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# A Sex-Positive Framework for Research on Adolescent Sexuality

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## Abstract

In this article, I propose a sex-positive framework for research on adolescent sexuality in which I consider consensual sexual activities in adolescence as developmentally normative and potentially healthy. The sex-positive framework is contrasted with the predominant “risk” perspective that presumes that abstinence from sexual activity is the ideal behavioral outcome for teenagers. Evidence from longitudinal and behavioral genetic studies indicates that engaging in sexual intercourse in adolescence does not typically cause worse psychological functioning. The relationship context of sexual experience may be a critical moderator of its psychological impact. Moreover, cross-cultural data on adolescents’ contraception usage, unintended pregnancy, and sexually transmitted infections suggest that, despite the unacceptably high rate of negative health consequences among U.S. teenagers, adolescents can have the developmental capacity to regulate the health risks inherent in sexual activity. Understanding adolescent sexuality can be fostered by considering sexual well-being, a multidimensional construct that incorporates an adolescent’s sexual self-efficacy, sexual self-esteem, feelings of sexual pleasure and satisfaction, and freedom from pain and negative affect regarding sexuality. New research is necessary to understand the development of adolescent sexual well-being, including its normative age trends, its reciprocal links with sexual behavior, and its impact on psychological and physical health.

## Keywords

adolescence, age at first sex, sexual development, behavior genetics, sexual well-being

Our parents look on in disbelief  
as we pioneer delights they thought only they knew  
before those delights gave them us.

—Debra Spencer (2004), “The Discovery of Sex”

Few topics incite as much controversy as adolescent sex. In debates about abstinence-only sex education (Kohler, Manhart, & Lafferty, 2008), parental notification laws (Dennis, Henshaw, Joyce, Finer, & Blanchard, 2009), teenage access to emergency contraception (Committee on Adolescence, 2012), purity balls (Gibbs, 2008), and the so-called hookup culture (Rosin, 2012), society is asked to “stare down the barrel of teenage sexuality” (Alford, 2013). Adolescent sex is commonly perceived—both by American society and in psychological research—as an inherently deviant behavior, whereas abstinence from sexual activity is often presumed to be the healthiest behavioral outcome for teenagers. In contrast, a small but persistent chorus of voices (e.g., Diamond & Savin-Williams, 2009; Fine, 1988; Halpern, 2010; Savin-Williams

& Diamond, 2004; Schalet, 2011; Tolman & McClelland, 2011) has called for a new paradigm for understanding adolescent sexuality, one in which teenage sexual experiences are regarded as both developmentally normative and potentially healthy. Yet, much of this sex-positive discourse remains centered within qualitative sociology and feminist social commentary and has only recently begun to receive attention as hypotheses that merit rigorous empirical investigation by quantitative social scientists. In the current article, I aim to further bridge this gap. I describe the emerging body of cross-cultural, longitudinal, and behavioral genetic research that challenges the conclusion that adolescent sex typically results in negative psychological consequences. Moreover, I discuss how sexual well-being can be operationalized within

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quantitative social science, and I describe how considering the potentially positive dimensions of adolescent sexuality opens exciting avenues for empirical research.

### A Sickness Best Prevented

Within a risk framework, adolescent sexuality is viewed as morally wrong, inherently deviant, and socially problematic. Individuals are expected to marry, and this marital relationship is presumed to be the normative and appropriate context for sexual behavior. This clearly excludes teenage sex, which in modern industrial societies is almost always nonmarital sex. The traditional risk framework is most clearly manifest in school-based, sex-education programs, which emphasize the physical and psychological dangers of sexuality—unplanned pregnancy, sexually transmitted infection (STI), victimization, and psychological trauma—and unequivocally advocate for sexual abstinence until marriage (presumably to someone of a different gender) as the ideal behavior. For example, Texas Education Code, Section 28.004 mandates that “any course materials relating to human sexuality” must “emphasize that abstinence from sexual activity, if used consistently and correctly, is the only method that is 100 percent effective in preventing . . . the *emotional trauma* [emphasis added] associated with adolescent sexual activity.” Such a curriculum “equates adolescent sexuality with a sickness best prevented” (Schalet, 2011, p. 209).

Perhaps more subtly, this traditional risk perspective has also guided social science research on adolescent sex (Tolman & McClelland, 2011). Research has generally adopted “a medicalized, reductionistic, and implicitly moralizing view of adolescent sexuality as *risk behaviors* that threaten social welfare and public health” (Savin-Williams & Diamond, 2004, pp. 190–191). This view is evident in at least three ways. First, research on the precursors and sequelae of sexual activity is most frequently justified in the literature by making reference to its potential health risks. Implicit in this framing is that adolescent sexuality is interesting because it is dangerous, posing new vulnerabilities for disease and broken dreams. Second, the psychological outcomes that are investigated as consequences of sexual activity are typically adverse events, such as depressive symptoms, academic problems, or delinquent behaviors. Only rarely are potentially positive outcomes even considered. Third, sexual activity is operationalized in terms of behaviors—most frequently, whether an adolescent has had penile–vaginal intercourse—but rarely is contextualized with regard to relationships or desires. In this way, the meta-narrative of much of the literature consists of two questions: “What bad things happen when teenagers have sex?” and “What causes teenagers to have sex (which we know is

important because it causes bad things to happen)?” More than 40 years ago, Reiss (1970) argued in *American Sociological Review* that (a) “deviant behavior . . . refers to behavior which is viewed by a considerable number of people as reprehensible and beyond the tolerance limit” (p. 78); (b) on the basis of adult objections, “premarital” sex qualified as deviant by this definition; and, thus, (c) social science researchers could study teenage sex using the theories applied to other deviant behaviors, such as delinquency or theft. With some notable exceptions, psychological research on teenage sex has remained rooted in this original formulation.

