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Subjective well-being during the transition to motherhood

A comparative study between natives and immigrant women in the Netherlands

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ABSTRACT

Driven by a perspective acknowledging the importance of a healthy and good transition to motherhood for mother and child, this research aims to examine the impact of migration on the subjective well-being (SWB) of women during their transition to motherhood. SWB in this study was defined as "… how people experience and evaluate their lives and specific domains and activities in their lives" (Western & Tomaszewski, 2016). Moreover, becoming a mother is a disruptive life event experienced as a time of development but also vulnerability. Many mothers experience mental health issues during this transition due to the increased responsibilities, hormonal imbalances, and required changes in lifestyle. This study aims to compare the SWB of immigrant women with the SWB of native women in the Netherlands. Quantitative research has been conducted by distributing questionnaires. The Mann-Whitney U test presented insignificant results indicating that it can be concluded that there is no evidence to suggest a difference in SWB between native and immigrant women in the Netherlands contradicting other literature. Hypothesising that an educational gradient might have impacted this outcome as the sample mainly included higher educated women. Nonetheless, correlation tests as well as binary logistic regression tests exhibit differences in the nature of the relationship between SWB during the transition to motherhood and being a native or immigrant woman. Conclusively, native women experience a decrease after pregnancy in SWB as also supported by other literature. This difference in SWB could not be statistically determined for immigrant women. This study aimed to gather insights into the differences and contribute to the currently limited literature existing about SWB of immigrant women during the transition to motherhood.

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CHAPTER 1: INTRODUCTION

The transition to motherhood is a common life event for women and is often perceived as a beautiful but hectic time of development into a new identity of becoming a mother. This phase can also be identified as a phase of vulnerability in which women experience shifts in, among others, hormonal imbalances, relationship dynamics, and appearance which could result in elevated levels of stress, anxiety, and sometimes even depressions. Research by Glover (2014) concluded that the health of an "unborn" child is influenced by the health of the mother. This finding was supported by the research of Ganchimeg et al. (2014) and exhibits the importance of a transition to motherhood in which a woman feels healthy and happy, and experiences as few medical complications as possible. Additionally, research conducted by Erfina et al. (2019) determined upon several factors as influential during the transition to motherhood which might impact a woman's well-being such as the received social support from health care providers, their partner, and friends but also the lack of information available or provided. During the transition to motherhood, and then specifically the pregnancy, women carry the life of another person within them which places them in a more vulnerable position compared to women who are not in the transition to motherhood.

A group which can be considered to be in a more vulnerable position compared to native women during the transition to motherhood are immigrant women. Lecompte et al. (2017) have determined upon an increasing risk of physiological and mental stress caused by migration and the additional adaptation process in an unfamiliar environment. The risk and exposure to behavioural, mental, and physical changes could negatively impact the well-being of immigrant women during their pregnancy. Therefore, this thesis will analyse whether the subjective well-being (SWB) of immigrant women during their transition to motherhood differs from the SWB of native women in the Netherlands.

Research established that immigrant women have worse motherhood outcomes compared to native women resulting in inequality among women. For instance, the Dutch governmental organisation Volksgezondheid en Zorg (2020) as well as Foets & Choté (2012) have determined that infant death is more common among non-western immigrants compared to native Dutch women. Several different studies have been conducted researching the source of inequality among motherhood outcomes between immigrant and native women and identified factors causing this disruption such as language barriers, accessibility to information, cultural expectations, and use of maternal support (Van der Wal, 2000; RIVM, 2007). However, limited research has been conducted focussing on the perception of immigrant women themselves regarding their transition to motherhood whilst they are the vulnerable group who experience a more stressful transition to motherhood compared to native women with possible worse health outcomes. Obtaining a better understanding of immigrant women their SWB during the transition to motherhood will give a new perspective upon how to provide support and indirectly assesses the quality of the Dutch maternity care system as experienced by non-Dutch women.

Societal relevance

This thesis potentially contributes relevantly to society in several ways. Currently, there is a lack of attention to women during their motherhood transition while a more personal focus instead of practical could potentially improve transition experiences (Nelson, 2002). Additionally, obtaining a better understanding regarding the SWB of immigrant women during their motherhood transition identifies where positive experiences meet negative experiences. Moreover, this understanding is needed for policy making and for health care practices/providers to give quality care and support which potentially results in equal well-being during the transition to motherhood between native

women and immigrant women also considering the positive impacts on the health of the (unborn) child.

Academic relevance

From an academic perspective, this thesis will contribute to the existing literature in two ways. Firstly, it will identify why, on average, immigrant women in the Netherlands have a higher potential to experience disruptions during their transition to motherhood by using an individual perspective researching the subjective well-being as a measurement tool. Secondly, the existing knowledge about the transition to parenthood of migrant women in a new country is limited and thus, this thesis aims to contribute to this phenomenon (DeSouza, 2004).

1.1 RESEARCH PROBLEM

The aim of this thesis is to analyse whether the SWB of immigrant women in the Netherlands differs from the SWB of native Dutch women. Therefore, the main research question is:

> *"Does the subjective well-being during the transition to motherhood differ between immigrants and native women in the Netherlands"*

To answer the main research question, several sub-questions have been developed:

1. How do native Dutch women rate their SWB during their transition to motherhood?
2. How do immigrant women in the Netherlands rate their SWB during their transition to motherhood?
3. What are the perceived differences in SWB between immigrant women and native women in the Netherlands during their transition to motherhood?

Following the main research question and the sub-questions, the subsequent hypothesis has been formulated: In the population, the SWB of native women is greater than the SWB immigrant women.

1.2 STRUCTURE

The structure of this report is as follows; after the introductory chapter, the theoretical framework will be provided which focuses upon the relevant theories behind the major relevant concepts within this research. Based upon the theoretical framework, the conceptual model has been created. The fourth chapter describes the methodology of this research including the methods for data collection, analysis, and ethical considerations. The fifth chapter describes the outcomes of the data collection. Chapter six discusses the results and chapter seven includes the conclusions with an additional focus on future research as well.

CHAPTER 2: THEORETICAL FRAMEWORK

This section provides an overview of the theoretical framework behind this thesis. The two main dimensions derived from the research question are the transition to motherhood and SWB, those dimensions will be defined and explained.

Subjective well-being

During the transition to motherhood, women transform into a new identity and at the same time experience many challenges such as an increased responsibility not only for themselves but also for the child, hormonal changes during pregnancy, but also change in appearance and changing relationship dynamics (Asadi et al., 2021). These major shifts influence the mental well-being of mothers (to-be) which again impact pregnancy outcomes (Rasmussen et al., 2013). Thus, highlighting the cruciality of well-being during the transition to motherhood. Well-being itself can be measured from an objective perspective including measurements focusing on income, housing, or education but it can also be measured from a subjective point of view (Western & Tomaszewski, 2016). Using the definition of Western & Tomaszewski (2016), subjective well-being can be defined as: "… how people *experience* and *evaluate* their lives and specific domains and activities in their lives". The concept of SWB is difficult to measure as it is individualistic and thus differs among people. However, this research will apply a SWB approach to measure the transition to motherhood because the transition to motherhood is an individualistic experience which is experienced different per woman.

Furthermore, Andrews & Withey (2012) state that SWB comprises three major components being life satisfaction (LS), positive affect (PA) and negative affect (NA). The positive affect is related to the experience of positive emotions such as joy, happiness, optimism, gratitude, or amusement while the negative affect includes negative emotions such as anger, loneliness, sadness, or depression. It has been determined that LS is influenced by a repeated occurrence of either PA or NA exhibiting the relationship between the factors (Andrews & Withey, 2012; Diener et al., 1997). Additionally, this thesis will use the perspective of SWB to analyse how immigrant women experience and evaluate their state of being during the transition to motherhood. Different literature has researched the concept of SWB in relation to concepts as parenthood and family trajectories (Bastaits et al., 2018; Musick et al., 2016; Herbst, 2012). Those studies commonly used surveys including Likert Scale questions to analyse SWB a methodology which will also be applied in this study.

Transition to motherhood

To understand how SWB could be influenced by the transition to motherhood, is firstly required an understanding of what the transition to motherhood is. Research has shown that the impact of becoming a mother on psychological well-being does not only influence women who are pregnant as determined by Mott et al. (2011). Mothers who have adopted a child can experience similar negative affects in terms of depression (Mott et al., 2011). This shows that the transition to motherhood is a transition impacting not only women who give birth but could already start when deciding upon the wish to have children indicating the complexity of the transition to motherhood. Furthermore, the concept of transition to motherhood has been researched and attempted to be defined by different scholars such as Chick & Meleis (1986) and Schumacher & Meleis (1994). It involves the subject of becoming a mother, and different variables as, among others, social environment, and levels of support during the transition are considered influential (Nelson, 2003; Rasmussen et al., 2013). Nevertheless, as determined by Nelson (2003) health care practisioners struggle to put the knowledge of influential variables into practice to reduce the exposure of risk during the transition to motherhood.

Additionally, when considering theories about the transition to motherhood, a prominent theory in nursing and midwifery is the theory of Maternal Role Attainment (MRA) developed by Rubin (1967). This theory is widely applied by midwives and nurses during the first year of motherhood and it focusses on a set of behaviours that mothers are expected to follow to create an identity for themselves as mother. Additionally, Alinejad-Naeini et al. (2020) describe MRA as a developmental, collaborative, and adaptive process which aims to let a mother discover the necessary set of behaviours, skills, and characteristics to become a mother. This theory views the transition as a homogeneous process and the 'formation of the cognitive-behavioural skills' are based upon social beliefs of how a mother should behave (Jirapaet, 2001). Another widely applied theory is the theory of Becoming a Mother (BAM) created by Mercer (2004) which can be perceived as an expansion of MRA which acknowledges the importance of the social environment during the transition as well as the process of continuous growth and reformation of identity (Mercer, 2004). Nevertheless, both theories do not completely recognize the mental well-being of women during this transition but consider it as something that follows the creation of the identity of being a mother. Moreover, Parratt and Fahy (2011) state that both theories are focused on the baby instead of the mothers. Athan & Reel (2015) concluded that within those theories, mothers are seen as 'functional agents' who must care for their children instead of focusing on the needs and experiences of the women themselves. Furthermore, the differences between mothers and their transition are currently diminished (Parratt, & Fahy, 2011).

CHAPTER 3 CONCEPTUAL MODEL

Figure 1 presents the conceptual model which illustrates the relationship between the transition to motherhood and well-being as determined by numerous studies (Nelson, 2003; Kursz, Davis, & Browne, 2021; Erfina et al., 2019). It will be analysed whether the SWB resulted from the transition to motherhood differs among immigrant women in the Netherlands and native Dutch women. The main examined life event is the transition to motherhood, experienced by both native and immigrant women. This transition impacts again their SWB.

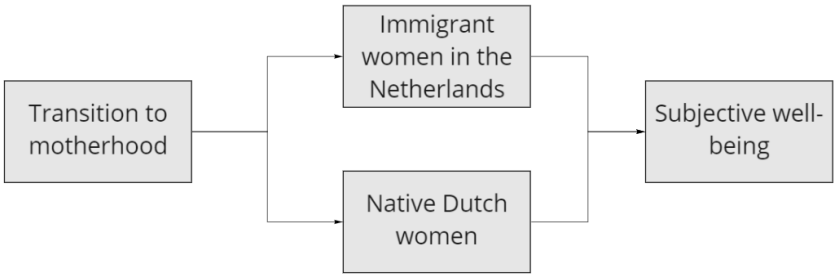

Figure 1: Conceptual model

CHAPTER 4: METHODOLOGY

This study aimed to analyse the SWB of immigrant women and compare it with the SWB of native women in the Netherlands. The subsequent section provides the methodological approach taken in this study to answer the main research question: *"Does the subjective well-being during the transition to motherhood differ between immigrants and native women in The Netherlands?".* The standard methodology within the field of research concerning SWB is by asking Likert Scale questions which was also the applied approach within this study (Bastaits et al., 2018; Musick et al., 2016; Herbst, 2012). Primary quantitative data was collected by distributing a questionnaire.

4.1 METHODS OF DATA COLLECTION

Two questionnaires were created as a method of data collection, one in Dutch and one in English. This, to make it as easy as possible for the respondents fill in the questionnaire. For this study it was chosen to operationalise the transition to motherhood as the period during pregnancy (prenatal) and the first four months after pregnancy (postnatal). According to Krueger & Schkade (2008), SWB can be operationalised by asking the question 'how satisfied are you with your life?' or 'how happy are you with your life?'. Therefore, those questions have been included in the questionnaire. Additional concepts have been included within the questionnaire to operationalise SWB and its possible influential factors as determined by literature. Appendix 1 provides a detailed overview of the questionnaire guide.

In total, 30 responses for the English questionnaire were conducted and 38 responses for the Dutch questionnaire. A recruitment criterion was that the respondents needed to have given birth to at least one child. Additionally, for the immigrant mothers it was required that they gave birth to their child in the Netherlands. Invalid responses of respondents who did not completely fill in the survey or filled in the questionnaire not based upon their experience of having a child in the Netherlands were excluded. The main distribution method of the questionnaire was through Facebook groups for expats in the Netherlands but also Facebook groups for Dutch moms. It needs to be acknowledged that using Facebook groups as main method of data collection also causes a selection in the sample as not all mothers have Facebook.

Research ethics

There were ethical issues to consider when conducting this research, important for the protection of the privacy and rights of the participants as well as to ensure research integrity. The transition to motherhood and SWB can be perceived as a personal and sensitive topic. This was acknowledged by the researcher and a consent form was created to communicate the rights and ethical issues to the respondents. Within this consent form was emphasised upon concerns as anonymity. Any personal identifiable information such as names or addresses was not stored. Furthermore, it was communicated that the collected data will remain confidential and will be solely used for academic purposes. The respondents could withdraw themselves from the research at any time without requiring any clarification. The consent form was located at the beginning of each questionnaire and ensured that all ethical issues concerning this research were communicated to the respondents.

4.2 METHODS OF ANALYSIS

The software used to analyse the conducted data was SPSS and before applying any statistical test upon the conducted data, were both the Dutch survey data and English survey data combined

into one dataset. All binary variables (language barrier, prenatal courses, information received, relationship changes) were recoded from yes/no answers to 0/1 answers. Additionally, two binary variables of prenatal SWB and postnatal SWB were created to be able to perform binary logistic regression. The ordinal variable SWB prenatally and postnatally were transformed to either a good or poor SWB. The cut-off point has been set at 3 meaning that all respondents reporting either 1 or 2 for SWB were relocated in the group of poor well-being and the respondents reporting three or higher were considered good SWB. Furthermore, the transition to motherhood has been analysed as consisting of a prenatal period and postnatal period, this data was collected retrospectively based on past experiences. The subsequent section will provide an overview of the statistical tests applied.

The first two research questions were about how native women and immigrant women rate their SWB during the transition to motherhood. Both questions were answered using the same methodology but applied for separate groups. Firstly, were used the measurements of central tendency to determine per group what the prenatal and postnatal SWB was. The mean and the median were used to analyse this as SWB comes in the form of a Likert scale variable. Furthermore, to gather more information about the nature of the relationship has been applied the Spearman's rho which is suitable for ordinal data. Table 1 presents the variables which were tested upon corelation with prenatal and postnatal SWB. The correlations were tested upon significance setting an alpha level of .05.

Table 1: Spearman's Rho tests

Spearman's rho variables	
Life satisfaction prenatal	SWB prenatal
Happiness	SWB prenatal
Optimism	SWB prenatal
Competence	SWB prenatal
Social support	SWB prenatal
Satisfaction maternity care system	SWB prenatal
Life satisfaction postnatal	SWB postnatal
Happiness	SWB postnatal
Optimism	SWB postnatal
Competence	SWB postnatal
Social support	SWB postnatal
Satisfaction maternity care system	SWB postnatal

To examine whether SWB remained the same over the course of this period or changed, was applied the Wilcoxon-Signed-Rank test (table 2). This test is suitable for ratio or interval data which is paired and not normally distributed. There is many discussion on how to interpret and treat Likert Scale data but it has been chosen to treat it as interval data as the numeric numbers of the Likert Scale (1,2,3,4, and 5) have a certain weight with them and not solely an order (Wu & Leung, 2017). The Wilcoxon-Signed-Rank test examined whether there is a difference in mean ranks within a paired observation. The outcomes of the tests were considered significant when the p-value was lower than 5%.

