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EMOTIONAL HEALTH AND TEENAGE PREGNANCY IN

GALVESTON INDEPENDENT SCHOOL DISTRICT HIGHSCHOOLERS

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EMOTIONAL HEALTH AND TEENAGE PREGNANCY IN GALVESTON INDEPENDENT SCHOOL DISTRICT HIGHSCHOOLERS

by

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Dedication

To My Family

Acknowledgements

To Dr. Mutambudzi, Dr. Prochaska, Frank Petronella, and to my Committee Members: Dr. McKee, Dr. Veeranki, and Dr. Croisant

EMOTIONAL HEALTH AND TEENAGE PREGNANCY IN GALVESTON INDEPENDENT SCHOOL DISTRICT HIGH SCHOOLERS

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Abstract: In Galveston County in 2011 there were 15.9 live births per 1000 girls aged 15-17 years old, which is higher than the national average. The purpose of this research was to assess the role of emotional health, specifically depression status, suicidal ideation, and family support in pregnancies among teens aged 14-18 years in Galveston County. The University of Texas Medical Branch and the Galveston Independent School District partnered to create the Gulf Coast Student Survey to obtain feedback on a wide range of student health topics, pertaining to risky behavior among adolescents. The high school students thus completed a survey to identify concerns in order to enable the District, the University and interested community programs to develop new student outreach programs or revise existing ones. Adolescents' self-reported responses were used to define the study outcome, teenage pregnancy, and study exposures including depression status, suicidal ideation and family support. Multivariable logistic regression analyses were conducted to assess the association of depression, suicidal ideation and family support with teenage pregnancies, adjusting for confounders. No statistical significant relationships were observed between emotional health of female students and teenage pregnancies when adjusted for age, race/ethnicity, socioeconomic status, condom use and birth control access in the analysis. Given the high rates of teenage pregnancies in Galveston County and possible study limitation of low power and self-reported responses, it is important that a large comprehensive prospective cohort study is needed to further evaluate these relationships.

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CI	Confidence Interval
GISD	Galveston Independent School District
OR	Odds Ratio
SES	Socio Economic Status

Chapter 1 Introduction

In Galveston County, the teenage birth rate was 32.6 in 2013, which is significantly higher than the national average at 29.0[1]. Several factors have been identified to play a significant role in pregnancies among adolescents aged 15-19 years, which include knowledge about sexual practices, perception about risky health behaviors, personal values about sex and abstinence, attitudes toward contraceptive practices, perception of peer norms and sexual behavior, intent to abstain or limit multiple partners' practices, and communication with parents or other adults about sexual practices, condoms and contraception. One such important factor, that is most often understudied, is the emotional status of an adolescent and how it contributes to high-risk behaviors thus leading to teenage pregnancies[2]. The purpose of this capstone project is to assess the role of emotional health on pregnancies among female adolescents aged 14-19 in Galveston County. The study hypothesis is that there will be a significant positive association between teenage pregnancy and emotional status of an adolescent, as defined by their depression status and suicidal ideation. An additional hypothesis is that there will be a negative association between teenage pregnancy and family support.

Another possible explanation is that teenage childbearing can be explained by a positive adaptive mechanism that is described by the life history theory. This theory suggest that individuals exposed to more risky and uncertain environments are more likely to reproduce early in order to increase the

probability of leaving descendants behind[3]. The desire to reproduce is an "adaptive mechanism" driven by many factors, such as emotional health, socio-economic status, adult attachment and father absence, in particular, as well as environmental influences such as drugs and alcohol[3]. These factors can be evaluated so that interventions can be developed to prevent teenage pregnancies[6].

The teenage period is a very sensitive and impressionable phase for students; therefore, it is imperative to evaluate students about personal concerns that could potentially have an impact on their future, and could be prevented. This project utilizes data from the Gulf Coast Student Survey, which was developed in part, for this purpose, along with identifying other behavioral risk factors for local children. The premise is that the Galveston Independent School District (GISD), the University of Texas Medical Branch (UTMB), and other local community organizations will be able to use this information about what may be influencing students to get pregnant during their teenage period to develop targeted programs such as counseling and home interventions with a goal of reducing the rate of teenage pregnancy in the GISD.

Chapter 2 Background

The City of Galveston, Texas consisted of 48,733 people in 2013, declining from 2000 at 57,247[4]. Currently, the white population makes up the majority of Galveston at 62.5% while Hispanics make up 31.3% and Non-Hispanic blacks/African Americans only make up 19.2%[4]. In 2002, GISD enrolled more than 2,500 high school students, who attended Ball High School and the alternative school[5]. The overall GISD pass rate in 2002 was slightly below the state pass rate of 85.3%[5].

In 2010, 19.3% of the population of Galveston, Texas was under the age of 18 years. In Texas City, 26.3% of the population was less than 18 years of age and in the city of Dickinson, 27.0% of the population was less than 18 years of age[6]. In the city of La Marque, 25.2% of the population was less than 18 years of age, and in League City 28.5% of the population was less than the age of 18 years of age in 2010[6]. Galveston, Texas, although having a declining rate of teenage pregnancies, has the highest birth rate compared to the surrounding cities, despite having the lowest percentage of the population under 18 years of age as observed in Figure 1[4]. This is of interest, given that the combination of an elevated birth rate to teens and lower academic achievement has been found to be correlated in a study conducted in Mexico[6].

