

# **Research Proposal**

## **STA1507 Project A**

### **Assignment 4**

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# **TABLE OF CONTENTS**

Definition of concepts (Appendix A) ..... 3

Introduction ..... 5

Research Questions .....5

Methodology .....6

Ethical considerations .....10

References .....11

Questionnaire (Appendix B) .....13

## APPENDIX A: DEFINITION OF CONCEPTS

**Anonymize** – To remove identifying information from something, such as computer data so that the source cannot be known.

**Confidentiality** – This means the state of keeping secret or not disclosing information, it is simply the act of keeping that information private.

**Contraceptives** – Devices or drugs serving to prevent pregnancy.

**Cross-classification** – The placing of observations or individuals into classes based on the features of two or more variables.

**Data** – Any information that has been collected, observed, generated, or created to validate original research findings.

**Data Analysis Methods** –Methods used to summarize collected data. They involve the interpretation of data gathered using analytical and logical reasoning to determine patterns, relationships, or trends.

**Data collection** – This is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes.

**Descriptive Research** – Research that only aims to describe phenomena, so it is used to find out how things are, not to explain why things happen.

**Ethical considerations** –These are a set of principles that guide your research designs and practices. These principles include voluntary participation, informed consent, anonymity, confidentiality, potential for harm, and results communication.

**Frequency distribution** – This is an organized tabulation/graphical representation of the number of individuals in each category on the scale of measurement. It allows the researcher to have a glance at the entire data conveniently.

**Guidelines** – These are general rules, principles, or pieces of advice.

**Informed Consent** – Permission granted for full knowledge of the possible consequences (risks and benefits).

**Methodology** – Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a topic.

**Population** – An entire group about which some information is required to be ascertained.

**Protocol** – A system of rules that explain the correct conduct and procedures to be

followed in formal situations.

**Quantitative Data** – Data that can be represented numerically, including anything that can be counted, measured, or given a numerical value.

**Questionnaire** – This is a set of printed or written questions with a choice of answers, devised for a survey or statistical study.

**Random Sampling** – The sample is chosen by selecting individuals from the population in some random way.

**Research Problem** – This is a statement about a concern or a situation that needs to be improved or addressed.

**Research Question** – This is a question that a research project sets out to answer.

**Sampling** – Is the selection of a subset of the population of interest in a research study.

**Socio-economic** – Refers to the interaction between the social and economic habits of a group of people.

**Stratified Random Sampling** – The sample is obtained by dividing the population into several groups called strata, and then drawing simple random samples from each stratum.

**Study Design** – A framework, or the set of methods and procedures used to collect and analyze data on variables specified in a particular research problem.

**Variable** – Something that can be changed or adapted.

# 1. INTRODUCTION

South Africa has one of the highest teenage pregnancy rates in the world, with over 30% of girls aged 15-19 falling pregnant each year. This has several negative consequences for the girls themselves, their families, and society.[1] (G Mchunu, 2012).

Teenage mothers are more likely to drop out of school, which limits their future employment opportunities and earning potential. They are also at higher risk of poverty, domestic violence, and health problems. Their children are also more likely to experience health problems, developmental delays, and educational difficulties. [3] (G Mchunu, 2012).

The high teenage pregnancy rate also has several negative social and economic consequences. It contributes to poverty, inequality, and crime. It also puts a strain on public resources such as healthcare and education.[6] (Salisu, 2018).

Several factors contribute to the high teenage pregnancy rate in South Africa. These include:

- Poverty and inequality
- Lack of access to education and sexual and reproductive health services
- Gender inequality and harmful social norms
- Early sexual initiation
- Lack of parental guidance and support. [6] (Salisu, 2018)

*The Research Problem for my proposal is: High teenage pregnancy rate in South Africa.*

# 2. RESEARCH QUESTIONS

*This research proposal aims to answer the following questions:*

1. What are the main factors that contribute to the high teenage pregnancy rate in South Africa?
2. What are the consequences of teenage pregnancy for teenage girls themselves, their families, and society?
3. What are some effective interventions to prevent teenage pregnancy?

### **3. METHODOLOGY**

#### **Study Design**

This research will use descriptive research techniques. Descriptive research aims at examining plans to accurately describe a phenomenon or event, which in this case is the high teenage pregnancy rate in South Africa. It will allow the capturing of relevant information and give a comprehensive outline of the problem. [4] (Google, 2019)

#### **1. The Population**

The target population for this study is teenage girls aged 15 years to 19 years residing in different areas/provinces of South Africa.

