# Understanding Factors Linked to Adolescent Pregnancy: A Review of the Literature

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## ABSTRACT

The adolescent pregnancy rate in the United States is the highest among industrialized nations. It is important for professionals working with pregnant minors and adolescent mothers to understand the factors associated with adolescent pregnancy to avoid forming judgmental and negative attitudes towards this population. The purpose of this article is to outline the factors stated in the academic literature, that it may serve as a reference for professionals working with this population. The scientific literature underscores that multiple factors interact to influence adolescent sexual behavior, which may result to adolescent pregnancy. Understanding these factors with adolescent childbearing allows for a broader perspective and prevents simplistic thinking on a complex phenomenon.

Key words: adolescent pregnancy, teen pregnancy, teen mothers, risk and protective factors for early childbearing



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#### INTRODUCTION

This article is an offshoot of the author's broader work on adolescent mothers attending an alternative public school in South Texas. This author worked closely with adolescent mothers for twelve consecutive years, teaching in an alternative, public high school for pregnant minors and female adolescent parents. This current literature review emerged initially from her deep curiosity about the causes of adolescent pregnancy. The main question she asked was: Why do adolescent females become pregnant at a young age? It was important for her to understand its causes so that she could become more empathetic towards a population often silenced and marginalized (Barcelos & Gubrium, 2014). Currently, the author is a teacher educator at a public institution of higher education, venturing into the possibility of disseminating information to teachers, social workers, school nurses who may benefit from gaining a research-based understanding of the correlates of teen pregnancy. She believed that examining the scientific literature to understand the causes of this phenomenon could reduce the forming of judgmental attitudes. Knowing risk and protective factors may also contribute to efforts in preventing its negative consequences. This article was written to serve as a resource for those wanting to better understand the factors associated with adolescent pregnancy and steer away from baseless conceptions of its causes.

A comprehensive literature search was conducted using the following online databases: Academic Search Complete, Education Research Complete, Educational Resources Information Center (ERIC), ProQuest Central, PsycARTICLES, PsycINFO, Science Direct, and SocIndex. Search terms used were: adolescent mothers, teen mothers, teen pregnancy, early childbearing, and teenage childbearing. The search was limited to scholarly, peer-reviewed articles and included a few older articles, considered to be landmark studies. Publications by government agencies, such as the Center for Diseases Control (CDC) and the National Center for Health Statistics (NCHS), for the most current data on teen pregnancy and parenting were also reviewed. This review was organized around the following topics: the recent statistics on adolescent pregnancies, the risk and protective factors framework, the predictors of adolescent sexual risk behavior, and the role of desire and goals. It is situated within the vast literature on adolescent parenting, actively studied in different countries and from different vantage points in the last decade (Aujoulat, Libion, Berrewaerts, Noirhomme-Renard, & Deccache, 2010; Bhana, Morrell, Shefer, & Ngabaza, 2010; Buhi & Goodson, 2007; Diez & Mistry, 2010; Edirne et al., 2010; Hurd & Zimmerman, 2010; Kincaid, Jones, Sterett & McKee, 2012; Omar et al., 2010; Mollborn, 2010). It should be noted that adolescent childbearing is a complex issue that can only be fully understood when viewed within a wider socioeconomic and environmental perspective (Whitehead, 2007). Thus, there is not one single factor that can be stated as a cause of teen pregnancy.

#### **RECENT STATISTICS**

Although teen pregnancy rates have declined considerably over the past few decades in the United States and in most of the other 20 countries with complete statistics, the teen pregnancy rate is still highest in the United States, with 57 per 1,000 among five to 19 year old adolescents (Sedgh, Finer, Bankole, Eilers & Singh, 2015).

According to the latest Youth Risk Behavior Surveillance Survey, a national survey conducted by the CDC (2017), among ninth to 12<sup>th</sup> grade students in public and private schools,

39.5% of high school students reported they had engaged in sexual intercourse. The percentage of sexually active adolescents for all high school grade levels is 28.7%. Only 8.8% of high school students used both a condom during and birth control pills; an IUD or implant; or a shot, patch, or birth control ring before last sexual intercourse (to prevent pregnancy among students who were currently sexually active). It was noted that engaging in unprotected sexual intercourse, being sexually active, beginning early sexual initiation and having sex with multiple partners are all considered sexual risk behaviors that make adolescents susceptible to negative consequences (CDC, 2017).