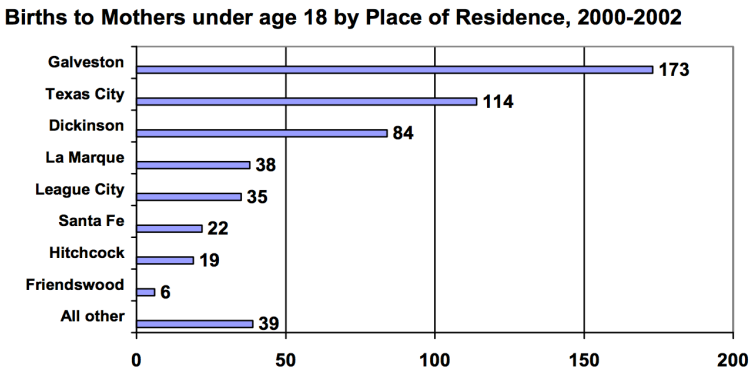

Figure 1: Births to Mothers under age 18 by Place of Residence, 2000-2002[5]

This discrepancy led to this research to determine if there is a correlation between emotional health of teenagers in Galveston ISD and teenage pregnancies. The National Longitudinal Study of Adolescent Health and the Early Childhood Longitudinal Study—Birth Cohort, found that high levels of psychological distress markedly increased the probability of becoming a teenage mother, particularly among poorer teenagers[7].

Although teenage pregnancy rates in all 50 states have declined steadily over the past 20 years, the U.S teenage pregnancy rate is still high at 29 births for every 1,000 adolescent females ages 15-19 (see Figure 2)[8]. Compared to other western industrialized nations, the U.S teenage pregnancy, birth, sexually transmitted infection, and abortion rates are substantially higher[5]. Disparities are seen geographically among the states of the nation as well (see Figure 2). The lowest teen birth rates were reported in the Northeast, while rates were highest in states across the southern part of the country[3].

Texas has the third highest teenage pregnancy rate in the nation at 42.3 births for every 1000 adolescent females ages 15-19[9]. Only Arkansas (43.5) and Mississippi (42.6) have higher rates of teenage pregnancy than Texas. While Galveston County's teenage birth rate is lower than that of Texas (32.6 vs. 42.3), Galveston County's teenage birth rate is 11% higher than the national average[9] (see Figure 2).

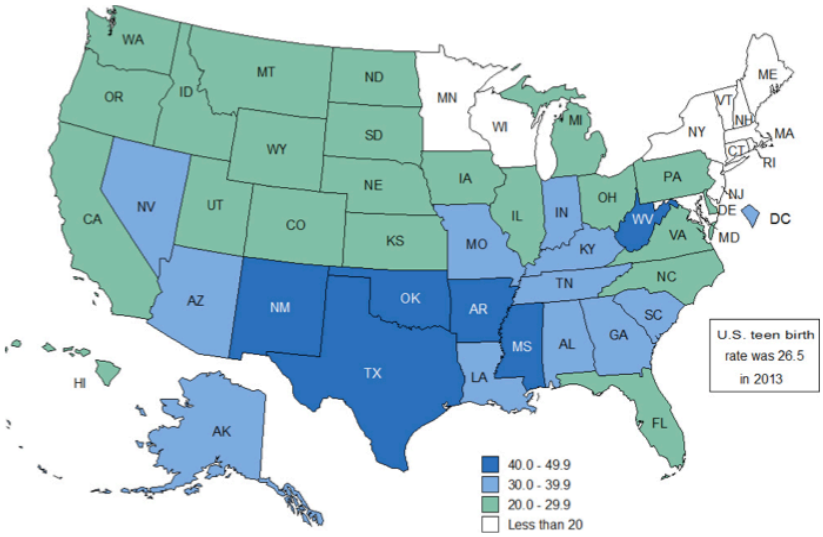

Figure 2: Teenage Birth Rates for 15-19 Year Olds by State, 2013[9]

A number of factors contribute to differences in teenage pregnancy rates between states, including differences in demographic characteristics of their populations, knowledge of and access to comprehensive sex education programs and contraceptive services, as well as cultural attitudes about adolescent sexual behavior and childbearing[1].

Over time, a decline in teenage pregnancy has been observed among all race/ethnic groups. Among 15-19 year olds during 2011-2012, teenage birth

rates decreased 6% for non-Hispanic whites, 7% for non-Hispanic blacks, 3% for American Indian/Alaska Natives, 5% for Asian/Pacific Islanders, and 7% for Hispanics[10] (see Figure 3). However, a significant disparity in rates among race/ethnicity remain high predominantly in non-Hispanic blacks and Hispanic teenagers, given that the age-adjusted birth rates are two times higher than the rate for non-Hispanic white teens (39.0, 41.7, 18.6 respectively)[10](see Figure 3).

