

**The Relationships between Personality Characteristics and Health Related Behaviors with
Pregnancy Outcomes**

By

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Table of Contents

List of Tables	iii
List of Appendices.....	iv
Abstract.....	v
Chapter One: Introduction	6
Chapter Two: Methods	10
Recruitment / Population.....	10
Measures.....	12
Procedure.....	14
Chapter Three: Results	16
Chapter Four: Discussion	19
References	22

List of Tables

Table 1. Pregnancy Health Behaviors.....	10
Table 2. Pregnancy Outcomes and Health Statuses.....	11
Table 3. Ethnicities	11
Table 4. Communities Resided.....	11
Table 5. Relationship Status	11
Table 6. Educations Levels.....	11
Table 7. Birth Weight Regression Model.....	17
Table 8. Gestational Length Regression Model.....	18

List of Appendices

Appendix A: Individual Survey Questions 26

Appendix B: Prenatal Distress Questionnaire 31

Appendix C: Brief Social Support Scale 33

Appendix D: Fetal Locus of Control Scale – Adapted 34

Appendix E: Trait and State Anxiety 36

Appendix F: Social Desirability Scale 41

Appendix G: Religiosity Composite Measure 43

Appendix H: Locus of Control Measure 44

Appendix I: Correlation Tables 45

Appendix J: Covariance Tables 48

Abstract

While 10% of all births in the United States are preterm, we only know the cause of 60% of cases. One pathway overlooked may be anxiety. The goal of this study was to identify how much variance factors previously identified to contribute to preterm birth had on the outcomes of infant weight and preterm birth. Data were collected retrospectively via an online survey from women who live in the United States who had given birth within the last six months. There were 348 participants. For each of the outcome measures a multiple regression was run with three groupings. The first grouping was demographic variables. For the second grouping health variables were added to demographic variables. The third group included demographic variable, health variables and psychological variables. In the multiple regressions state and trait anxiety were significant predictors for infant birth weight even when accounting for the variance of health and demographics where women with more trait anxiety gave birth to higher weight infants and women with more state anxiety gave birth to lower weight infants. State and trait anxiety were also marginally significant for gestational length with the same relationship of trait increasing and state decreasing gestational length. While the total variances accounted for by the regression were small, trait and state anxiety are interesting as it shows that type or level of anxiety may play a role in whether anxiety contributes to poor birth outcomes.

The Relationships between Personality Characteristics and Health Related Behaviors with Pregnancy Outcomes

Chapter One: Introduction

Despite a decreasing rate of mother and infant death around childbirth, many dangers remain. According to the Center of Disease Control and Prevention, premature birth accounts for 10% of all births and 17% of all infant deaths in the United States. Preterm birth often has lasting effects. Infants born prematurely often experience breathing problems, feeding difficulties, cerebral palsy, developmental delays, vision problems, and/or hearing problems. Premature infants usually have lower birth weights which carry additional risks (Preterm Birth | Maternal and Infant Health | Reproductive Health | CDC, 2019). For 40% of these preterm births the cause is unclear (Goldenberg, Culhane, Iams, & Romero, 2008). To reduce the likelihood of premature birth, we need to better understand its causes. One possible cause generally overlooked is the mental health of the mother.

The correlation between stressors and premature birth is well established. The much-supported pathway for this relationship is that chronic psychosocial stressors alter immune functions. A pregnant woman's mental health biochemically influences fetal development through stress reactions, where stressors activate the endocrine system's hypothalamic-pituitary-adrenal (HPA) axis (Coussons-Read, 2012). The HPA axis changes a person's biological functioning by producing stress hormones. These include cortisol, corticotropin-releasing hormones, and catecholamine neurotransmitters. These stress hormones may help the individual deal with the current stressor. However, possibly helpful in the short term, chronic activation

often has negative effects. When the HPA axis is chronically activated, these stress hormones are likely to have adverse effects such as increased inflammatory activity, reduced resistance to disease, and increased risk of cardiovascular disease, some cancers, and dementia, along with increased severity of viral illnesses (Coussons-Read, 2012). During a women's pregnancy these inflammatory causing stress hormones are down-regulated, so that the mother's body does not reject the fetus as it is a foreign object in the individual's body. These stress hormones will increase at the end of pregnancy in order to prepare a woman's body for birth. Therefore, fluctuations in these hormones influence gestational timing.

Since these hormones influence gestation, the HPA axis is down-regulated throughout the pregnancy to avoid early rejection of the fetus. Even though the HPA axis is down-regulated, it can still be activated due to stressors. The HPA axis has the same bodily effect on pregnant women as on non-pregnant individuals. This includes an increased immune response (Coussons-Read, 2012). High levels of HPA axis activation during pregnancy can have the effect of reducing gestation and therefore increasing the chance of preterm birth. Several studies have supported this pathway. Increased immune response from HPA axis activation is similar to the pathway which explains the correlation between stress reactivity and preterm births (Dunkel Schetter, 2011; Kramer, Lydon, Seguin, Goulet, Kahn, McNamara, Platt, 2009; Lobel, Cannella, Graham, DeVincent, Schneider, & Meyer, 2008).

When people have high stress reactivity for an amount of time, we label this as anxiety. Therefore, anxiety levels are a common measure to approximate chronic stress activation. Different types of anxiety have been found to have different effects. For instance, subjective stress and pregnancy specific stress predict preterm birth more accurately than other types of anxiety (Beijers, Buitelaar, & Weerth, 2014). High anxiety events such as trauma during

pregnancy have also been shown to increase risk (Bruckner, Catalano, & Ahern, 2010; Livingston, Otado, & Warren, 2003). It is important to note that these studies measured anxiety levels at the end of a woman's pregnancy. Stressors have the greatest effect on preterm birth and low birth weight during the 5th and 6th months of pregnancy (Class, Lichtenstein, Långström, & D'Onofrio, 2011). Trauma magnifies the impact of maternal prenatal mood on birthweight (Blackmore, Putnam, Pressman, Rubinow, Putnam, Matthieu, & Oconnor, 2016). It is possible that subjective stress and pregnancy specific stress have a similar relationship where they are increasing bodily inflammation that is already there from chronic stress or depression. Loomans, van Dijk, van Eijsden, Gemke, and van den Bergh (2013) found that women with high depression and high anxiety, regardless of additional parenting or work stressors, were related to adverse birth outcomes.

