

# Impact of life factors on pregnancy



## **Abstract**

Pregnancy rates throughout history have changed due to many factors such as the environment, political, economic and social reasons. Previous studies have examined factors that may suggest unintended pregnancies in women such as race, social class, income, and education. The focus of this research is personal life factors such as the number of people participating is living with, the total number of jobs this participant has had, income, number of sexual partners, health insurance as factors they may or may not suggest the amount time a person is pregnant. Results showed that some of the factors listed held significant result that suggests future pregnancy. Significance was found in the number of sexual partners, health insurance, the number of people respondent lived with and, income.

*Key Words* : Pregnancy, sexual partners, health insurance.

### Life Factors on Pregnancy

Pregnancy rates throughout history have changed due to many factors such as the environment, political, economic and social reasons. Most individuals want to plan the timing and spacing of their childbearing and to avoid unintended pregnancies. An unintended pregnancy is one that was either mistimed or unwanted. If a woman did not want to be pregnant at the time and became pregnant, this includes all pregnancies despite how pregnancies were carried out. Meaning pregnancies that ended in live birth, stillbirth, miscarriage, adoption, and abortion.

Unintended pregnancy can result from contraceptive failure, non-use of contraceptive services, and, less commonly, rape. Abortion is a frequent consequence of unintended pregnancy and, in the developing world, can result in serious, long-term negative health effects including infertility and maternal death. If a woman did not desire to be pregnant then or now and became pregnant it is considered as an unwanted pregnancy.

Unintended pregnancy effect almost half of the United States population (Finer& Zolna, 2016). Unintended pregnancy also has a public health impact meaning births resulting from unintended associated with some adverse maternal health outcomes, such as delayed prenatal care, and premature birth (Finer& Zolna, 2016). Although the rate of unintended pregnancies in the United States had decreased in the mid-1990s there was an increase in 2001 and 2008 (Finer& Zolna, 2016). In 2011, a total of 6.1 million pregnancies occurred in the United States 45% of these pregnancies were unintended, as compared with 51% of the pregnancies in 2008 (Finer& Zolna, 2016). In other words, there were 45 unintended pregnancies for every 1,000 women. These statistics are for women in the U.S. alone and does not include the rate of other countries.

The costs associated with unintended pregnancy would be even higher if not for continued federal and state investments in family planning services. If it weren't for government funding, providing welfare, temporary assistance for needy families, the pregnancy assistance fund and other programs that provide low-income women and single mothers. These programs are beneficial for those that have unplanned pregnancies as most younger women find themselves in such situations.

Women that have had unintended pregnancies nationwide totaled \$21 billion in 2010 (Finer & Zolna, 2016). Although there are funds for unintended pregnancy given by the United States government, there are medical effects and psychological effect for mother that are unaware or not prepared for pregnancy. Women and adolescents require access to age-appropriate and culturally sensitive reproductive health care services, including emergency contraception. Access to safe, legal abortion services is necessary to impact the staggering maternal mortality rates worldwide.

It is still important for those that have unplanned pregnancies to seek prenatal care. Prenatal care is very important during pregnancy, a service that all women should be able to have access to. Unfortunately, some women in the U. S. have financial barriers that affect the access to maternal health services. Health insurance can influence the effect of maternal health care, often times it determines the quality of these services. Health insurance can be defined as a financial mechanism that allows individuals to protect themselves against the financial cost of illness (Comfort, A. B., Peterson, L. A., & Hatt, L. E. 2013).

One study found that private insurance companies have shown to be consistently associated with prenatal care and better outcomes (Guillory, Lia, Suminski & Crawford, 2015). In a study investigating health care reform extracted evidence that Black mothers experience more risk factors and are much more likely to give birth to a low birth infant than mothers of other races.

These risk factors not only are related to race, but they include other maternal demographic factors such as age, living in poverty or low socioeconomic status, single marital status, lack of education, and is more likely to experience medical problems before and during pregnancy (Guillory, 2015). These factors might influence access to quality health insurance and prenatal care and have a long-term effect on the mother and/or the child.