Table 2: Wilcoxon-Signed-Rank tests

Wilcoxon-Signed-Rank test	
Prenatal SWB native women	Postnatal SWB native women
Prenatal life satisfaction native women	Postnatal life satisfaction native women
Prenatal SWB immigrant women	Postnatal SWB immigrant women
Prenatal life satisfaction immigrant women	Postnatal life satisfaction immigrant women

The final research question was about the perceived differences in SWB between groups. To answer this question were applied two different tests being the Mann-Whitney U test and binary logistic regression. The Mann-Whitney U test was applied to analyse the differences in medians between native Dutch women and immigrant women (table 3). Like the other tests, was the alpha level set at .05.

Table 3: Mann-Whitney U tests

Mann-Whitney U test	
Prenatal SWB native women	Prenatal SWB immigrant women
Postnatal SWB native women	Postnatal SWB immigrant women
Life satisfaction prenatal native women	Life satisfaction prenatal immigrant women
Life satisfaction postnatal native women	Life satisfaction postnatal immigrant women
Happiness native women	Happiness immigrant women
Optimism native women	Optimism immigrant women
Competence native women	Competence immigrant women
Social support native women	Social support immigrant women
Satisfaction maternity care system native women	Satisfaction maternity care system immigrant women

Binary logistic regression was applied to investigate the nature of the relationship of SWB and whether being an immigrant of native women cause any differences. Moreover, this test examined whether other variables strengthen or weaken the relationship between SWB and migration status (native/immigrant). The method used for adding and removing characteristics was enter and it was ensured that ordinal and nominal variables were assigned as categorical variables. Furthermore, this analysis included the effect of the explanatory variables: age, number of children, prenatal courses, information received, and language barrier. SWB was the dependent variable.

4.3 RESEARCH QUALITY

The reliability of the collected data was ensured by distributing the questionnaire consistently, no changes were made within the questionnaire after publishing it online. Moreover, the statistical tests used to analyse the data were also applied consistently. It was ensured that all the requirements for the tests were met and that the statistical test applied matches the purpose of what was aimed to be analysed. Nevertheless, this research includes some limitations impacting the reliability of the data and results. Firstly, the sample size is too small to be considered representative for the entire population. Causing that conclusions can solely be made upon the sample and not the entire population. If this study will be replicated, data and results might differ. Secondly, the questionnaire asks respondents about their SWB based upon a transition

experienced years ago. It could be that the respondents do not remember correctly or that their current mood when filling in the questionnaire influences their answers.

Furthermore, the study can be considered valid since the questionnaire uses a common methodology for measuring SWB as mentioned earlier. Besides that, all concepts included within the questionnaire are chosen based upon existing literature in which was emphasised upon the relevance between the concepts such as social support or receiving enough information and SWB.

CHAPTER 5: RESULTS

This study examined two different groups being native and immigrant women by conducting two questionnaires to form an overview of the SWB during the transition to motherhood. A sample was conducted including thirty immigrant women and 38 native women. Figures 2 and 3 shows the distribution in educational level among the sample. Primarily immigrant women with a bachelor's degree or higher filled in the survey. Regarding the native Dutch women, the majority of the sample (65.79%) was also higher educated. Acknowledging, that the sample composition might have impacted the results of this study. Furthermore, an overview of the geographical distribution and motivation for migration of the sample can be found in Appendix 2. The results exhibit that the mean age was 47 years and the average number of children of the respondents two. On average, immigrant women were 6.7 years in the Netherlands.

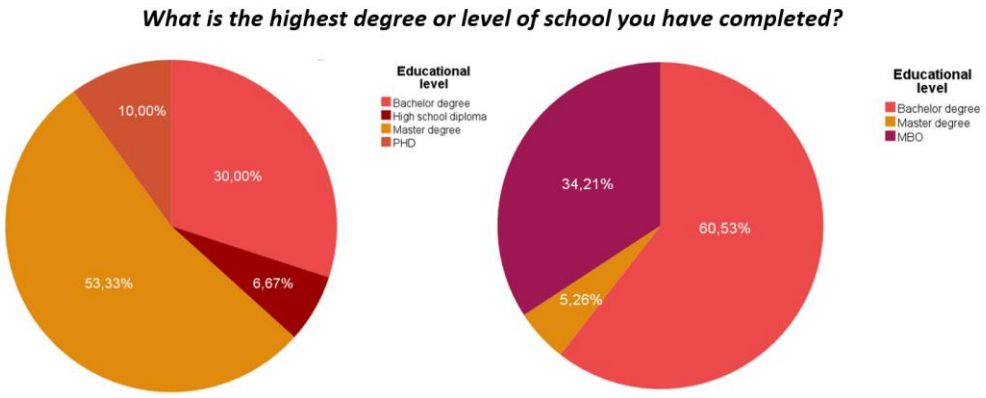

Figure 2: Pie chart of educational level (immigrant women) **Figure 3: Pie chart of educational level (native women)**

SWB rating of immigrant and native women

To fully capture SWB during the transition to motherhood, was asked to the respondents to rate their SWB prenatally and postnatally. In general, the majority of both the immigrant and native women considered their well-being as either good or very good. The mean prenatal SWB of immigrant women is 3.86 and the mean postnatal SWB is 3.43. For native women, the mean of prenatal SWB is 4.21 and the mean postnatal SWB is 3.76 (Appendix 2). Besides the differences in means, figures 4 and 5 also present some noticeable differences in percentages between both groups. Therefore, statistical analysis was required to determine whether there is a difference between the groups and what the nature of the difference is. This will be elaborated upon later in this chapter.

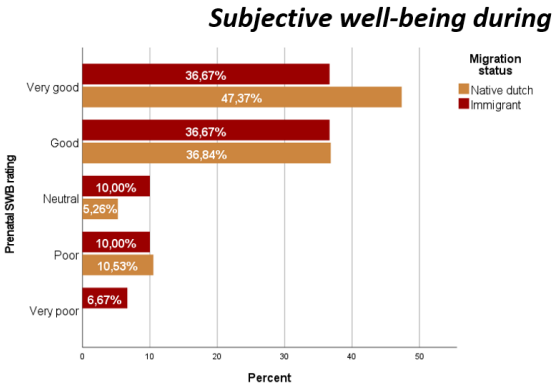

Figure 4: Bar chart of prenatal SWB

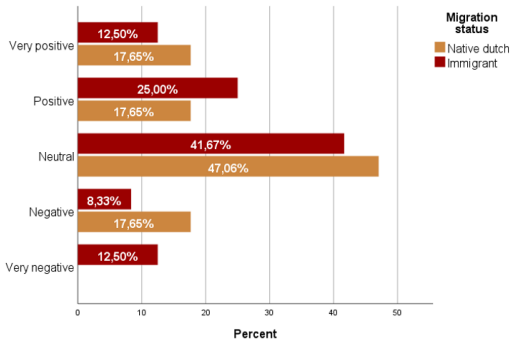

Figure 5: Bar chart of postnatal SWB

Figures 6 and 7 show that the majority of the immigrant women (66.67%) took prenatal courses. The distribution for the native women is slightly different. A lower percentage of women took prenatal courses compared to the immigrant women.

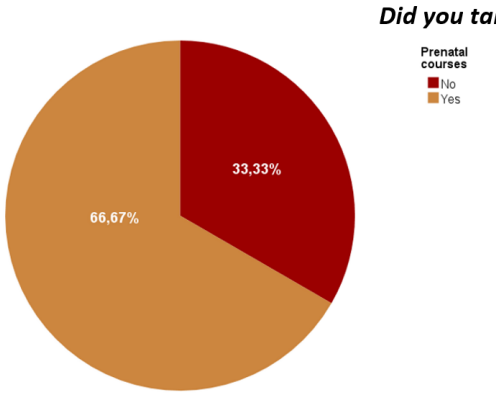

Figure 6: Pie chart of prenatal courses (immigrant women)

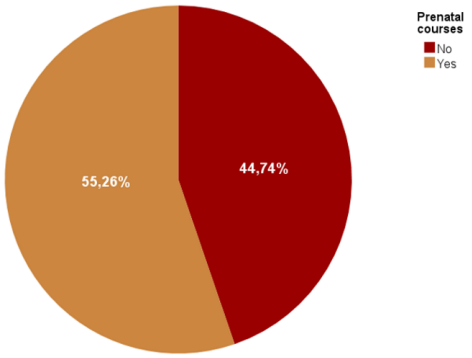

Figure 7: Pie chart of prenatal courses (native women)

Furthermore, 36.67% of the immigrant women and 31.58% of the native women did not believe that they received enough information to be well-prepared for parenthood (figure 8). This is a high percentage for both groups considering the fact receiving enough information influences SWB during the transition to motherhood (Barimani et al., 2017). Furthermore, 20% of the immigrant women did experience a language barrier when communicating with health care providers (figure 9). One respondent explained that she had “Difficulty to express wishes to birth twins.”.

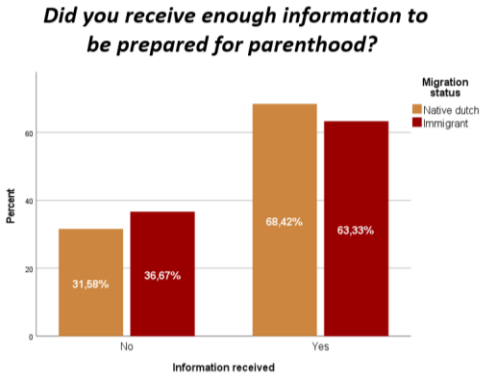

Figure 8: Bar chart of information received

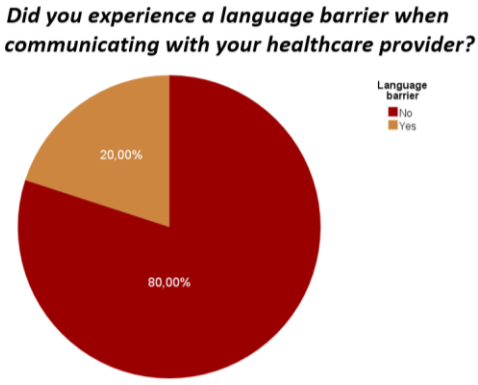

Figure 9: Pie chart of language barrier

Figure 10 shows that approximately halve of the native women experienced relationship changes with their partner. The majority is this group experienced this as neutral or positive on their SWB. The proportion of immigrant women that experienced relationship changes is larger in comparison to the native women. Similar to the native Dutch women, did the majority of the immigrant women experience the relationship changes as neutral or positive on their SWB (figure 11).

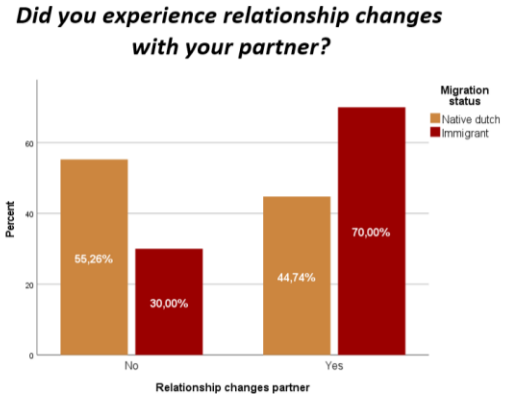

Figure 10: Bar chart of relationship changes partner

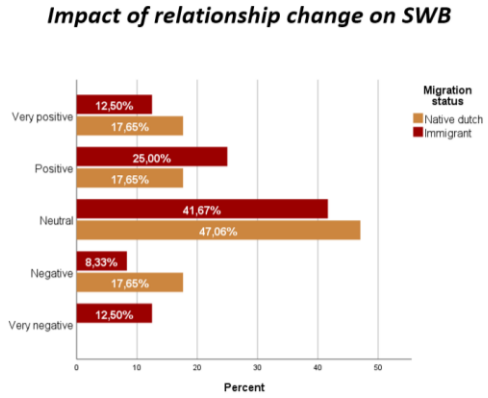

Figure 11: Bar chart of impact relationship changes partner

When interpreting the results of the relationship changes with friends, less women experience relationship changes with friends during their transition to motherhood compared to the proportion that experienced relationship changes with their partner (figure 12). Nonetheless, 33.34% of the immigrant women who did experience relationship changes with friends, reported it to have a negative impact on their SWB (figure 13).

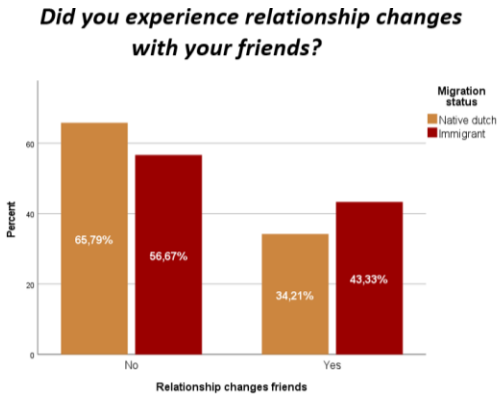

Figure 12: Bar chart of relationship changes friends

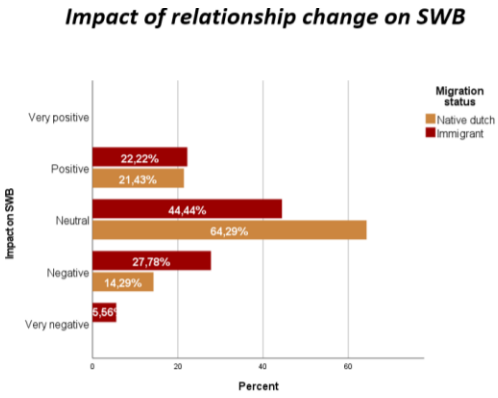

Figure 13: Bar chart of impact relationship changes friends

5.1 DESCRIPTIVE STATISTICS

To determine whether there was a difference in SWB of immigrant women and native women during their transition to motherhood was performed the Mann-Whitney U test on the ordinal variable prenatal SWB of the two populations. The results can be found in Appendix 4 and showed that there was no significant relationship between the SWB of immigrant women and native women in the Netherlands during their pregnancy (U=483, p=.250). Similarly to prenatal SWB, SWB in the first months after pregnancy did also show an insignificant relationship between the two groups (U=473, p=.209).

However, to analyse whether prenatal SWB and postnatal SWB were statistically different from each other has been performed the Wilcoxon-Signed-Rank test (Appendix 3). A significant

difference was found between the prenatal SWB and postnatal SWB of native women where SWB became poorer after pregnancy.

Huppert et al. (2009) created a framework for measuring SWB including several components as life satisfaction, happiness, competence, optimism, and social support. To test whether there was a difference between groups concerning these factors has the Mann-Whitney U test been executed (Appendix 4). An insignificant result was derived from all the Mann-Whitney U tests indicating that there is no evidence to suggest there is a difference between groups regarding life satisfaction, happiness, competence, optimism, and social support.

5.2 CORRELATIONS

Correlations factors influencing SWB – Native Dutch women

The Spearman's Rho test was performed to examine the nature of the relationship between the beforementioned factors and SWB (table 4). A significant relationship was found between SWB and LS, optimism, and happiness both prenatally and postnatally (Appendix 5). LS has a positive strong relationship with SWB similarly to happiness. The strength of the correlation between SWB and happiness however decreases to moderately after pregnancy. Optimism has a positive moderate relationship with SWB prenatally and postnatally.