### The Sex-Positive Counterpoint

In the last 50 years, there have been striking cultural and demographic changes that have altered relations among sex, marriage, and childbearing. Adolescent sex is not a rare behavior engaged in by a deviant few but is rather statistically normative. Of U.S. adolescents, 70% have had intercourse by 19 years of age (Martinez, Copen, & Abma, 2011). Furthermore, contraception and legal abortion have separated sex from pregnancy and childbearing. The current teen birth rate in the United States (29.4 births per 1,000 women) represents a historic low for American teens (Hamilton, Martin, & Ventura, 2013), a decline that is mostly attributable to increased contraceptive use (Guttmacher Institute, 2013). Sex and childbearing are even more disconnected for teenagers from European nations. For example, 23% of Dutch boys and 21% of Dutch girls reported having sex by 15 years of age (Godeau et al., 2008); yet, the Netherlands has one of the lowest teen birth rates in the world, with fewer than five births per 1,000 women (United Nations, 2011). Meanwhile, marriage in the United States is increasingly postponed, sometimes indefinitely. By 25 years of age, 44% of women have had a baby, but only 38% have married, and nearly half of first births are to unmarried women (Hymowitz, Carroll, Wilcox, & Kaye, 2013). The number of states that permit same-sex couples to marry is steadily increasing. There are entrenched cultural and political arguments regarding whether these changes reflect a liberation that is to be hailed as progress or presage a catastrophic breakdown in social order. However, for better or for worse, the traditional sexual ethic—in which sex is inextricably bound with procreation, and both are proscribed for everyone except married heterosexuals—no longer describes the typical American teenager or adult.

Concomitant with these social changes, a number of writers and activists have articulated a counterpoint perspective on sexuality. Supporters of the sex-positive perspective regard consensual sexual activities, for teenagers and adults, as potentially positive and healthy.

Thus, sex-positivity encompasses a variety of sexual behaviors, sexual identities, and gender identities that are traditionally viewed as deviant, including not only sex that has been deemed deviant on the basis of age or marital status (such as teenage sex) but also lesbian, gay, and bisexual sexual orientations and experiences. The term sex-positive does not imply that abstinence from sexual activity is viewed negatively or that all sex is necessarily positive or healthy. This point is important and easily misconstrued: Supporters of a sex-positive position are not advocating that it is always good to be having sex. Rather, sexual abstinence is seen as one potential sexual choice that may (or may not) be the healthiest choice for an individual at a particular time. Supporters of a sex-positive perspective also do not seek to trivialize the risk-management aspects of sexuality; preventing negative consequences is an integral part of sexual health. Yet, central to the sex-positive perspective is that a healthy sexuality is more than avoiding unwanted consequences.

The sex-positive perspective articulates a strikingly different conception of adolescent sexuality. The role of psychological science is not to discriminate among competing conceptions of sexual morality: Just because teenagers are having sex does not mean that they ought to be having sex. However, conceptions of sexual morality can and do inform the specific hypotheses that motivate researchers' work. During the past 40 years of research on adolescent sexuality, the traditional perspective that teenagers ought not to be having sex has pervasively influenced the science of adolescent sexuality, leading to the recurrent hypothesis that sexual intercourse causes psychological harm. Similarly, the sex-positive emphasis on pleasure, consent, health, agency, and sexual-minority experiences can also meaningfully inform the science of adolescent sexuality by suggesting new hypotheses that warrant empirical attention.

Accordingly, research that is informed by a sex-positive framework differs from research that is situated within a risk framework in several key respects. First, sexuality is considered a normative and essential part of human development. Indeed, from an evolutionary perspective, sex is the point of adolescence: The overarching function of the biological, intrapersonal, and interpersonal changes of adolescence (pubertal maturation, increased novelty seeking, and social reorientation away from parents and toward peers) is to facilitate reproduction. Second, abstinence until marriage to a person of a different sex is not assumed to be the sole option for healthy sexual behavior (Santelli et al., 2006). Rather, there is potentially "a wide range of strategies through which adolescents learn about themselves, their bodies, intimate partners, and relationships within contexts where they are required to both manage risks and

develop positive patterns for adult sexuality" (Tolman & McClelland, 2011, p. 242). Third, adolescent sexuality is conceptualized as having potentially positive aspects and consequences, including pleasure, intimacy, competence, and well-being. This conceptualization has ties to the larger field of positive psychology, in which researchers aim to understand human flourishing and positive subjective experiences (e.g., happiness, well-being, health, contentment, esteem, and optimism) as a counterpoint to the more typical focus on disease, disorder, and dysfunction (Linley, Joseph, Harrington, & Wood, 2006; Seligman & Csikszentmihalyi, 2000). Finally, as described by the National Commission on Adolescent Sexual Health, "sexual health is not defined by which sexual behaviors a teenager has or has not engaged in" (Haffner, 1995, p. 20). Rather, researchers whose studies are situated within a sex-positive framework consider the emotional, cognitive, and relational elements of adolescents' sexual experiences to be critical determinants of how these sexual experiences influence development, for better or for worse.

These themes are evident in two landmark definitions of sexual health. Nearly two decades ago, the National Commission on Adolescent Sexual Health wrote the following:

Sexual health encompasses sexual development and reproductive health, as well as such characteristics as the ability to develop and maintain meaningful interpersonal relationships; appreciate one's own body; interact with both genders in respectful and appropriate ways; and express affection, love, and intimacy in ways consistent with one's own values. (Haffner, 1995, p. 4)

More recently, the World Health Organization (2006) defined sexual health as

a state of physical, emotional, mental and social well-being related to sexuality; it is not merely the absence of disease, dysfunction, or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be maintained, the sexual rights of all persons must be respected, protected, and fulfilled. (p. 5)

Both definitions highlight dimensions of adolescent sexuality beyond virginity—including physical pleasure, sexual subjectivity, bodily awareness and esteem, interpersonal respect, and intimacy. Yet, decades later, these dimensions remain infrequently represented within

quantitative psychological research, both in terms of how adolescent sexuality is operationalized and measured and in terms of which hypotheses are tested.

## **A Second Look at the Negative Consequences of Sex**

### ***Health consequences***

Clearly, any sexually active person—adolescent or adult, married or unmarried—must manage their risks for the negative or unwanted health consequences of sex, including unintended pregnancy and STI. These negative consequences are widely considered to be particularly catastrophic for teenagers, because they are not yet functioning as fully autonomous adults (i.e., financially and residentially independent).<sup>1</sup> These negative consequences do affect an unacceptably high number of U.S. adolescents. Teenagers and young adults (15–24 years of age) account for half of the approximately 19 million new STI cases each year (Guttmacher Institute, 2013). In 2011, there were 334,000 births to teenagers, 82% of which were unplanned. Although the teen birth rate has been steadily declining for decades, American teenagers are still much more likely to become pregnant than teenagers in other developed nations. Given these stakes, teenagers are commonly presumed in the United States to be developmentally ill-equipped to manage the inherent riskiness of sex because of their cognitive and emotional immaturity (Schalet, 2011).

