*\*

\*Merge Datasets

DATASET ACTIVATE DataSet1.

GET FILE='/Users/imkeplatenkamp/Documents/Master SPPH/Key Issues + thesis '+  
'/Data/avars\_201412\_EN\_1.0p.sav'.

DATASET NAME DataSet2.

DATASET ACTIVATE DataSet1.

SORT CASES BY nomem\_encr.

DATASET ACTIVATE DataSet2.

SORT CASES BY nomem\_encr.

DATASET ACTIVATE DataSet1.

MATCH FILES /FILE=\*

/FILE='DataSet2'

/BY nomem\_encr.

EXECUTE.

USE ALL.

COMPUTE filter\_\$=(NMISS(lu14a037) < 1).

VARIABLE LABELS filter\_\$ 'NMISS(lu14a037) < 1 (FILTER)'.  
'

VALUE LABELS filter\_\$ 0 'Not Selected' 1 'Selected'.  
'

FORMATS filter\_\$ (f1.0).

FILTER BY filter\_\$.

EXECUTE.

\*Hernoemen variabelen

RENAME VARIABLES

(lu14a038=CB\_01)(lu14a039=CB\_02)(lu14a040=CB\_03)(lu14a041=CB\_04)(lu14a042=CB\_05)(lu14a043=CB\_06)(lu14a044=CB\_07)

RENAME VARIABLES (lu14a014=FO\_01)(lu14a018=FO\_02)(lu14a020=FO\_03)

RENAME VARIABLES (lu14a049=EP\_01)(lu14a050=EP\_02)

\*\*\*MIGRATIE VARIABELE MAKEN\*\*\*

\* Dummy variabele migratie

RECODE herkomstgroep (0=1) (ELSE=0) INTO Dummy\_Migration.

VARIABLE LABELS Dummy\_Migration 'Dummy migration'.

EXECUTE.

VALUE LABELS Dummy\_Migration

0 = 'migrant'

1 = 'non-migrant'

\*Dummy variabele gender

RECODE geslacht (1=1) (2=0) INTO Gender\_Dummy.

VARIABLE LABELS Gender\_Dummy 'Dummy Gender'.

EXECUTE.

VALUE LABELS Gender\_Dummy

0 = 'Female'

1 = 'Male'

\*\*\*FACTORANALYSES en BETROUWBAARHEID\*\*\*

\*care behaviour

RELIABILITY

```
/VARIABLES=CB_01 CB_02 CB_03 CB_04 CB_05 CB_06 CB_07  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=TOTAL.
```

#### FACTOR

```
/VARIABLES CB_01 CB_02 CB_03 CB_04 CB_05 CB_06 CB_07  
/MISSING LISTWISE  
/ANALYSIS CB_01 CB_02 CB_03 CB_04 CB_05 CB_06 CB_07  
/PRINT INITIAL ROTATION  
/PLOT EIGEN  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PAF  
/CRITERIA ITERATE(25)  
/ROTATION VARIMAX  
/METHOD=CORRELATION.
```

\*Filial obligation

#### RELIABILITY

```
/VARIABLES=FO_01 FO_02 FO_03  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=TOTAL.
```

#### FACTOR

```
/VARIABLES FO_01 FO_02 FO_03  
/MISSING LISTWISE  
/ANALYSIS FO_01 FO_02 FO_03  
/PRINT INITIAL ROTATION  
/PLOT EIGEN  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PAF  
/CRITERIA ITERATE(25)
```

```
/ROTATION VARIMAX  
/METHOD=CORRELATION.
```

\*Expectations parents

RELIABILITY

```
/VARIABLES=EP_01 EP_02  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=TOTAL.
```

FACTOR

```
/VARIABLES EP_01 EP_02  
/MISSING LISTWISE  
/ANALYSIS EP_01 EP_02  
/PRINT INITIAL ROTATION  
/PLOT EIGEN  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PAF  
/CRITERIA ITERATE(25)  
/ROTATION VARIMAX  
/METHOD=CORRELATION.
```

\*\*\*SCHAAL VARIABELEN MAKEN\*\*\*

\*Schaal Care Behaviour

```
COMPUTE Scale_CB=(CB_01 + CB_02 + CB_03 + CB_04 + CB_05 + CB_06 + CB_07) /  
7.  
EXECUTE.
```

\*Schaal Filial Obligation

```
COMPUTE Scale_FO=(FO_01 + FO_02 + FO_03) / 3.  
EXECUTE.
```

\*Schaal Expectation parents

```
COMPUTE Scale_EP=(EP_01 + EP_02) / 2.
```

```
EXECUTE.
```

\* Define Variable Properties.