Table 4: Results Spearman's rho native women

Variable correlated with SWB	*Spearman's correlation coefficient (Prenatal)*	*Spearman's correlation coefficient (Postnatal)*
Life satisfaction	,507*	,791*
Happiness	,505*	,360*
Optimism	,382*	,475*
Competence	,250	,208
Support friends	,203	,174
Support family	,283	,310
Support partner	,147	,090

*Significant ($p<0.05$)

Correlations factors influencing SWB – Immigrant women

Table 5 exhibits the results of the Spearman's rho tests performed using data on immigrant women. Prenatal SWB is significantly correlated to the variables LS, happiness, optimism, competence, and the support of partner. Prenatally, the relationship between SWB and LS as well as happiness is very strong and positive. Additionally, the relationship between prenatal SWB and optimism for the future is positive and strong. Controversially to the correlations of native women, a significant moderate and positive relationship was determined between competence and prenatal SWB meaning that immigrant women with a higher SWB rating felt in general more competent to deal with aspects concerning pregnancy. Another variable which presented a positive moderate relationship with prenatal SWB was the perceived support of partner. A relationship which was not determined for the native women and exhibits a possible area of differences.

The correlation of LS and postnatal SWB becomes even stronger compared to prenatal SWB, but the other correlations have weakened or even become insignificant (table 5). For instance, happiness which was prenatally very strongly related to SWB, showed a moderate positive correlation with postnatal SWB. The variables optimism, competence, and support of partner correlated to prenatal SWB were after pregnancy insignificantly related to SWB. Another difference was determined, when comparing the correlations of native Dutch women presented in table 4 with the correlations of immigrant women in table 5. Whereas for the native women

optimism exhibited a moderate positive relationship with SWB after pregnancy, for the immigrant women the relationship was not significant.

Table 5: Results Spearman's rho immigrant women

Variable correlated with SWB after pregnancy	*Spearman's correlation coefficient (Prenatal)*	*Spearman's correlation coefficient (Postnatal)*
Life satisfaction	,769*	,892*
Happiness	,824*	,423*
Optimism	,568*	,334
Competence	,363	,353
Support friends	,047	-,006
Support family	,208	,102
Support partner	,470*	,093

*Significant (p<0.05)

5.3 REGRESSION

Binary logistic regression was performed to analyse the nature of the relationship between SWB and explanatory variables such as age and number of children during the transition to motherhood (Appendix 6). To do this, migration status was inserted in the model as main variable and age, number of children, information received, prenatal courses, language barrier as control variables. Table 6 exhibits the binary regression model with prenatal SWB as dependent variable. The results exhibit that the first model which includes the variables migration status (native/migrant), age, and number of children is highly insignificant as p=.594. Additionally, Nagelkerke R^2 is considerably low (.051) meaning that this model is poorly able to explain prenatal SWB. Nevertheless, when adding the variables enough information received (yes/no) and whether the respondent followed prenatal courses (yes/no) the model is improved but not enough to make the whole model statistically significant. Yet, it does exhibit that the relationship between prenatal SWB and migration status is influenced by other variables. Model three has been used to examine in more detail as it had the lowest significance level. The explanatory variables themselves are individually not significantly related to SWB during pregnancy except for prenatal courses. This means that a person who followed prenatal courses is 6.656 times more likely to experience good well-being. However, if we do interpret the results of migration status (native/immigrant) on prenatal SWB ignoring the insignificance presented in model three, we could say that native women are 2.281 times more likely to experience a good prenatal SWB when controlling for age, number of children, information received, and prenatal courses.

Table 6: Results Binary logistic regression prenatal SWB

	Model 1		*Model 2*		*Model 3*	
	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.
Constant	3.311	.558	1.777	.830	1.745	.836
Migration status	1.728	.608	2.163	.506	2.281	.457
Age	.982	.695	.967	.514	.966	.505
Number of children	1.868	.288	3.417	.098	3.402	.098
Information received			.299	.292	.304	.296
Prenatal courses			6.722	.043*	6.656	.043*
Language barrier			.816	.877		
Nagelkerke pseudo R^2	.051		.244		.243	
Omnibus Test Model sig.	.594		.141		.087	

Dependent variable: SWB during pregnancy

* Significant (p<0.05)

Table 7 presents the results of the binary logistical analysis with postnatal SWB as dependent variable. The results exhibit a significant model when the variables migration status, age, number of children, information received, prenatal courses, and language barrier are included in the model meaning that combined the variables significantly influence whether someone experience good or poor well-being after their pregnancy. Model two has been selected as the most accurate model as it exhibits a significant p-value of .049. When examining the individual variables, it can be determined that solely language barrier is significantly related to SWB after pregnancy. Someone who experiences a language barrier is, according to the model, 0.078 times less likely to experience good well-being after pregnancy compared to someone who does not experience a language barrier (Appendix 6). Additionally, when looking at the influence of migration status on postnatal SWB (ignoring the insignificance), it can be noted that there is a positive relationship in which native Dutch women are 1.707 more likely to experience good postnatal SWB.

Table 7: Results Binary logistic regression postnatal SWB

	Model 1		*Model 2*		*Model 3*	
	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.
Constant	11.304	.162	46.669	.094	10.330	.241
Migration status	3.866	.135	1.707	.617	1.918	.538
Age	.976	.555	.992	.865	.985	.731
Number of children	.791	.562	.516	.183	.717	.438
Information received			2.003	.328	2.551	.175
Prenatal courses			.268	.158		
Language barrier			.078	.021*	.098	.030*
Nagelkerke pseudo R^2	.065		.272		.227	
Omnibus Test Model sig.	.423		.049*		.065	

Dependent variable: SWB first months after pregnancy

* Significant (p<0.05)

CHAPTER 6: DISCUSSION

Results show that the SWB of immigrant and native women decreased postnatally. This result however, could solely be statistically determined for the group native women. Nevertheless, this phenomenon could be explained by literature showing that approximately 20% of the women postnatally experience mental health disorders which impacts SWB (Vigod et al., 2016). This finding contradicts the findings of Hoffenaar et al. (2009) who found that the mean level of SWB of women did not change during the transition to motherhood. Brandel et al. (2018) determined that having a child actually improved well-being. The diverse findings emphasise that well-being is very divers and subjective making it a difficult concept to measure.

Furthermore, this study indicated that there is no evidence to suggest there is a difference in SWB during the transition to motherhood between native women and immigrant women. This is in accordance with the results of Almeida et al. (2016) who stated that being an migrant does not immediately follow poor mental health outcomes during the process of becoming a mother. Nevertheless, other literature comparing mental health of immigrant women with native women have determined that stress, anxiety, and sometimes depression are more common for immigrant women than for native women (Lansakara et al., 2009; Falah-Hassani et al., 2015; Dennis et al., 2012).

This research was performed based upon a small sample influencing the representativity of the outcomes and causing that the conclusions made based upon the results cannot be interpreted

as representative for the entire population. Nevertheless, a significant positive correlation was found between SWB during the transition to motherhood and life satisfaction during the transition of motherhood for both immigrant and native women. The correlation however, was slightly stronger for immigrant women. Indicating that when SWB improves, LS also simultaneously improves and vice versa. Several studies determined that LS improves during pregnancy but declines over the course of the first years of motherhood (Dyrdal & Lucas, 2013; Dyrdal et al., 2011). The significant results of the Wilcoxon-signed-rank test exhibited this phenomenon as well for the native women (Appendix 3). The mean ranking of prenatal LS was greater than the mean ranking of postnatal LS. On the contrary, this test was not significant for immigrant women indicating that there might not be a difference in LS prenatally and postnatally for this group.

According to Huppert et al. (2009) other indicators of SWB are, optimism and happiness which both showed to be significantly positively related to SWB during the transition to motherhood of immigrant women and native women (Appendix 5). A difference was perceivable in strength of correlation, immigrant women experienced a stronger correlation between SWB and happiness than native women do. Furthermore, native women had a significant moderate positive correlation between SWB and optimism while immigrant women their SWB postnatally was not correlated with their optimism. Meaning that it could be that immigrant women who experience postnatally poor SWB could still be optimistic for the future or vice versa. Another study has also highlighted upon the positive relationship between optimism and mental health including stress and anxiety (Park et al., 1997). According to Carver & Gaines (1987) and Fontaine & Jones (1997), women who are more optimistic during pregnancy experienced fewer depressive symptoms or other mental issues.

The results from the Spearman's rho exhibit an insignificant relationship between SWB and social support, except for the positive moderate significant correlation between SWB during pregnancy and social support of partner of immigrant women (Appendix 5). Meaning that when prenatal SWB of immigrant women increases, the perceived social support from their partner increases moderately. Although other correlations are insignificant, different literature has concluded upon a very strong positive influence of social support on SWB during the transition to motherhood (Gjerdingen et al., 1991; Orr, 2004; Hodnett et al., 2010; East et al., 2019).

Moreover, binary logistic regression analysis indicated that native women are approximately two times more likely to experience a good SWB compared to immigrant women (Appendix 6). This finding corresponds with the findings of Collins et al. (2010) who stated that 42% of the immigrant women may be affected by postnatal depression compared to approximately 10-15% of native women. Discrete literature about SWB of native and immigrant women could not be found but extensive literature does exist focussing upon postnatal depression and other health outcomes for those two groups. A study of Chow et al. (2019) conducted within Canada, identified that immigrant women living in Canada for 5 to 10 years were approximately 2 to 4 times more likely to experience negative mental health outcomes compared to native Canadian women. Nevertheless, the percentage of immigrant women experiencing postnatal depression is decreasing possibly due to the healthy immigrant effect (Chow et al., 2019). This shows that the findings of this study correspond with findings of other studies.

CHAPTER 7: CONCLUSION

This section will firstly provide answers on the sub-questions and consequently, conclusions will be given answering the main research question: "*Does the subjective well-being during the transition to motherhood differ between immigrants and native women in the Netherlands."*

It can be concluded that the SWB during the transition to motherhood of immigrant women is considered neutral/good. The average prenatal SWB of native women however is between good/very good and postnatal SWB is between neutral/good. Factors influencing SWB according to literature were, among others, whether a person took prenatal courses or not. It can be concluded that immigrant women take prenatal courses more often compared to native women. Reasons for this could differ from the fact that immigrant women are not familiar with the maternity care system in the Netherlands or that they feel like it would prepare them better for motherhood. This, however, is speculated reasoning and shows an area for future research.

Moreover, both the majority of the immigrant and native women in the Netherlands believe that they received enough information from the health care providers to be prepared for motherhood. When considering the experienced relationship changes and its influence on SWB, it can be concluded that immigrant women experience relationship changes with their partner more often than native women (70% over 44.74%). If experiencing relationship changes with friends, results show that 33.34% of the immigrant women experienced this as negative while only 14.29% of the native women experienced those changes with friends as negative on their SWB. Indicating the importance of receiving social support to prevent relationship changes from impacting SWB, a point which should be recognised by the external environment of all mothers. Nevertheless, preventing relationship changes is impossible during the transition to motherhood as it includes a change in identity and it could be that if people in your environment did not experience a transition to motherhood/parenthood, they might not understand. Providing information on how to cope with relationship changes during prenatal courses or by health care providers could be a solution.

Additionally, it can be concluded that this study did not provide enough evidence to suggest there is a difference in medians of SWB between immigrant and native women even though the descriptive statistics do show a small difference in SWB means between groups. However, when digging into the nature of SWB and its relation to other factors as happiness, competence, optimism, and life satisfaction it could be determined that there is a difference of correlation strength between native women and immigrant women. Immigrant women tend to experience a stronger correlation between SWB and life satisfaction and happiness while native women experience a stronger positive correlation between postnatal SWB and optimism for the future. Moreover, significant evidence was found that native Dutch women experience a shift in SWB during their transition to motherhood. The rating of SWB was higher during pregnancy than postnatally. This difference was not found for immigrant women indicating that they might experience a more stable SWB during their transition to motherhood.

To answer the main research question: *"Does the subjective well-being during the transition to motherhood differ between immigrants and native women in the Netherlands"*, it can be determined that the SWB during the transition to motherhood does differ as Binary Logistic Regression exhibit that native women are approximately 2 times more likely to experience a good SWB compared to immigrant women (Appendix 6). This is in line with other literature found. Moreover, it can be concluded that the SWB differs in terms of relationship with components describing SWB such as perceived happiness, LS, and optimism for the future.

Future research

Further research into the subject is recommended based upon a larger sample. Conducting a larger sample will enable to obtain more accurate results and create a more precise prediction

model. Furthermore, it is recommended to further research whether socio-economic factors as income, education, or location plays a role in the SWB. The analysed sample within this study contained mainly highly educated people which possibly could have an impact on the SWB. Currently, descriptive statistics show a difference between groups of approximately 9% but this study was not able to detect where the differences come from. A reason for this, could be that non-parametric tests were applied due to the nature of the variables and the low sample. This causes that information is lost as ties are excluded for the test, increasing the sample size would potentially solve this problem and enable to perform additional tests. Moreover, this study has been conducted retrospective which might have had an impact on the results. Therefore, further research into SWB of immigrant and native women is recommended.

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APPENDICES

APPENDIX 1: QUESTIONNAIRE GUIDE

Concept	*Questions*	*Answers*	*Measurement level*
Demographics	What is your date of birth?	Open answer (recoded answers to age)	Ratio/interval
	In which country were you born?	Open answer	Nominal
	What is the highest degree or level of school you have completed?	No degree High school diploma Some college, no degree Associates degree Bachelor degree Master degree Prefer not to say Other	Nominal
	In which year did you move to the Netherlands?	Open answer (recoded answers to time in the Netherlands)	Ratio/interval
	Why did you move to the Netherlands?	Employment Education or training Marriage/ family reunification Forced displacement Prefer not to say Other	Nominal
	How many children do you have?	Open answer	Ratio/interval
	In which year was your child born?	Open answer	Interval
	In which country did you live during your pregnancy?	Open answer	Nominal
SWB	During your pregnancy, how would you rate your well-being?	Likert scale 1 = Very poor 5 = Very good	Ordinal/interval
	In the first months after your pregnancy, how would you rate your well-being?	Likert scale 1 = Very poor 5 = Very good	Ordinal/interval
Satisfying life (Alderdice & Gargan, 2019)	During your first pregnancy, how satisfied were you with your life?	Likert scale 1 = Very dissatisfied	Ordinal/interval

		5 = Very satisfied	
	In the first months after your pregnancy, how satisfied were you with your life?	Likert scale 1 = Very dissatisfied 5 = Very satisfied	Ordinal/interval
Resilience and self-esteem (Alderdice & Gargan, 2019)	During my transition to motherhood, I was happy with myself	Likert scale 1 = Strongly disagree 5 = Strongly agree	Ordinal/interval
	During my transition to motherhood, I was optimistic for the future	Likert scale 1 = Strongly disagree 5 = Strongly agree	Ordinal/interval
Positive functioning (Alderdice & Gargan, 2019)	During my transition to motherhood, I felt competent to deal with every aspect concerned with pregnancy	Likert scale 1 = Strongly disagree 5 = Strongly agree	Ordinal/interval
Supportive relationships (Alderdice & Gargan, 2019)	During my transition to motherhood, I felt well supported by my friends	Likert scale 1 = Strongly disagree 5 = Strongly agree	Ordinal/interval
	During my transition to motherhood, I felt well supported by my family	Likert scale 1 = Strongly disagree 5 = Strongly agree	Ordinal/interval
	During my transition to motherhood, I felt well supported by my partner	Likert scale 1 = Strongly disagree 5 = Strongly agree	Ordinal/interval
Cultural differences (Nelson, 2003)	Did you experience a language barrier when interacting with your health care providers during your pregnancy?	Yes/no	Binary
	If yes, did the language barrier cause any problems?	Open question	Nominal
Prenatal courses (Rasmussen et al., 2013)	Did you follow any prenatal courses during your pregnancy?	Yes/no	Binary
	If yes, do you feel like the prenatal courses positively impacted your well-being?	Yes/no	Binary
	If no, would you rather have taken prenatal courses during your pregnancy?	Yes/no	Binary
Information received (Barimani et al., 2017)	Do you feel like you received enough information from your health care provider to be prepared for parenthood?	Yes/no	Binary

