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Family and School Connectedness and Teenage Pregnancy in Amansie Central District, Ghana

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Abstract

The general assumption is that young people require direction and support from the adult world to achieve milestones in life. When family and school are unable to meet these needs, adolescents seek out other means of meeting the needs which are often negative sources. The study that produced this paper was designed to find out if social connectedness in the family, the school and the peer group would be predictive of teen motherhood. The study involved a sample of 513 respondents who were made up of 170 teen mothers and 343 non-mothers. The questionnaire, which also served as an interview guide, was used to gather the data. The result indicated that of all the two forms of social connectedness only family connectedness, could predict early motherhood. That is, school-age teen mothers who were attached to family members tended to be less predisposed to early sex, thereby not becoming pregnant during their teens. It is therefore concluded that the stronger the family connectedness a teenage girl enjoys, the less likely it is that she will engage in early sex and become an early (teen) mother. Therefore, when family connectedness is promoted, teenage pregnancy would be controlled and teenage girls would stay in school. It is recommended to parents to establish close bonds of relationship with their teen girls, and then use that bond to constantly draw the teen's attention to the negative consequences of early sex.

Key words: *Family connectedness; school connectedness; teen-motherhood; teen non-motherhood; attachment*

1. Introduction

Teenage pregnancy is a global issue that raises concerns for all those interested in the health and wellbeing of young women and their children. It is among the societal problems that trigger the vicious cycle of poverty, uncontrollable increase in population and school dropouts in Ghana. The intermittent drop and rise in the incidents of teenage pregnancy makes it evident that the source of the problem is stronger than the fight against it (Selby, 2010) and so needs serious attention and diverse strategies in dealing with it. The seriousness of it is manifested in the report by the United Nations Population Fund (UNFPA, 2022), which indicates that the adolescent birth rate in sub-Saharan Africa is 100 births per 1,000 adolescent women and that this figure is twice as high as the global rate. The UNFPA report further indicates that girls aged 15-19 are twice as likely to die during childbirth as women 20 years and above, making teenage pregnancy a high-risk venture for the girl-child (Oduor, 2021).

Although this is the general trend globally, various countries have their peculiar experiences concerning the problem of teenage pregnancy. For example, in the United States, where the problem has been extensively studied and documented, Carr and Packham (2017) report that the country has the highest teenage pregnancy rate among developed countries, even though recent data conducted in 2020 shows a drop in teen pregnancy (Centers for Disease Control and Prevention, 2022). Irrespective of this drop in statistics, the rate of teenage pregnancy in the United States is still substantially higher than other Western countries. A similar description can be made of some African countries. For example, a town in South Africa called Ganteng recorded more than 23,000 adolescent pregnancies between April 2020 and March 2021.



In Ghana, Boateng, Botchwey, Adatorvor, Baidoo, Boakye and Boateng (2023) report that 76 per 1000 births are born to teenage mothers in the age range of 15 to 19 years old and that more than half of adolescents marry in their teens. The situation is more alarming when data from girls are compared with that of boys in Ghana. For example, according to UNICEF (2021), 14.3% of females 15-19 have had a live birth or are pregnant with their first child as compared to 0.5 percent of males 15-19 who have fathered a live birth. This is suggestive that gender disparities due to pregnancy in educational achievement will continue to widen as girls will leave school and make babies as confirmed by the same report from UNICEF, even though girls have a slightly higher school attendance rate than boys at the lower primary schools. It is therefore not surprising that the same report concluded that early pregnancy and child marriage are likely to contribute to the widening gender gap in later adolescence.

Even though this is the general trend in Ghana, various geographical areas experience different trends in teenage pregnancy. For example, some parts of Ghana have higher rates of teenage pregnancy than others. Studies conducted show that the Volta Region has higher rates than other parts of the country (Ghana Statistical Service, 2015). The detailed report from this survey indicates that the percentage of women aged 15-19 that have begun childbearing ranges from 8% in the Greater Accra regions to 22% in the Volta Region. The Volta Region has 170 per 1,000 live births, which is significantly higher than the National average of 150 per 1,000 live births (Bedzo & Manortey, 2019). The survey further indicates that Ashanti Region has 11.9% of teenagers who have given birth within the Ashanti Region. In 2009, the Amansie Central District had the highest teenage pregnancy record, with 190 per 1000 live births, which is greater than the national average of 150 per 1000 live births (Bedzo & Manortey, 2019). This was confirmed during the Annual Regional Health Review by the District Chief Executive who revealed that the district recorded the highest total number of women who presented themselves for antenatal care in the Ashanti Region (Adu, 2010).

