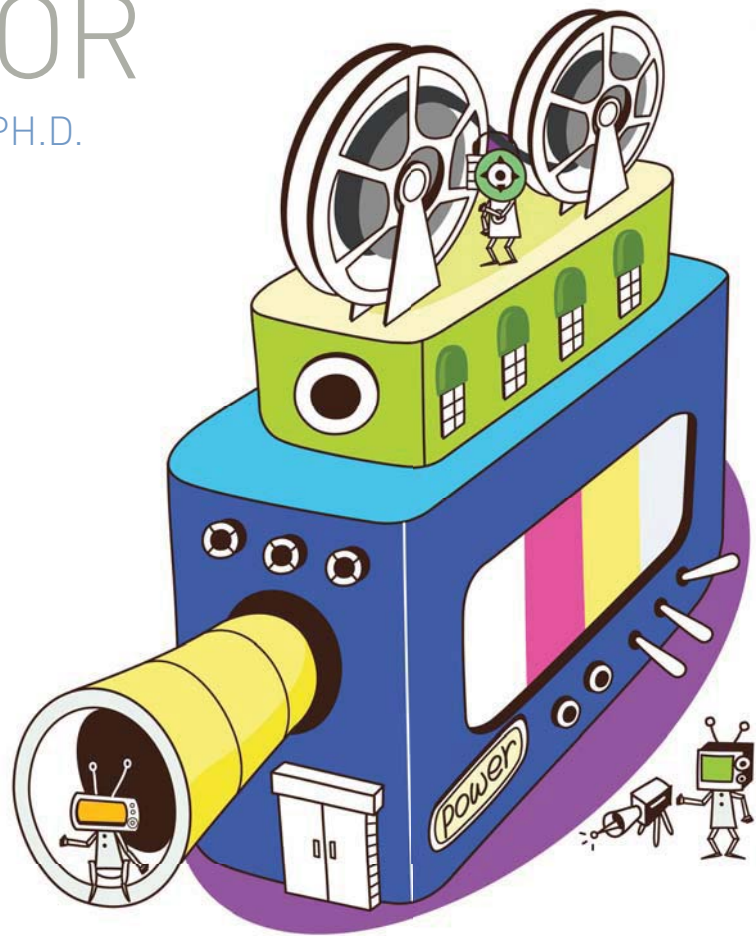


1.0 VIRTUAL SEXUALITY: THE INFLUENCE OF ENTERTAINMENT MEDIA ON SEXUAL ATTITUDES AND BEHAVIOR

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INTRODUCTION

From the earliest days of the motion picture through the rapid proliferation of television (TV) into American homes to the explosion of media technologies at the turn of the millennium, the public has been concerned about portrayals of sex and violence in entertainment media. Although “sex and violence” are often uttered as inextricably linked, the disparity in the amount of research investigating the influence of the media on sex and violence reveals much about our cultural preconceptions. There is a general consensus that violent behavior is unhealthy; more than 1,000 scientific reports in the last half century have focused on the effects of media violence. Our society is much more conflicted and values-driven about sexual behavior. Fewer than 300 studies of sex in the media have been published, beginning with several content analyses conducted in the late 1970s, followed by studies of the effects of pornography in the 1980s. The first serious examination of the effects of sexual content in mainstream entertainment media was initiated only in the 1990s.

This chapter outlines the theories of how media influence sexual attitudes and beliefs and describes how adoles-

cents use media and the sexual content to which their use exposes them. The chapter also evaluates studies assessing “real world” correlations between media exposure and sexual behavior and examines the results of experimental research. Finally, the chapter explores the promise of strategies to reduce the harmful effects of sexual media content on adolescents. Although much remains to be learned about the influence of media on adolescents’ sexual behavior, what we already know provides insight into the ways in which media exposure can influence young people and helps to inform strategies to encourage healthy sexual behavior.