Trauma, depression, and anxiety may also be decreasing gestational age through more indirect pathways. These factors may increase certain high-risk pregnancy behaviors. High-risk pregnancy behaviors such as smoking increase inflammatory hormones without activating the HPA axis. For instance, pregnant women with PTSD are significantly more at risk to engage in smoking, alcohol consumption, substance use, poor prenatal care and excessive weight gain (Morland, Goebert, Onoye, Frattarelli, Derauf, Herbst, & Friedman, 2007). Therefore, adverse birth outcomes may not be from anxiety itself but rather an increase of pro-inflammatory behaviors. It is also possible that there are additional variables. Lopez and Seng (2014) found that cortisol levels in pregnant women who smoked and had PTSD were significantly greater than PTSD or smoking alone.

How much of this inflammation is due to psychological factors themselves rather than the inflammatory behaviors they influence? Lobel, Cannella, Graham, DeVincet, Schneider, and

Meyer (2008) used structural equation modeling to map how stress contributes to preterm birth with respect to these behaviors. They found that pregnancy specific stress was the best predictor of preterm birth. In addition, pregnancy specific stress significantly correlated with increased caffeine intake and unhealthy eating, as well as decreased healthy eating, less frequent exercise and prenatal vitamin compliance. Stress also correlated with increased cigarette usage which correlates with low birth weight. Their multifactor model accounted for 10% of the variance in gestational age and 33% of the variance in birth weight (Lobel et al, 2008). Mitchell, Porter, and Christian (2018) found that for pregnant women who had experienced childhood trauma, body mass index or BMI was a mediating factor between abuse and increased immune response. Excessive gestational weight gain was also associated with perinatal depression, while self-efficacy and an internal locus of control correlated with lower levels of gestational weight gain (Wright, Charmaine, Bilder, DeBlasis, Mogul, Rubin, David, & Shea, 2013). Strong coping skills have also been found to correlate with decreased inflammation (Steffen, Ortiz, Tidler, & Smith, 2012). There are numerous factors that should be taken into account when looking at the influence of psychological factors on adverse outcomes in pregnancy.

Our study continues the exploration of potential factors and relationships involved in the association between psychological factors and adverse birth outcomes. Specifically, we will examine how much variance can be attributed to each of these factors the relative impact of psychological factors versus other inflammatory health behaviors. Our hypothesis is that most of the variance will attributed to health behaviors rather than to anxiety or psychological factors.

Chapter Two: Methods

Recruitment / Population

Our sample was recruited through the web-based survey tool, Turk Prime, which allowed access to a large, demographically diverse sample. Participants were compensated \$3.25 through the web platform. Seven hundred people attempted to take the survey. Out of those 700, 21 did not finish, 11 did not consent, 6 were male, and 304 had not given birth within the last six months. An additional 10 were removed for being high in social desirability which also eliminated outliers. The qualified sample consisted of 348 participants.

It took an average of 22.7 minutes to complete the survey. The average age was 31.26. Substance use was low with less than 10% reporting use during pregnancy on each substance asked with the exception of caffeine (table 1). Almost all the participants used a multivitamin (table 1). The sample had a variety of pregnancy complications and outcomes (table 2). Most of the participants identified as Caucasian with the rest mainly identifying as African American or Hispanic (table 3). Most participants reported living in suburban areas (table 3) There was also a range of reported relationship statuses and educational levels (table 5 & 6).

Multivitamin	95%
Probiotic	20%
Caffeine	71%
Alcohol	5%
Illegal Drugs	3%
Cigarettes	11%
Marijuana	10%

Table 1. Pregnancy Health Behaviors

Twins	3%
Planned Cesarean	16%
Unplanned Cesarean	14%
Unplanned Procedures	7%
Preterm birth	14%
Gestational Diabetes	11%
High Blood Pressure	37%
Pregnancy was Planned	55%
First Pregnancy	37%

Table 2. Pregnancy Outcomes and Health Statuses

Caucasian	68%
African American	10%
Hispanic	9%
Asian	2%
Mixed	3%
Native American	<1%

Table 3. Ethnicities

Rural	26%
Suburban	39%
Small city	19%
Large city	16%

Table 4. Communities Resided

Single	7%
Living with significant other	22%
Not living with significant other	4%
Married	61%
Separated	2%
Divorced	3%

Table 5. Relationship Status

Some High School	<1%
High School	14%
Some College	32%
Associates Degree	16%
Bachelors Degree	27%
Graduate Degree	9%

Table 6. Educations Levels

Measures

To test our hypothesis that inflammatory health behaviors contributed more to the variance than psychological variables, several measures were selected. Pregnancy outcome measures were length of gestation, birth weight, preterm birth and having unplanned or planned cesareans. Demographic information collected was ethnicity, level of education, age, marital status, and community residence. Questions about health and health behaviors during pregnancy include weight, gestational diabetes, high blood pressure, prenatal vitamin use, probiotic use, drug use, diet, cardio exercise, strength exercise, alcohol use, caffeine use, and smoking (table 9). All questions and measures can be found in the appendix.

Five published psychological scales were administered in the following order: Prenatal Distress Questionnaire, Brief Social Support Scale, Fetal Health Locus of Control Scale—Adapted, State-Trait Anxiety Inventory for Adults, Social desirability scale, Religiosity Composite Measure and Locus of Control Measure. All of these were chosen due to good reliability and validity. They were also chosen for being brief in nature to keep our survey manageable for participants.

The first measure was the Prenatal Distress Questionnaire (table 10). It was an important measure to include as this measure was commonly cited in past studies to contribute to poor pregnancy outcomes (Alderdice, & Lynn, 2011). It was 12 items where participants respond to on a 5 point scale from strongly agree (1) to strongly disagree (5). High scores indicated more pregnancy specific anxiety.

The Brief Social Support Scale (table 11) was also added to understand the social emotional environment during pregnancy (Beutel, Brähler, Wiltink, Michal, Klein, Jünger, &

Tibubos, 2017). It was 6 items with a 4 point response from never (1) to always (4) (Beutel & et al, 2017). High scores indicated having more social support during pregnancy.