This prevalence of teen pregnancy is attributed to a number of factors in the Ashanti Region, specifically Amansie Central District. These factors include economic challenges, socio-cultural factors, religious factors, demographic factors and sex education. Economically, anytime parents and other providers are not able to provide the needs of these teenagers, they tend to look for these needs outside the home. These providers, mostly men, sleep with them and impregnate them. This appears to be one of the main reasons why teenage pregnancy in Amansie Central District is attributed to high rate of 'galamsey' activities (thriving illegal gold mining industry) in the sister district of Amansie Central District; a situation that is not entirely different from the sister district of Amansie West District (Ghana News Agency, 2015). Baah, Owusu-Agyeman, Boateng, Aboagye and Ampofo (2020) studied Asante Akim Municipality and found a significant association between galamsey and teenage pregnancy in the district. These galamsey men use sex as a compensatory reward for financial assistance they provide for the teenagers. This eventually results in pregnancy because of the unprotected sex these teen girls normally have with the men. Teenagers who are often victims live in poor neighbourhoods, come from poor families or perform poorly in school and become drop outs. One other economic factor is that the district is considered to be one of the poorest districts in the Ashanti Region. The poor nature of the district means that the people often find it difficult to gain access to contraceptives as often times fees are charged for them. For example, the boys who engage these girls cannot afford to buy condoms, which are often sold in the drug stores.

Other factors that appear to account for the high prevalence of teenage pregnancy in the district are cultural. The general assumption in most Ghanaian cultures is that mentioning of the word 'sex' is not appropriate among teenagers and so sex education is perceived as dangerous and premature for them. Related to this is the shame associated with the buying and patronage of contraceptives from the shops, especially as those who patronise these items publicly are normally considered in the community as 'spoiled' people. Directly related to culture are religious factors; where the usage of contraceptives is considered 'unchristian' in a community predominantly considered Christian as usage of birth control methods are frowned upon as a result of Christian faith (Ghana Statistical Service, 2014).

The prevalence of teen pregnancy is also attributed to demographic factors, where boys and girls begin to have various contemplation and information about sexual activities through both print and electronic media, including social media. In a culture where public discussion about sex is frowned upon, these teenagers resort to other avenues for such information. Teenagers at this stage may want to try-out adult behaviours including smoking, drinking and sex. More teenagers become sexually active at an early age, risking unwanted pregnancies, as well as sexually transmitted diseases (Koch, 2020). It is equally important to consider the impact of this problem on the society as a whole and the individuals themselves. Teen pregnancy was seen as a threat to achievement of the Millennium Development Goals



(MDGs) by 2015 (Millennium Project, 2005). This is because teen pregnancy leads to an increased infant and maternal mortality rate. The achievements of the following global goals were not met because of the continuous trend in high-rate teen pregnancy: reducing the maternal mortality rate by three quarters and the under-five mortality rate by two-thirds. Moreover, because in many parts of the world, pregnant girls are not allowed to remain in school, achievement of the goal of eliminating gender disparity at all levels of education were not met either. This eventually adds up to the drop-out rate in most countries. According to the Ghana Statistical Service (GSS, 2015), sections of the community in the Amansie Central District revealed that most people are worried about early motherhood in the district because for them it leads to unwanted pregnancies, 'wayward' children, greater marital instability, poor education, fewer assets and lower income later in life.

The problems associated with adolescent pregnancy can be significantly reduced through sex education, provision of contraceptives, counselling services, education of women, and medical, social and psychological support for affected teenagers. In addition, provision of good antenatal and postnatal care for these adolescents will help reduce the death rates among these target groups. Although a comprehensive sex education and access to birth control are proven to be successful preventative measures in combating teenage pregnancy, access to them in these areas might be constrained by a number of factors.