Moreover, risky sexual behaviors were associated with seasonal school breaks, characterized by free time and unsupervised activities. Such risky sexual behaviors result to negative outcomes, specifically, sexually transmitted infections and pregnancies. Adolescent pregnancies, in turn, increase the risk of public assistance use and low educational attainment (Casarez, Lahiff, Eskenazi, & Halpern, 2010).

While most adolescents perceive adolescent pregnancy and parenting negatively, this perception does not always translate to prevention. In fact, half of the adolescents who became pregnant in 2004 to 2008 reported they did nothing to prevent pregnancy. Moreover, scholars have documented that the highest rates of unintended pregnancies occur among unmarried adolescents, aged 15-19 years (Brown & Sullentrop, 2009; Duncan, 2007). Thus, in both public discourse and social scientific literature, adolescent motherhood is viewed as a social problem (Breheny & Stephens, 2010).

Adolescent pregnancy is commonly viewed as a violation of social norms that may lead to resources being withheld from the adolescent parent as a punishment that have negative consequences (Duncan, 2007; Mollborn, 2009; Savio Beers & Hollo, 2009). Indeed, a lack of particular material resources such as housing, childcare, and financial support has been linked to lower educational attainment (Mollborn, 2007) and depression (Reid & Meadows-Oliver, 2007). Given the extent and severity of outcomes of adolescents' early sexual activity, it is important to understand its causal factors.

### RISK AND PROTECTIVE FACTORS FRAMEWORK

Researchers have studied behavioral, social, and environmental factors linked to adolescent pregnancy but were careful not to directly state its causes (Cavazos-Rehg et al., 2010; March & Serdar Atav, 2010). In fact, most of the literature that investigated adolescent sexual risk behavior, which may lead to pregnancy, was typically framed within a risk and protective factors framework (March & Serdar Atav, 2010). These studies justified their significance as contributing to teenage pregnancy prevention efforts. Researchers identify factors, which were considered determinants of sexual risk taking and resulting teenage pregnancy, suggesting that adolescents who possess these determinants must be targeted for intervention, or that such factors must be reduced to avoid unintended pregnancy.

Scholars viewed adolescents as either having or not having a set of characteristics that predict being at-risk or protected from teenage pregnancy. Risk factors are elements within the adolescent's life that may make her more prone to becoming an adolescent mother while protective factors are those that may prevent her from becoming one. Hence, not all adolescents have the same level of risk for pregnancy and adolescent parenting (Cavazos-Rehg, et al., 2010). This notion also accounted for disparities in the rate of adolescent pregnancy and parenting among different segments of the adolescent population. Mollborn (2011) considered teen

parenthood as a "polarized experience – common in some segments of the population and rare in others" (p.34). For example, Latinas, African Americans, and Native Americans have high adolescent pregnancy rates while European American and Asian American families with high socioeconomic status have comparatively low rates (Mollborn, 2011). The succeeding subsections present a synthesis of risk factors related to early sexual behavior. This author analyzed the various behavioral, social, and environmental factors.

### PREDICTORS OF ADOLESCENT SEXUAL RISK BEHAVIOR

In a systematic review of 69 studies published between 1996 and 2005, which investigated the predictors of adolescent sexual behavior, Buhi and Goodson (2007) found that intention to have sex was the most stable predictor of sexual behavior. Eight studies reviewed by the researchers revealed a statistically significant association between intention to have sex with sexual intercourse and initiation of sexual behaviors. The researchers did not found any study which did not associate intention to sexual behavior.

Buhi and Goodson's review also found that another stable predictor of adolescent sexual behavior was adolescent perceptions of norms (i.e., peers' and parents' attitudes toward sex and peers' sexual behaviors). Adolescents who perceived their friends and parents disapprove of early sexual activity were more likely to be abstinent, while adolescents who perceived that most of their peers have had sex were more likely to engage in sexual activities themselves. Researchers emphasized that one reason adolescents engage in early sexual activity is that they may overestimate how many of their peers are sexually active, hence they make assumptions that it is normal to engage in early sexual activities. Correspondingly, Manlove, Moore, and Ikramullah (2008) found that positive family environments and positive peer influences were linked to reduced sexual risk behaviors. On the other hand, association with delinquent peers were linked to an earlier initiation of sexual intercourse.