The Fetal Health Locus of Control Scale—Adapted (table 12) was a more specific locus of control measure that related directly pregnancy (Soliday, Strahm, & Mammenga, 2016). This was included to appraise the functioning of locus of control on the outcome variables. This measure contained 18 items on a 9 point response from strongly agree (1) to strongly disagree (9) (Soliday, Strahm, & Mammenga, 2016). Within the scale had three categories: internal, powerful others and chance. High scores in one of these meant that participants were high in that category.

The State-Trait Anxiety Inventory for Adults (tables 13 & 14) was included to measure anxiety (Spielberger, 1983). It contains 40 items, with 20 items for state and 20 items for trait, on a 4 point scale from not at all (1) to very much so (4) (Spielberger, 1983). High scores in either the trait or state category indicates having high anxiety in that category.

In order to identify truthfulness of responses, a Social desirability scale (table 15) was added (Stöber, 2001). It contains 17 items that the participants respond either true (1) or false (2). High scores in this category may indicate participants are pretending to be better than they are.

A Religiosity Composite Measure was added to see its effect the outcome (Bharmal, Kaplan, Shapiro, Kagawa-Singer, Wong, Mangione, & McCarthy, 2013). It contained 3 items with a 5 point response from strongly agree (1) to strongly disagree (5) with higher score indicating less a participant is less religious.

The Locus of Control Measure (table 17) was included as a more general locus of control measure in order to compare to the specific Fetal Health Locus of Control (Wang, & Su, 2013). This measure had 4 items on a 5 point response from strongly agree (1) to strongly disagree (5)

(Soliday, Strahm, & Mammenga, 2016). High scores indicate that a participant has more internal than external loci of control.

Procedure

Participants were recruited via the M-Turk website. The study was listed, with its compensation amount, on the website for participants to choose to contribute. The study was listed for two weeks. Participants were provided a consent sheet that described risks, benefits, inclusion/exclusion criteria, the study's purpose, expected completion time, confidentiality, and contact information. They were reminded that the survey was voluntary and that they were able to stop at any time. Once they consented, the survey asked for age, gender, and whether they have given birth within the last six months. If they do not meet these criteria, they were excluded from participation. If they pass the inclusion criteria, they had the chance to complete the rest of the survey. At the end of the survey they were thanked for their time and reminded about the information given in the consent form. They were then compensated via M-Turk. The survey platform assigns each survey a random number, so we are not able to link any survey to an individual.

After the data was collected, we reviewed the resulting correlation tables. From these baby weight and gestational length were chosen to be ran as multiple regression since they were ratio/interval outcome variables. Yes/No health behavior questions were calculated into a total health behavior score with higher scores meaning doing more behaviors that leads to poorer outcomes such as smoking. Gestational diabetes and high blood pressure were calculated into a total health status score with higher scores meaning that they did not have those health complications. Correlated health characteristics and stress measures were entered as predictor

Running Head: PERSONALITY CHARACTERISTICS AND HEALTH RELATED BEHAVIORS IN PREGNANCY

variables for outcomes variables of baby weight, length of pregnancy, preterm birth, planned and unplanned cesarean. Baby weight and length of pregnancy were entered as dependent variables in individual multiple regression. Two groups were entered with demographic variables in the first group followed by the remaining variables that were of interest.

Chapter Three: Results

Three multiple regressions were run to predict infant's birth weight with three different groupings inputted. This gave us our Birth Weight Regression Model (table 7). The first grouping included demographic variables: age, educational level, ethnicity, community, and primiparous status. Demographic variables were found to significantly contribute to infant birth weight ($R^2=.060$, $F(8, 308) = 2.453$, $p < .05$). Women who had given birth before gave birth to higher weight infants with the standardized coefficient being small ($\beta = .117$, $p < .005$). Women who did not identify as being white gave birth to lower weight infants with the standardized coefficient being small ($\beta = -.218$, $p < .05$).

In the second grouping a general health behavior measure and medical health status were added to the predictors and found to be a significant inclusion ($R^2=.073$, $F(10, 306) = 2.121$, $p < .05$). In this grouping medical health status was found to be a significant predictor of lower birth weights with the standardized coefficient being small ($\beta = .115$, $p < .05$).

The final grouping which included psychological measures was found to be significant ($R^2=.127$, $F(20, 296) = 1.854$, $p < .005$). Women with more trait anxiety gave birth to higher weight infants with the standardized coefficient being small ($\beta = .197$, $p < .05$) and women with more state anxiety gave birth to lower weight infants with a small effect size ($\beta = -.272$, $p < .005$). Women with lower pregnancy specific stress gave birth to lower weight infants at a marginal level with the standardized coefficient being small ($\beta = -.133$, $p < .1$).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.245 ^a	.060	.035	1.35052	.060	2.453	8	308	.014
2	.270 ^b	.073	.042	1.34563	.013	2.121	2	306	.122
3	.357 ^c	.127	.068	1.32725	.055	1.854	10	296	.051

- a. Predictors: (Constant), Was this your first pregnancy?, What is your highest level of education completed?, nohispanic, notblack, How would you describe your community?, What is your relationship status?, What is your age?, notwhite
- b. Predictors: (Constant), Was this your first pregnancy?, What is your highest level of education completed?, nohispanic, notblack, How would you describe your community?, What is your relationship status?, What is your age?, notwhite, healthbehavior, healthoverall
- c. Predictors: (Constant), Was this your first pregnancy?, What is your highest level of education completed?, nohispanic, notblack, How would you describe your community?, What is your relationship status?, What is your age?, notwhite, healthbehavior, healthoverall, fetalocusinternal, fetalocuspowerfulothers, stateanxiety, fetalocuschance, socialdesirability, religiosity, Socsupport, locusofcontrol, PregStress, traitanxiety

Table 7. Birth Weight Regression Model

Multiple regressions were also run to predict weeks of gestation with the same three grouping inputted as was done when predicting infant’s birth weight. This gave us our Gestational Length Regression Model (table 8). While no overall effect was found in the first group ($R^2=.012$, $F(8, 311) = 1.473$, $p=.166$), women who had given birth before was significant with the standardized coefficient being small ($\beta = .148$, $p<.005$) in that women who have given birth before had longer pregnancies.

In the second grouping, the addition of the general health measure and the medical health status resulted in a significant inclusion raising the F change ($R^2=.032$, $F(10, 309) = 4.243$, $p<.05$). Health overall was again significant with the standardized coefficient being small ($\beta = .166$, $p<.005$) such that high blood pressure and gestational diabetes predicted fewer weeks of gestation.