However, a growing body of cross-cultural and longitudinal research suggests that this presumption underestimates adolescents' developmental capabilities. With regard to safe sex practices, data from a national probability sample show that American adolescents (14–17 years of age) actually use condoms more consistently than single, sexually active, American adults: Of the past 10 vaginal intercourse events, 79.1% were condom protected for male adolescents, and 58.1% were condom protected for female adolescents, compared with 46.7% for single (unmarried and not in a relationship) adults (Reece et al., 2010).

Moreover, teenagers' use of contraception continues to improve. For example, only 48% of sexually active teenagers reported contraceptive use at first sexual intercourse in 1982, compared with 78% in 2006–2010. Finally, research on contraceptive practices by adolescents in other developed nations sheds new light on teenagers' capacities for responsible sexual behavior. In the Netherlands, 93% of sexually active 15-year-olds reported using condoms or birth control pills at last sexual intercourse, with 17% reporting using both methods (Godeau et al., 2008). Not surprisingly, Dutch adolescents enjoy comparative freedom from anxiety about the physical

hazards of sex, as they experience exceptionally low rates of teenage childbearing and STIs. For example, the odds of being infected with gonorrhea for Dutch adolescents are 75 times lower than for U.S. adolescents (Panchaud, Singh, Feivelson, & Darroch, 2000), and less than 1% of adolescent Dutch women give birth (United Nations, 2011).

These longitudinal and cross-cultural comparisons suggest that negative health consequences of teenage sexual activity are not a developmental inevitability. As Santelli, Sandfort, and Orr (2008) commented, "Such examples challenge the notion that teenage sexual activity always has serious short-term and long-term health-compromising consequences" (p. 93). In other words, adolescent sexuality is not necessarily pathological simply by virtue of being adolescent. Rather, the location of the pathology appears to be cultural: American culture, rather uniquely among developed nations, fails to support teenagers' sexual development, to their detriment. Given adequate education, access to reproductive health care services, and open communication with adults, teenagers are capable of successfully navigating the transition to becoming sexually mature adults without encountering unduly negative health outcomes.

### ***Psychological consequences***

What about the supposed psychological consequences of teenage sex? This question is more difficult to answer than might be presumed, because sexual intercourse is not randomly assigned. Teenagers who conform to social proscriptions against intercourse differ from those who do not in a wide variety of ways, including (but certainly not limited to) race, class, religion, pubertal development, family environment, personality, peer relationships, and genetic predispositions. Most researchers compare teenagers who have had intercourse with those who have not without adequately controlling for these preexisting differences, particularly genetic differences among individuals (Harden, 2013). Is having had sexual intercourse correlated with depression because sex makes one depressed? Or is there some third variable confound—such as going through puberty early—that increases one's risk for depression and makes sexual intercourse in adolescence more likely?

Recently, this methodological problem has been addressed by researchers using a behavioral genetic design in which they compare biological relatives—such as identical twins—who differ in their sexual behavior and test whether these within-twin differences predict differences in psychological outcomes. The twin comparison has the advantage of controlling for all the environmental and genetic background factors shared by twins raised in the same family. If one twin has sexual

intercourse at 14 years of age, but her identical twin sister does not have intercourse until she is 19 years of age, do the twins differ in their risk for depression, as would be predicted by the hypothesis that adolescent sexual experiences cause psychological harm?

On the whole, the answer seems to be no. After controlling for genetic and shared environmental background factors using a cotwin control design, Donahue and colleagues found that sexual intercourse in adolescence was not significantly associated with cannabis use, cigarette use, childhood symptoms of externalizing disorders, substance use, depression, or criminal convictions (Donahue, D'Onofrio, Lichtenstein, & Långström, 2013; Donahue, Lichtenstein, Långström, & D'Onofrio, 2013; Donahue, Lichtenstein, Lundström, et al., 2013). In other genetically informed research, researchers have found that third-variable confounds<sup>2</sup> account for associations between adolescent sexual intercourse and risky sexual behavior in adulthood (Huibregtse, Bornovalova, Hicks, McGue, & Iacono, 2011; Samek et al., 2013), early substance use (Deutsch, Slutske, Heath, Madden, & Martin, 2014), delinquent behavior (Harden, Mendle, Hill, Turkheimer, & Emery, 2008), conduct disorder (Zietsch, Verweij, Bailey, Wright, & Martin, 2010), and depression (Mendle, Ferrero, Moore, & Harden, 2013). In fact, when comparing twins who differed in their age at first sexual intercourse, my colleagues and I found that earlier sexual intercourse was associated with less delinquency in young adulthood (Harden et al., 2008). Together, the behavioral genetic literature suggests that genetically influenced traits (Harden, 2013), such as behavioral disinhibition (Samek et al., 2013) and early pubertal timing (Rowe, 2002), predispose some teenagers toward sexual activity, and these same genes might also predispose them toward emotional and behavioral health problems—regardless of whether they have sex. Above and beyond these genetically influenced predispositions, the experience of sex is not generally associated with worse psychological outcomes.

### Considering Relationship Context

Although the weight of behavioral genetic evidence suggests that sexual intercourse is largely benign with regard to psychosocial outcomes, there is an exception to this pattern: When comparing cotwins who have differed in their experiences with sexual intercourse during adolescence, we have found that “hooking up” (a sexual relationship with a nonromantic partner) is cross-sectionally associated with a higher number of depressive symptoms (Mendle et al., 2013) and is longitudinally associated with increased delinquent behavior (Harden & Mendle, 2011). In contrast, sex with a romantic partner was not associated with depressive symptoms and was associated with

reduced delinquent behavior. Thus, *relationship context*—the nature and quality of the adolescent's relationship to his or her sexual partner—may be a critical moderator of the psychological impact of sexual experiences. Romantic relationships are the most common context for adolescents' first sexual experiences (Elo, King, & Furstenberg, 1999; Manning, Longmore, & Giordano, 2005), and by 18 years of age, most (more than 70%) adolescents have reported that they have been recently involved in a romantic dating relationship (Collins, Welsh, & Furman, 2009). In recent review of research on adolescent romantic relationships, Connolly and McIsaac (2011) concluded that “adolescents consider their romantic relationship to be among the most supportive and caring of all their personal connections” (p. 189), rating them more favorably than their relationships with friends or with parents (see also Connolly & Johnson, 1996). These relationships provide teenagers with new opportunities for sexual activity and also contextualize the meaning of their sexual experiences.