Apart from the general factors that condition teen pregnancy as discussed earlier, young people also require direction and support from the adult world to achieve milestones in life. When family and school are unable to meet these needs, adolescents seek out other means of meeting the needs, which are often negative sources. For example, when adolescents are not strongly connected within the family, other contexts like family connectedness, may provide opportunities to develop meaningful, influential connections. Research suggests it is the act of meeting the teenagers' need for connecting, regardless of the contextual source providing it that promotes continued development. Socialization experiences from non-family contexts are particularly important for adolescents who are lacking in these experiences within the family (Grossman, Lynch, DeSouza & Richer, 2021). The school is one such environment for the adolescent.

Theoretically social control theory (Hirschi, 1969) and attachment theory (Bowlby, (1951) are a valuable source for understanding the quality of individuals' experiences with significant others. For instance, social control theory by Hirschi (1969) states that higher levels of attachment to the conventional group such as the school will strengthen the adolescent's emotional bond, or connection, with that group and decrease the likelihood that he/she will experience internalizing and externalizing problems. Related to this theory is the assumption by attachment theory that stipulates that the quality of individuals' early experiences with a primary caregiver impacts the models they develop of themselves and others in interpersonal relationships (Bowlby, 1951). Initially, attachment theory was utilized to explain the development of an infant's early social relations. However, it has become a more general theory of behaviour that is now applied to children, adolescents, and adults. There is evidence among scholars in the literature looking at attachment relationships with peers and romantic relationships (Gillath, Karantzas & Lee, 2019; Overall, Chang, Pietromonaco, Low & Henderson, 2022). In one study for example, Markiewicz, Lawford, Doyle and Haggart (2006) explored how adolescents and young adults reported their use of parents and peers to fulfil attachment functions. These scholars found that in adolescence, the individual enters a period of change with not only physical maturation, increasing independence and a changing nature of peer relationships but also a revision of attachment relationships. Drawing on this theory, the researcher was interested in finding out whether or not adolescent's attachment to parents and school can predict teen pregnancy.

This is because the family and school environments are the primary contextual influence on an adolescent's development (McCann, Jordan, Higgins & Moore, 2019) providing intellectual, emotional and social experiences that ideally facilitate growth. Parents and teachers, who are the main agents in the family and school contexts, are regularly found to be a critical socializing influence on the development of adolescents as well as young children. Positive parenting and teaching have regularly been found to enhance the adolescent's development across varied outcomes. This is the reason why families and schools traditionally are viewed as the institutions with the greatest effect on the development of children. Although home and school were viewed as two separate institutions in the past, with schools responsible for the academic education and the home environment was solely responsible for moral and ethical education; this viewpoint has changed over the years and now both institutions are working more cooperatively to meet each child's holistic needs (Hurst, 2009).



The above discussions that family and schools need to work collaboratively need to be expanded on in the literature, especially as most people the researchers interacted with in the Amansie Central District attributed the high rate of teenage pregnancy in the district to lack of an effective social relationship between teens and their parents. Furthermore, the researchers through observation noticed that all the teenage mothers, irrespective of their age of pregnancy, were either not in school or had dropped out of the school for becoming pregnant. The researchers therefore sought to find out in this study the extent school age teenage mothers and teenage non-mothers are socially connected in the family and the school and whether or not the quality of social connectedness (family and school) predicts early motherhood.

It is as a result of these objectives that the researchers sought to find answers to the following research questions.

1. What are the differences in the quality of social connectedness in the family between teen mothers and non-teen mothers (motherhood status)
2. What are the differences in the quality of social connectedness in the school between teen mothers and non-teen mothers (motherhood status)

In addition to these research questions, this study was also guided by the following research hypothesis.

1. H_0 : Social connectedness in the family will not predict teen motherhood among school age girls.
2. H_0 : Social connectedness in the school will not predict teen motherhood among school aged girls.