Relationship changes (Darvill et al., 2010; Barlow & Cairns, 1997)	Did you experience relationship changes with your partner after your pregnancy?	Yes/no	Binary
	If yes, did the relationship changes have a positive or negative impact on your well-being	Likert scale 1 = Extremely negative impact 5 = Extremely positive impact	Ordinal/interval
	Did you experience relationship changes with your partner after your pregnancy?	Yes/no	Binary
	If yes, did the relationship changes have a positive or negative impact on your well-being	Likert scale 1 = Extremely negative impact 5 = Extremely positive impact	Ordinal/interval
Maternity care system	In general, how satisfied are you with the maternity care that you received during your pregnancy?	Likert scale 1= Very dissatisfied 5= Very satisfied	Ordinal/interval

Concept	*Questions*	*Answers*	*Measurement level*
Demographics	Wat is uw geboortedatum?	Open answer (recoded answers to age)	Ratio/interval
	In welk land bent u geboren?	Open answer	Nominal
	Wat is de hoogste opleiding of het hoogste opleidingsniveau dat u heeft afgerond?	Geen diploma Middelbare school diploma MBO HBO WO Zeg ik liever niet	Nominal
	Hoeveel kinderen heeft u?	Open answer	Ratio/interval
	In welk jaar is uw kind geboren?	Open answer	Interval
	In welke plaats woonde u tijdens de zwangerschap van uw eerste kind?	Open answer	Nominal
SWB	Hoe zou u uw welzijn tijdens de zwangerschap beoordelen?	Likert scale 1 = Zeer slecht 5 = Zeer goed	Ordinal/interval
	Hoe zou u uw welzijn beoordelen in de eerste maanden na de bevalling?	Likert scale 1 = Zeer slecht 5 = Zeer goed	Ordinal/interval

Satisfying life (Alderdice & Gargan, 2019)	Hoe tevreden was u met uw leven tijdens de zwangerschap?	Likert scale 1 = Zeer ontevreden 5 = Zeer trevreden	Ordinal/interval
	Hoe tevreden was u met het leven in de eerste paar maanden na de bevalling van uw kind?	Likert scale 1 = Zeer ontevreden 5 = Zeer trevreden	Ordinal/interval
Resilience and self-esteem (Alderdice & Gargan, 2019)	Ik was tijdens de zwangerschap blij met mijzelf	Likert scale 1 = Helemaal mee oneens 5 = Helemaal mee eens	Ordinal/interval
	Ik was tijdens de zwangerschap optimistisch over de toekomst	Likert scale 1 = Helemaal mee oneens 5 = Helemaal mee eens	Ordinal/interval
Positive functioning (Alderdice & Gargan, 2019)	Ik voelde me tijdens de zwangerschap bekwaam om met ieder aspect van de zwangerschap om te gaan	Likert scale 1 = Helemaal mee oneens 5 = Helemaal mee eens	Ordinal/interval
Supportive relationships (Alderdice & Gargan, 2019)	Tijdens mijn zwangerschap voelde ik mij gesteund door mijn vrienden	Likert scale 1 = Helemaal mee oneens 5 = Helemaal mee eens	Ordinal/interval
	Tijdens mijn zwangerschap voelde ik mij gesteund door mijn familie	Likert scale 1 = Helemaal mee oneens 5 = Helemaal mee eens	Ordinal/interval
	Tijdens mijn zwangerschap voelde ik mij gesteund door mijn partner	Likert scale 1 = Helemaal mee oneens 5 = Helemaal mee eens	Ordinal/interval
Prenatal courses (Rasmussen et al., 2013)	Heeft u tijdens uw zwangerschap prenatale cursussen gevolgd?	Ja/nee	Binary
	Zo ja, heeft u het gevoel dat de prenatale cursussen een positieve invloed hebben gehad op uw welzijn?	Ja/nee	Binary
	Zo nee, had u liever wel prenatale cursussen gevolgd tijdens uw zwangerschap?	Ja/nee	Binary
Information received (Barimani et al., 2017)	Heeft u het gevoel dat u tijdens de zwangerschap voldoende informatie heeft ontvangen van uw zorgverlener om voldoende voorbereid te zijn op het ouderschap?	Ja/nee	Binary

Relationship changes (Darvill et al., 2010; Barlow & Cairns, 1997)	Heeft u door uw zwangerschap relatieveranderingen ervaren met uw partner?	Ja/nee	Binary
	Zo ja, hadden deze relatieveranderingen een positief of negatief effect op uw welzijn?	Likert scale 1 = Zeer negatief effect 5 = Zeer positief effect	Ordinal/interval
	Heeft u door uw zwangerschap relatieveranderingen ervaren met uw vrienden?	Ja/nee	Binary
	Zo ja, hadden deze relatieveranderingen een positief of negatief effect op uw welzijn ?	Likert scale 1 = Zeer negatief effect 5 = Zeer positief effect	Ordinal/interval
Maternity care system	Hoe tevreden was u over het algemeen over de ontvangen zorg tijdens uw zwangerschap?	Likert scale 1= Zeer ontevreden 5= Zeer tevreden	Ordinal/interval

APPENDIX 2: DESCRIPTIVE STATISTICS

Statistics

		Age	Number of children
N	Valid	68	68
	Missing	0	0
Mean		47,35	2,18
Median		51,00	2,00
Mode		35[a]	2

a. Multiple modes exist. The smallest value is shown

Statistics

Time_NL

N	Valid	30
	Missing	38
Mean		6,80
Median		5,00
Mode		5

Statistics

		Prenatal SWB rating – Immigrant women	Postnatal SWB rating – Immigrant women
N	Valid	30	30
	Missing	0	0
Mean		3,87	3,43
Median		4,00	4,00
Mode		4[a]	4

Statistics

		Prenatal SWB rating – native women	Postnatal SWB rating – native women
N	Valid	38	38
	Missing	0	0
Mean		4,21	3,76
Median		4,00	4,00
Mode		5	4

a. Multiple modes exist. The smallest value is shown

Prenatal SWB rating – native women

	N	%
Poor	4	10,5%
Neutral	2	5,3%
Good	14	36,8%
Very good	18	47,4%

Postnatal SWB rating – native women

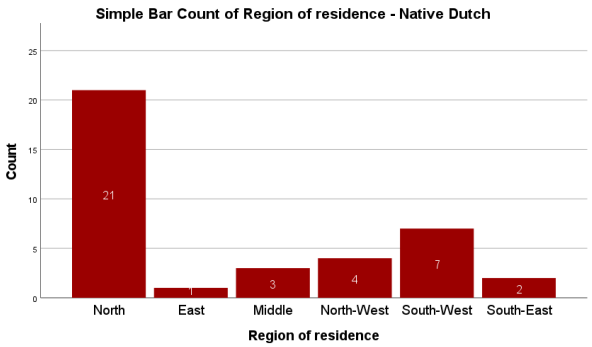
	N	%
Very poor	2	5,3%
Poor	3	7,9%
Neutral	7	18,4%
Good	16	42,1%
Very good	10	26,3%

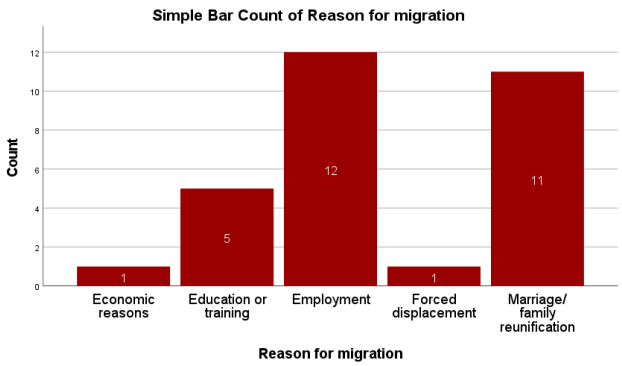
Prenatal SWB rating – immigrant women

	N	%
Very poor	2	6,7%
Poor	3	10,0%
Neutral	3	10,0%
Good	11	36,7%
Very good	11	36,7%

Postnatal SWB rating – immigrant women

	N	%
Very poor	1	3,3%
Poor	7	23,3%
Neutral	5	16,7%
Good	12	40,0%
Very good	5	16,7%





APPENDIX 3: RESULTS WILCOXON-SIGNED-RANK TEST

Ranks – Immigrant women

		N	Mean Rank	Sum of Ranks
Postnatal SWB rating - Prenatal SWB rating	Negative Ranks	9[a]	7,67	69,00
	Positive Ranks	4[b]	5,50	22,00
	Ties	17[c]		

	Total	30		

a. Postnatal SWB rating < Prenatal SWB rating

b. Postnatal SWB rating > Prenatal SWB rating

c. Postnatal SWB rating = Prenatal SWB rating

Test Statistics[a]

	Postnatal SWB rating - Prenatal SWB rating
Z	-1,663[b]
Asymp. Sig. (2-tailed)	,096

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Ranks – Immigrant women

		N	Mean Rank	Sum of Ranks
Satisfaction with life first months after pregnancy - Satisfaction with life during pregnancy	Negative Ranks	10[a]	9,05	90,50
	Positive Ranks	5[b]	5,90	29,50
	Ties	15[c]		
	Total	30		

a. Satisfaction with life first months after pregnancy < Satisfaction with life during pregnancy

b. Satisfaction with life first months after pregnancy > Satisfaction with life during pregnancy

c. Satisfaction with life first months after pregnancy = Satisfaction with life during pregnancy

Test Statistics[a]

	Satisfaction with life first months after pregnancy - Satisfaction with life during pregnancy
Z	-1,775[b]
Asymp. Sig. (2-tailed)	,076

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Ranks – Native Dutch

		N	Mean Rank	Sum of Ranks
Satisfaction with life first months after pregnancy - Satisfaction with life during pregnancy	Negative Ranks	13[a]	8,73	113,50
	Positive Ranks	3[b]	7,50	22,50
	Ties	22[c]		
	Total	38		

a. Satisfaction with life first months after pregnancy < Satisfaction with life during pregnancy

b. Satisfaction with life first months after pregnancy > Satisfaction with life during pregnancy

c. Satisfaction with life first months after pregnancy = Satisfaction with life during pregnancy

Test Statistics[a]

	Satisfaction with life first months after pregnancy - Satisfaction with life during pregnancy
Z	-2,387[b]
Asymp. Sig. (2-tailed)	,017

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Ranks – Native Dutch

		N	Mean Rank	Sum of Ranks
Postnatal SWB rating - Prenatal SWB rating	Negative Ranks	17[a]	11,06	188,00
	Positive Ranks	5[b]	13,00	65,00
	Ties	16[c]		
	Total	38		

a. Postnatal SWB rating < Prenatal SWB rating

b. Postnatal SWB rating > Prenatal SWB rating

c. Postnatal SWB rating = Prenatal SWB rating

Test Statistics[a]

	Postnatal SWB rating - Prenatal SWB rating
Z	-2,054[b]
Asymp. Sig. (2-tailed)	,040

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

APPENDIX 4: RESULTS MANN-WHITNEY U TEST

Ranks

	Migration status	N	Mean Rank	Sum of Ranks
Satisfaction with life during pregnancy	Native dutch	38	37,08	1409,00
	Immigrant	30	31,23	937,00
	Total	68		
Satisfaction with life first months after pregnancy	Native dutch	38	36,78	1397,50
	Immigrant	30	31,62	948,50
	Total	68		
Happiness	Native dutch	38	35,74	1358,00
	Immigrant	30	32,93	988,00
	Total	68		
Optimism	Native dutch	38	36,14	1373,50
	Immigrant	30	32,42	972,50
	Total	68		
Competence	Native dutch	38	37,80	1436,50
	Immigrant	30	30,32	909,50
	Total	68		
Support of friends	Native dutch	38	37,47	1424,00
	Immigrant	30	30,73	922,00
	Total	68		
Support of family	Native dutch	38	35,74	1358,00
	Immigrant	30	32,93	988,00
	Total	68		
Support of partner	Native dutch	38	33,76	1283,00
	Immigrant	30	35,43	1063,00
	Total	68		
Satisfaction with maternity care system	Native dutch	38	34,83	1323,50
	Immigrant	30	34,08	1022,50
	Total	68		

Test Statistics[a]

	Prenatal Life satisfaction	Postnatal Life satisfaction	Happiness	Optimism	Competence	Support of friends	Support of family	Support of partner	Satisfaction with maternity care system
Mann-Whitney U	472,000	483,500	523,000	507,500	444,500	457,000	523,000	542,000	557,500
Wilcoxon W	937,000	948,500	988,000	972,500	909,500	922,000	988,000	1283,000	1022,500
Z	-1,340	-1,115	-,635	-,859	-1,703	-1,509	-,636	-,431	-,169
Asymp. Sig. (2-tailed)	,180	,265	,526	,390	,089	,131	,525	,666	,866

a. Grouping Variable: Migration status

Ranks

	Migration status	N	Mean Rank	Sum of Ranks
Prenatal SWB rating	Native dutch	38	36,79	1398,00
	Immigrant	30	31,60	948,00
	Total	68		
Postnatal SWB rating	Native dutch	38	37,05	1408,00
	Immigrant	30	31,27	938,00
	Total	68		

Test Statistics[a]

	Prenatal SWB rating	Postnatal SWB rating
Mann-Whitney U	483,000	473,000
Wilcoxon W	948,000	938,000
Z	-1,151	-1,255
Asymp. Sig. (2-tailed)	,250	,209

a. Grouping Variable: Migration status

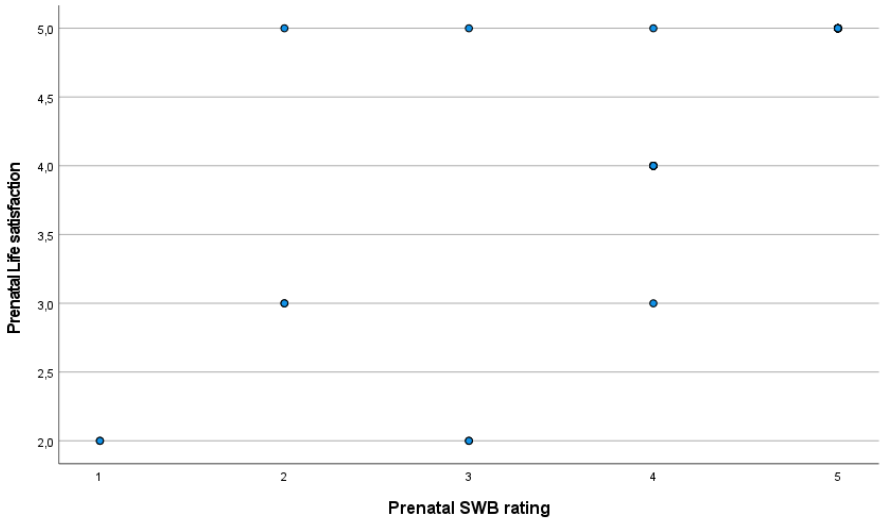
APPENDIX 5: RESULTS SPEARMAN'S RHO

Correlations Immigrant women

Correlations

			Prenatal Life satisfaction	Prenatal SWB rating
Spearman's rho	Prenatal Life satisfaction	Correlation Coefficient	1,000	,769**
		Sig. (2-tailed)	.	<,001
		N	30	30
	Prenatal SWB rating	Correlation Coefficient	,769**	1,000
		Sig. (2-tailed)	<,001	.
		N	30	30

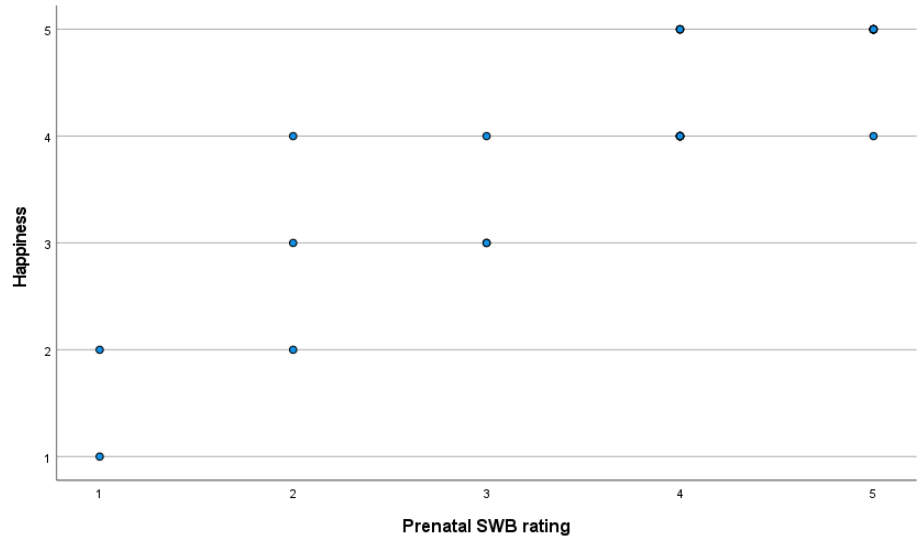
**. Correlation is significant at the 0.01 level (2-tailed).