#### **2. Sampling**

A multi-stage sampling (stratified sampling) method will be used to select a representative sample of teenage girls. In the first stage, a random sample of provinces of 5-10% teenage girls will be selected. In the second stage, a random sample of districts of 5-10% teenage girls within each selected province will be selected. In the third stage, a random sample of 5-10% teenage girls in schools within each selected district will be selected. Finally, a random sample of 5-10% teenage girls within each selected school will be selected. [2] (Brown, 2010)

The sample size of 5-10% teenage girls is sufficient to provide a margin error of 5% and a 95% confidence level. This sampling method was chosen because it is the best way to select a representative sample of teenage girls from a large population. This method ensures that all teenage girls from all provinces, districts, and schools have an equal chance of being selected, regardless of their race, ethnicity, or socioeconomic status (where they live or attend school).[2] (Brown, 2010)

#### **3. Data Collection**

Quantitative data will be collected using a self-regulated survey questionnaire. The questionnaire will be distributed to participants in various ways, including in-person distribution at schools and community centers. The questionnaire will be designed to collect data on the factors that contribute to the high teenage pregnancy rate in South Africa.

#### 4. Data Analysis Method

Quantitative data collected using questionnaires will be analyzed utilizing statistical methods such as frequency distributions, cross-classifications, and relapse investigation to recognize the relationship between variables.

Below is a list of all the variables and their measurement scales from the questionnaire, along with an explanation of how their values will be used to answer the research questions.

<b><i>Variable</i></b>	<b><i>Meaning</i></b>	<b><i>Measurement Scale</i></b>	<b><i>How values will be used to answer the research questions</i></b>
Age	The number of years an individual has lived.	Continuous	Age will be used to determine whether the participant is a teenage girl (aged 15-19).
Race	A person's social and political classification is based on the perceived physical characteristics.	Categorical	Race will be used to describe the demographic characteristics of the participants.
Ethnicity	A person's cultural identity or affiliation.	Categorical	Ethnicity will be used to describe the demographic characteristics of the participants.
Socioeconomic status	A person's social and monetary position.	Categorical	Socioeconomic status will be used to assess whether the participant's socioeconomic status is a factor in their risk of teenage pregnancy.
Where do you live? (Urban/rural)	The type of community in which the person lives.	Categorical	Place of residence will be used to assess whether the participant's place of residence is a factor in their risk of teenage pregnancy.
Age at first sexual intercourse	The age at which the person first had sexual intercourse.	Continuous	Age at first sexual intercourse will be used to assess whether the participant's age at first sexual intercourse is a factor in their risk of teenage pregnancy.
Number of sexual partners	The number of people a person has had sexual	Continuous	Number of sexual partners will be used to assess whether the participant's number of sexual partners is a factor in their risk of teenage pregnancy.

	intercourse with.		
Contraceptive use (e.g., type of contraceptive, frequency of use)	Whether or not a person uses contraception, and if so, the type they use and how often.	Categorical	Contraceptive use will be used to assess whether the participant's contraceptive use is a factor in their risk of teenage pregnancy.
Unintended pregnancy history	Whether or not a person has had an unintended pregnancy.	Categorical	Unintended pregnancy history will be used to assess whether the participant's unintended pregnancy history is a factor in their risk of teenage pregnancy.
Have you ever been pressured to have sex against your will?	Whether or not a person has been forced to have sex against their will.	Categorical	Pressure to have sex against one's will, be used to assess whether it is a factor in teenage pregnancy.
Do you have access to sexual and reproductive health services?	Whether or not a person has access to sexual and reproductive health services such as contraception testing and treatment, and abortion services.	Categorical	Access to sexual and reproductive health services will be used to assess whether it is a factor in teenage pregnancy.
Knowledge about different types of contraception and how to use them	A person's knowledge about different types of contraception and how to use them.	Continuous	Knowledge about contraception will be used to assess whether the participant's knowledge about contraception is a factor in their risk of teenage pregnancy.
Attitudes towards sex and contraception	An individual's perspectives towards sex and	Continuous	Attitudes towards sex and contraception will be used to assess whether the participant's attitudes towards sex and contraception are factors in their risk of teenage



	contraception.		pregnancy.
Sources of information about sex and contraception	Sources from which a person gets information about sex and contraception.	Categorical	Sources of information about sex and contraception will be used to assess whether the participant's sources of information about sex and contraception are a factor in their risk of teenage pregnancy.
Peer pressure	The influence of a person's friends or peers on their attitudes and behaviors related to sex and contraception.	Continuous	Peer pressure will be used to assess whether peer pressure is a factor in teenage pregnancy.
Parental pressure	The influence of a person's parents on their attitudes and behaviors related to sex and contraception.	Continuous	Parental pressure will be used to assess whether parental pressure is a factor in teenage pregnancy.
Religious beliefs	A person's religious beliefs about sex and contraception.	Continuous	Religious beliefs will be used to assess whether religious beliefs are a factor in teenage pregnancy.
Access to contraception and sexual and reproductive health services	A person's access to contraception and sexual reproductive health services.	Continuous	Access to contraception and sexual and reproductive health services will be used to assess whether it is a factor in teenage pregnancy.