The third model demonstrated that the addition of psychological measures contributed to the prediction ($R^2=.101$, $F(20, 299) = 1.278$, $p<.05$). State and trait anxiety were marginally significant such that women with more trait anxiety had longer pregnancies with the standardized

coefficient being small size ($\beta = .194, p < .1$) and women with more state anxiety had shorter pregnancies with the standardized coefficient being small ($\beta = -.169, p < .1$).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.191 ^a	.037	.012	2.97052	.037	1.473	8	311	.166
2	.250 ^b	.062	.032	2.94002	.026	4.243	2	309	.015
3	.317 ^c	.101	.041	2.92688	.038	1.278	10	299	.242

a. Predictors: (Constant), Was this your first pregnancy?, nothispanic, What is your highest level of education completed?, notblack, How would you describe your community?, What is your relationship status?, What is your age?, notwhite

b. Predictors: (Constant), Was this your first pregnancy?, nothispanic, What is your highest level of education completed?, notblack, How would you describe your community?, What is your relationship status?, What is your age?, notwhite, healthbehavior, healthoverall

c. Predictors: (Constant), Was this your first pregnancy?, nothispanic, What is your highest level of education completed?, notblack, How would you describe your community?, What is your relationship status?, What is your age?, notwhite, healthbehavior, healthoverall, fetalocusinternal, fetalocuspowerfulothers, stateanxiety, fetalocuschance, socialdesirability, religiosity, Socsupport, locusofcontrol, PregStress, traitanxiety

Table 8. Gestational Length Regression Model

Chapter Four: Discussion

This study supports the conclusion that anxiety contributes independently to gestational length and infant weight. While variances accounted for by the predictors were small, even a small impact on increasing weight and gestation make marked effects on later outcomes (Lobel, Cannella, Graham, DeVincent, Schneider, & Meyer, 2008). Having many factors that make a small effect also may explain why it is difficult to track down specific reasons for low birth weight and shorter gestational length. A combination of several factors may be the best predictor.

Our data supported trait and state anxiety being the best psychological predictors of gestational length and infant birth weight. From correlational analysis, we found both higher trait and state anxiety individually increased the likelihood of lower birth weights and shorter gestational lengths. When trait and state anxiety were analyzed together in our multiple regression models, we found that trait anxiety did not contribute to lower birth weight or shorter gestational length. Trait anxiety's unique variance correlated in the opposite direction than when alone. In the gestational length and birth weight models, trait anxiety increased gestational length and birth weight.

This trait and state anxiety relationship in pregnancy has not been identified in previous research, there are several possible explanations. One possible explanation is that trait anxiety in pregnancy only contributes to negative outcomes when it reaches a certain level (Hosseini, Biglan, Larkby, Brooks, Gorin, & Day, 2009; Pluess, Bolten, Pirke, & Hellhammer, 2010). Having severe trait anxiety would increase the likelihood of also having state anxiety. Therefore,

the unique variance attributed to trait anxiety in our gestational length and birth weight models could be thought of as measuring low or medium trait anxiety levels.

Perhaps people with low levels of trait anxiety choose better health behaviors than people without any trait anxiety. This would explain why trait anxiety has a positive correlation with outcomes in our gestational length and birth weight models rather than having no relationship when state anxiety is included in the gestational length and birth weight models. Perhaps women with low levels of trait anxiety are more likely to go to their doctor, eat healthier, and/or avoid other poor contributing behaviors such as alcohol. Women without trait anxiety may wait longer before going to the doctor or be more open to consuming alcohol or caffeine.

Another explanation for our findings is that people with trait anxiety may develop a habituation towards anxiety such that some women who have trait anxiety may become accustomed stressful stimuli such that pregnancy is not a stressful event. These women would have developed a resiliency. Research shows that optimism is a protect trait against poor birth outcomes (Catov, Abatemarco, Markovic, & Roberts, 2010). It is possible that resiliency plays a similar role. In women with trait anxiety who have not developed a resiliency would be more prone to high levels of anxiety throughout their pregnancy which would follow the more expected route (Millimet & Gardner, 1972; Huizink, Menting, Oosterman, Verhage, Kunseler, & Schuengel, 2014).

It is important to recognize that there are many contributors to poor pregnancy outcomes. Medical professions should continue to screen for factors such as trait and state anxiety as contributing factors. Our research adds additional considerations. Trait anxiety was a positive factor for better outcomes like higher birth weight and longer gestation in our gestation length and birth weight models. Therefore, there should be a focus on not completely eliminating

anxiety but rather how to positively use good stress and anxiety towards increasing healthy behaviors as well as a focus on developing resiliency. Eliminating all anxiety in pregnant women may be harmful as evidence by how trait anxiety increased gestational length and birth weight in our model. Additional research should be conducting to establish possible explanations for trait anxiety leading to positive outcomes.

Women who give birth to premature infants have higher levels of anxiety (Hosseini, Biglan, Larkby, Brooks, Gorin, & Day, 2009). This is a limitation to our models of gestational length and birthweight since data was collected after women gave birth. Women who had shorter gestation and smaller infants would report greater trait and state anxiety meaning that our measure may not be the ideal reflection of what was happening during pregnancy. The argument against this effect playing too much of a role in this model was that pregnancy specific anxiety, which exclusively refers to events during pregnancy, had a similar relationship with trait anxiety as the state anxiety measure.

Considerations in interpreting our results are that we had a mostly Caucasian sample that was sourced solely from the online platform M-turk. This may have contributed to a bias in the data. In addition, data was also only measured once. Participants may have filled out these measures either immediately after birth or up to six months after birthing their infants. In an ideal scenario there would have been multiple measures taken. Future studies may also want to mark cortisol or other inflammatory markers in participants in addition to self-reported data.

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Appendix A: Individual Survey Questions

What is your age?

Skip To: End of Survey If What is your age? < 18

What is your gender?

- Male (1)
- Female (2)
- other (3)

Skip To: End of Survey If Male

Have you given live birth within the last 6 months?

- Yes (1)
- No (2)

Skip To: End of Survey If No

How much did you weigh in lbs at the end of your pregnancy?

What is your height in feet?

In your recent pregnancy, did you have high blood pressure?

- Yes (1)
- No (2)

In your recent pregnancy, did you have gestational diabetes?