Another important factor that contributes to pregnancy is social support, those who live with others compared to those that live alone. Social surrounding might have an effect on future pregnancy by either form the desire to be pregnant or not. One study found, growing up in a family receiving public assistance as well as receiving public assistance at baseline were two of the strongest predictors of pregnancy desires (Weitzman, Barber, Kusunoki, & England, 2017). They also found further evidence supporting the importance of the social environment, that pregnancy desires were predicted by the proportion of friends who are mothers and whether friends approve of pregnancy (Weitzman, Barber, Kusunoki, & England, 2017).

Social support is very important during and after the pregnancy due to postnatal depression. One study found that a history of depression was most strongly associated with postnatal depression symptoms, followed by low social support and, unplanned pregnancy. These four psychosocial factors each contributed to predicting; women reporting all four factors were highly likely to have PND symptoms (de Castro, Place, Billings, Rivera, & Frongillo, 2015).

Previous studies have examined factors that may suggest unintended pregnancies in women such as race, social class, income, and education. The focus of this research is personal life factors such as the number of people the participant is living with, total number of jobs this participant has had, income, number of sexual partners, and health insurance as factors that might or might not suggest the amount time a person will get pregnant. Most of these life factors are not examined till after the pregnancy. The purpose of this research is to examine any significance in personal life factors that may contribute to future pregnancy and safeguard future pregnancy for those who are likely to have unintended pregnancies.

The purpose of this study is to examine factors that have been overlooked in contributing to pregnancy. Factors such as the number of people lived with to examine social support. Health insurance although it does not include the quality. Number of sexual partners through vaginal intercourse, which is a common variable but necessary for study. The total number of jobs is crucial to investigate the source of income may have an effect on their health insurance status.

## Methods

### Participants

Wave IV, conducted in 2008, respondents were ages 24-32 and assuming adult roles and responsibilities. Follow up at Wave IV has enabled researchers to study developmental and health trajectories across the life course of adolescence into adulthood using an integrative approach that combines the social, behavioral, and biomedical sciences in its research

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objectives, design, data collection, and analysis. The fourth wave of interviews expanded the collection of biological data in Add Health to understand the social, behavioral, and biological linkages in health trajectories as the add health cohort ages through adulthood. For this study, there are 3771 participants predominately White women.

### Materials and Procedure

The National Longitudinal Study of Adolescent to Adult Health was developed in response to a mandate from the U. S. Congress to fund a study of adolescent health. Designed by researchers at the University of North Carolina, Add Health is the largest, most comprehensive longitudinal survey of adolescents ever undertaken. (AddHealth, 2013).

Other sources of data include questionnaires for parents, siblings, fellow students and school administrators, and interviews with romantic partners. Preexisting databases provide information about neighborhoods and communities. Each wave combines longitudinal survey data on respondents' social, economic, psychological and physical well-being with contextual data on the family, neighborhood, community, school, friendships, peer groups, and romantic relationships, providing unique opportunities to study how social environments and behaviors in adolescence are linked to health and achievement outcomes in young adulthood.

Multiple datasets are available for study from each wave of data, providing opportunities to increase knowledge in the social and behavioral sciences and many theoretical backgrounds. (AddHealth, 2013). Data were extracted from the Add Health data set. DS22 from wave IV is the data set that is used <https://assignbuster.com/impact-of-life-factors-on-pregnancy/>

to conduct this analyses. Sample population consists of 3771 participants, a good sample size for a multiple regression.

A multiple regression was conducted to analyze four independent variables on a single dependent variable. This test is useful for those that want to analyze any predictor variables on a single dependent variable. Multiple regression does not mean causality of any variable but is used as a mere suggestion. Multiple regression forms a combination of several independent variables and correlates this new combination variable with a single outcome variable. Thus researchers can get an overall, macro-level view of how several variables relate to a relevant outcome, while also finding out at a micro-level how important each predictor is in relating to the new outcome.