Correlations

			Prenatal SWB rating	Happiness
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,824**
		Sig. (2-tailed)	.	<,001
		N	30	30
	Happiness	Correlation Coefficient	,824**	1,000
		Sig. (2-tailed)	<,001	.
		N	30	30

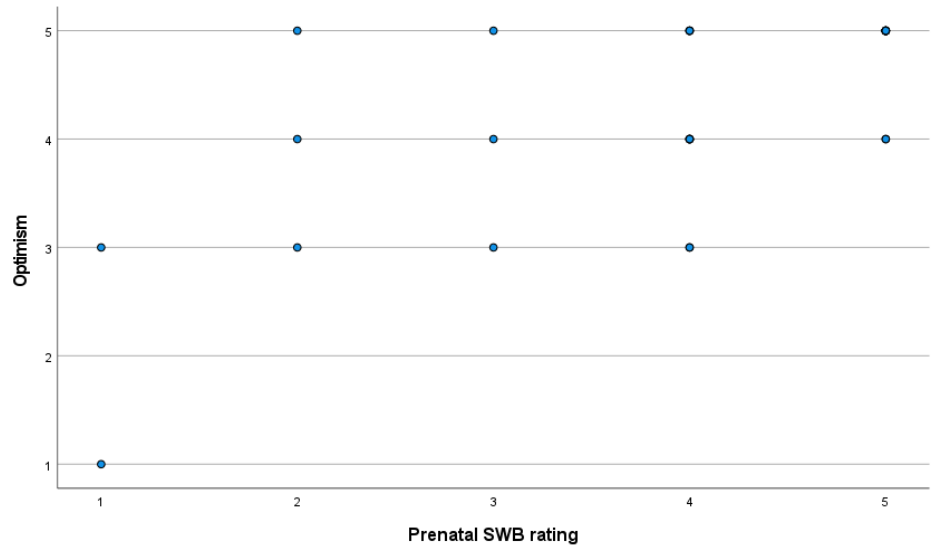
**. Correlation is significant at the 0.01 level (2-tailed).



Correlations

			Prenatal SWB rating	Optimism
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,568**
		Sig. (2-tailed)	.	,001
		N	30	30
	Optimism	Correlation Coefficient	,568**	1,000
		Sig. (2-tailed)	,001	.
		N	30	30

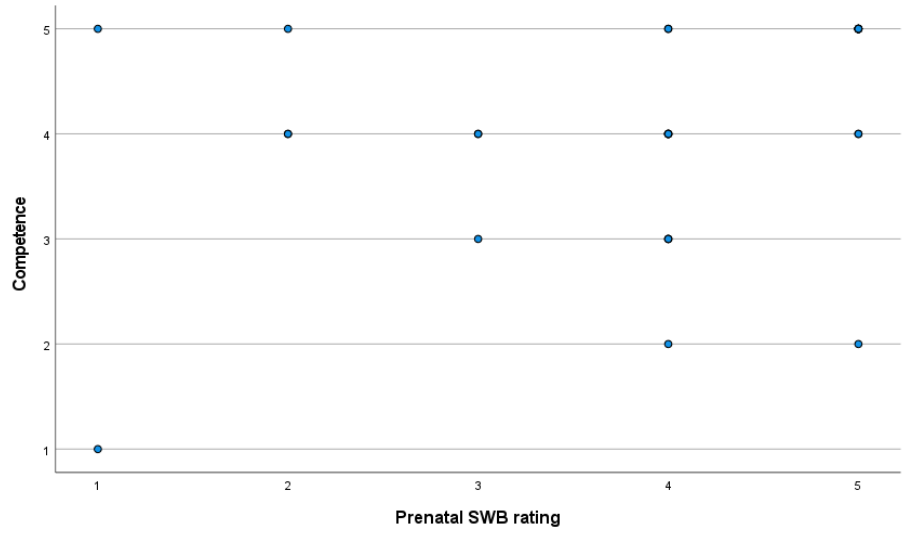
**. Correlation is significant at the 0.01 level (2-tailed).



Correlations

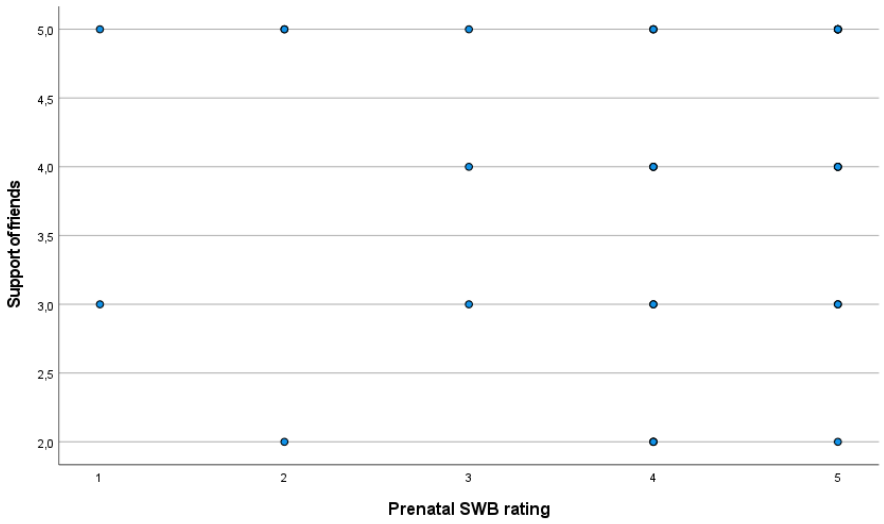
			Prenatal SWB rating	Competence
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,363*
		Sig. (2-tailed)	.	,049
		N	30	30
	Competence	Correlation Coefficient	,363*	1,000
		Sig. (2-tailed)	,049	.
		N	30	30

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



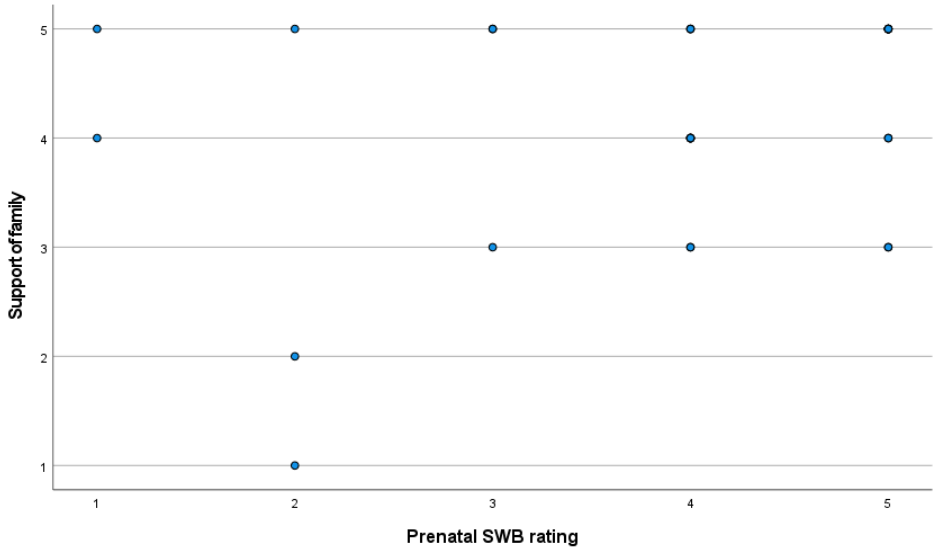
Correlations

			Prenatal SWB rating	Support of friends
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,047
		Sig. (2-tailed)	.	,804
		N	30	30
	Support of friends	Correlation Coefficient	,047	1,000
		Sig. (2-tailed)	,804	.
		N	30	30



Correlations

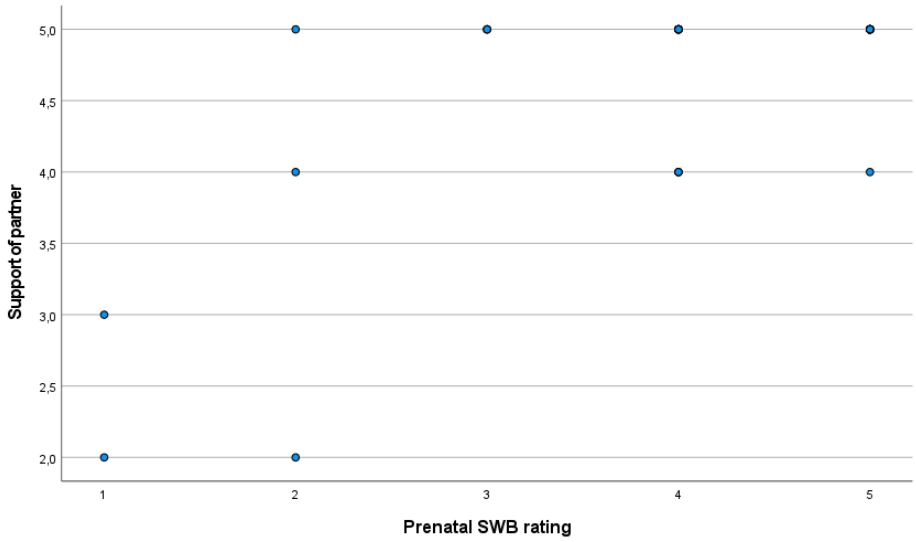
			Prenatal SWB rating	Support of family
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,208
		Sig. (2-tailed)	.	,270
		N	30	30
	Support of family	Correlation Coefficient	,208	1,000
		Sig. (2-tailed)	,270	.
		N	30	30



Correlations

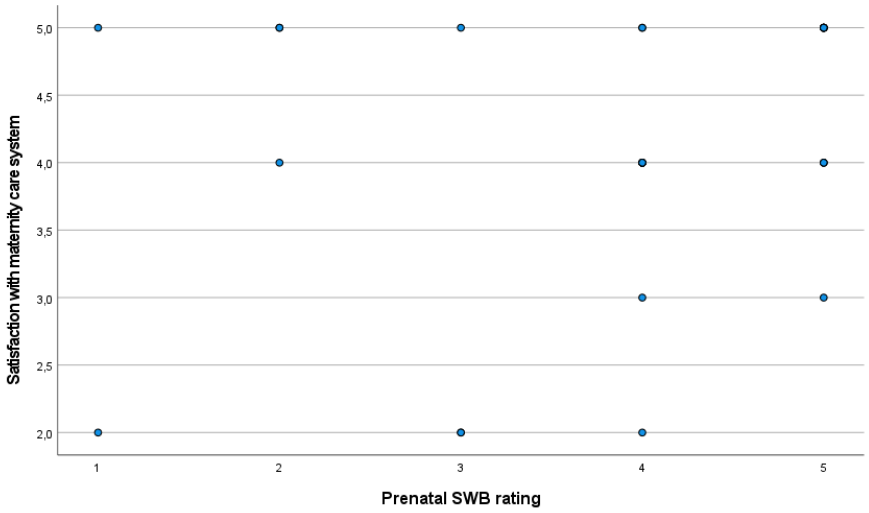
			Prenatal SWB rating	Support of partner
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,470**
		Sig. (2-tailed)	.	,009
		N	30	30
	Support of partner	Correlation Coefficient	,470**	1,000
		Sig. (2-tailed)	,009	.
		N	30	30

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



Correlations

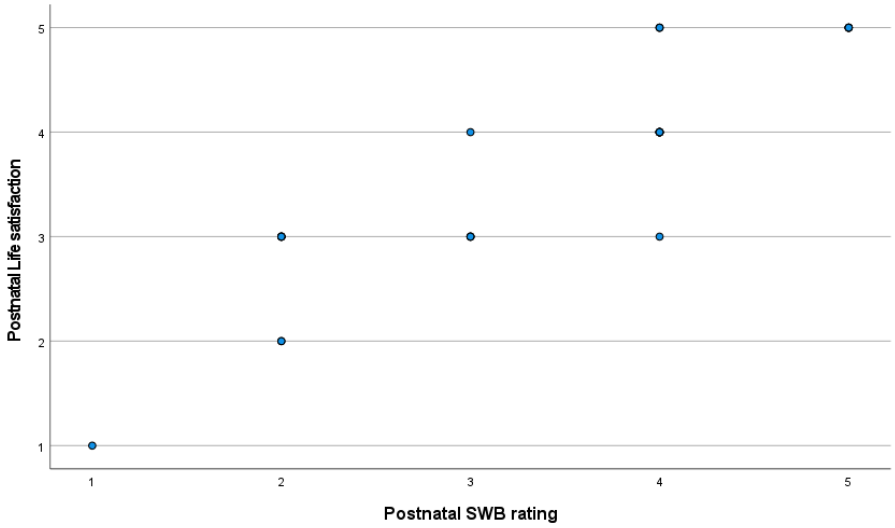
			Prenatal SWB rating	Satisfaction with maternity care system
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,238
		Sig. (2-tailed)	.	,205
		N	30	30
	Satisfaction with maternity care system	Correlation Coefficient	,238	1,000
		Sig. (2-tailed)	,205	.
		N	30	30



Correlations

			Postnatal SWB rating	Postnatal Life satisfaction
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,892**
		Sig. (2-tailed)	.	<,001
		N	30	30
	Postnatal Life satisfaction	Correlation Coefficient	,892**	1,000
		Sig. (2-tailed)	<,001	.
		N	30	30

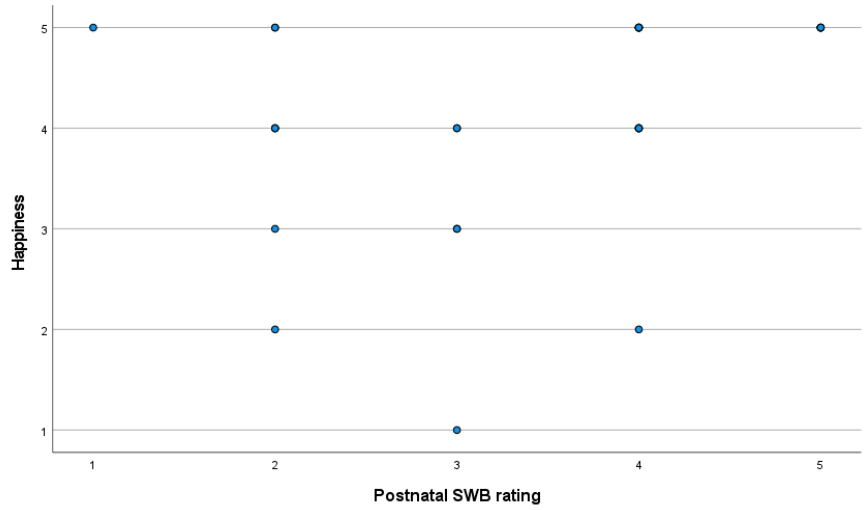
**. Correlation is significant at the 0.01 level (2-tailed).