2. Research Methods

The study employed the descriptive cross-sectional survey design, which, in spite of some weaknesses in it, was found most appropriate. The weaknesses include the possibility that some questions will not be clearly answered because they are misleading and not getting sufficient number of questionnaires completed and returned so that meaningful analysis can be made (Freankel & Wallen, 2000). The relative strengths of this design include it being versatile and practical, especially to researchers (Osuala, 1982), as well as its potential to provide a lot of information from quite a large sample of individuals (Freankel & Wallen, 2000). These tend to overshadow the weaknesses, hence its adoption for this study.

The target population for the study was all teenage girls of school age in the Amansie Central District. The accessible population, however, was those teenage girls of school going age in the ten major towns selected in the district. The simple random sampling procedure was adopted to select the students in the schools. In all, 343 teen non-mother respondents were selected for the study. The snowball sampling technique was used to select the teen mothers. After talking to me, I asked the respondent whether she knew a friend who had dropped out of school due to pregnancy, or had become pregnant, although not in school. This was done until 170 such youth were reached.

The data collection instrument was the questionnaire, which was also used as an interview guide to collect information from those respondents who could not read and write properly. The administration of the instruments was done through personal visits to the selected communities. The instruments were personally delivered to the literate teenagers who under my guidance filled the questionnaire. Face-to-face interviews using the questionnaire as an interview guide were employed for gathering responses from teen mothers who could not read and write.

Means, Standard deviation and independent t-test were used to analyse research question questions. The means and standard deviations were used to compare whether teen mothers and non-teen mothers are equally connected in the family and school. In computing the means, the arithmetic averages of all the scores for the various items were computed. The Independent t-test was used because data from teen mothers and teen non-mothers were being compared (Mishra, Singh, Pandey, Mishra & Pandey, 2019). Logistic Regression was used to test the hypothesis for the study in order to determine whether social connectedness in the family and school can predict teen motherhood among school age girls.

3. Results

3.1 Extent Teen Mothers and Teen Non-Mothers are Socially Connected to the Family

To what extent are teen mothers and teen non-mothers socially connected to the family? To answer this question, the means and standard deviations of the answers to the various questions were examined and used. The greater the



proportion of respondents in each category, that indicated 'yes', the more socially connectedness that category is. All the items were stated in positively.

Table 1: Nature of the Relationships between Parents and their School Age Girls

Statement:	Teen Mothers			Teen Non-Mothers		
	N	Mean	SD	N	Mean	SD
1. My parents help me to understand myself better	170	4.00	1.278	343	4.28	1.41
2. I tell my parents about my problems and troubles	170	3.75	1.430	343	4.01	1.644
3. When my parents know that I am upset about something, they ask me	170	3.70	1.401	343	4.34	1.462
4. I can count on my parents when I need to talk about a problem	170	3.62	1.297	343	3.70	1.671
Grand mean/SD	170	3.77	1.040	343	4.08	1.166

The teen non-mothers had higher mean for all items there than those of the teen mothers. This suggests that the nature of the relationship between parents of the teen non-mothers was stronger than that of the teen mothers. The next stage was to find out whether there is a significant difference between the two groups, that is, connectedness in the family between school age teen mothers and teen non-mothers.

Table 2: Difference in Means of Teen Mothers and Teen Non-mothers Social Connectedness in the Family

Motherhood status	N	mean	SD	t	Sig.
Teen mother	170	3.77	1.040		
Non-teen mother	343	4.08	1.166	2.967	0.003

P < 0.05, Df 511S

At an alpha level of 0.05, the result shows that the difference in the two means is statistically significant, $t(513) = 2.967, p < 0.05$. This means that in actual fact, the teen non-mothers enjoyed more social connectedness in the family than the teen mothers. The answer to research question 1, therefore, is that to a large extent, the teen non-mothers enjoyed more family connectedness than the teen mothers. This implies that when social connectedness in the family is strong teenage girls tend to avoid early sex, which predisposes them to early pregnancy. This result indicates lack of attachment to family and early motherhood as the teen mothers did not only indicate that their relationship with parents was strained by becoming mothers but that their relationship with parents was non-existent even before becoming mothers.

3.2 Extent Teen Mothers and Teen Non-Mothers are Socially Connected to the School

To what extent are teen mothers and teen non-mothers socially connected in the school? Without disaggregation, the next stage was to find out whether there is a difference between the two groups, that is, teen mothers and teen non-mothers in terms of their connectedness to the school.