### Converging evidence for the importance of relationships

Consistent with this idea, in a large national study of American adolescents, researchers found that sexual intercourse in the context of a romantic relationship was not associated with delinquency, substance use, or poorer academic achievement when intercourse occurred in the context of a romantic relationship, whereas sex that was not with a romantic partner did indeed predict worse outcomes (McCarthy & Casey, 2008; McCarthy & Grodsky, 2011). Similarly, greater sexual involvement in *stable relationships* (defined as 10 weeks or longer in duration) was correlated with fewer depressive symptoms among Israeli adolescents, whereas sexual behavior in *short-term relationships* (less than 10 weeks) was correlated with greater depression, at least in girls (Shulman, Walsh, Weisman, & Schelyer, 2009). In this study, Shulman et al. (2009) further considered relationship characteristics, in addition to just duration, and found that *relationship authenticity*—communicating one's preferences, desires, and feelings to one's partner—was also predictive of lower levels of depression.

Research on the short-term emotional sequelae of sex similarly indicates that the nature of the relationship with one's partner is an important contextual moderator. In a daily diary study of 1st-year college students (mean age = 18.5 years), the positive consequences of sex (e.g., feeling physically satisfied and feeling intimate or closer with a partner) were nearly universal, reported on 96% of days in which the participant had vaginal intercourse (Vasilenko, Lefkowitz, & Maggs, 2012). Sex with a non-dating partner, however, was associated with greater

immediate negative consequences, most notably feelings of guilt, feelings of not being ready for sex, and worries about health. Similar results were found in a study of Australian high school students, in which Donald, Lucke, Dunne, and Raphael (1995) concluded that “for most young people, sex is a positive emotional experience” (p. 462), but they found that girls who had sex outside of a steady dating relationship or who had sex after drinking or using drugs were more likely to report feeling negative emotions (bad, used, or guilty) after sexual intercourse. Among undergraduate students retrospectively on their first experience with intercourse, both women and men described the experience as more positive, less negative, and more empowering when it was planned, intentional, and occurred in a relationship of longer duration (Smiler, Ward, Caruthers, & Merriwether, 2005), and they described greater satisfaction at first intercourse when in a romantic relationship with one’s partner (Higgins, Trusseau, Moore, & Davidson, 2010).

### ***Issues for the study of sex in adolescent relationships***

Overall, existing research suggests that relationship context is a key moderator of the psychological sequelae of sex, but five theoretical and methodological issues regarding adolescents’ romantic relationships merit further resolution. Existing streams of research in which researchers compare romantic versus nonromantic relationships can be improved by grappling with the first three issues: (a) considering the potential role of selection factors, including genetic predispositions; (b) specifying the timescale of putative psychological effects; and (c) identifying the mechanisms differentiating romantic from nonromantic relationships. Moreover, research in this area can be further extended by examining (d) the quality of adolescents’ romantic relationships (rather than just their status as romantic or nonromantic) and (e) how these relationship processes operate in sexual minority adolescents.

First, with the exception of two previous studies (Harden & Mendle, 2011; Mendle et al., 2013), researchers studying adolescent romantic relationships have not used genetically informed designs that rigorously control for genetic selection factors. Among adults, genetically influenced dispositional factors are associated with multiple relationship processes, including initiation, quality, conflict, and dissolution (Harden et al., 2007; Jocklin, McGue, & Lykken, 1996; Trumbetta, Markowitz, & Gottesman, 2007). Moreover, genetically informed designs have been effectively used to examine the psychological impact of these relationship processes for adults themselves (e.g., Horn, Xu, Beam, Turkheimer, & Emery, 2013) and for their offspring (e.g., D’Onofrio

et al., 2007). Additional behavioral genetic research specifically focused on adolescent relationships is needed.

Second, the timescale of putative psychological effects has been poorly specified. In some studies, researchers have used daily diary studies to capture short-term affective fluctuations (e.g., Vasilenko et al., 2012), whereas in other studies, researchers have examined relatively enduring changes in behavior over the transition from adolescence to early adulthood (e.g., Harden & Mendle, 2011). This issue is particularly salient for research on adolescent relationships, which obviously do not have the same expected duration as adult relationships. One can easily envision a scenario in which an adolescent experiences an acute increase in positive affect immediately after having sex with a loved partner and experiences an acute increase in negative affect immediately after the dissolution of that relationship—but he or she experiences only a modest enduring change in overall emotional well-being. (Of course, a similar statement could just as easily be made about adults.) There is a need for additional longitudinal research, particularly measurement burst designs capable of discriminating short-term dynamic variability from longer term intraindividual change (Nesselrode, 1991).

Third, the mechanisms that differentiate sex in a romantic versus nonromantic relationship are unclear: Why might sex with a nonromantic partner be associated with less positive outcomes? As Calzo (2013) cautioned, “treating hookup sex and romantic relationship sex as separate phenomena can have the unintended consequence of placing the two on a hierarchy, reinforcing sentiments that hookups are inferior to romantic relationships” (p. 515). It is doubtful that all nonromantic sexual experiences are bad or that all romantic sexual experiences are good. Rather, nonromantic relationships may differ, on average, from romantic ones with regard to processes within the relationship itself (e.g., communication), processes external to the relationship (e.g., peer relations), and selection factors. These factors, in turn, may underlie the differences observed between the correlates of sex with a romantic versus nonromantic partner. For example, a stronger romantic connection facilitates open sexual communication, leading to more consistent contraceptive use and perhaps alleviating fears about pregnancy (Manning, Longmore, & Giordano, 2000; Widman, Welsh, McNulty, & Little, 2006). Adolescents, particularly girls, risk social derogation and “slut-shaming” from peers if they violate norms regarding acceptable sexual activity (Baumeister & Twenge, 2002; Jackson & Cram, 2003; Kreager & Staff, 2009; Ringrose, 2013; Vrangalova, Bukberg, & Rieger, 2014). Furthermore, the problematization of adolescent sexuality in American culture may itself be partly to blame, as it provokes shame and fear in teenagers engaging in behavior labeled