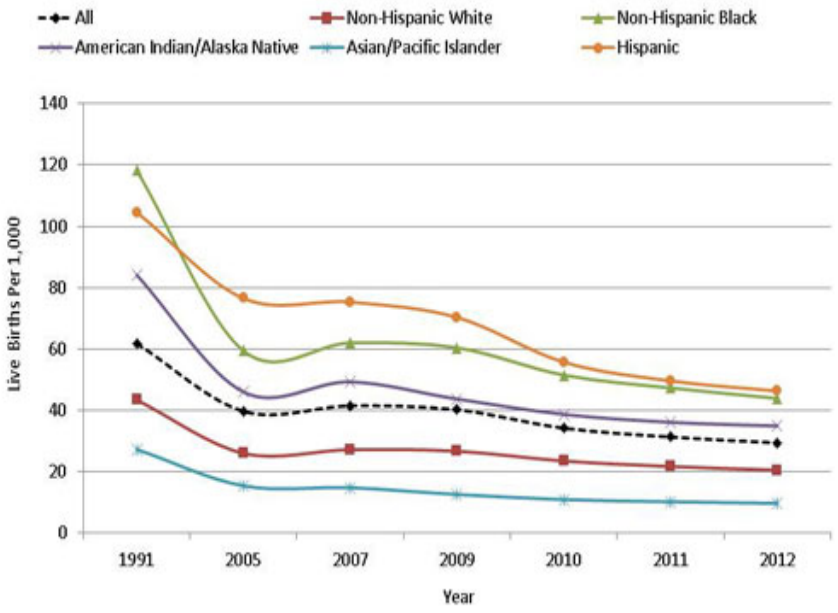

Figure 3: Descriptive Epidemiology of Teenage Pregnancies: Birth Rates per 1,000 Females Aged 15-19 Years, by Race and Hispanic Ethnicity[10]

The economic and social cost of teenage pregnancy and childbearing are substantial through immediate and long-term impacts on teen parents, their children and the community at large[6]. In 2011, U.S taxpayers spent at least $9.4 billion due to teenage pregnancy and childbirth[10]. These funds were allocated towards the needs as well as repercussions of teenage pregnancy; this includes:

increased health and foster care, increased incarceration rates among children of teenage parents, as well as lost tax revenues because of lower educational attainment and income among teenage mothers[10]. Pregnancy and birth rates are significant contributors to high school dropout rates among girls[10]. Approximately 50% of teenage mothers received a high school diploma by age 22, compared to approximately 90% of women who had not given birth during adolescence[8]. Teenage mothers are also more like to have children who have lower social and academic achievement. They also tend to have higher incarceration rates, compared to children of mothers who did not give birth during adolescence[8]. Children of teenage mothers also face more health problems, are more likely to face unemployment as a young adult, and are more likely to bear children during adolescence as well[9]. Teenage pregnancy and the substantial social and economic burdens associated with it remain the same, even if factors that increase teenagers' risk for pregnancy were adjusted for. These risks include being raised in a single parent household, low socio-economic status or having poor school performance[5].

Included in one of the top six priorities of the Centers for Disease Control and Prevention (CDC) is teenage pregnancy prevention because the CDC considers teenage pregnancy as a public health "winnable battle"[10]. The CDC believes it is "of paramount importance to the health and quality of life for our youth"[10]. There are evidence-based teenage pregnancy prevention programs that address specific protective factors on the basis of knowledge, skills, beliefs or attitudes related to teenage pregnancy, but are limited in access due to cost and

conflicting cultural attitudes[10]. In Galveston, programs are available for teenage girls who are pregnant or have been pregnant to educate and empower them on how to be successful teen moms as well as how to prevent a reoccurrence of another unplanned pregnancy. Programs such as the Children's Services Board of Galveston County or Galveston Co-Teen Parenting Coalition provide both secondary and tertiary preventative care for teen mothers[11].

This capstone looks at depression, suicidal ideation and family support as risk factors for teen pregnancy in a population of female high school students in Galveston ISD, with the hopes of proposing a primary prevention for teenage pregnancy.

Chapter 3 Data and Methods

The University of Texas Medical Branch and the Galveston ISD partnered to create the Gulf Coast Student Survey (Appendix A) to obtain feedback on a wide range of student health topics pertaining to risky behavior among school attending adolescents. The high school students were asked to complete a 103-question survey to identify concerns in order to enable the District, the University, and interested community programs to develop new student outreach programs or revise the existing ones. The survey was used for this cross sectional study because it addressed the students' sexual activities, their family support as well as their emotional health. The students were informed that the survey was completely confidential and voluntary. The instrument was developed after a thorough literature review and multiple meetings between stakeholders, including representatives of the District, and University clinicians and investigators. Face validity was assessed by a team including an epidemiologist, an Obstetrician/Gynecologist, a Pediatrician, an Asthma specialist, a Galveston ISD representative, and a Psychologist. The collected data were entered into SPSS. Students were not asked to provide any identifying information, therefore results are likewise de-identified.

There were 1472 students who completed a Gulf Coast Student Survey, a response rate of 78%; according to the enrollment figures from the Texas Education Agency. This represents an increase from 51% in 2012, at which time a similar survey was conducted with students. A few factors affected the response rate, such as gender and grade, as illustrated in Figure 4. The

response rates by grade were 419 of 513 in 9th grade (81.7%), 399 of 471 in 10th grade (84.7), 343 of 470 in 11th grade (73%), and 308 of 435 in 12th grade (70.8%).

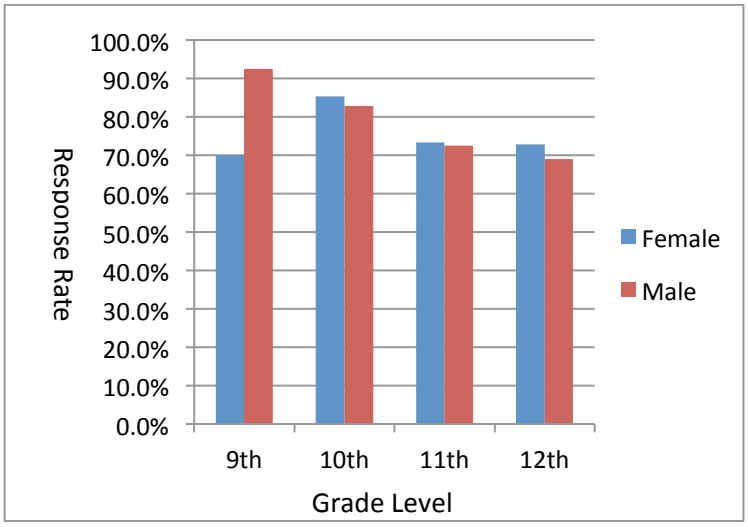

Figure 4: Grade and Gender of Respondents of Gulf Coast Student Survey

The primary independent variables in the study were depression, suicidal ideation and family support. The study variable, depression, was defined using adolescents' self-reported positive responses to the questions: "During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?" and "Have you ever felt depressed?". Similarly, the variable "suicidal ideation" was defined using the responses to the questions, "During the past 12 months, did you ever seriously consider suicide?" and "During the past 12 months, did you make a plan about how you would attempt suicide?" The third exposure variable was defined using adolescents' response to the question, "With whom do you live?".