Specific variables were extracted out of the Add Health data, the number of people respondent lives with, the total number of jobs respondent has had in their life, gross income, the number of sexual partner's respondent has had, and if the respondent has health insurance. These variables were selected to represent the average person's daily life, although there are plenty of others to choose from these are the primary focus.

Question for income represented by " Now think about your personal earnings. In {2006/2007/2008}, how much income did you receive from personal earnings before taxes, that is, wages or salaries, including tips, bonuses, and overtime pay, and income from self-employment?" With answers ranging from 0 to 2400 and answers based upon 4846 valid cases out of 5114 total cases. This question was used to assess their yearly earnings on a daily basis before taxes.



Independent variables were the number of people respondent lived with was constructed as “ How many people live with you? Don’t count yourself. If someone usually lives with you but is away temporarily include him or her.”. This question is scale as well and used to represent social surroundings on a daily basis. As for health insurance, the question was “ Over the past 12 months, how many months did you have health insurance?”. Answers are scale ranging from 0 to 12, representing the 12 months in the year. Variable was used to represent access to health care but not the quality.

The total number of jobs was constructed as, “ Thinking back over the period from 2001 to the previous year how many total jobs have you had? Include only paying jobs that lasted 9 weeks or more and were at least 10 hours a week.”. Variables were scale and used to determine participant source of income. The number of sexual partners was constructed as “ With how many partners have you ever had vaginal intercourse, even if only once?” Answers are scale. Variable was chosen because the question allowed for both genders to include their number of sexual partners. Variable also specifically target vaginal intercourse which is a primary factor to pregnancy.

The dependent variable was the number of times pregnant the question was constructed as “ Thinking about all the relationships and sexual encounters you have ever had; (how many times have you ever been pregnant/how many times have you ever made a partner pregnant)? Include all pregnancies, whether they resulted in babies born alive, stillbirth, abortion, miscarriage, or ectopic or tubal pregnancy. Be sure to include your current pregnancy in your count.”. This question was used to represent the number

of times the individual has been pregnant regardless of how the pregnancy ended.

## Results

A Descriptive analysis was conducted to analyze the demographic variables race, gender, income, highest level of education and religion. Gender categorized between male and female, 46% of the sample is male and 54% of the sample is female. Our main focus is of the 54 percent of the of the population and the number of times those women have been pregnant. The race is divided into four groups, Black or African American, white, American Indian, and Asian. The sample population is predominately white, as they are 71% of the sample. Black or African Americans make 24%, American Indian . 8%, and Asian 3% of the sample population. The demographic variable does not show any problems for multicollinearity all variables are below the . 7, meaning all variables are independent of each other.

A preliminary analysis was conducted on the variables relevant to the study. Testing the assumptions of normality, homoscedasticity, and linearity. The independent variables of the study were the number of people respondent lives with, the total number of jobs respondent has had in their life, gross income, the number of sexual partner's respondent has had, and if the respondent has health insurance. Variables that violate the assumption of normality are the total number of jobs, income and the total number of sexual partners as the skewness and the kurtosis are out of range for normality. Examining the correlations in Table 2. 1 the variables do not have multicollinearity. All correlations are under . 70. The six continuous variables

mean range from 1.41 for times pregnant to 35045.99 for income. Not all variables violate the assumption of normality, linearity, and homoscedasticity.

A multiple regression analysis was conducted on a sample of 3776 participants from the add health data to conduct a secondary analysis. Based on the computer output, the predictor variables of Number of people respondent lives with, the total number of jobs they have had, Income, number of sexual partners and health insurance on the amount of time pregnant,  $F(5, 3770) = 237.90$   $p < .01$ . Number of people the respondent lives with was significant ( $t = 1.99$ ,  $p < .01$ ), gross income ( $t = -4.94$ ,  $p < .01$ ), number of partners ( $t = 8.57$ ,  $p < .01$ ) and health insurance was significant as well ( $t = 2.4$ ,  $p < .05$ ). The R Squared value of .23 which indicated a medium to large effect size according to Cohen's  $d$ . In regards to standardized Beta weights again number of people respondent lives with ( $B = .46$ ,  $p < .01$ ), income ( $B = -.072$ ,  $p < .01$ ), number of sexual partners ( $B = .12$ ,  $p < .01$ ) and, health insurance ( $B = .036$ ,  $p < .01$ ) are the only independent variables that predict number of time being pregnant.