deviant: “At worse, denying the normative dimension of adolescent sex creates unnecessary associations between sexuality and adverse outcomes; associations that may result in a self-fulfilling prophecy” (McCarthy & Grodsky, 2011, p. 230). On the other hand, some studies have suggested that associations between casual sex and negative psychosocial outcomes are artifacts of uncontrolled selection factors, including preexisting negative affect. Using a longitudinal design to examine the association between sexual intercourse and change in depressive symptoms, Monahan and Lee (2008) concluded that “the few significant differences found between youth who had sex in romantic relationships versus those who had casual sex were present *before* sexual initiation and not maintained over time” (p. 917). Similarly, other researchers longitudinally found that depressive symptoms were already evident in adolescents who had casual sex, indicating that sex with a nonromantic partner may be a signal of psychological distress rather than a cause (Grello, Welsh, Harper, & Dickson, 2003).

Fourth, in addition to the status of the relationship as romantic or nonromantic, how is the psychological impact of sexual experience moderated by the quality of the romantic relationship? Although sometimes dismissed as trivial and transitory (Collins, 2003), adolescent romantic relationships do meaningfully differ in *quality*—“the degree to which partners manifest intimacy, affection, and nurturance” (Collins, Welsh, & Furman, 2009, p. 640). Moreover, these relationship characteristics show continuity across the early life span: Higher romantic relationship quality in adolescence predicts a greater likelihood of experiencing a close and trusting relationship in young adulthood (Seiffge-Krenke, 2003). Romantic relationship characteristics intersect with sexual development in complex ways. For example, positive relationship processes in adolescent dating relationships, such as intimate self-disclosure and feeling cared for, prospectively predict the initiation of sexual intercourse, but so do negative relationship processes, such as perceiving that one has less power in the relationship (Giordano, Manning, & Longmore, 2010). As researchers continue to parse teenagers’ romantic relationships in increasingly nuanced and sophisticated ways, the positive and negative functions of sexual experiences within those relationships will become clearer.

Fifth, to what extent do the processes linking sex, relationships, and psychosocial well-being generalize beyond heterosexual couples and sex with different-sex partners? The majority of researchers studying sex in romantic relationships have focused on different-sex couples. However, heterosexually identified teenagers may have same-sex partners, and gay and lesbian teenagers may have different-sex partners. In a national probability sample of adolescents 13–18 years of age,

only about 50% of teenagers who identified as gay or lesbian reported exclusively same-sex sexual partners, and a minority of teenagers who reported exclusively same-sex sexual partners (approximately 21%) identified as gay or lesbian (Mustanski et al., 2014). At the same time, gay and lesbian teenagers may have limited opportunities for same-sex dating relationships (Halpern, Young, Waller, Martin, & Kupper, 2004). These results suggest that many adolescents experience disjunctures among identity, romantic and sexual attractions, and their social enactments. Some research suggests consistencies across opposite-sex and different-sex relationships in adolescence and young adulthood, both in terms of teenagers’ goals for dating relationships (Zimmer-Gembeck, Hughes, Kelly, & Connolly, 2012) and overall levels of relationship satisfaction, love, and commitment (Joyner, Manning, & Bogle, 2013). Yet, clearly more research is necessary to delineate the relationship conditions that promote the most positive psychosocial outcomes for teenagers who have same-sex attractions and who identify as gay, lesbian, or bisexual.

Despite these outstanding issues, the current evidence suggests that the sexual experiences of adolescents in an intimate dating relationship are often neutral—or even positive—with regard to their emotions, depression, delinquency, substance use, and academic achievement. This may come as a surprise to many American parents, who are often concerned about teenagers’ romantic entanglements, considering them as either a fleeting distraction or a pernicious and emotionally fraught threat to a teenager’s fledgling autonomy. In response to a recent *New York Times* article about teenage boyfriends or girlfriends spending the night at parentally sanctioned sleepovers (Dell’Antonia, 2013), one commenter wrote the following: “Teenagers aren’t ready for the emotional bondage of sex . . . Sex adds a layer to a relationship [that] children—as 16-year-old teens are—shouldn’t have to manage.” This comment reflects that attitude that adolescents are too developmentally immature (“children”) to build meaningful romantic attachments or to experience sexual intimacy in a healthy way. As Schalet (2000) commented, “This dissociation of teenage sexuality from contexts of love and commitment explains why American parents often refer to teenage sexual activity as experimental, promiscuous, immoral or exclusively pleasure-driven” (p. 83).

## Positive Correlates of Adolescent Sexual Behavior

Whereas in the vast majority of correlational studies on adolescent sexual behavior researchers have primarily measured potentially negative outcomes, in a smaller—and rather neglected—literature, researchers have



documented the positive correlates of adolescent sex, including positive well-being (Vrangalova & Savin-Williams, 2011), higher self-esteem (Goodson, Buhi, & Dunsmore, 2006), lower stress reactivity (Brody, 2002), positive affect (Shrier, Shih, Hacker, & de Moor, 2007), better *social self-concept* (i.e., perceiving oneself as popular, socially accepted, and easy to like; Valle, Torgersen, Røysamb, Klepp, & Thelle, 2005), and improved adult sexual functioning (Raboch & Barták, 1983; Vallery-Masson, Valleron, & Poitrenaud, 1981). As many of these studies have methodological limitations regarding their ability to control for selection factors, results from this stream of research should be interpreted cautiously. In particular, no researchers studying positive outcomes have used a genetically informed research design capable of disentangling the causal effects of sexual relationships from shared genetic influences. (For example, genetic predispositions toward extraversion may increase positive affect and lead to more sexual relationships.) Nevertheless, these results suggest intriguing hypotheses about the potentially positive functions of adolescent sexual experience that merit further study with greater methodological rigor.