- Yes (1)
- No (2)

Was this recent pregnancy planned?

- Yes (1)
- No (2)

Was this your first pregnancy?

- Yes (1)
- No (2)

Display This Question:

If Was this your first pregnancy? = No

If this was not your first pregnancy, how many years has it been since your previous?

Display This Question:

If Was this your first pregnancy? = No

Was the pregnancy before the last to full term?

- Yes (1)
- No (2)

Display This Question:

If Was this your first pregnancy? = No

Did the pregnancy before the last have any of the following:

- you were induced (1)

- planned cesarean (2)
- unplanned cesarean (3)
- preterm labor (4)
- assisted delivery (ex. use of forceps) (5)
- eclampsia (6)
- other complication not listed (7)

How many other children live with you below the age of 18?

Do you think that stress can affect pregnancy?

- Yes (1)
- No (2)

Do you think that stress can affect a baby who is in the womb?

- Yes (1)
- No (2)

During your recent pregnancy, did you take a multivitamin?

- Yes (1)
- No (2)

Display This Question:

If During your recent pregnancy, did you take a multivitamin? = Yes

How often did you take a multivitamin?

- twice a day (1)
- once a day (2)
- every other day (3)
- once a week (4)
- a couple times a month (5)

Display This Question:

If During your recent pregnancy, did you take a multivitamin? = Yes

When did you start taking a multivitamin?

- Before I was pregnant (1)
- 1st trimester (2)
- 2nd trimester (3)
- 3rd trimester (4)

During your recent pregnancy, did you take a probiotic?

- Yes (1)
- No (2)

Display This Question:

If During your recent pregnancy, did you take a probiotic? = Yes

How often did you take it?

- twice a day (1)
- once a day (2)
- every other day (3)
- once a week (4)
- a couple times a month (5)

Display This Question:

If During your recent pregnancy, did you take a probiotic? = Yes

When did you start taking a probiotic?

- before I was pregnant (1)
- 1st trimester (2)
- 2nd trimester (3)
- 3rd trimester (4)

Did you consume caffeine during your recent pregnancy?

- Yes (1)
- No (2)

Display This Question:

If Did you consume caffeine during your recent pregnancy? = Yes

One average how often did you consume a serving of caffeine?

- More than two a day (1)
- Two a day (2)
- Once a day (3)
- Every other day (4)
- Once a week (5)
- A couple times a month (6)

During your recent pregnancy did you consume any alcohol?

- Yes (1)
- No (2)

Display This Question:

If During your recent pregnancy did you consume any alcohol? = Yes

One average how often did you consume a serving of alcohol?

- more than two a day (1)
- two a day (2)
- once a day (3)
- every other day (4)
- once a week (5)
- a couple times a month (6)

During your recent pregnancy, did you take any non-prescribed drugs such as cocaine or methamphetamine?

- Yes (1)
- No (2)

Display This Question:

If During your recent pregnancy, did you take any non-prescribed drugs such as cocaine or methamphet... = Yes

What did you use?

Display This Question:

If During your recent pregnancy, did you take any non-prescribed drugs such as cocaine or methamphet... = Yes

How often did you use non-prescribed drugs?

- more than twice a day (1)
- twice a day (2)
- once a day (3)
- every other day (4)

once a week (5)

a couple times a month (6)

On a scale from 0-10 (with 10 being excellent), how would you rate your diet during pregnancy?

0 (0) 1 (1) 2 (2) 3 (3) 4 (4) 5 (5) 6 (6) 7 (7) 8 (8) 9 (9) 10 (10)

During an average week of your third trimester in your recent pregnancy, how many times did you participate in sports or exercise for at least 20 minutes that made you sweat and breathe hard?

During an average week of your third trimester in your recent pregnancy, how many times did you do exercises to strengthen your muscles such as push-ups or weight lifting?

Have you ever smoked cigarettes or cigars?

Yes (1)

No (2)

Display This Question:

If Have you ever smoked cigarettes or cigars? = Yes

What was the most amount of cigarettes or cigars you ever smoked per week?

Did you smoke cigarettes or cigars during your recent pregnancy?

Yes (1)

No (2)

Display This Question:

If Did you smoke cigarettes or cigars during your recent pregnancy? = Yes

On average, how many times during your pregnancy did you smoke a cigar or cigarette per week?

Did you smoke marijuana during your recent pregnancy?

yes (1)

no (2)

Display This Question:

If Did you smoke marijuana during your recent pregnancy? = yes

On average how many times did you smoke marijuana during your pregnancy per week?

What is your highest level of education completed?

some high school (1)

high school graduate / GED (2)

some college (3)

associates degree (4)

bachelor's degree (5)

graduate/professional degree (6)

What ethnicity do you identify as?

What is your relationship status?

single (1)

living with significant other (2)

current significant other but, not married or living with (3)

married (4)

separated (5)

divorced (6)

How would you describe your community?

Rural (1)

- Suburban (2)
- Small City (3)
- Large City (4)

How many weeks along were you when you gave birth to your most recent child?

During your recent birth, were you induced?

- Yes (1)
- No (2)

Did you have twins?

- Yes (1)
- No (2)

Did you have a planned cesarean?

- Yes (1)
- No (2)

Did you have an unplanned cesarean?

- Yes (1)
- No (2)

During labor did you feel supported by the medical staff?

- Definitely yes (1)
- Probably yes (2)
- Probably not (3)
- Definitely not (4)

Q46 Did you have any additional unplanned procedures such as the use of forceps?

- Yes (1)
- No (2)

What was your baby's birth weight?

Do you plan on having more children in the future?

- Definitely yes (1)
- Probably yes (2)
- Probably not (3)
- Definitely not (4)

Was your baby considered preterm?