Lastly, Buhi and Goodson's review showed that time alone with the opposite sex (or being home alone without a parent) was associated with increased sexual activity. Time alone with the opposite sex was indicative of less environmental constraints to sexual risk behavior. Thus, researchers suggested that parents monitor children's activities, involve children in regular family activities, develop positive parent-child relationships, and set standards for responsible sexual behavior to reduce the odds of adolescents engaging in risky sexual behaviors that may lead to early childbearing.

In another study which examined adolescents' risky sexual behaviors, Price and Hyde (2009) analyzed the role of individual, familial, and socio-cultural factors related to the early onset of risky sexual behaviors. The researchers hypothesized that there is not just one factor, but that there are cumulative factors that increase the likelihood that adolescents will engage in risky sexual behaviors. The cumulative risk model suggested that the more risk an adolescent is exposed to, the more likely he or she will engage in early sexual behaviors.

Price and Hyde longitudinally followed a sample of 273 adolescents (53% girls, 90% European American) from age 13 to 15. The researchers found that for girls, several influences were associated with initiation into sexual activity. These influences were: (a) low self-esteem, (b) more time watching television with high sexual content, (c) poor relationships with parents, (d) a non-intact household, (e) higher levels of misconduct (f) low academic achievement, and (g) parents with low educational levels. Parents' low educational level had been considered by some researchers as a "proxy", or a substitute variable, which represents parents' income and socio-economic status (Casares, Lahiff, Eskenazi, & Halpern-Felsher, 2010, p. 145; Price &

Hyde, 2009, p. 1069). It is a factor considered to be complex and difficult to improve; however, authors argued that parents can improve relationships with their children (Price & Hyde, 2009).

Further, using Bronfenbrenner's bioecological theory, supported by a framework of risk and protective factors, Jordahl and Lohman (2009) studied a sample (N= 984) of urban, low income, predominantly minority (Latina/o and African-American) adolescents. The scholars proposed that individual characteristics and the adolescents' environment affect their crucial decision to engage in early sexual activity. Their study showed that adolescents who lived in single parent and separated households had higher odds of engaging in sexual intercourse. Of the different family factors investigated, the only factor that decreased the odds of engaging in sexual activity was father involvement. In terms of school factors, it was found that adolescents who had high levels of delinquency increased their odds of engaging in sexual activity. Consistent with Price and Hyde's (2009) study, Jordahl and Lohman found support that adolescents with mothers who held a technical degree or higher decreased the chances of early sexual activity.

In theorizing the causes of adolescent pregnancy, Waddel (2009) cautioned readers about the notion that adolescents engage in sexual activities simply out of ignorance, carelessness, and imprudence. Waddel considered adolescence as a particularly problematic time in a person's life. Thus, she proposed that "sexual activity may represent an escape, through physical arousal and excitement, from the tumult of change and uncertainty" (p. 271) and that "pregnancy is often an expression of complex impulses and feelings, whether conscious or not" (p. 273). A qualitative study reinforces Waddel's theory. Through this qualitative study, researchers found that although pregnancy may not be necessarily planned or wanted, it may become desirable for adolescents in the absence of positive parental involvement and educational opportunities. The researchers suggested that most adolescents who had unintended pregnancies were associated with problematic family situations and lack of parental care (Biggs, et al., 2010). On the contrary, close parental supervision was associated with delayed childbearing (Biggs, et al., 2010). These findings are consistent with the literature reviewed earlier, which revealed that positive parental relationships and close parental monitoring are protective factors against adolescent childbearing.

Evidence also pointed that adolescent pregnancy may represent unresolved internal conflicts and problem behaviors (March & Sedar Atav, 2010). Misconduct and symptoms of antisocial personality disorder increased the risk of adolescent pregnancy (Cavazos-Rehg, et al., 2010). Specifically, Cavazos-Rehg et al. (2010) found that daily cigarette use, family instability (which includes parental alcohol and drug problems), racial minority status, and antisocial behavior are significantly associated with adolescent parenting. Similarly, it has been found that girls with chronic high aggression-disruptive disorder have significantly increased risk for pregnancy (Bradshaw, Schaeffer, Petras & Ialongo, 2010). These research outcomes are compatible with Waddel's notion that adolescent pregnancy arises from a wide range of motivations, which may or may not be consciously held by adolescents themselves.