What are the main challenges you face in making decisions about sex and contraception?	The challenges a person faces in making decisions about sex and contraception.	Open-ended	This open-ended question will be used to gather qualitative data on the challenges that teenage girls face in making decisions about sex and contraception.
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## 4. ETHICAL CONSIDERATIONS

This research will follow strict ethical guidelines and protocols to protect the rights, privacy, and confidentiality of participants, this means that their names and personal information should not be disclosed without their consent. [1] (Bhandari, 2021)

Informed consent will be obtained from all participants or their legal guardians, it is important to obtain informed consent from all participants, or their legal guardians if they are minors. [1] (Bhandari, 2021)

Participants should be fully informed about the nature of the research, the risks and benefits of participation, and their rights to withdraw from the study at any time (Autonomy). [1] (Bhandari, 2021)

Any personal information collected will be anonymized and stored safely/securely. Ensuring that participants are protected is also of utmost importance since they form part of the vulnerable group. [1] (Bhandari, 2021)

*The following will be done to ensure that they are protected:*

### *Use of a gatekeeper*

A gatekeeper is a person or organization that can help recruit participants and ensure that they are protected. A school principal or community leader will be asked to act as a gatekeeper for this study. [7] (Shivayogi, 2013)

### *Provision of a safe and supportive environment*

Participants should feel safe and comfortable participating in the study. This

implies that a welcoming and non-judgmental environment should be created. Preparation to provide support to participants if they become distressed during the study should be made. [7] (Shivayogi, 2013)

#### *Plan to deal with unexpected events*

It is important to have a plan for dealing with unexpected events, such as a participant disclosing personal or traumatic information. A list of resources and services (for counseling and support) that participants can be referred to should such events occur will be available. [7] (Shivayogi, 2013)

#### *Ethics Review*

The research plan will be submitted to an institutional ethics review board for approval, for evaluation of the study's ethical aspects and suggest improvements if necessary. [7] (Shivayogi, 2013)

#### *Reporting Child Abuse*

If during the research it is suspected or evidence is discovered that a child is/was abused or neglected, it will be reported to the relevant authorities as it is of legal and ethical obligation to do so. [7] (Shivayogi, 2013)

## **5. REFERENCES**

### **Works Cited**

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[7] Shivayogi, P. (2013, Jan-Mar). *Vulnerable population and methods for their safeguard*. Retrieved from National Centre for Biotechnology Information: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3601707/>

## APPENDIX B: THE QUESTIONNAIRE

### ***Instructions***

Please answer all the questions to the best of your ability. Your responses will be anonymous and confidential.

This questionnaire is designed to gather information on the factors that contribute to the high teenage pregnancy rate in South Africa. The information will be utilized to help clarify the research and develop interventions to prevent teenage pregnancy.

### **Demographic Information:**

#### *Age*

- ☐ 15-16
- ☐ 17
- ☐ 18
- ☐ 19

#### *Race*

- ☐ *Black African*
- ☐ *White*
- ☐ *Colored*
- ☐ *Indian/Asian*
- ☐ *Other*

#### *Ethnicity*

- ☐ *Zulu*
- ☐ *Xhosa*
- ☐ *Sepedi*
- ☐ *Setswana*
- ☐ *Afrikaans*
- ☐ *English*
- ☐ *Other*

#### *Socioeconomic status (parent's combined income)*

- ☐ *Less than R100,000*
- ☐ *R100,000-R200,000*
- ☐ *R200,000-R300,000*
- ☐ *R300,000-R400,000*
- ☐ *More than R400,000*

#### *Where do you live?*

- ☐ *Urban*
- ☐ *Rural*

Sexual Behavior:

*Age at first sexual intercourse*

- ☐ 12 or younger
- ☐ 13-14 years old
- ☐ 15-16 years old
- ☐ 17-18 years old
- ☐ 19 years old

*Number of sexual partners*

- ☐ 1
- ☐ 2
- ☐ 3-4
- ☐ 5-9
- ☐ 10 or more

*Contraceptive use (type)*

- ☐ None
- ☐ Condom
- ☐ Pill
- ☐ Injection
- ☐ Implant
- ☐ IUD
- ☐ Other

*Unintended pregnancy history?*

- ☐ Yes
- ☐ No

*Have you ever been pressured to have sex against your will?*

- ☐ Yes
- ☐ No

*Do you have access to sexual and reproductive health services?*

- ☐ Yes
- ☐ No

Knowledge and Attitudes towards Sexual and Reproductive Health:

*Please list the different types of contraception that you know of and how to use them.*

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*What are your attitudes towards sex and contraception?*

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*Where do you get your information about sex and contraception?*

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*How much pressure do you feel from your peers to have sex?*

None	Some	A lot

*How much pressure do you feel from your parents to have or not to have sex?*

None	Some	A lot

*How do your religious beliefs influence your decisions about sex and contraception?*

None	Some	A lot

*How easy is it for you to access contraception and sexual reproductive health services?*

Very easy	Somewhat easy	Not easy at all

*What are the main challenges you face in making decisions about sex and contraception?*

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*Thank you for your participation!*