Additionally, an incorrect MANOVA was conducted to investigate the use of an incorrect test. A MANOVA has two or more independent variables and two or more dependent variables. MANOVA doesn't only compare differences in mean scores between multiple groups but also assumes a cause-effect relationship whereby one or more independent, controlled variables *cause* the significant difference of one or more characteristics. The factors sort the data points into one of the groups causing the difference in the mean value of the groups. Results for the MANOVA are unavailable due to SPSS error; the <https://assignbuster.com/impact-of-life-factors-on-pregnancy/>

variables do not align with variables need to run a correct multiple analysis of variance. As all variables in this study are continuous scale factors, as well as the research investigates predictor factors whereas a MANOVA investigates group differences.

Table 1

## Demographic Descriptive Variables

Variable	Mean	Standard Deviation	Skewness	Kurtosis
Gender	1.54	.498	-.160	-1.975
Race	1.35	.654	.388	5.878
Education	5.71	2.230	1.883	.755
Religion	2.95	1.945	9.749	3.476
Income	35045.99	44694.8	9.749	157.235

Table 2

## Descriptive Statistics

Variable	Mean	SD	Min	Max	Skewness	Kurtosis
Num of PPL Resp Live	2.49	1.45	1	15	1.41	4.01
Total num	3.44	2.8	0	50	4.96	55.78
Of jobs	3504	4469	0	99999	9.74	157.23
Income	5.99	4.89	0	5		
Num of partners	12.40	21.40	1	500	8.47	121.04
Health insurance	9.18	4.64	0	12	-1.24	-.24
Times Pregnant	1.41	1.59	0	12	1.50	3.64

Table 2. 1

## Correlations

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Num  
of Tota  
PPL I Num  
Variabl Res num Incom of Health Times  
e p of e Partne insuran Pregna  
Live jobs rs ce nt  
s

Num of  
PPL  
1  
Resp  
Live

Total  
num  
014  
Of jobs

Income  
131 070 1

Num  
Partner  
005 092 .041 1  
s

## Health

insuran	-.112	-.170	.190	-.088	1
ce					

## Times

Pregna	.437	.003	-.116	.125	-.063	1
nt						

Table 2. 2

## Standard MR

Source	df	Sum of squares	Mean square	F-Value	Sig
Model	5	2290.45	458.09	237.89	.001
Error	7249.86	3765	1.92		
Corrected total	9540.32	3770			

## Discussion

It can be implied that amount of time a person is pregnant can be affected by how many people they live with, the number of sexual partners, income and if they have health insurance. The number of people the respondent lived with showed a positive correlation close to the r-value +1 with the

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amount of time pregnant. This might suggest that an increase of social support can affect the amount times participant will have intended or unintended pregnancies. The average total number of jobs in the last two years showed an average of 3 but held no significance toward the number of times pregnant. This might suggest that there may have been saved income in some households.

Overall, the four variables do display significance to the amount of time pregnant in general. This may suggest that these variables can be beneficial predictors or suggestions towards guessing future pregnancy. One study showed in the United States, Mexican immigrant women have significantly increased rates of perceived social stress but decreased levels of pregnancy-related anxiety (Fleuriet & Sunil, 2014). Another study investigating social support on anxiety levels during pregnancy found that high social support given during pregnancy has the effect of reducing the pregnant woman's anxiety (Duman & Kocak 2013). Indicating social support is a key factor in reducing anxiety in pregnancy. Social support might determine the number of times women will have planned or unplanned pregnancy.