The answer choices included: “mother and stepfather”, “father and stepmother”, “mother only”, “father only”, “other relatives”, “friends”, and “alone”. These choices were grouped into two parent households (both parents, mother and stepfather, father and stepmother), single parent household (mother only, father only) and non-parent household (friends, other relatives, alone). Table 1 provides details about the survey questions and respective responses. The study outcome variable was teenage pregnancy, defined using adolescents’ self-response to the question, “Have you ever been or gotten someone pregnant?” Those who reported, “Yes” were categorized into the teenage pregnancy group and those who reported “No” into the no teenage pregnancy group (Table 1).

Table 1: Description of Variables and Survey Questions and Responses used from the Gulf Coast Student Survey (103 Questions on survey given)

Survey Question	Responses
Dependent Variable	Yes
Been or gotten someone pregnant?	No
Covariates	
Age:	14 years old
How old are you?	15 years old
	16 years old
	17 years old
	18 years old
Race/Ethnicity:	Black or African American
How do you describe yourself?	Hispanic or Latino
	White or Caucasian
Socioeconomic Status:	Did not complete high school
What grade of school did your mother complete?	Completed high school
	Some college
	Completed college
	Don't know
Contraceptive Use:	Never
How often do you use condoms when you have vaginal intercourse?	Sometimes
	Every time
Availability of birth control:	Yes
Have you ever tried or wanted to obtain birth control, other than condoms, but were unable to do so?	No
Independent Variables	
Depression	
Have you ever felt depressed?	
During the past 12m, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?	Yes No
Suicide:	
During the past 12m, did you ever seriously consider suicide?	Yes
During the past 12m, did you make a plan about how you would attempt suicide?	No
Family Support:	Both Parents
With whom do you live?	Mother and stepfather
	Mother Only
	Father Only
	Other relative (s)
	Friend(s)
	Alone

Cross tabulations were carried out to determine if there were patterns seen in the relationships studied. Descriptive characteristics of adolescents were presented using frequencies and proportions. Bivariate analyses were conducted to determine if there is a significant difference in teenage pregnancy groups (no versus yes) by adolescent characteristics using the chi-square contingency statistic test. Finally, logistic regression models were conducted to analyze relationships between depression and teenage pregnancy, suicidal ideation and teenage pregnancy and family support and teenage pregnancy, adjusted for potential adolescent covariates including age, race, socioeconomic status, contraceptive use and availability of birth control options. Each model was constructed in possible adjustment with the effect of other two independent variables. For example, the multivariable model estimating the association between depression statuses of adolescents with teenage pregnancy was adjusted for covariates, and suicidal ideation and family support. Point estimates with 95% confidence intervals were reported. A p-value <0.05 was considered significant for statistical inferences.

Chapter 4 Results

The study population included students aged 14-18 years of age who attend school in the Galveston ISD. There are three secondary schools within the GISD: Ball High School, Aim High School, and Galveston Early College High School. Both Aim and Galveston Early High School are open enrollment, meaning students must apply to attend.

There were a total of 1472 responses, 47.3% female and 52.7% male. Only responses from adolescent females were included resulting in a final analytical study sample of 696 adolescents, with demographic characteristics of the study population presented in Table 2. Of the 696 female responses, 129 (18.5%) girls reported having been pregnant (see Table 2). Approximately 57% of adolescents were aged 16 or 17 years. Adolescents who participated in the study were diverse by race, with approximately 34% Hispanic and 23% non-Hispanic black. In Galveston County, Non-Hispanic whites make up 58.3% of the population, and Hispanics or Latinos make up 23.5%[6], which indicated a possible oversampling of Hispanic high school female students in the survey. Mother's highest level of education attainment was used as a proxy measure for SES status of an adolescent[12]. Approximately 41% of students have mothers who have at least some college degree. Approximately 40% of students reported using condoms every time during sexual practice (see Table 2). Almost 63% of students have desired means of birth control but did not know how or where to access them.