- Yes (1)
- No (2)

Appendix B: Prenatal Distress Questionnaire

Remembering the last few months of your pregnancy, respond to the following questions with how much each statement was like you

I find weight gain during pregnancy troubling

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Physical symptoms of pregnancy, such as nausea, vomiting, swollen feet or backache, irritate me

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

I am worried about handling the infant when I first come home from the hospital

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Emotional ups and downs during pregnancy annoy me

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

I am troubled that my relationships with other people important to me are changing due to my pregnancy

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

I am worried about eating healthy foods and a balanced diet for the infant

- Strongly agree (1)
- Somewhat agree (2)

- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Overall, the changes in my body shape and size during pregnancy bother me

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

I am concerned that having a new infant will alter my relationship with the infant's father

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

I worry about having an unhealthy infant

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

I am anxious about labour and childbirth

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

The possibility of premature childbirth frightens me

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

I am worried that I might not become emotionally attached to the infant

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Appendix C: Brief Social Support Scale

Remembering the last few months of your pregnancy, respond to the following questions with how like you the statement was

If you needed it, how often was someone available to take you to the doctor if you needed it

- never (1)
- occasionally (2)
- mostly (3)
- always (4)

If you needed it, how often was someone available to prepare your meals if you were unable to do it yourself

- Never (1)
- occasionally (2)
- mostly (3)
- always (4)

If you needed it, how often was someone available to help with daily chores if you were sick

- never (1)
- occasionally (2)
- mostly (3)
- always (4)

If you needed it, how often was someone available to give you good advice about a crisis

- never (1)
- occasionally (2)
- mostly (3)
- always (4)

If you needed it, how often was someone available to confide in or talk to about yourself or your problems

- never (1)
- occasionally (2)
- mostly (3)
- always (4)

If you needed it, how often was someone available who understands your problems

- never (1)
- occasionally (2)
- mostly (3)
- always (4)

Appendix D: Fetal Locus of Control Scale – Adapted

Remembering the last few months of your pregnancy, how much do you agree or disagree with the following statements:

Prenatal classes greatly increase odds of normal baby

- Strongly agree (1)
- Strongly disagree (9)

Unborn child's health affected by diet

- Strongly agree (1)
- Strongly disagree (9)

Consulting doctor when sick is best for unborn child

- Strongly agree (1)
- Strongly disagree (9)

What I do can affect my baby's health

- Strongly agree (1)
- Strongly disagree (9)

Caring for self before pregnancy helps child to be born healthy

- Strongly agree (1)
- Strongly disagree (9)

Before pregnancy, I would learn specifics I should do

- Strongly agree (1)
- Strongly disagree (9)

Fate will determine whether my child will be normal

- Strongly agree (1)
- Strongly disagree (9)

If my baby is unhealthy nature intended it

- Strongly agree (1)
- Strongly disagree (9)

Laws of nature determine if my child will be normal

- Strongly agree (1)
- Strongly disagree (9)

God will determine the health of my child

- Strongly agree (1)
- Strongly disagree (9)

Fate determines the health of my unborn child

- Strongly agree (1)
- Strongly disagree (9)

Miscarriage means that baby was not destined to live

- Strongly agree (1)
- Strongly disagree (9)

Baby will be born healthy only if I do all my doctor says

- Strongly agree (1)

- o Strongly disagree (9)
- Professional care is responsible for unborn baby's health
- o Strongly agree (1)
 - o Strongly disagree (9)
- Health professionals are responsible for child's health
- o Strongly agree (1)
 - o Strongly disagree (9)
- Doctors, nurses only ones competent to advise on pregnancy
- o Strongly agree (1)
 - o Strongly disagree (9)
- Baby's health is in the hands of health professionals
- o Strongly agree (1)
 - o Strongly disagree (9)
- Only health professionals can say what I should do
- o Strongly agree (1)
 - o Strongly disagree (9)

Appendix E: Trait and State Anxiety

State Anxiety

Right now, how well does each of the following statements describe you

I feel calm

- not at all (1)
- somewhat (2)
- moderately so (3)
- very much so (4)

I feel secure

- not at all (1)
- somewhat (2)
- moderately so (3)
- very much so (4)

I am tense

- not at all (1)
- somewhat (2)
- moderately so (3)
- very much so (4)

I feel strained

- not at all (1)
- somewhat (2)
- moderately so (3)
- very much so (4)

I feel at ease

- not at all (1)
- somewhat (2)
- moderately so (3)
- very much so (4)

I feel upset

- not at all (1)
- somewhat (2)
- moderately so (3)
- very much so (4)

I am presently worrying over possible misfortunes

- not at all (1)
- somewhat (2)

moderately so (3)

very much so (4)

I feel satisfied

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I feel frightened

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I feel comfortable

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I feel self-confident

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I feel nervous

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I am jittery

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I feel indecisive

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I am relaxed

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I feel content

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I am worried

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I feel confused

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I feel steady

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

I feel pleasant

not at all (1)

somewhat (2)

moderately so (3)

very much so (4)

Trait Anxiety

In general, how well does each of the following statements describe you

I feel pleasant

almost never (1)

sometimes (2)

often (3)

almost always (4)

I feel nervous and restless

almost never (1)

sometimes (2)

often (3)

almost always (4)

I feel satisfied with myself

almost never (1)

sometimes (2)

often (3)

almost always (4)

I wish I could be as happy as others seem to be

almost never (1)

sometimes (2)

often (3)

almost always (4)

I feel like a failure

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I feel rested

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I am “calm, cool, and collected”

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I feel that difficulties are piling up so that I cannot overcome them

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I worry too much over something that really doesn't matter

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I am happy

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I have disturbing thoughts

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I lack self-confidence

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I feel secure

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I make decisions easily

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I feel inadequate

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I am content

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

Some unimportant thought runs through my mind and bothers me

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I take disappointments so keenly that I can't put them out of my mind

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

I am a steady person

- almost never (1)
- sometimes (2)
- often (3)
- almost always (4)

Appendix F: Social Desirability Scale

Below you will find a list of statements. Please read each statement carefully and decide if that statement describes you or not. If it describes you check the word "true"; if not, check the word "false."

I sometimes litter

- True (1)
- False (2)

I always admit my mistakes openly and face the potential negative consequences

- True (1)
- False (2)

In traffic I am always polite and considerate of others

- True (1)
- False (2)

I have tried illegal drugs (for example, marijuana, cocaine, etc.)