On the flip side, although many sex-education programs prize abstinence from sexual activity until marriage as the healthiest behavior choice, and although marriage is increasingly delayed within the United States, little is actually known about the small group of individuals who abstain from sexual activity well into their 20s. The limited body of research suggests that young adults who did not have sexual intercourse during adolescence are a heterogeneous group: Some report satisfying romantic relationships, high adult socioeconomic status, and strong religious commitment in adulthood (Harden, 2012), whereas others have characteristics, such as low IQ or obesity, that may limit success in finding a romantic partner and report continued (and perhaps unwanted) celibacy well into young adulthood (Haydon et al., 2014). In particular, Haydon et al. (2014) questioned whether adolescents who have no experience with romantic or sexual behaviors (including kissing and handholding) “may have missed important developmental transitions and may find it increasingly difficult to ‘catch up’ with their peers as they move into adulthood” (p. 227).

### **Beyond Behavior: Understanding Sexual Well-Being**

The research described in the previous sections offers a more nuanced perspective on adolescent sexuality: Sexual behavior during adolescence has some potentially positive correlates, and abstinence from sexual behavior is not uniformly associated with higher psychological functioning. The researchers of these studies, however,

have retained their focus on sexual behaviors—which sex acts an adolescent has engaged in and at what age. Certainly, from a public health perspective, some behaviors are prioritized for research because of their unique reproductive potential or elevated risk for STI. Yet, from a psychological perspective, a group of teenagers who have all done ostensibly the same behaviors may have had very different sexual experiences, some of which were positive and healthy, and some of which were not. As Halpern (2010, p. 6) described,

A fine line may divide exploratory sexual activity that ultimately contributes to positive sexual identity and competence, and sexual activity that significantly increases risk of harm. We do not know how to help youth navigate this line, or *even exactly where or what that line is* [emphasis added] for individuals of diverse physical, psychological and cultural characteristics (e.g., biological sex, physical disability, sexual orientation, and gender ideology) who are exposed to varying experiences at different points in the life course.

The challenge, then, is to understand not just sexual behavior but also adolescent sexual well-being. Moreover, as I describe in the following section, sexual well-being and sexual behavior may be reciprocally linked with both physical and mental health.

### ***Defining sexual well-being***

Researchers have posited several, conceptually overlapping models of adolescent sexual well-being (e.g., Buzwell & Rosenthal, 1996; Deutsch, Hoffman, & Wilcox, 2013; O’Sullivan, Meyer-Bahlburg, & McKeague, 2006; Rostosky, Dekhtyar, Cupp, & Anderman, 2008).<sup>3</sup> The various components of these disparate models can be mapped to four key dimensions. Crucially, these dimensions are not considered replacements for the more traditional foci of scientific study (e.g., intercourse, contraceptive use, as well as fertility and infection outcomes) but rather as complementary information that may be particularly relevant for understanding the psychology of adolescent sexuality. First, sexual well-being involves *sexual self-esteem*, defined as “perceptions of worth as a sexual person, pride in one’s own sexual behaviors or conduct, and perceptions of [one’s own] sexual attractiveness” (Deutsch, Hoffman, & Wilcox, 2013, p. 3). Adolescents with high sexual self-esteem are expected to state that they feel attractive and desirable to sexual partners, that they are happy and proud of how they express their sexual desires and needs, and that they feel competent in sexual situations with a partner. Second, sexual well-being involves *sexual self-efficacy* (also

referred to as *sexual agency*), the perceived ability to assert sexual preferences and desires with a partner (including the desire to not engage in sexual activity) and to take appropriate precautions against unintended pregnancy and STI (e.g., condom use). Third, sexual well-being involves experiencing feelings of arousal, satisfaction, and pleasure as well as recognizing that one is entitled to these feelings. Finally, sexual well-being involves freedom from pain, anxiety, and negative affect regarding sexuality.

This definition of sexual well-being overlaps with what many authors have referred to as *sexual subjectivity* (Martin, 1996; Tolman, 2002):

the capacity to be aware of one's sexual feelings, to enjoy sexual desire and pleasure, to conceive of oneself as the subject [rather than the object] of one's sexual activities, and to experience a certain amount of control in sexual relationships. (Schalet, 2010, p. 305)

Sexual subjectivity involves both the ability to take initiation in saying no to unwanted sexual activity and also the ability to provide enthusiastic consent (Friedman & Valenti, 2008) in recognition of one's own sexual desires. As Bay-Cheng (2003) commented, "True sexual agency consists of more than the ability to say 'no.' It involves the negotiation of sexual desires, contextual factors, and the ability to assert the resulting decision, whether yes or no" (p. 65).