Table 2: Demographic and Behavioral Characteristics of GISD High School Students, Sample Size (n)=696 females

		Total Study Sample
Characteristic	**Reponses**	**N (%)**
Age (in years)	14	16(2.3)
	15	107(15.3)
	16	190(27.3)
	17	206(29.6)
	18	177(25.4)
Race/ethnicity	Non-Hispanic Black	161(23.1)
	Non-Hispanic White	297(42.6)
	Hispanic or Latino	238(34.2)
Socio-economic status	Did not complete high school (1)	187(26.9)
	Completed high school (1)	213(30.6)
	Some college (2)	118(16.9)
	Completed college (2)	178(25.6)
Contraceptive Use	Never	148(21.2)
	Sometimes	267(38.4)
	Every time	281(40.3)
Wanted to get birth control but couldn't	Yes	438(62.9)
	No	258(37.1)

Approximately, 21.3% of students who responded positively to the depression question (During the past 12m, did you ever feel so sad or hopeless almost every day for >2w in a row that you stopped doing some usual activities?) reported being pregnant in the past compared to 20% of students who did not report depression. There were 23.9% of students who reported positively to the suicidal ideation question, compared to 23.1% of students who did not respond yes to the suicidal ideation question. However, when assessing family support, 39.3% of those who replied that they lived in a non-parent household, answered yes to having been pregnant, compared to 14.7% of students who live in a two-parent household. When considering SES, there were fewer students who have

been pregnant whose mothers completed some college or has a college degree compared to those who did not complete high school or only completed high school (p-value 0.015). Except for family support and socio-economic status variables, no significant differences were identified between teenage pregnancy groups (yes versus no) across other study exposures and covariates.

Table 3: Bivariate Analysis of Factors Associated with Teenage Pregnancy among High School Female Students Attending Ball High School in GISD, n=696

		"Been pregnant"		
Characteristic	**Reponses**	**Yes (%)**	**No (%)**	**P-value**
Depression	Yes No	21.3 20.0	78.7 80.0	0.420
Suicidal ideation	Yes	23.9	76.1	0.557
	No	23.1	76.9	
Family support	2 parent household	14.7	85.3	0.011
	1 parent household	17.7	82.3	
	Non-parent household	39.3	60.7	
Age (in years)	14	11.1	88.9	0.414
	15	14.5	85.5	
	16	17.6	82.4	
	17	19.0	81.0	
	18	16.7	83.3	
Race/ethnicity	Non-Hispanic Black	24.4	75.6	0.050
	Non-Hispanic White	11.3	88.7	
	Hispanic or Latino	16.9	83.1	
Socio-economic status (SES)	Did not complete high school (1)^ Completed high school (1)	31.8	68.2	0.015
	Some college (2)* Completed college (2)	25.0	75.0	
Contraceptive Use	Never	20.6	79.4	0.094
	Sometimes	43.8	56.2	
	Every time	35.6	64.4	
Wanted to get birth control but couldn't	Yes	41.1	58.9	0.463
	No	17.0	83.0	

^Coding for SES (1): did not complete high school and completed high school *Coding for SES (2): some college, completed college

A multivariable logistic regression model was used to determine whether there was a significant relationship between depression, suicidal ideation and

family support with teenage pregnancy. The results of the multivariable logistic regression model are illustrated in Table 5. After adjusting for age, race/ethnicity, SES, contraceptive use and birth control access in individual regression models, it was found that high school female students who reported depression have a 0.71 odds (95% confidence interval (CI) 0.11-3.079) of being pregnant than those who reported no depressive symptoms; however, the confidence interval of the point estimate does not reveal it to be significant.

After adjusting for age, race/ethnicity, SES, condom use and birth control access in individual regression models, it was found that high school female students who reported having suicidal ideation have a 1.420 higher odds (95% CI 0.04-8.690) of having been pregnant compared to those who reported not having suicidal ideation; however, again, this is not significant.

It was found that high school female students who reported living in a 2-parent household have a 0.045 odds (95% CI 0.020-0.110) of having been pregnant compared to those who reported living in a non-parent household, but after adjusting for age, race/ethnicity, SES, condom use and birth control access, the point estimate was no longer significant (0.329; 95% CI 0.02-2.17). It was also found that high school females living in a single parent household, after adjusting for age, race/ethnicity, SES, condom use and birth control access, have a 0.401 odds (95% CI 0.090-1.795) of having been pregnant compared to those who reported living in a non-parent household; however, again, this is not significant.

Table 4: Results of Multivariable Logistic Regression Model to Estimate the Association of Teenage Pregnancies with Depression, Suicidal Ideation and Family Support among High School Female Students in GISD, n=696

Study exposure	Responses	Teenage pregnancies		
		N	Unadjusted OR (95% CI)	Adjusted OR* (95% CI)
Depression	No	142	Referent	Referent
	Yes	148	1.19 (0.52-2.69)	0.71 (0.11-3.80)
Suicidal ideation	No	141	Referent	Referent
	Yes	185	1.05 (0.42-2.64)	1.42 (0.04-8.69)
Family support	Non-parent household	274	Referent	Referent
	2 parent household	102	0.05 (0.02-0.11)	0.33 (0.02-2.17)
	1 parent household	123	0.26 (0.05-1.94)	0.40 (0.09-1.08)

OR means Odds Ratio, CI means Confidence Interval

*OR adjusted for age, race/ethnicity, contraceptive use and availability of birth control

Chapter 5 Discussion

The aim of this study was to determine if there was an association between emotional health and teenage pregnancies in the Galveston ISD. It was found that in Galveston ISD, among the students who participated in the Gulf Coast Student Survey, there were no statistically significant relationships observed between the emotional health of female students and teenage pregnancies when age, race/ethnicity, SES, condom use and birth control access were adjusted for in the models.

The lack of statistical significance observed in this study might be due to multiple factors. It could be attributed to the limitations of the study, such as peer pressure to answer questions dishonestly. Other limitations of this study include the small limited sample size of only female students. Considering the Gulf Coast Student Survey was presented to the high school students as a voluntary survey with no incentive to take it, the response rate was low after removing missing data, “I don’t know” and “refuse to answer” responses. The intimate nature of some of the questions asked in the questionnaire (Appendix A) may have led to students answering dishonestly. Students struggling with depression and suicidal ideation may be less inclined to answer questions accurately for lack of interest in the survey. Another factor could be the number of questions associated with the survey itself, which could have led to question fatigue, thus impacting the study validity.