One limitation is the method data was collected was through interview and surveys relying on self-report. Self-report relies on honest answers but sometimes responses are exaggerated, the respondent may be too embarrassed to answer or tell the truth. Other effects are social desirability, and demand characteristics, where participants may change their responses to either answer questions in a manner that is desirable or unconsciously change their behavior to fit that interpretation.



Another limitation is the data was collected from a longitudinal study tendency for some participants to be more likely to drop out of a study is known as selective attrition, participants might drop out for a number of reasons. Some may move away from the area while others simply lose the motivation to participate. Others might become housebound due to illness or age-related difficulties, and some participants will pass away before the study is concluded. In some cases, this can lead to an attrition bias and influence the results of the longitudinal study.

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## Appendix

Syntax: \* Encoding: UTF-8.

/\* SPSS Descriptives syntax: demographics \*/.

DESCRIPTIVES VARIABLES= Sex Race Edu Religion Income

/STATISTICS= MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.

FREQUENCIES VARIABLES= Sex Race Edu Religion Income

/ORDER= ANALYSIS.

CORRELATIONS /VARIABLES= Sex Race Edu Religion Income

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```
/PRINT= TWOTAIL NOSIG /MISSING= PAIRWISE.
```

```
/* SPSS SYNTAX for Descriptive Statistics */.
```

```
DESCRIPTIVES VARIABLES= LivingW TotJobs Income V_partners Health_Ins  
Num_preg
```

```
/STATISTICS= MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.
```

```
FREQUENCIES VARIABLES= Num_preg
```

```
/ORDER= ANALYSIS.
```

```
/* SPSS Syntax for Correlation Coefficients */.
```

```
CORRELATIONS
```

```
/VARIABLES = LivingW TotJobs Income V_partners Health_Ins Num_preg
```

```
/PRINT= TWOTAIL NOSIG
```

```
/MISSING= PAIRWISE.
```

```
/* SPSS Syntax for Standard MR */.
```

```
REGRESSION
```

```
/MISSING LISTWISE
```

```
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
```

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

```
/NOORIGIN
```

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```
/DEPENDENT Num_preg
```

```
/METHOD= ENTER LivingW TotJobs Income V_partners Health_Ins
```

```
/PARTIALPLOT ALL
```

```
/SCATTERPLOT=(*ZRESID,*ZPRED).
```

The syntax for Incorrect analysis

```
/* Request descriptives for MANOVA variables */
```

```
FREQUENCIES VARIABLES= LivingW TotJobs Income V_partners Health_Ins  
Num_preg
```

```
/FORMAT= NOTABLE
```

```
/NTILES= 4
```

```
/STATISTICS= MEAN STDDEV MINIMUM MAXIMUM SKEWNESS SESKEW  
KURTOSIS SEKURT
```

```
/ORDER= ANALYSIS.
```

```
/* Request correlations */
```

```
CORRELATIONS
```

```
/VARIABLES= sex1f2m Influencc GenEquity Respect LivingW TotJobs Income  
V_partners Health_Ins Num_preg
```

```
/PRINT= TWOTAIL NOSIG
```

```
/MISSING= PAIRWISE.
```

```
/* Run boxplots by gender */
```

```
EXAMINE VARIABLES= Num_preg BY LivingW TotJobs Income V_partners  
Health_Ins
```

```
/COMPARE VARIABLE
```

```
/PLOT= BOXPLOT
```

```
/STATISTICS= NONE
```

```
/NOTOTAL
```

```
/MISSING= LISTWISE.
```

```
/* Request MANOVA: List DVs after GLM and IV after BY */
```

```
GLM Num_preg Respect BY LivingW TotJobs Income V_partners Health_Ins
```

```
/METHOD= SSTYPE(3)
```

```
/INTERCEPT= INCLUDE
```

```
/EMMEANS= TABLES(sex1f2m) COMPARE ADJ(LSD)
```

```
/PRINT= ETASQ HOMOGENEITY
```

```
/CRITERIA= ALPHA(. 05)
```

```
/DESIGN= sex1f2m.
```