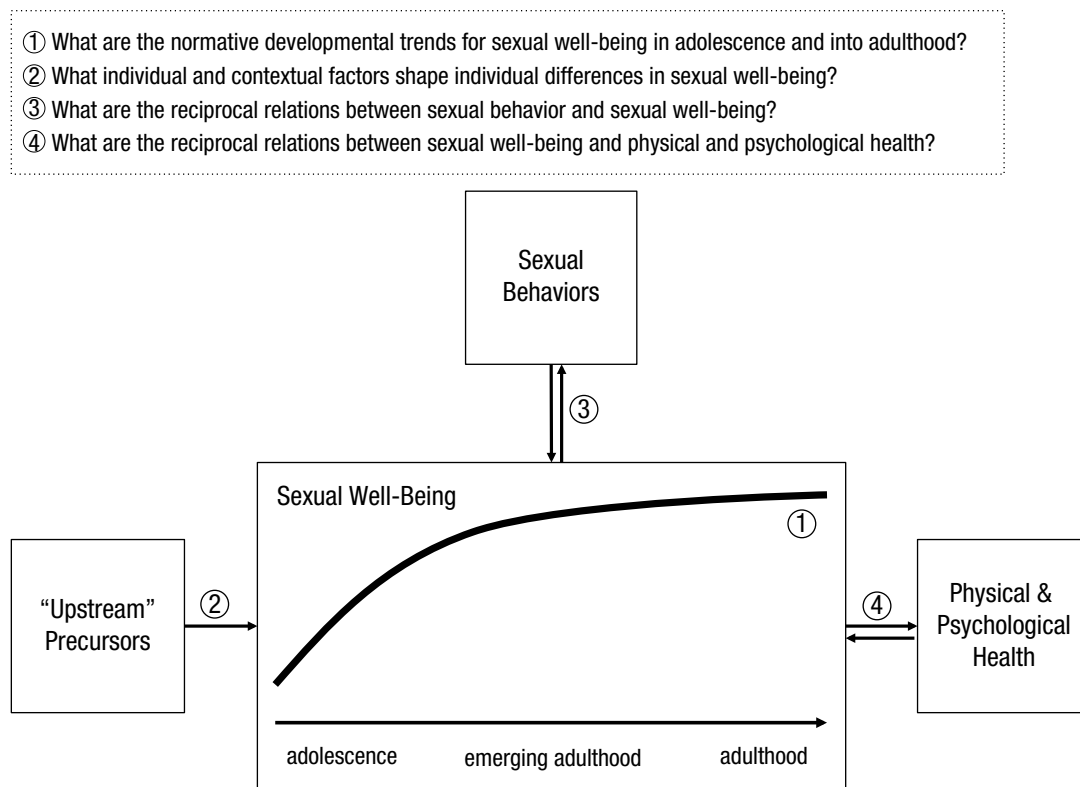
These dimensions of sexual well-being may be independent of whether an adolescent has engaged in some of the sexual behaviors typically measured in psychological studies. For example, an adolescent might purposefully abstain from sexual intercourse but engage in other sexual acts (such as kissing) to satisfy desires for physical pleasure while simultaneously asserting personal values about the types of sexual contact that are unwanted. In this way, abstinence could reflect high sexual self-efficacy while still recognizing an entitlement to sexual feelings. Alternatively, abstinence from sexual intercourse could reflect high levels of sexual anxiety, difficulties with sexual self-esteem (e.g., feeling undesirable or unattractive), or low sexual self-efficacy (e.g., inability to communicate sexual desires to partner). Consistent with this conceptualization, among a predominantly African American sample of female adolescents (14–17 years of age), greater sexual well-being was significantly associated with both sexual abstinence and (among sexually active adolescents) more frequent sex (Hensel & Fortenberry, 2013). These results further challenge a binary perspective about abstinence versus sexual activity being good or bad. Rather, an adolescent's expectations of pleasure and

satisfaction, his or her agency to regulate or decline sexual experiences, and his or her freedom from sexual pain and anxiety can be expressed in multiple behaviors, depending on the individual. Well-being is difficult to ascertain from behavior alone; ideally, researchers conducting psychological studies will measure both.

### ***Four questions for psychological science***

The National Commission on Adolescent Sexual Health proposed a definition of sexual well-being two decades ago, but, as noted earlier, much of the sex-positive discourse has remained centered within qualitative sociology and feminist social commentary; even among quantitative social scientists, the study of sexuality is often marginalized rather than considered integral to the understanding of human functioning (Diamond & Huebner, 2012). Thus, the full potential of the sexual well-being model for guiding rigorous, quantitative research has not yet been realized. Simply acknowledging that (a) adolescents differ in sexual domains other than which behaviors they have engaged in and (b) these individual differences are likely not random raises (at least) four general questions that merit further empirical study. These questions are summarized in Figure 1.

First, what are the normative age-related developmental trends in sexual well-being in adolescence and into adulthood? Age norms provide a critical backdrop for understanding individual differences. We know, for example, that average levels of fluid intelligence begin to decline in young adulthood (Tucker-Drob & Salthouse, 2011), that average levels of depression increase markedly during puberty for girls but not boys (Nolen-Hoeksema & Girgus, 1994), and that crime is most common in middle adolescence for both sexes (Moffitt, 1993). These age-related means permit researchers to make clearer inferences about what is "normal" versus atypical functioning at a given point in development. Although age-related trends in sexual behavior are well-established, comparable knowledge is lacking regarding sexual well-being. There is little data regarding how average levels of sexual self-esteem, self-efficacy, arousal, or sexual anxiety change over the course of the teenage years, or how these age-related averages compare with adults. A necessary precursor to understanding age-related developmental change is the construction of measures that tap the underlying constructs with an age-invariant metric (Hertzog & Nesselrode, 2003). The various scales used to measure dimensions of sexual well-being have generally been validated by researchers using cross-sectional samples of adolescents or college students, and the invariance of their measurement



**Fig. 1.** Four questions for sex-positive research on adolescent sexuality.

properties across age, as well as across other salient groupings (e.g., gender, sexual orientation, and race/ethnicity), has not been tested.

Second, what individual (e.g., genes, personality, biological sex, gender identity, pubertal timing, and sexual orientation) and contextual (e.g., school, peer, family, religious, and culture) factors shape individual differences in sexual well-being? Very little is known about the antecedents of adolescent sexual well-being. Among adolescents (15–19 years of age) from the National Longitudinal Study of Adolescent Health, there were stark gender differences in the expectation that sexual intercourse will be pleasurable, with less than one third (30.1%) of girls agreeing with this statement, compared with 62% of boys (Missari, 2013). Moreover, individual differences in this attitude toward sex were evident even among teenagers who had not yet had sexual intercourse, with 22% of virgins agreeing that sex would be physically pleasurable, 29% disagreeing, and 49% saying that they neither agree nor disagree. What is the origin of these sexual attitudes, which predate experiences with intercourse? Results indicated that socioeconomic privilege (higher family income, higher parental education, and race/ethnic majority status) predicted expectations of sexual pleasure, suggesting that there may also be important sociodemographic disparities in adolescent sexual

well-being. Beyond gender and socioeconomic differences, much remains to be discovered regarding the conditions and individual traits that nurture the development of sexual well-being during adolescence.