The only statistically significant association observed in this study was with teenage pregnancy and family support, if age, race/ethnicity, SES, condom

use and birth control access were not taken into account (OR 0.045, 95%CI 0.020-0.110). This finding was similar to results from previous studies[7] . A two-parent household was an indicator of high family support, and I hypothesized that family support would be associated with an inverse relationship with teenage pregnancies, although, this was not seen once age, race/ethnicity, SES, condom use and birth control access were considered.

This study was important to determine what factors are leading students in Galveston ISD to make poor family planning decisions. There was not a statistical significance between teenage pregnancy and depression and suicidal ideation in this study, but considering the limitations, I believe that a larger more comprehensive study will need to be conducted, to increase the validity of the associations determined by this study. In addition, a cross-sectional study inclusive of questions specifically related to emotional health in teenagers and their pregnancy status will help us address some of the study limitations, as highlighted above.

Another next step that is imperative to reduce teenage pregnancy in Galveston ISD would be to encourage contraceptive usage among minors within the school district through promotional awareness. In this study, it was determined that 62.9% of female students have desired birth control but did not know how or where to access them. To assess the effectiveness of these programs, a cohort study would need to be conducted to determine if awareness and availability of contraceptives were increased would birth rates among teenagers decline in Galveston, Texas.

Appendix

Gulf Coast Student Survey

Demographics	
Q1- How old are you?	14 years old, 15 years old, 16 years old, 17 years old, 18 years old or older
Q2-What is your gender?	Female, Male
Q3-What grade are you in now?	9th grade, 10th grade, 11th grade, 12th grade, Ungraded/other
Q4-How do you describe yourself?	American Indian or Alaska native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Islander, White or Caucasian
Q5-With whom do you live?	Both parents, Mother and step father, Father and stepmother, Mother only, Father only, Grandparent(s), Other relative(s), Friend(s), Alone
Q6- What grade of school did your mother complete?	Did not complete high school, Completed high school, Some college, Completed college, Don't know
Personal Safety	
Q7-During the past 30 days, how many times were you the passenger in car or another vehicle that was driven by someone under the influence of alcohol, marijuana, or drugs?	O times, 1 time, 2-3 times, 4-5 times, more than 6 times
Q8-How often do you wear a seatbelt in the car?	Never, Less than 1 time per week, 1-4 times per week, More than 5 times per week
Q9-Do you drive?	Never, Less than 1 time per week, 1-4 times per week, More than 5 times per week
Q10-If you have driven during the past 30 days, how many times did you drive when you had been drinking alcohol, smoking marijuana, or using drugs?	O times, 1 time, 2-3 times, 4-5 times, more than 6 times

Q11-During the past 30 days, how many times did you carry a weapon such as a gun, knife, or club on school property?	O times, 1 time, 2-3 times, 4-5 times, more than 6 times
Q12-During the past 30 days, how many times did you carry a weapon such as a gun, knife, or club ON school property?	O times, 1 time, 2-3 times, 4-5 times, more than 6 times
Q13-During the past 30 days, how many times did you carry a weapon such as a gun, knife, or club OFF school property?	O times, 1 time, 2-3 times, 4-5 times, more than 6 times
Q14-If you carried a weapon in the past 30 days, what is the main reason you did so? Check all that apply?	For protection, It's expected, Power, To be used as a tool, Don't know, I did not carry a weapon in the past 30 days
Q15-During the past 30 days, how many times were you in a physical fight on school property?	O times, 1 time, 2-3 times, 4-5 times, more than 6 times
Q16-During the past 30 days, how many times were you in a physical fight off school property?	O times, 1 time, 2-3 times, 4-5 times, more than 6 times
Q17-During the past 30 days, how many times did you not go to school because you felt you would be unsafe at school or on your way to or from school?	O times, 1 time, 2-3 times, 4-5 times, more than 6 times
Q18- During the past 30 days, while on school property, did anyone forcibly take money or other valuable items from you?	Yes, No
Stress	
Q19-In the last month, how often have you been upset because of something that happened unexpectedly?	Never, Almost never, Sometimes, Fairly often, Very often
Q20- In the last month, how often have you felt that you were unable to control the important things in your life?	Never, Almost never, Sometimes, Fairly often, Very often
Q21- In the last month, how often have you felt nervous and "stressed"?	Never, Almost never, Sometimes, Fairly often, Very often
Q22- In the last month, how often have you felt confident about your ability to	Never, Almost never, Sometimes, Fairly

handle your personal problems?	often, Very often
Q23- In the last month, how often have you felt that things were going your way?	Never, Almost never, Sometimes, Fairly often, Very often
Q24-In the last month, how often have you found that you could not cope with all the things you had to do?	Never, Almost never, Sometimes, Fairly often, Very often
Q25-In the last month, how often have you been able to control irritations in your life?	Never, Almost never, Sometimes, Fairly often, Very often
Q26-In the month, how often have you felt that you were on top of things?	Never, Almost never, Sometimes, Fairly often, Very often
Q27- In the last month, how often have you been angered because of things that were outside of your control?	Never, Almost never, Sometimes, Fairly often, Very often
Q28- In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	Never, Almost never, Sometimes, Fairly often, Very often
Q29-Do you smoke or use chewing tobacco? In no, please move on to question #34?	Yes, No
Q30-During the past 30 days, how many days did you smoke cigarettes, cigars, cigarillos, or little cigars?	0 days, 1-9 days, 10-19 days, 20-29 days, All 30 days
Q31-During the past 30 days, how many days did you use chewing tobacco or other smokeless form of tobacco?	0 days, 1-9 days, 10-19 days, 20-29 days, All 30 days
Q32-Do you smoke or use chewing tobacco in front of your parents/guardian?	Yes, No
Q33-If you currently smoke or use chewing tobacco, what is your interest in stopping?	No interest in stopping, Mildly interested in stopping, Interested in stopping, Very interested in stopping