#### PREGNANCY DESIRE, INTENTION AND ADOLESCENT GOALS

While most adolescent pregnancies are unintended (Furstenberg, 2003), Sipsma, Ickovics, Lewis, Ethier and Kershaw (2011) found a link between pregnancy desire and pregnancy over time. In a sample of racially diverse, sexually active females (N=208, mean age=17.2 years), the investigators found that a desire for pregnancy indicated a higher risk for

subsequent pregnancy. In this study, participants completed baseline interviews and subsequent interviews every six months for a period of 18 months. The researchers used Cox regression analysis to determine whether desire to become pregnant predicted pregnancy incidence over time. The analysis suggested that pregnancy desire and ambivalence in the sample of adolescents was significantly associated with becoming pregnant over the 18-month follow-up period.

The study revealed that older adolescents, who are in less serious romantic relationships, had initiated sexual activities at a younger age, and had greater stress levels expressed pregnancy desire and ambivalence (Sipsma, Ickovics, Lewis, Ethier and Kershaw, 2011). Furthermore, the risk of pregnancy was almost five times higher among those who were not in school. The researchers recommended that intervention efforts must focus on adolescents who desire pregnancy, such as those in romantic relationships and promote coping skills to reduce pregnancy rates.

The findings on pregnancy desire are related to the study on pregnancy intention conducted by Rocca, Doherty, Padian, Hubbard, & Minnis (2010). In their study, 213 adolescent Latinas were observed and interviewed within a two-year period. Pregnancy intention was measured by asking participants two questions: (a) if they wanted to get pregnant within the next six months and (b) how happy they would be if they were to become pregnant in the next six months.

Researchers found that the odds of pregnancy among adolescents who expressed any degree of wanting pregnancy were more than twice those teenagers who definitely did not want pregnancy. Moreover, those who had expressed any happiness about having a pregnancy had an even higher risk of pregnancy. However, 70% of pregnancies occurred among participants who had reported they did not want to become pregnant. The researchers explained that the measure used to express pregnancy intention might have been insufficient and that, due to societal expectation, participants might have underreported intention. Also, the researchers noted that the odds of pregnancy doubled among women who had less power and control over their relationships. The researchers explained that within this sample, young women may have difficulty negotiating sex and contraceptive use, resulting to pregnancy. The researchers suggested the need to educate young women regarding decision-making processes and the provision of interventions for male adolescents. Accordingly, CDC (2017) recommended that health care providers, community partners, and parents/guardians can help sexually active teens to negotiate contraceptive use with their partners.

Researchers also investigated whether goals (e.g., completing a college degree) affected adolescent sexual behavior. They found that adolescents avoid getting pregnant only if they believed that pregnancy will be an obstacle in achieving their goals (Jumping-Eagle, Sheeder, Kelly, & Stevens-Simons, 2008). Consistent with this finding, evidence suggested that high career aspirations may not be a protective factor against unintended pregnancy (Phipps, Salak, Nunes, & Rosengard, 2011). Thus, to increase adolescents' motivation to avoid pregnancy (CDC, 2012), it is important for them believe that early childbearing is a threat to goal achievement. Moreover, prevention efforts must include information on the educational and time demands of intended careers and the difficulty of meeting these demands following a pregnancy (Phipps, Salak, Nunes, & Rosengard, 2011).

The research on adolescents' pregnancy desire, intention and goals show that aside from the multiple environmental and social factors affecting sexual behaviors that may lead to pregnancy, individual actions and choices also play a role in adolescent childbearing. To synthesize, adolescents who express intention, desire and ambivalence toward pregnancy, and a lack of understanding that an early pregnancy may negatively affect achievement of goals may become at risk for becoming adolescent parents.

#### CONCLUSION

Various behavioral, social, and environmental factors are significantly linked to adolescent parenthood. However, researchers do not point to a single cause. Instead, the scientific literature underscores that multiple factors interact with each other to influence adolescent sexual behavior, which may result to adolescent pregnancy. Thus, readers must not readily assume that an adolescent who possesses a risk factor will become an adolescent mother. Adolescent pregnancy is a complex phenomenon occurring due to multiple influences that are difficult to untangle and not easily identifiable. Understanding the factors associated with adolescent childbearing allows for a broader perspective and prevents simplistic thinking on a complex phenomenon.

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