Third, what are the reciprocal relations between sexual behavior and sexual well-being during adolescence and the transition to early adulthood? The links between sexual behavior and sexual well-being are likely reciprocal over the course of development, as adolescents gain additional sexual and romantic experience and also increase in their overall cognitive, emotional, and social sophistication (Hensel, Fortenberry, O'Sullivan, & Orr, 2011). Few researchers have parsed these bidirectional associations; however, the few existing studies suggest a complicated picture, with components of sexual well-being associated with more frequent sexual intercourse and more frequent condom use (Breakwell & Millward, 1997; Deutsch, 2012) but not with age at first sexual intercourse or number of sexual partners (Impett & Tolman, 2006). Hensel et al. (2011) are the only researchers to have examined the longitudinal relations between sexual well-being and sexual behavior. Over the 4-year study period, adolescents' sexual self-esteem, openness, and frequency of sexual intercourse increased, on average, whereas their sexual anxiety decreased. More frequent sexual intercourse at Year 1 was correlated with higher

initial levels of sexual self-esteem as well as lower initial sexual anxiety. There were also reciprocal relations between sexual intercourse and sexual anxiety: More frequent sexual intercourse at Year 1 predicted steeper declines in sexual anxiety, whereas slower declines in sexual anxiety predicted slower growth in intercourse frequency. Sexual well-being may also result in decreased sexual risk taking. Again, this is a hypothesis that has not received much empirical attention, but initial results are supportive: Sexual well-being predicts more consistent condom use, use of hormonal contraception, and absence of STI (Hensel & Fortenberry, 2013). Thus, somewhat counterintuitively, researchers who consider the “potentially pleasurable, connecting, and empowering aspects” of sex (Schalet, 2011, p. 209) may actually contribute to understanding of how to prevent its negative potential consequences. Additional longitudinal research is needed to understand more fully how the components of sexual well-being shape—and are shaped by—different sexual histories. Such research will further erode the arbitrary boundary between research on adolescent and adult sexuality, as these dimensions of adolescent sexual well-being are expected to have links with sexual function and sexual behavior in adulthood (Fortenberry, 2013).

Fourth, what are the reciprocal relations between sexual well-being and individual differences in nonsexual domains, including resilience to psychopathology and physical health? In addition to being an interesting scientific question in its own right, understanding the development of sexual well-being during adolescence may be broadly relevant for understanding psychosocial and health outcomes of general interest (Diamond & Huebner, 2012). Among adults, regular sexual activity is predictive of lower mortality (Chen, Tseng, Wu, Lee, & Chen, 2007; Smith, Frankel, & Yarnell, 1997) and is positively correlated with overall well-being (Anderson, 2013; Brody, 2010; Davison, Bell, LaChina, Holden, & Davis, 2009; Holmberg, Blair, & Phillips, 2010; Hooghe, 2012). Sexual problems trigger—and are triggered by—anxiety and depressed mood (Althof et al., 2005; Frohlich & Meston, 2002), whereas sexual activity induces physiological changes that regulate negative emotions (Diamond & Huebner, 2012). Similar processes may play out in adolescents. Sexual well-being may promote adolescents’ psychological and physical health, increasing resilience to depression and anxiety; fostering more positive relationships with romantic partners; and sparking feelings of competence, optimism, well-being, and joy.

## Conclusions

A major overarching goal of adolescent sexuality research is to improve psychological, social, and health outcomes for teenagers. Focusing exclusively on the

potential dangers of sexuality, without inquiring about its potentially positive functions, impoverishes the scientific understanding of sexual development and of adolescence more generally, and it also potentially hampers the ability to mitigate dangers and promote positive health. Over the past two decades, numerous writers and theorists have called for a more comprehensive perspective on adolescent sexuality, one that acknowledges teenagers’ experiences of pleasure, desire, intimacy, and agency. At the same time, longitudinal, behavioral genetic, and cross-cultural research has challenged the assumption that sexual intercourse during adolescence is necessarily psychologically harmful or physically hazardous. Together, these theoretical and empirical developments suggest a new focus for research—understanding the causes and consequences of adolescent sexual well-being.

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The author declared no conflicts of interest with respect to the authorship or the publication of this article.

## Notes

1. Parsing the effects of teenage childbearing per se on mothers and their children is itself a topic of considerable academic debate. In reviews of quasi-experimental designs (e.g., comparing teenagers who miscarried vs. those who had a live birth; comparing sisters who differed in teenage childbearing), researchers have concluded that teenage childbearing has adverse consequences for women’s socioeconomic attainment, but these costs are more modest than commonly assumed (Geronimus, 2003; Hotz, McElroy, & Sanders, 1996). Moreover, early childbearing may have some adaptive consequences for infant health (birth weight and mortality) in very disadvantaged communities, because poor women experience steep declines in physical health with advancing age, even in their 20s (reviewed in Geronimus, 2003). For example, in Harlem, New York, the infant mortality rate for babies born to African American teenage mothers is half that of babies born to older mothers (Geronimus, 2001).

2. Behavioral genetic designs can be used to partition confounds into two general categories: (a) genetic and (b) shared environmental. First, there are genetic differences among people. If an association between a risk factor (e.g., age at first sexual intercourse) and a putative outcome (e.g., depression) is not evident when comparing within monozygotic twin pairs (who are nearly genetically identical) but is evident when comparing within dizygotic (i.e., fraternal) twin pairs (who differ genetically like any other pair of full siblings), this is evidence that the same set of genes influences both the risk factor and the outcome and that these genes confound associations observed in samples of unrelated people. Second, there are family-level environments that are shared by siblings raised in the same home (such as neighborhood environment, socioeconomic status, and family structure). To the extent that these factors serve to make siblings raised in the same home similar to one another, regardless

of zygosity, this constellation of family-level environments is termed the *shared environment*. When shared environmental factors confound associations between a risk factor and an outcome, the association will be attenuated in both dizygotic and monozygotic twin pairs relative to what is observed in samples of unrelated people. Generally, both genetic and shared environmental factors have been found to confound associations between sexual behavior in adolescence and negative psychosocial outcomes. See Turkheimer and Harden (2014) and Lahey and D'Onofrio (2010) for a more detailed description of the logic underlying twin and sibling designs.

3. One difficulty in synthesizing this research literature is a lack of consensus regarding terminology. Various authors have used various terms (e.g., sexual health, sexual subjectivity, and sexual self-concept) to refer to overlapping constructs. Drawing on the World Health Organization's (2006, p. 5) definition ("a state of physical, emotional, mental and social *well-being* related to sexuality"), I use the term *sexual well-being* here, because "well-being" connotes flourishing (not just absence of dysfunction) across multiple domains (not just physical health).

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