Q34- New types of cigarettes are now available called electronic cigarettes (also known as e-cigarettes or personal vaporizers). These products deliver nicotine through a vapor. Compared to smoking cigarettes, would you say that electronic cigarettes are:	Much less harmful than regular cigarettes, Less harmful than regular cigarettes, Just as harmful than regular cigarettes, More harmful than regular cigarettes, Much more harmful than regular cigarettes, I've never heard of electronic cigarettes
Q35-Have you ever tried electronic cigarettes?	Yes, No
Alcohol Use	
Q36-Have you ever consumed alcohol? If no, you may skip this section and move on to question #41?	Yes, No
Q37-During the past 30 days, on how many days did you have at least one drink of alcohol?	0 days, 1-9 days, 10-19 days, 20-19 days, All 30 days
Q38-During the past 30 days, how many days did you have 5 or more drinks of alcohol in a row, i.e., within a couple of hours	0 days, 1-9 days, 10-19 days, 20-19 days, All 30 days
Q39-During the past 30 days, how many days before or during school, did you drink alcohol?	0 days, 1-9 days, 10-19 days, 20-19 days, All 30 days
Q40-During the past 30 days, how many days have you been unable to remember what happened the night before because you had been drinking?	0 days, 1-9 days, 10-19 days, 20-19 days, All 30 days
Marijuana and Drug Use	
Q41- Have you ever used marijuana or other drugs to get high? If no, please move on to question #48.	Yes, No
Q42-If yes, during the past 30 days, how many days before or during school, did you use any drugs not prescribed for you in order to get high, relax or stay awake?	0 days, 1-9 days, 10-19 days, 20-19 days, All 30 days
Q43- During the past 30 days, how many days did you use marijuana?	0 days, 1-9 days, 10-19 days, 20-19 days, All 30 days
Q44-During the past 30 days, how many days did you use marijuana while	0 days, 1-9 days, 10-19 days, 20-19 days, All 30 days

on school property?	
Q45-During the past 30 days, have you sniffed glue, breathed the contents of aerosol spray cans or inhaled any paints or sprays to get high? If no, please skip question #46.	Yes, No
Q46- If yes, during the past 30 days, have you sniffed glue, breathed the contents of aerosol spray cans or inhaled any paints or sprays to get high?	0 days, 1-9 days, 10-19 days, 20-19 days, All 30 days
Q47- During your lifetime, have you used any of the following during drugs to get high? Check all that apply.	Prescription medications that were prescribed to someone else such as OxyContin, Percocet, Vicodin, Codeine, Adderall, Ritalin, or Xanax, Bath salts, Cocaine (powder, crack, freebase), DXM/Tuss(Triple C's, CCC, Dex, Robo), Ecstasy(MDMA, X, XTC, XTABS), LSD or acid, Marijuana soaked in formaldehyde and/or PCP (Fry, wet), Synthetic marijuana (K2, spice), Methamphetamines (Speed, crystal, crank or ice), PCP, My own medication in higher doses, Other, I haven't used any of these drugs to get high
Q48-During the past 30 days, while on school property, has anyone offered sold, or given you an illegal drug on a prescription drug so you could get high?	Yes, No, Not, Sure
Sexual Activity, Contraceptive Use, and Sexually Transmitted Infections	
Q49-Have you ever engaged in: If no to both please move to question #69	Sexual Intercourse: Yes or No Oral Sex: Yes or No
Q50-How old were you when you had sexual intercourse for the first time?	____
Q51-How old were you when you had oral sex for the first time?	____
Q52-During your lifetime, how many different people have you had sexual intercourse with?	1 person, 2-3 people, 4-5 people, More than 6 people
Q53-During your lifetime, how many different people have you had oral sex	1 person, 2-3 people, 4-5 people, More

with?	than 6 people
Q54-During the past 30 days, while on school property, how many time have you had sexual intercourse or oral sex?	O times, 1 time, 2-3 times, 4-5 times, More than 6 times
Q55-During your lifetime, have your sexual partners been people of the opposite sex, same sex, or both?	Opposite sex, Same sex, Both
Q56- Who was your partner the last time you had sexual intercourse?	Someone I just met, A friend but not a boyfriend or girlfriend, Boyfriend or girlfriend
Q57- The last time you had sexual intercourse, what birth control did you use to avoid pregnancy?	We did not use any birth control, Condom, Pill, patch or vaginal ring, Shots, Withdrawal, Safe time of the month, Other
Q58-The last time you had sexual intercourse, did you discuss birth control with your partner before you had sex?	Yes, No
Q59-The last time you had sexual intercourse, did you regret having sex with this person?	Yes, No
Q60- The last time you had sexual intercourse, were you worried that you might a sexually transmitted infection?	Yes, No
Q61- Did you use a condom the last time you had sex?	Yes, No
Q62- How often do you use condoms when you have vaginal intercourse?	Never, Sometimes, Every time
Q63- How often do you use condoms when you have anal sex?	Never, Sometimes, Every time
Q64- How often do you use condoms when you have oral sex?	Never, Sometimes, Every time
Q65- Where have you gotten condoms in the past? Check all that apply.	Parent/Guardian, School clinic, Store, Friend, Partner
Q66- Have you ever been tested for HIV, the virus that cause AIDS?	Yes, No, Don't Know
Q67-Have you been tested for HIV, the virus that causes AIDS?	Yes, No, Don't Know