Table 3: Differences in the Means of Teen Mothers and Teenage Non-mothers Social Connectedness in the School

Statement:	Teen mothers			Teen non-mothers		
	N	Mean	S/D	N	Mean	S/D
1. I am comfortable talking with adults in this school	164	3.29	1.709	343	3.64	1.303



2. I feel like I belong in this school	164	4.18	1.590	343	4.11	1.266
3. I have friends in this school	164	4.26	1.453	343	4.39	0.878
4. Other students in this school take my opinion seriously	164	4.16	3.447	343	3.91	1.215
5. I am treated with as much respect as other students	164	4.41	1.460	343	4.17	1.088
Grand mean/SD	164	4.04	1.227	343	4.04	0.817

$P < 0.05$, $Df = 505$, $t = 0.170$, $sig = 0.865$.

With alpha set at 0.05, the results show the difference in the two means is not statistically significant, $t(513) = 0.170$, $p > 0.05$. The result of the independent t -test shows that there is no significant difference in social connectedness in the school between school going age teen mothers and teen non-mothers. The answer for research question 2, therefore, is that the teen mothers and the teen non-mothers are equally socially connected in the school. Both of them were strongly socially connected in the school.

3.3 Hypotheses

Since relationship does not indicate causality or influence, the following hypotheses were tested at an alpha level of 0.05.

1. H_0 : Social connectedness in the family will not predict teen motherhood among school age girls.
2. H_0 : Social connectedness in the school will not predict teen motherhood among school age girls.

Logistic Regression was used to find out how strongly early motherhood can be predicted by social connectedness in the family and in the school. Before running the logistic regression model, it was found necessary to test the model for goodness of fit. The full model containing all the predictor variables was found to be statistically significant $X^2(8, N=513) = 92.12$, $p < 0.05$. This is an indication of a good fit of the model, which means that the variables in the equation fit the model. The results of the logistic regression analysis are presented in Table 4.

Table 4: Logistic Regression Coefficients Predicting the Likelihood of Early Motherhood among School going Children

Variables	B	S.E	Wald	DF	Exp(B)	95% C.I for EXP(B)	
						Lower	Upper
1. Living arrangement:							
i. Both parents (constant)	-.112	.516	.047	1	.894	.325	2.460
ii. Father only	-1.113*	.243	20.99	1	.328	.204	.529
iii. Mother only	.821	.779	1.111	1	2.272	.494	10.448
iv. Mother plus step-father	19.884	12587	.000	1	4.322	.000	.000
v. Father plus step-mother	-2.292*	.325	49.81	1	.101	.053	.191
2. Family connectedness	-.287*	.110	6.800	1	1.332	1.074	1.652
3. School connectedness	-.072	.119	.369	1	.930	.73745	1.175
4. Sibling size	-.093	.058	2.582	1	.911	.813	1.021
constant	1.339	.577	5.379	1	3.816	-	-

2 log likelihood = 534.209

Cox and Snell $R^2 = 0.171$

Nagelkerke $R^2 = 0.237$

*= $p < 0.05$



The results shown in Table 4 indicate that the category labelled “father only” under living arrangements has the B coefficient of -1.113, significant at 0.05. The B coefficient shows the direction of the prediction. Therefore, the negative value means that under the living arrangement when the teenage girl stayed with the father alone, there was the likelihood that she would not experience early motherhood. The next category as shown in Table 4, which indicates significant value under living arrangement is staying with father plus step-mother. It has a B coefficient of -2.292 and is significant at 0.05. Therefore, the negative value means that under living arrangement when the teenage girl stayed with the father plus the step-mother, there is the likelihood that she will not experience early motherhood.

The next variable, which is statistically significant is family connectedness. Its B coefficient value is -0.287 and is significant at 0.05, meaning that when family connectedness is strong, early motherhood among teenage school girls is reduced. Among the three predictors, family connectedness is the least important predictor with the odds ratio for family connectedness being 1.332. This means that the chance of a teenage girl of school going age not becoming an early mother when family connectedness is strong is 1.332 times greater than the one who does not enjoy such a connectedness. This means that where there is closeness between an adolescent girl and the family, the likelihood of the girl experiencing early motherhood will reduce.