Correlations

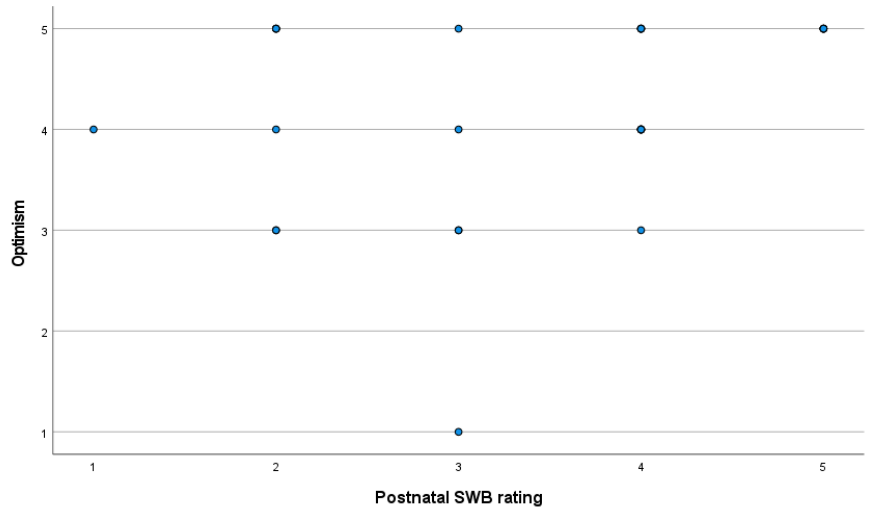
			Postnatal SWB rating	Happiness
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,423*
		Sig. (2-tailed)	.	,020
		N	30	30
	Happiness	Correlation Coefficient	,423*	1,000
		Sig. (2-tailed)	,020	.
		N	30	30

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



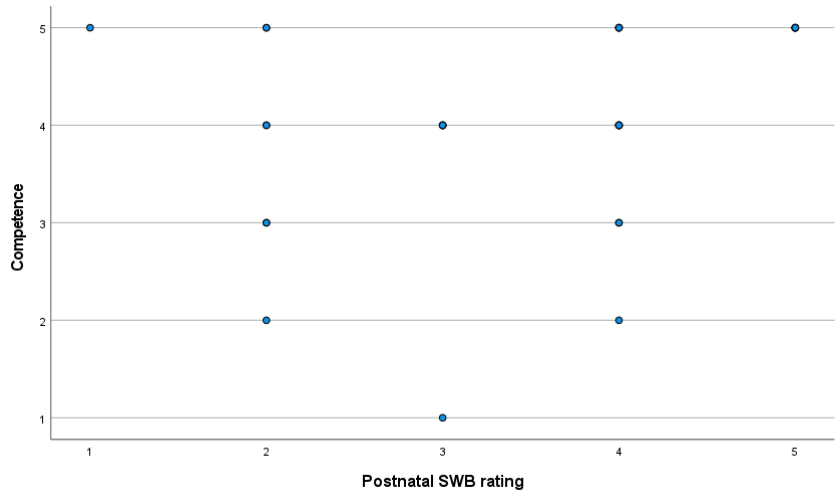
Correlations

			Postnatal SWB rating	Optimism
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,334
		Sig. (2-tailed)	.	,072
		N	30	30
	Optimism	Correlation Coefficient	,334	1,000
		Sig. (2-tailed)	,072	.
		N	30	30



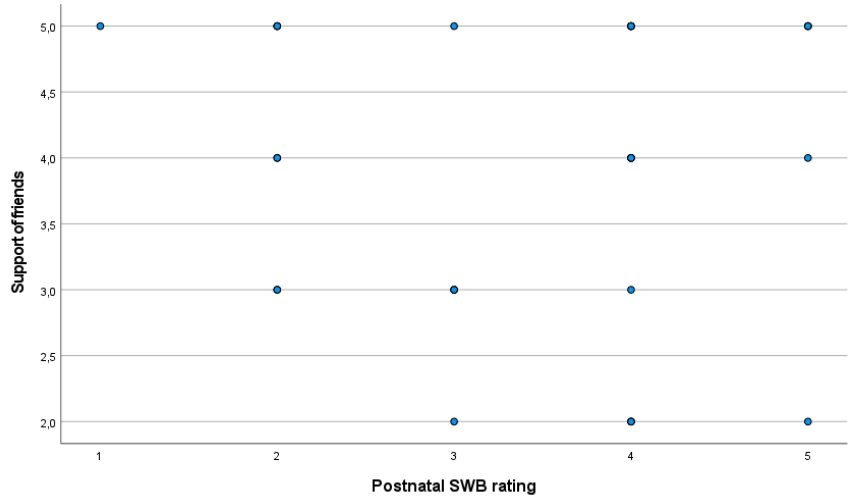
Correlations

			Postnatal SWB rating	Competence
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,353
		Sig. (2-tailed)	.	,056
		N	30	30
	Competence	Correlation Coefficient	,353	1,000
		Sig. (2-tailed)	,056	.
		N	30	30



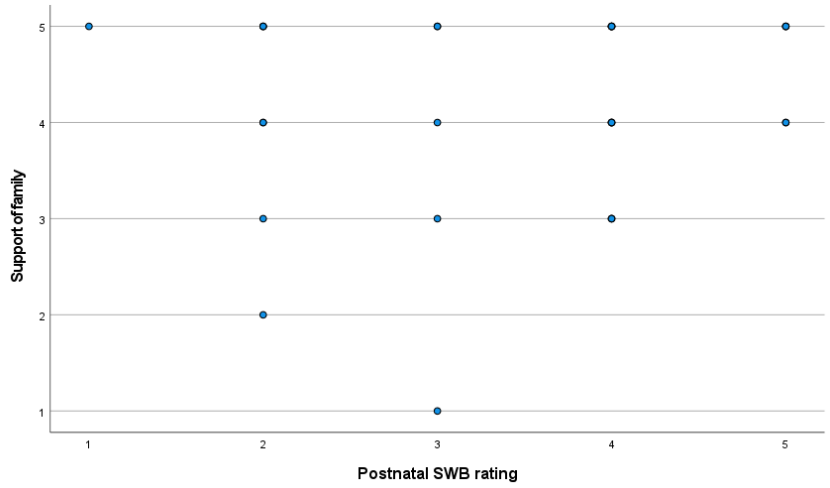
Correlations

			Postnatal SWB rating	Support of friends
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	-,006
		Sig. (2-tailed)	.	,973
		N	30	30
	Support of friends	Correlation Coefficient	-,006	1,000
		Sig. (2-tailed)	,973	.
		N	30	30



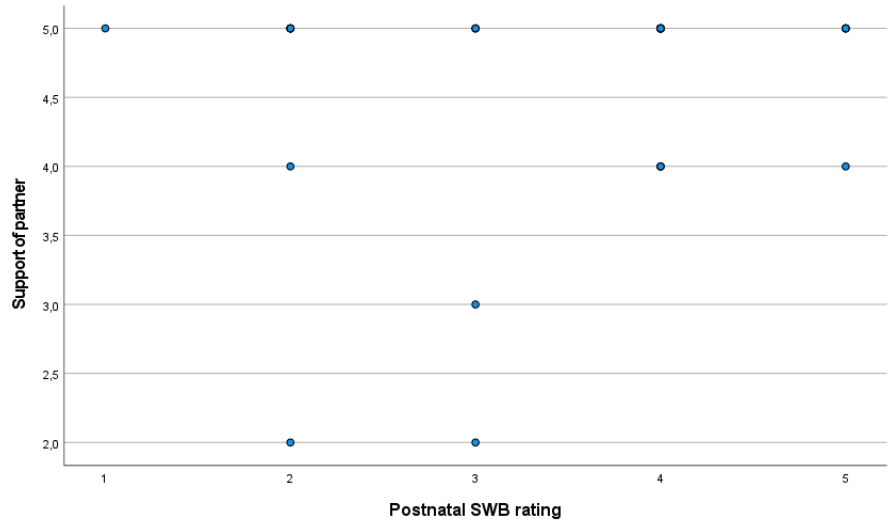
Correlations

			Postnatal SWB rating	Support of family
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,102
		Sig. (2-tailed)	.	,592
		N	30	30
	Support of family	Correlation Coefficient	,102	1,000
		Sig. (2-tailed)	,592	.
		N	30	30



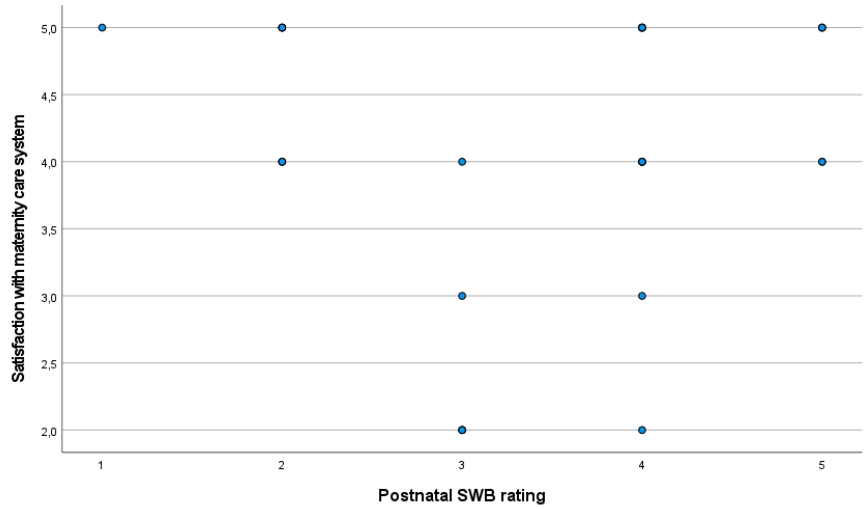
Correlations

			Postnatal SWB rating	Support of partner
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,093
		Sig. (2-tailed)	.	,625
		N	30	30
	Support of partner	Correlation Coefficient	,093	1,000
		Sig. (2-tailed)	,625	.
		N	30	30



Correlations

			Postnatal SWB rating	Satisfaction with maternity care system
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,053
		Sig. (2-tailed)	.	,782
		N	30	30
	Satisfaction with maternity care system	Correlation Coefficient	,053	1,000
		Sig. (2-tailed)	,782	.
		N	30	30



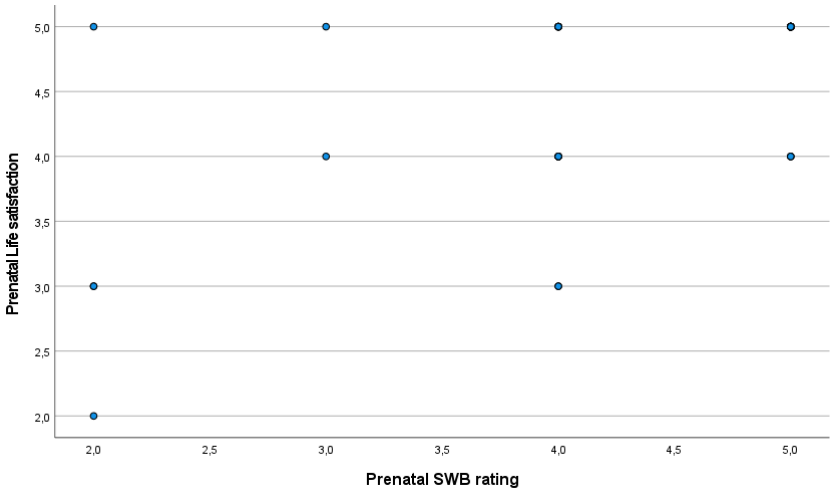
Correlation native Dutch

Correlations

			Prenatal Life satisfaction	Prenatal SWB rating
Spearman's rho	Prenatal Life satisfaction	Correlation Coefficient	1,000	,507**
		Sig. (2-tailed)	.	,001
		N	38	38
	Prenatal SWB rating	Correlation Coefficient	,507**	1,000

	Sig. (2-tailed)	,001	.
	N	38	38

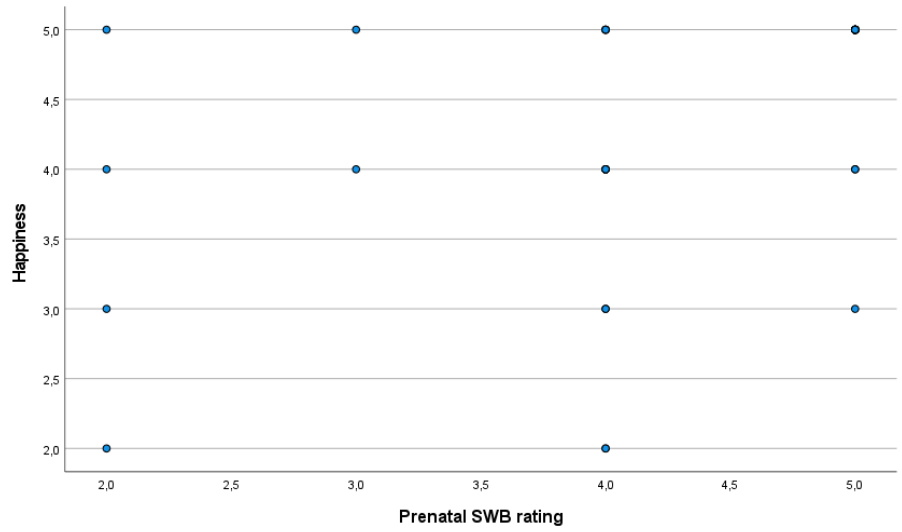
**. Correlation is significant at the 0.01 level (2-tailed).



Correlations

			Prenatal SWB rating	Happiness
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,505**
		Sig. (2-tailed)	.	,001
		N	38	38
	Happiness	Correlation Coefficient	,505**	1,000
		Sig. (2-tailed)	,001	.
		N	38	38

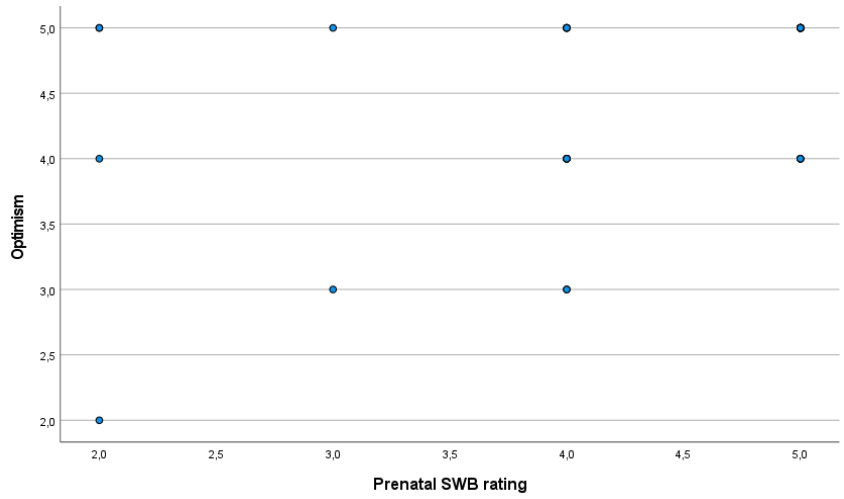
**. Correlation is significant at the 0.01 level (2-tailed).