\*oplcat.

```
VARIABLE LEVEL oplcat(SCALE).
```

```
EXECUTE.
```

\*\*\*CENTREREN SCHALEN\*\*\*

```
COMPUTE CE_FO=Scale_FO - 3.6439.
```

```
EXECUTE.
```

```
COMPUTE CE_EP=Scale_EP - 3.3697.
```

```
EXECUTE.
```

```
COMPUTE CE_oplcat=oplcat - 3.46.
```

```
EXECUTE.
```

\*\*\*INTERACTIE EFFECTEN AANMAKEN\*\*\*

\*interactie Migration X Filial Obligation

```
COMPUTE Int_Mig_FO=Dummy_Migration * CE_FO.
```

```
EXECUTE.
```

\*interactie Migration X Expectations Parents

```
COMPUTE Int_Mig_EP=Dummy_Migration * CE_EP.
```

```
EXECUTE.
```



\*interactie Migration X Gender

```
COMPUTE Int_Mig_Gen=Dummy_Migration * Gender_Dummy.  
EXECUTE.
```

\*interactie Migration X Education Level

```
COMPUTE Int_Mig_Edu=Dummy_Migration * CE_oplcat.  
EXECUTE.
```

\*\*\*\*ASSUMPTIES REGRESSIE\*\*\*\*

\*Normaalverdeling en outliers.

```
EXAMINE VARIABLES=Scale_CB CE_FO CE_EP CE_oplcat leeftijd Gender_Dummy  
Dummy_Migration  
/COMPARE VARIABLES  
/STATISTICS DESCRIPTIVES  
/CINTERVAL 95  
/MISSING LISTWISE  
/NOTOTAL.
```

PLOT

```
/VARIABLES=Scale_CB CE_FO CE_EP CE_oplcat leeftijd Gender_Dummy  
Dummy_Migration  
/NOLOG  
/NOSTANDARDIZE  
/TYPE=P-P  
/FRACTION=BLOM  
/TIES=MEAN  
/DISTRIBUTION=NORMAL
```

\*\*\*DESCRIPTIVES AND CORRELATIONS\*\*\*

CORRELATIONS

/VARIABLES=Scale\_CB Dummy\_Migration Scale\_FO Scale\_EP Gender\_Dummy oplcat  
leeftijd

/PRINT=TWOTAIL NOSIG FULL

/MISSING=PAIRWISE.

DESCRIPTIVES VARIABLES=Scale\_EP Scale\_FO Scale\_CB Gender\_Dummy  
Dummy\_Migration oplcat leeftijd

/STATISTICS=MEAN STDDEV MIN MAX.

FREQUENCIES VARIABLES=Gender\_Dummy Dummy\_Migration

/ORDER=ANALYSIS.

\*\*\*REGRESSIE ANALYSES\*\*\*

\*Regressie hoofdeffect migration

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Scale\_CB

/METHOD=ENTER Dummy\_Migration.

\*Regressie Filial Obligation

DATASET ACTIVATE DataSet1.

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Scale\_CB

```
/METHOD=ENTER leeftijd  
/METHOD=ENTER Dummy_Migration  
/METHOD=ENTER CE_FO  
/METHOD=ENTER Int_Mig_FO  
/SCATTERPLOT=(*ZPRED ,*ZRESID)  
/SAVE RESID.
```

\*Regressie expectations parents

REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Scale_CB  
/METHOD=ENTER leeftijd  
/METHOD=ENTER Dummy_Migration  
/METHOD=ENTER CE_EP  
/METHOD=ENTER Int_Mig_EP.  
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)  
/SAVE RESID.
```

\*Regressie gender

REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Scale_CB  
/METHOD=ENTER leeftijd  
/METHOD=ENTER Dummy_Migration
```

```
/METHOD=ENTER Gender_Dummy
/METHOD=ENTER Int_Mig_Gen
/SCATTERPLOT=(*ZPRED ,*ZRESID)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE RESID.
```

\*Regressie Education level

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Scale_CB
/METHOD=ENTER leeftijd
/METHOD=ENTER Dummy_Migration
/METHOD=ENTER CE_oplcat
/METHOD=ENTER Int_Mig_Edu
/SCATTERPLOT=(*ZPRED ,*ZRESID)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE RESID.
```

\*Regressie main-effect\*

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Scale_CB
/METHOD=ENTER leeftijd Dummy_Migration CE_FO CE_EP
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE RESID.
```

\*\*\*ADDITIONAL ANALYSES\*\*\*

\*Regressie migranten

TEMPORARY

Select if(Dummy\_Migration=0).

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Scale\_CB

/METHOD=ENTER leeftijd CE\_FO CE\_EP CE\_oplcat Gender\_Dummy

\*Regressie met niet migranten

TEMPORARY

Select if(Dummy\_Migration=1).

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Scale\_CB

/METHOD=ENTER leeftijd CE\_FO CE\_EP CE\_oplcat Gender\_Dummy