Q68- Have you ever been pregnant or gotten someone else pregnant?	Yes, No, Don't Know
Q69- Do you want to get pregnant or get someone else pregnant right now?	Yes, No, Don't Know
Q70- Have you ever had any HIV education from a teacher?	Yes, No, Don't Know
Q71- Have you ever tried or wanted to obtain birth control, other than condoms, but were unable to do so?	Yes, No
HPV and Other Vaccines	
Q72- Did you go a doctor's office to see a doctor for any reason in the last year?	Yes, No
Q73- Did you get a flu shot or nasal mist flu prevention this year?	Yes, No
Q74- Where did you go to get your most recent flu shot?	I didn't get a flu, Doctor's office, Health Department, Regular clinic or health center, School clinic, Hospital, Pharmacy or drug store, Work, Health fair
Q75- Have you heard about an HPV vaccine for teenagers called Gardasil or Cervarix that protects against some kinds or cancers that happen later to women?	Yes, No
Q76- Have you ever discussed HPV or the HPV vaccine Gardasil with a parent/guardian?	Yes, No
Q77-Have you ever discussed HPV or the HPV vaccine with a doctor, nurse, or other healthcare provider?	Yes, No
Q78- Do you want information on HPV or the HPV vaccine?	Yes, No
Q79- How would you like to get information on HPV and the HPV vaccine?	Pamphlet, From a doctor/ nurse/healthcare provider, Internet site, Text message, Social media (Twitter, Facebook), Newspaper, Church or other community gatherings, Email, Letter, I do not want any information on HPV or the HPV vaccine
Q80-How many HPV shots do you think are needed?	1, 2, 3, 4, More than 4, I don't know

Q81-How many HPV shots have you gotten?	1, 2, 3, 4, More than 4, I don't know
Q82-What is the main reason you have not gotten any of the HPV shots? Check all that apply.	I got at least one shot, Doctor did not recommend, Parent said no, Don't know about diseases, Shot is not needed, School does not require, Don't know if its safe, Doctor said I could get HPC short when I am older, Costs too much, Shot could be painful, Shot not available in doctors office, Had trouble getting to appointment
Q83-Do you want to get the HPV shorts?	Yes, No, Not sure, I have already had the HPV shots
Asthma and Environmental Health	
Q84-Have you ever been told by a doctor, nurse, or other health professional that you have asthma?	Yes, No
Q85- Do you currently have asthma (have used asthma medication in the past 12 months or had an asthma attack in the past 12 months)? If no, please skip to question #90.	Yes, No
Q86- Do you have a medical doctor who treats for asthma?	Yes, No
Q87- In the past 12 months, how many days have you missed school because of asthma?	O days, 1 day, 2-3 days, 4-5 days, More than 6 days
Q88-In the past 12 months, how many times did you visit the emergency room or an urgent care clinic for treatment of asthma?	0 times, 1 time, 2-3 times, 4-5 times, More than 6 times
Q89-In the past 12 months, how many times were you hospitalized for asthma?	O times, 1 time, 2-3 times, 4-5 times, More than 6 times

Q90-In the past 30 days, have you been exposed to any of the following in you home? Check all that apply.	Tobacco smoke, Mold or obvious water intrusion, Pets such as dogs, cats, birds, and rodents in the main area of your house, Pets such as dogs, cats, birds, and rodents in your bedroom, Moderate to severe problem with cockroaches, Moderate to heavy use of pesticides, Use of gas or wood-burning stove or fireplace
Family Support	
Q91-Do your parents keep track of what you do on the internet, what movies you watch, or what video games you play?	Never, Rarely, Sometimes, Often
Q92-In the past 7 days, how many meals have you eaten with a parent/guardian?	O, 1, 2-3, 4-6, 7 or more
Q93- Do you feel loved and/or cared for at home?	I don't live at home, Yes, No, Unsure
Q94- Do you feel safe at home?	I don't live at home, Yes, No, Unsure
Depression and Suicidal Ideation	
Q95-Have you ever…? If no to both, please move on to question #101.	Felt depression Yes, No Considered suicide Yes, No
Q96-During the past 12 months, did you ever feel so sad or hopeless almost everyday for two weeks or more in a row that you stopped doing some usual activities?	Yes, No
Q97- During the past 12 months, did you ever seriously consider suicide? If no, please move on to question #101.	Yes, No
Q98-During the past 12 months, did you make plan about how you would attempt suicide?	Yes, No
Q99-During the past 12 months, how many times did you actually attempt suicide?	O times, 1 time, 2-3 times, 4-5 times, More than 6 times

Q100-If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?	Yes, No
Q101-During the past 12 months, have you hurt yourself in an attempt to feel better? Examples of hurting oneself is cutting or burning?	O times, 1 time, 2-3 times, 4-5 times, More than 6 times
Q102-During the past 12 months, if you have felt sad, depressed, anxious, and/or suicidal who would you talk to? Check all that apply.	Friend(s), Parent(s), Teacher(s), Minister or other religious or spiritual advisor, Mental health provider, School guidance counselor, No one
Q103-The Teen Health Center is located at Ball High School. What services do they provide? Check all that apply.	Sports physicals, Mental health services, A place to go when you are sick, Birth control, No sure who or what they provide, All of the above

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Vita

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