Correlations

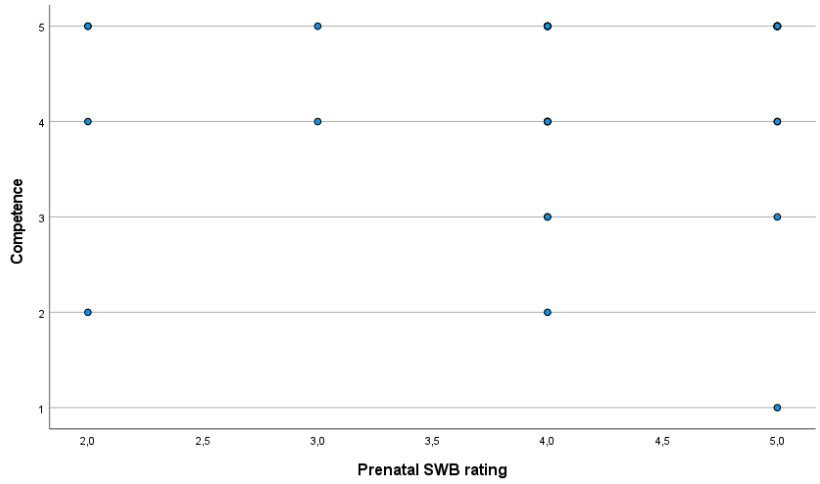
			Prenatal SWB rating	Optimism
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,382*
		Sig. (2-tailed)	.	,018
		N	38	38
	Optimism	Correlation Coefficient	,382*	1,000
		Sig. (2-tailed)	,018	.
		N	38	38

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



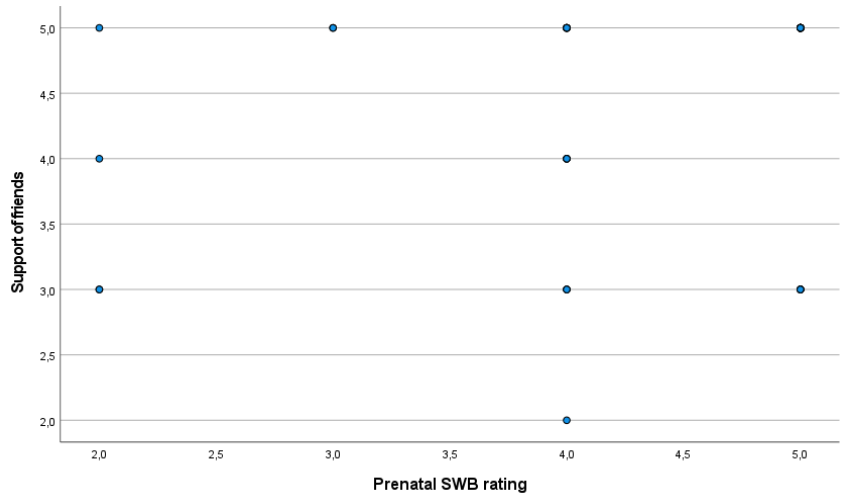
Correlations

			Prenatal SWB rating	Competence
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,250
		Sig. (2-tailed)	.	,131
		N	38	38
	Competence	Correlation Coefficient	,250	1,000
		Sig. (2-tailed)	,131	.
		N	38	38



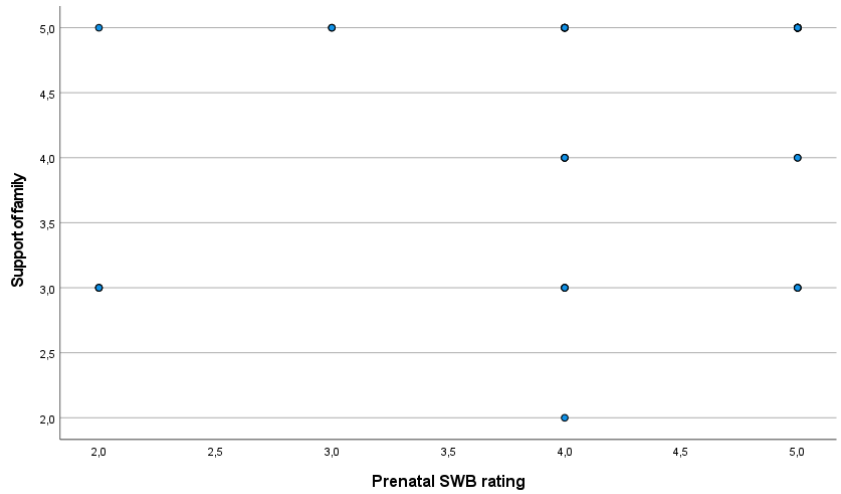
Correlations

			Prenatal SWB rating	Support of friends
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,203
		Sig. (2-tailed)	.	,222
		N	38	38
	Support of friends	Correlation Coefficient	,203	1,000
		Sig. (2-tailed)	,222	.
		N	38	38



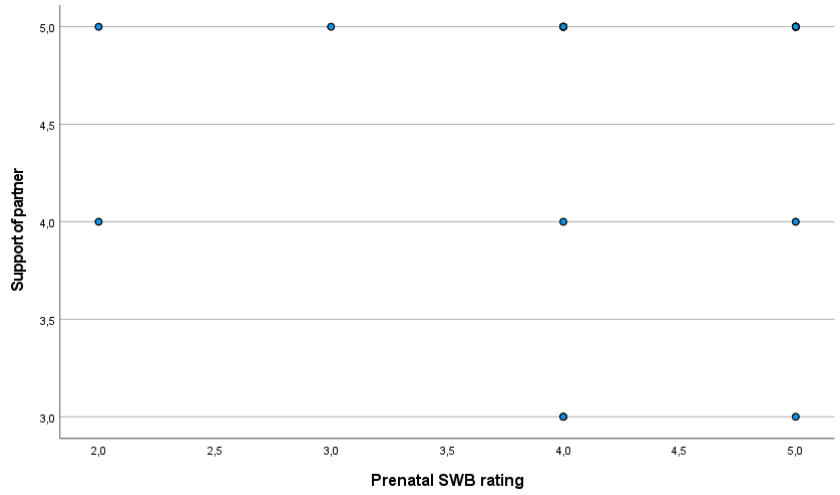
Correlations

			Prenatal SWB rating	Support of family
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,283
		Sig. (2-tailed)	.	,086
		N	38	38
	Support of family	Correlation Coefficient	,283	1,000
		Sig. (2-tailed)	,086	.
		N	38	38



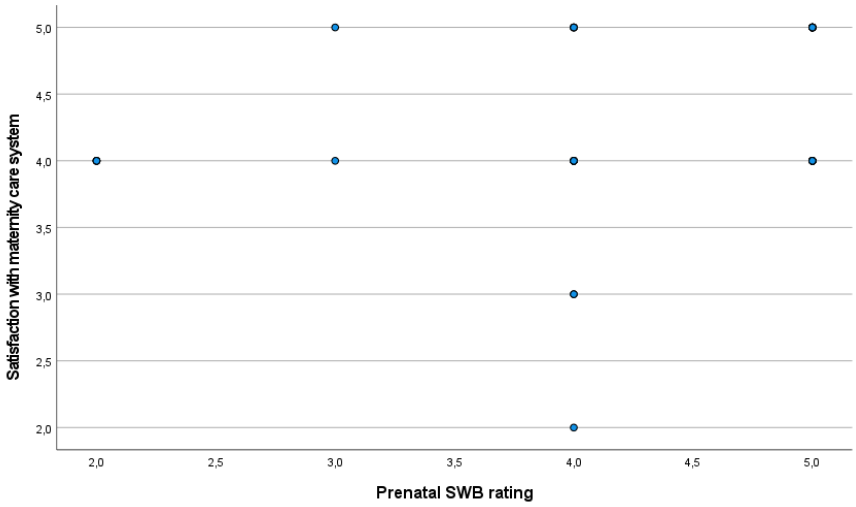
Correlations

			Prenatal SWB rating	Support of partner
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,147
		Sig. (2-tailed)	.	,380
		N	38	38
	Support of partner	Correlation Coefficient	,147	1,000
		Sig. (2-tailed)	,380	.
		N	38	38



Correlations

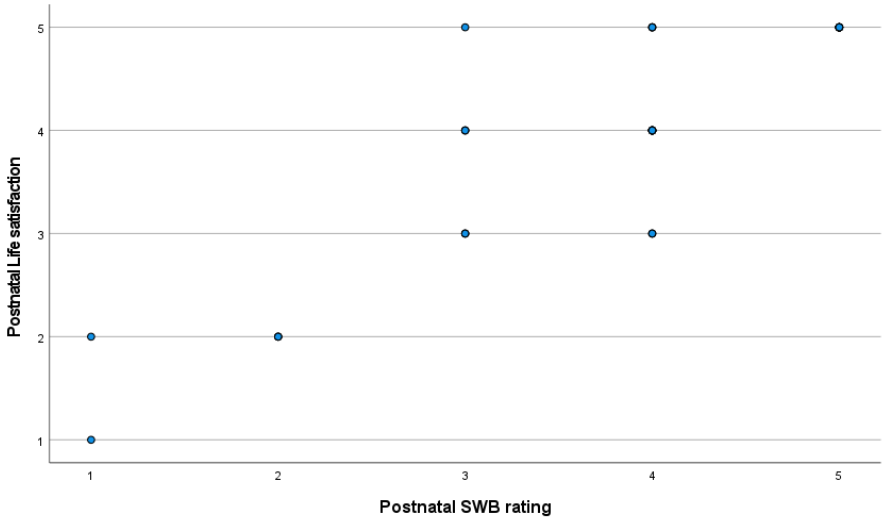
			Prenatal SWB rating	Satisfaction with maternity care system
Spearman's rho	Prenatal SWB rating	Correlation Coefficient	1,000	,304
		Sig. (2-tailed)	.	,064
		N	38	38
	Satisfaction with maternity care system	Correlation Coefficient	,304	1,000
		Sig. (2-tailed)	,064	.
		N	38	38



Correlations

			Postnatal Life satisfaction	Postnatal SWB rating
Spearman's rho	Postnatal Life satisfaction	Correlation Coefficient	1,000	,791**
		Sig. (2-tailed)	.	<,001
		N	38	38
	Postnatal SWB rating	Correlation Coefficient	,791**	1,000
		Sig. (2-tailed)	<,001	.
		N	38	38

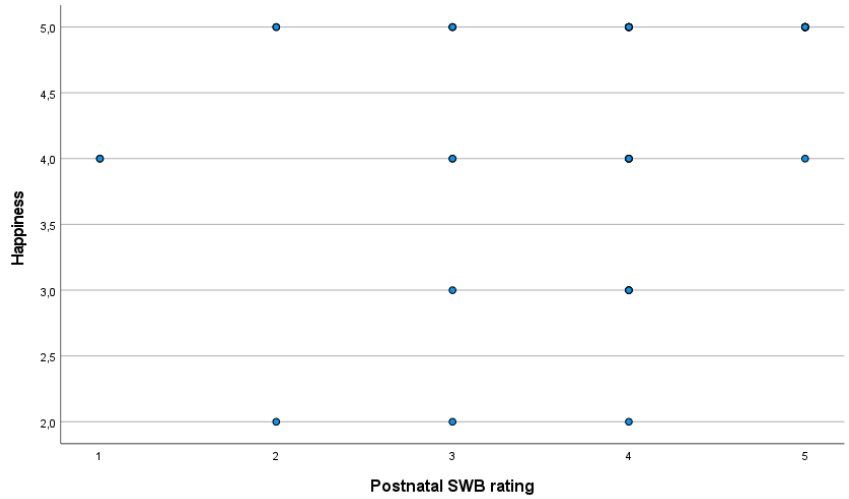
**. Correlation is significant at the 0.01 level (2-tailed).



Correlations

			Postnatal SWB rating	Happiness
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,360*
		Sig. (2-tailed)	.	,026
		N	38	38
	Happiness	Correlation Coefficient	,360*	1,000
		Sig. (2-tailed)	,026	.
		N	38	38

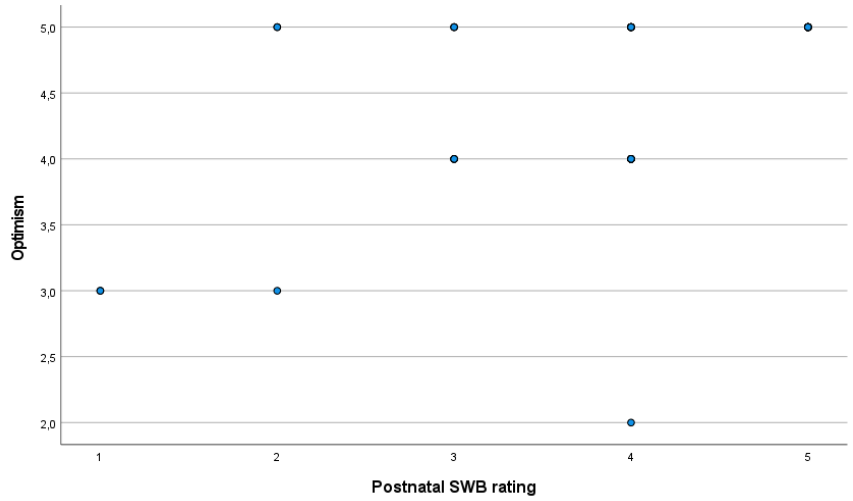
*. Correlation is significant at the 0.05 level (2-tailed).



Correlations

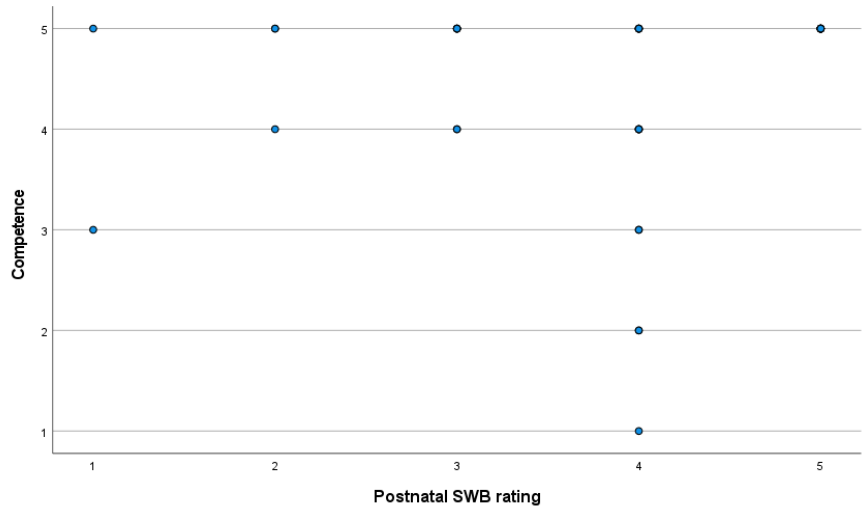
			Postnatal SWB rating	Optimism
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,475**
		Sig. (2-tailed)	.	,003
		N	38	38
	Optimism	Correlation Coefficient	,475**	1,000
		Sig. (2-tailed)	,003	.
		N	38	38

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



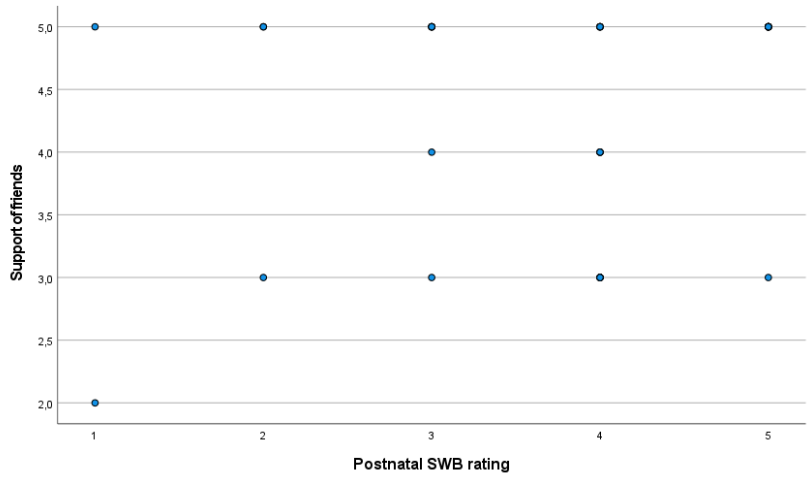
Correlations

			Postnatal SWB rating	Competence
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,208
		Sig. (2-tailed)	.	,211
		N	38	38
	Competence	Correlation Coefficient	,208	1,000
		Sig. (2-tailed)	,211	.
		N	38	38