- True (1)
- False (2)

I always accept others' opinions, even when they don't agree with my own

- True (1)
- False (2)

I take out my bad moods on others now and then

- True (1)
- False (2)

There has been an occasion when I took advantage of someone else

- True (1)
- False (2)

In conversations I always listen attentively and let others finish their sentences

- True (1)
- False (2)

I never hesitate to help someone in case of emergency

- True (1)
- False (2)

When I have made a promise, I keep it – no ifs, ands or buts

- True (1)
- False (2)

I occasionally speak badly of others behind their back

- True (1)
- False (2)

I would never live off other people

- True (1)
- False (2)

I always stay friendly and courteous with other people, even when I am stressed out

- True (1)
- False (2)

During arguments I always stay objective and matter-of-fact

- True (1)
- False (2)

There has been at least one occasion when I failed to return an item that I borrowed

- True (1)
- False (2)

I always eat a healthy diet

- True (1)
- False (2)

Sometimes I only help because I expect something in return

- True (1)
- False (2)

Appendix G: Religiosity Composite Measure

How much do you agree or disagree the following statements are like you
I believe that I am a religious person

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

My spiritual beliefs are the foundation of my approach to life

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

I observe the traditional holidays that are important in my culture and religion

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Appendix H: Locus of Control Measure

How much are the following statement like you

I do not have enough control over the direction my life is taking

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

In my life, good luck is more important than hard work for success

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Every time I try to go ahead, something or somebody stops me

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

My plans hardly ever work out, so planning makes me unhappy

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Appendix I: Correlation Tables

Birth Weight Correlational Table

	Pearson Correlation	Sig. (2-tailed)	Sum of Squares and Cross-products	Covariance	N
How much did you weigh in lbs at the end of your pregnancy?	.218**	0	5747.338	16.854	342
In your recent pregnancy, did you have high blood pressure?	.176**	0.001	39.677	0.117	341
Was this your first pregnancy?	.160**	0.003	36.988	0.108	342
Was the pregnancy before the last to full term?	-.260**	0	-25.862	-0.119	218
Did the pregnancy before the last have any of the following: you were induced	.132*	0.015	28.784	0.084	342
Did the pregnancy before the last have any of the following: preterm labor	-.133*	0.013	-15.708	-0.046	342
How often did you take it?	-.254*	0.034	-18.286	-0.265	70
One average how often did you consume a serving of alcohol?	.709**	0.001	28.667	1.686	18
During an average week of your third trimester in your recent pregnancy, how many times did you do exercises to strengthen your muscles such as push-ups or weight lifting?	-.174**	0.001	-225.807	-0.662	342
How many weeks along were you when you gave birth to your most recent child?	.417**	0	549.713	1.617	341
Did you have twins?	.195**	0	13.205	0.039	341
Did you have an unplanned cesarean?	.201**	0	33.408	0.098	341
Was your baby considered preterm?	.414**	0	69.576	0.204	342
Socsupport	.114*	0.035	275.482	0.808	342

Preterm Birth Correlational Table

	Pearson Correlation	Sig. (2-tailed)	Sum of Squares and Cross-products	Covariance	N
In your recent pregnancy, did you have high blood pressure?	.245**	0	14.141	0.041	347
Was the pregnancy before the last to full term?	-.299**	0	-7.808	-0.036	219
Did the pregnancy before the last have any of the following: you were induced	.115*	0.032	6.368	0.018	348
Did the pregnancy before the last have any of the following: preterm labor	-.163**	0.002	-4.839	-0.014	348
One average how often did you consume a serving of caffeine?	.163*	0.011	19.398	0.079	246
One average how often did you consume a serving of alcohol?	.886**	0	7.333	0.431	18
Did you smoke cigarettes or cigars during your recent pregnancy?	.109*	0.042	4.253	0.012	348
How many weeks along were you when you gave birth to your most recent child?	.391**	0	144.046	0.416	347
Did you have an unplanned cesarean?	.252**	0	10.775	0.031	346
babyweightrounded	.414**	0	69.576	0.204	342

Appendix J: Covariance Tables

Baby Weight Covariance Table

Running Head: PERSONALITY CHARACTERISTICS AND HEALTH RELATED BEHAVIORS IN PREGNANCY

		Coefficients ^a									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	6.644	.830		8.001	.000					
	What is your age?	.002	.014	.010	.168	.867	.053	.010	.009	.831	1.204
	What is your highest level of education completed?	.015	.026	.032	.557	.578	.035	.032	.031	.913	1.095
	notwhite	-.667	.249	-.218	-2.675	.008	-.150	-.151	-.148	.461	2.170
	notblack	-.031	.355	-.006	-.086	.932	.084	-.005	-.005	.605	1.653
	nohispanic	-.507	.350	-.103	-1.446	.149	.017	-.082	-.080	.602	1.662
	What is your relationship status?	-.006	.071	-.005	-.079	.937	.047	-.004	-.004	.872	1.146
	How would you describe your community?	-.016	.078	-.012	-.204	.839	-.049	-.012	-.011	.922	1.084
	Was this your first pregnancy?	.504	.171	.177	2.946	.003	.154	.166	.163	.846	1.182
2	(Constant)	6.004	.999		6.008	.000					
	What is your age?	.007	.014	.029	.477	.634	.053	.027	.026	.811	1.232
	What is your highest level of education completed?	.012	.027	.025	.434	.665	.035	.025	.024	.890	1.124
	notwhite	-.688	.251	-.224	-2.746	.006	-.150	-.155	-.151	.454	2.203
	notblack	-.089	.355	-.018	-.251	.802	.084	-.014	-.014	.601	1.664
	nohispanic	-.493	.349	-.100	-1.412	.159	.017	-.080	-.078	.601	1.663
	What is your relationship status?	-.010	.071	-.009	-.144	.886	.047	-.008	-.008	.860	1.163
	How would you describe your community?	-.024	.078	-.018	-.311	.756	-.049	-.018	-.017	.917	1.091
	Was this your first pregnancy?	.426	.174	.150	2.443	.015	.154	.138	.134	.807	1.240
	healthbehavior	-.031	.080	-.022	-.388	.698	-.037	-.022	-.021	.938	1.067
healthoverall	.266	.132	.115	2.020	.044	.132	.115	.111	.931	1.074	
3	(Constant)	5.459	1.467		3.721	.000					
	What is your age?	.010	.015	.041	.644	.520	.053	.037	.035	.735	1.361
	What is your highest level of education completed?	.007	.027	.015	.259	.796	.035	.015	.014	.860	1.163
	notwhite	-.572	.255	-.187	-2.244	.026	-.150	-.129	-.122	.427	2.343
	notblack	-.008	.357	-.002	-.023	.981	.084	-.001	-.001	.580	1.723
	nohispanic	-.423	.352	-.086	-1.203	.230	.017	-.070	-.065	.577	1.734
	What is your relationship status?	-.001	.072	-.001	-.009	.993	.047	-.001	.000	.814	1.229
	How would you describe your community?	-.026	.079	-.019	-.327	.744	-.049	-.019	-.018	.872	1.147
	Was this your first pregnancy?	.491	.177	.173	2.780	.006	.154	.160	.151	.764	1.310
	healthbehavior	-.010	.083	-.007	-.120	.904	-.037	-.007	-.007	.848	1.180
	healthoverall	.267	.134	.116	1.996	.047	.132	.115	.108	.874	1.144
	PregStress	-.021	.012	-.133	-1.829	.068	.015	-.106	-.099	.556	1.797
	Socsupport	.018	.017	.065	1.017	.310	.097	.059	.055	.715	1.399
	fetalocusinternal	-.012	.012	-.056	-.951	.343	-.045	-.055	-.052	.839	1.192
	fetalocuspowerfulothers	-.010	.009	-.069	-1.140	.255	-.046	-.066	-.062	.798	1.253
	fetalocuschance	.007	.008	.047	.785	.433	.059	.046	.043	.809	1.235
	stateanxiety	-.030	.010	-.272	-3.137	.002	-.129	-.179	-.170	.391	2.556
	socialdesirability	.025	.024	.065	1.042	.298	.097	.060	.057	.751	1.331
religiosity	.009	.022	.026	.412	.681	.028	.024	.022	.747	1.339	
locusofcontrol	.022	.025	.064	.882	.379	.090	.051	.048	.559	1.788	
traitanxiety	.023	.012	.197	1.979	.049	-.030	.114	.107	.299	3.348	