The results from Table 4 show that social connectedness in the family will predict that teen motherhood among school age girls would be low. Therefore, hypothesis 1 is rejected. These same results cannot be said of hypotheses 2, because from the results shown in Table 4, school connectedness does not predict early motherhood among school age girls. Therefore, we fail to reject the null hypothesis, which states that social connectedness in the school will not predict teen motherhood among school age girls.

3.4 Discussion

The purpose of this study was to determine the extent to which teenage mothers and teenage non-mothers are socially connected in the family and school and also to determine whether the quality of family connectedness and school connectedness can predict early motherhood among school age teenage girls.

The main findings of the study are that teen mothers and teen non-mothers did not enjoy an equal amount of social connectedness in the family. The teen non-mothers appeared to enjoy more family connectedness than the teen mothers. The study thus tends to support Wu and Lee (2020) in that when parent-child connectedness is high in a family, where the “emotional climate” is one of affection, warmth and satisfaction, there is the tendency for the girl to delay sexual activity. This means that where there is closeness between an adolescent girl and the family, the likelihood of the girl experiencing early motherhood will reduce. This seems to support the conclusion by Grossman, Lynch, Richer, DeSouza and Ceder (2019) that lack of closeness in the parental/teen relationship increases the influence of peers on the adolescent’s sexual activity.

Among family connectedness and school connectedness only family connectedness was found to be a predictor of early motherhood. This seems to contradict a similar finding by Touloupis (2022) that a variety of adolescent externalizing problems have been associated with low levels of school connectedness, including violence, alcohol use, cigarette and marijuana use, and onset of sexual activity. The inability of school connectedness to predict early motherhood in this study seems contrary to the findings of Košir, Aslan and Lakshminarayanan (2023), which indicate that school connectedness predicted delayed initiation of externalizing problems one year later, although this relationship was not as strong when adolescents were already engaged in the problem behaviour.

In addition, among all the variables that predicted early motherhood, there is the presence of the biological father. This seems to confirm a study by Kim (2008), who studied many researchers and concluded that the absence of a natural father in the home, and the duration of such absences are significant and are more related to sexual activity than peers living in other forms. This goes to confirm the generally held belief that the presence of the biological father exerts a check on the behaviour of teenage school girls, apparently because fathers tend to be strict on their adolescent wards, especially in a traditional patriarchal society like Ghana where fathers, apart from their provider role, are also supposed to be the disciplinarian in the family.

One other important finding that emerged from the study is that most of the teen mothers were staying with their mothers alone prior to them becoming pregnant. When probed further to find out why they were staying with their



mothers alone, those respondents said because their parents were no longer living together. The picture appears constant with Yockey, King and Vidourek (2021) who reported that adolescents who suffer from a parental death or divorce are likely to turn to deviant behaviours such as marijuana use and other vices to help cope with the stress that has been created. This suggests appears to suggest that there is a strong negative relationship between living with mother only and the tendency to be free enough to experience early sex and eventually fall into early motherhood thereby becoming a school dropout. This seems to be consistent with a study conducted by Atiasi (2001) on correlates of dropping out of Basic School. His study reveals that more of the dropouts, especially the girls, came from single parent homes due to either divorce or separation. He therefore concludes that most of the dropouts came from single parent homes and that the condition was due primarily to marital distraction.

5. Conclusion and Recommendation

It is therefore concluded that the stronger the family connectedness a teenage girl enjoys, the less likely it is that she will engage in early sex and become an early (teen) mother. Therefore, when family connectedness is promoted, teenage pregnancy would be controlled and teenage girls would stay in school. It is therefore recommended to parents to establish close bonds with their teenage girls, and then use that bond to constantly draw the teen's attention to the negative consequences of early sex. Despite this study's contributions, the following limitation is also identified. This limitation stems from the fact the researchers have to use face-to-face interviews using the questionnaire as an interview guide to gather responses from mainly teen mothers who could not read and write. Most of these respondents found it difficult talking about their sexual experiences, which are considered private, and so divulging such information made them uncomfortable. This was overcome by constantly assuring these respondents about the confidentiality of the study.

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