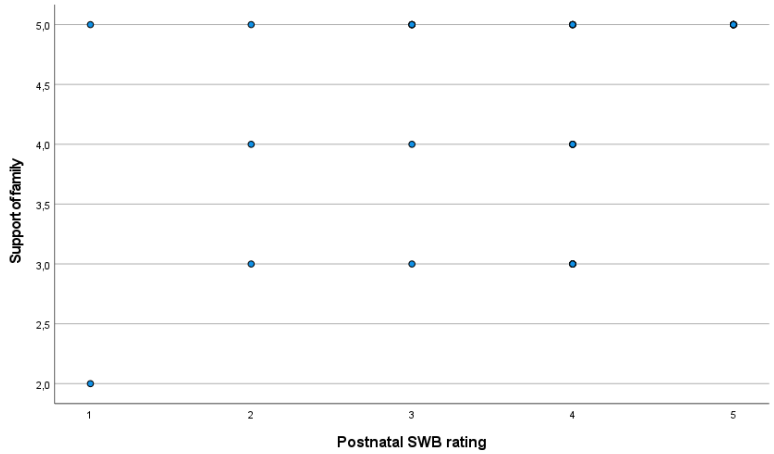
Correlations

			Postnatal SWB rating	Support of friends
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,174
		Sig. (2-tailed)	.	,296
		N	38	38
	Support of friends	Correlation Coefficient	,174	1,000
		Sig. (2-tailed)	,296	.
		N	38	38



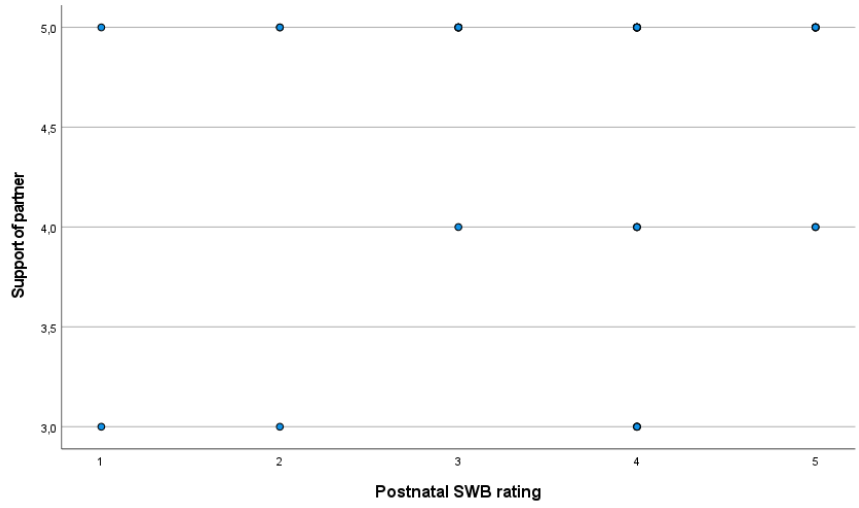
Correlations

			Postnatal SWB rating	Support of family
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,310
		Sig. (2-tailed)	.	,058
		N	38	38
	Support of family	Correlation Coefficient	,310	1,000
		Sig. (2-tailed)	,058	.
		N	38	38



Correlations

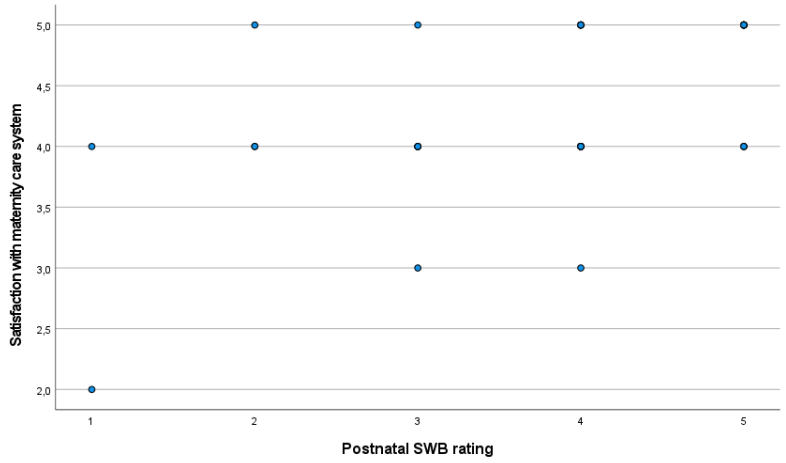
			Postnatal SWB rating	Support of partner
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,090
		Sig. (2-tailed)	.	,590
		N	38	38
	Support of partner	Correlation Coefficient	,090	1,000
		Sig. (2-tailed)	,590	.
		N	38	38



Correlations

			Postnatal SWB rating	Satisfaction with maternity care system
Spearman's rho	Postnatal SWB rating	Correlation Coefficient	1,000	,441**
		Sig. (2-tailed)	.	,006
		N	38	38
	Satisfaction with maternity care system	Correlation Coefficient	,441**	1,000
		Sig. (2-tailed)	,006	.
		N	38	38

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



APPENDIX 6: RESULTS BINARY LOGISTIC REGRESSION

Binary logistic regression: Dependent variable Prenatal SWB

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	68	100,0
	Missing Cases	0	,0
	Total	68	100,0
Unselected Cases		0	,0
Total		68	100,0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Poor	0
Good	1

Categorical Variables Codings

		Frequency	Parameter coding (1)
Information received	No	23	,000
	Yes	45	1,000
Migration status	Native dutch	38	1,000
	Immigrant	30	,000

Block 0: Beginning Block

Classification Table[a,b]

			Predicted		
			Prenatal SWB		
	Observed		Poor	Good	Percentage Correct
Step 0	Prenatal SWB	Poor	0	9	,0
		Good	0	59	100,0
	Overall Percentage				86,8

a. Constant is included in the model.

b. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	1,880	,358	27,609	1	<,001	6,556

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	Migration status(1)	,550	1	,458
		Age	,107	1	,744
		Number of children	1,463	1	,227

	Overall Statistics	1,764	3	,623

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	1,897	3	,594
	Block	1,897	3	,594
	Model	1,897	3	,594

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	51,257[a]	,028	,051

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than ,001.

Classification Table[a]

			Predicted		
			Prenatal SWB		
	Observed		Poor	Good	Percentage Correct
Step 1	Prenatal SWB	Poor	0	9	,0
		Good	0	59	100,0
	Overall Percentage				86,8

a. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Migration status(1)	,547	1,067	,262	1	,608	1,728
	Age	-,019	,048	,154	1	,695	,982
	Number of children	,625	,589	1,127	1	,288	1,868
	Constant	1,197	2,046	,343	1	,558	3,311

a. Variable(s) entered on step 1: Migration status, Age, Number of children.

Logistic Regression Model 2

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	68	100,0
	Missing Cases	0	,0
	Total	68	100,0
Unselected Cases		0	,0
Total		68	100,0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Poor	0
Good	1

Categorical Variables Codings

		Frequency	Parameter coding (1)
Information received	No	23	,000
	Yes	45	1,000
Prenatal courses	No	27	,000
	Yes	41	1,000
Migration status	Native dutch	38	1,000
	Immigrant	30	,000

Block 0: Beginning Block

Classification Table[a,b]

			Predicted		
			Prenatal SWB		
	Observed		Poor	Good	Percentage Correct
Step 0	Prenatal SWB	Poor	0	9	,0
		Good	0	59	100,0
	Overall Percentage				86,8

a. Constant is included in the model.

b. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	1,880	,358	27,609	1	<,001	6,556

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	Migration status(1)	,550	1	,458
		Age	,107	1	,744
		Number of children	1,463	1	,227
		Prenatal courses(1)	3,149	1	,076
		Information received(1)	2,391	1	,122
		Language barrier	,067	1	,795
	Overall Statistics		8,895	6	,180

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	9,643	6	,141
	Block	9,643	6	,141
	Model	9,643	6	,141

Classification Table[a]

			Predicted		
			Prenatal SWB		
	Observed		Poor	Good	Percentage Correct
Step 1	Prenatal SWB	Poor	0	9	,0
		Good	1	58	98,3
	Overall Percentage				85,3

a. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Migration status(1)	,771	1,159	,443	1	,506	2,163
	Age	-,033	,051	,426	1	,514	,967
	Number of children	1,229	,742	2,745	1	,098	3,417
	Prenatal courses(1)	1,905	,941	4,097	1	,043	6,722
	Information received(1)	-1,208	1,146	1,110	1	,292	,299
	Language barrier	-,204	1,313	,024	1	,877	,816
	Constant	,575	2,684	,046	1	,830	1,777

a. Variable(s) entered on step 1: Migration status, Age, Number of children, Prenatal courses, Information received, Language barrier.

Logistic Regression – Model 2

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	68	100,0
	Missing Cases	0	,0
	Total	68	100,0
Unselected Cases		0	,0
Total		68	100,0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Poor	0
Good	1

Categorical Variables Codings

		Frequency	Parameter coding (1)
Information received	No	23	,000
	Yes	45	1,000
Prenatal courses	No	27	,000
	Yes	41	1,000
Migration status	Native dutch	38	1,000

	Immigrant	30	,000

Block 0: Beginning Block

Classification Table[a,b]

			Predicted		
			Prenatal SWB		
	Observed		Poor	Good	Percentage Correct
Step 0	Prenatal SWB	Poor	0	9	,0
		Good	0	59	100,0
	Overall Percentage				86,8

a. Constant is included in the model.

b. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	1,880	,358	27,609	1	<,001	6,556

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	Migration status(1)	,550	1	,458
		Age	,107	1	,744
		Number of children	1,463	1	,227
		Prenatal courses(1)	3,149	1	,076
		Information received(1)	2,391	1	,122
	Overall Statistics		8,895	5	,113

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	9,619	5	,087
	Block	9,619	5	,087
	Model	9,619	5	,087

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	43,534[a]	,132	,243

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than ,001.

Classification Table[a]

			Predicted		
			Prenatal SWB		
	Observed		Poor	Good	Percentage Correct
Step 1	Prenatal SWB	Poor	0	9	,0
		Good	1	58	98,3
	Overall Percentage				85,3

a. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Migration status(1)	,825	1,108	,554	1	,457	2,281
	Age	-,034	,051	,445	1	,505	,966
	Number of children	1,224	,740	2,739	1	,098	3,402
	Prenatal courses(1)	1,896	,936	4,098	1	,043	6,656
	Information received(1)	-1,192	1,141	1,090	1	,296	,304
	Constant	,557	2,693	,043	1	,836	1,745

a. Variable(s) entered on step 1: Migration status, Age, Number of children, Prenatal courses, Information received.

Binary logistic regression: Dependent variable Postnatal SWB

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	68	100,0
	Missing Cases	0	,0
	Total	68	100,0
Unselected Cases		0	,0
Total		68	100,0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Poor	0
Good	1

Categorical Variables Codings

		Frequency	Parameter coding (1)
Migration status	Native dutch	38	1,000
	Immigrant	30	,000

Block 0: Beginning Block

Classification Table[a,b]

			Predicted		
			Postnatal SWB		
	Observed		Poor	Good	Percentage Correct
Step 0	Postnatal SWB	Poor	0	13	,0
		Good	0	55	100,0
	Overall Percentage				80,9

a. Constant is included in the model.

b. The cut value is ,500

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)

Step 0	Constant	1,442	,308	21,876	1	<,001	4,231

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	Migration status(1)	1,979	1	,160
		Age	,210	1	,647
		Number of children	,081	1	,776
	Overall Statistics		2,833	3	,418

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	2,802	3	,423
	Block	2,802	3	,423
	Model	2,802	3	,423

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	63,555[a]	,040	,065

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than ,001.

Classification Table[a]

			Predicted		
			Postnatal SWB		
	Observed		Poor	Good	Percentage Correct
Step 1	Postnatal SWB	Poor	0	13	,0
		Good	0	55	100,0
	Overall Percentage				80,9

a. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Migration status(1)	1,352	,905	2,234	1	,135	3,866
	Age	-,024	,041	,348	1	,555	,976
	Number of children	-,235	,405	,337	1	,562	,791

	Constant	2,425	1,734	1,957	1	,162	11,304

a. Variable(s) entered on step 1: Migration status, Age, Number of children.

Logistic Regression – Model 2

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	68	100,0
	Missing Cases	0	,0
	Total	68	100,0
Unselected Cases		0	,0
Total		68	100,0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Poor	0
Good	1

Categorical Variables Codings

		Frequency	Parameter coding (1)
Information received	No	23	,000
	Yes	45	1,000
Prenatal courses	No	27	,000
	Yes	41	1,000
Migration status	Native dutch	38	1,000
	Immigrant	30	,000

Block 0: Beginning Block

Classification Table[a,b]

			Predicted		
			Postnatal SWB		
	Observed		Poor	Good	Percentage Correct
Step 0	Postnatal SWB	Poor	0	13	,0
		Good	0	55	100,0
	Overall Percentage				80,9

a. Constant is included in the model.

b. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	1,442	,308	21,876	1	<,001	4,231

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	Migration status(1)	1,979	1	,160
		Age	,210	1	,647
		Number of children	,081	1	,776
		Language barrier	9,622	1	,002
		Prenatal courses(1)	1,856	1	,173
		Information received(1)	2,879	1	,090
	Overall Statistics		13,896	6	,031

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	12,628	6	,049
	Block	12,628	6	,049
	Model	12,628	6	,049

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	53,730[a]	,169	,272

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than ,001.

Classification Table[a]

Observed	Predicted

			Postnatal SWB		
			Poor	Good	Percentage Correct
Step 1	Postnatal SWB	Poor	4	9	30,8
		Good	3	52	94,5
	Overall Percentage				82,4

a. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Migration status(1)	,535	1,068	,250	1	,617	1,707
	Age	-,008	,046	,029	1	,865	,992
	Number of children	-,662	,497	1,774	1	,183	,516
	Language barrier	-2,555	1,105	5,351	1	,021	,078
	Prenatal courses(1)	-1,317	,934	1,990	1	,158	,268
	Information received(1)	,695	,710	,956	1	,328	2,003
	Constant	3,843	2,294	2,807	1	,094	46,669

a. Variable(s) entered on step 1: Migration status, Age, Number of children, Language barrier, Prenatal courses, Information received.

Logistic Regression – Model 3

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	68	100,0
	Missing Cases	0	,0
	Total	68	100,0
Unselected Cases		0	,0
Total		68	100,0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Poor	0
Good	1

Categorical Variables Codings

		Frequency	Parameter coding (1)
Information received	No	23	,000
	Yes	45	1,000
Migration status	Native dutch	38	1,000
	Immigrant	30	,000

Block 0: Beginning Block

Classification Table[a,b]

			Predicted		
			Postnatal SWB		
	Observed		Poor	Good	Percentage Correct
Step 0	Postnatal SWB	Poor	0	13	,0
		Good	0	55	100,0
	Overall Percentage				80,9

a. Constant is included in the model.

b. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	1,442	,308	21,876	1	<,001	4,231

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	Migration status(1)	1,979	1	,160
		Age	,210	1	,647
		Number of children	,081	1	,776
		Language barrier	9,622	1	,002
		Information received(1)	2,879	1	,090
	Overall Statistics		12,339	5	,030

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	10,386	5	,065
	Block	10,386	5	,065
	Model	10,386	5	,065

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	55,972[a]	,142	,227

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than ,001.

Classification Table[a]

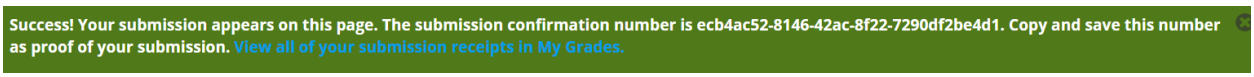
			Predicted		
			Postnatal SWB		
	Observed		Poor	Good	Percentage Correct
Step 1	Postnatal SWB	Poor	3	10	23,1
		Good	2	53	96,4
	Overall Percentage				82,4

a. The cut value is ,500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Migration status(1)	,651	1,058	,379	1	,538	1,918
	Age	-,016	,045	,119	1	,731	,985
	Number of children	-,332	,429	,601	1	,438	,717
	Language barrier	-2,320	1,072	4,684	1	,030	,098
	Information received(1)	,937	,690	1,842	1	,175	2,551
	Constant	2,335	1,992	1,374	1	,241	10,330

a. Variable(s) entered on step 1: Migration status, Age, Number of children, Language barrier, Information received.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