a. Dependent Variable: babyweightrounded

Running Head: PERSONALITY CHARACTERISTICS AND HEALTH RELATED BEHAVIORS IN PREGNANCY

Gestational Length Covariance Table

		Coefficients ^a									
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t		Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	39.889	1.809		22.046	.000					
	What is your age?	-.009	.031	-.017	-.285	.776	.022	-.016	-.016	.839	1.192
	What is your highest level of education completed?	-.033	.058	-.033	-.566	.572	-.043	-.032	-.031	.912	1.096
	notwhite	-.523	.542	-.079	-.965	.335	.016	-.055	-.054	.465	2.151
	notblack	-.762	.768	-.071	-.992	.322	-.041	-.056	-.055	.605	1.654
	nohispanic	-1.334	.764	-.124	-1.747	.082	-.060	-.099	-.097	.612	1.634
	What is your relationship status?	.020	.153	.008	.132	.895	.014	.007	.007	.880	1.136
	How would you describe your community?	-.193	.170	-.066	-1.136	.257	-.068	-.064	-.063	.918	1.090
	Was this your first pregnancy?	.910	.373	.148	2.439	.015	.148	.137	.136	.844	1.184
2	(Constant)	37.536	2.162		17.364	.000					
	What is your age?	.004	.031	.008	.135	.892	.022	.008	.007	.820	1.219
	What is your highest level of education completed?	-.047	.058	-.047	-.806	.421	-.043	-.046	-.044	.888	1.126
	notwhite	-.616	.541	-.093	-1.139	.255	.016	-.065	-.063	.457	2.189
	notblack	-.968	.764	-.090	-1.267	.206	-.041	-.072	-.070	.599	1.668
	nohispanic	-1.306	.756	-.122	-1.726	.085	-.060	-.098	-.095	.611	1.636
	What is your relationship status?	-.004	.153	-.001	-.023	.981	.014	-.001	-.001	.869	1.151
	How would you describe your community?	-.215	.169	-.073	-1.274	.204	-.068	-.072	-.070	.913	1.096
	Was this your first pregnancy?	.690	.377	.112	1.829	.068	.148	.103	.101	.809	1.236
	healthbehavior	-.021	.174	-.007	-.121	.904	-.016	-.007	-.007	.939	1.065
healthoverall	.834	.287	.166	2.909	.004	.175	.163	.160	.933	1.072	
3	(Constant)	34.869	3.215		10.847	.000					
	What is your age?	.016	.032	.032	.506	.614	.022	.029	.028	.750	1.333
	What is your highest level of education completed?	-.049	.059	-.050	-.840	.402	-.043	-.049	-.046	.855	1.169
	notwhite	-.437	.556	-.066	-.786	.432	.016	-.045	-.043	.429	2.334
	notblack	-1.054	.771	-.098	-1.367	.173	-.041	-.079	-.075	.583	1.715
	nohispanic	-1.208	.767	-.113	-1.575	.116	-.060	-.091	-.086	.589	1.699
	What is your relationship status?	.050	.155	.019	.322	.747	.014	.019	.018	.832	1.202
	How would you describe your community?	-.198	.173	-.068	-1.148	.252	-.068	-.066	-.063	.863	1.159
	Was this your first pregnancy?	.742	.386	.120	1.921	.056	.148	.110	.105	.766	1.306
	healthbehavior	.057	.183	.019	.312	.755	-.016	.018	.017	.848	1.180
	healthoverall	.905	.294	.180	3.080	.002	.175	.175	.169	.880	1.137
	PregStress	-.035	.026	-.101	-1.381	.168	.024	-.080	-.076	.566	1.766
	Socsupport	.023	.038	.039	.600	.549	.032	.035	.033	.726	1.378
	fetallocusinternal	-.035	.027	-.079	-1.323	.187	-.054	-.076	-.073	.837	1.195
	fetallocuspowerfulothers	-.001	.018	-.005	-.078	.938	.022	-.004	-.004	.803	1.246
	fetallocuschance	.027	.018	.091	1.474	.141	.076	.085	.081	.798	1.253
	stateanxiety	-.041	.021	-.169	-1.922	.056	-.054	-.110	-.105	.388	2.578
	socialdesirability	.015	.053	.018	.279	.780	.039	.016	.015	.754	1.326
religiosity	.064	.048	.083	1.312	.191	.089	.076	.072	.747	1.338	
locusofcontrol	.031	.055	.041	.556	.579	.058	.032	.030	.556	1.799	
traitanxiety	.050	.026	.194	1.938	.054	.026	.111	.106	.300	3.334	

a. Dependent Variable: How many weeks along were you when you gave birth to your most recent child?