Confronting, learning about, experimenting with, and finally establishing one’s sexuality is a key developmental task of adolescence. Media, from television to the Internet, offer an accessible source of information and an arena in which to work through this task. Adolescents seek out sexual knowledge and experience through the media, but may not have the ability to determine the quality of the information or the safety of the experience. Although accessible media channels have liberated youth from dependence on parents, schools, or other resources that may be help-

ful or may stifle or twist adolescents’ developmentally normal quest, media present new problems by offering few clues as to which sexual behaviors are appropriate, respectful, and safe.

BACKGROUND

Media influences on sexual behavior were first reported in a sex education newsletter in 1981.^[1] General reviews of the influence of media on a broad variety of health concerns among all adolescents^[2, 3] and specific sub-populations, such as boys^[4] and adolescents of color,^[5] have included sexual behavior as a key outcome of concern. Changes in sexual attitudes and behaviors have been included among 1,043 studies of the effects of viewing TV^[6] and as one of five health outcomes associated with viewing music videos.^[7] Several overviews have examined adolescents’ use of media as a source of information,^[8-13] raising concern about the influence of media portrayals on sexual attitudes and normative expectations of adolescents at a critical developmental stage. Regardless of each article’s perspective, audience, and purpose, all of the reviews of the research evidence on media and sexual behavior have described serious limitations in the evidence base and aggressively called for more research. This call was heard and responded to by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) with a program announcement in 1998 calling for research on the effects of media on sexual behavior. Since the NICHD’s funding of five large-scale projects, the publication of rigorous research in this area has increased significantly.^[14]

Several times over the last quarter century, pediatricians led by Victor Strasburger, M.D., a specialist in adolescent medicine, have made recommendations for protecting youth from media effects on sexual behavior through clinical practice, advocacy, and education.^[15-22] Building upon these, the American Academy of Pediatrics (AAP) issued formal policy statements on “Sexuality, Contraception and the

Media” in 1986, 1995, and 2001.^[23-25] Concerned about the influence of media and popular culture on self-image and gender roles, the American Psychological Association appointed a task force to study the sexualization of girls, releasing their findings in 2007.^[26] Their recommendations were that adults should help adolescents limit their exposure to the sexual content in media, teach them how to deconstruct and assess messages they receive from popular culture, and balance media portrayals of fun, risk-free sex with accurate and practical information about the potential consequences of sexual activity.

THEORIES OF MEDIA INFLUENCE ON SEXUAL BEHAVIOR

Following the model established in media violence research, most theoretical models build on the foundation of Bandura’s Social Learning Theory, which proposes that when we see behavior that is rewarded in the media, we imitate and may eventually adopt that behavior as our own.^[27] Exposure to sexual content in the media also may prime viewers, sensitizing them to sexualized attitudes and behaviors.^[28] The Surgeon General’s 1982 report on TV violence suggested that media may have an activating or arousal effect on sexual behavior, as well as on aggression.^[29]

The cultivation theory, developed by Gerbner and colleagues, proposed that media portrayals of sexual behavior are more extensive and powerful than the limited life experience of young people, cultivating attitudes and expectations in young people that are more consistent with virtual reality than with reality itself.^[30] As youth use media more and more, it has been proposed that media may overwhelm the information they receive from their real-world peers. As a result, media personalities may become “superpeers,” engaging youths’ aspirations, demonstrating how fictional teens think and act, and functioning as virtual role models for those who are figuring out who they are and how they should behave as sexual beings.^[31]

METHODS

The literature describing scientific theory and research findings on the influences of entertainment media on the sexual knowledge, attitudes, and behaviors of youth has been accessed through the Database of Research at the Center on Media and Child Health (CMCH), based at Children's Hospital Boston, Harvard Medical School. Seeking to establish a single, reliable source of rigorous scientific information on how media affect human health and development, CMCH has collected and validated literature from 13 disciplines to build a comprehensive database of the research on how media affect the physical, mental, and social health of young people from infancy through the college years. Posted at www.cmch.tv, the CMCH Database of Research is searchable by subject keywords and accessible to natural language queries through the Smart Search engine. For this chapter, search terms included sexual, pregnan*, pornograph*, STI, HIV, and AIDS. Of the 9,625 discrete papers, articles, and books that CMCH had collected by June 2008, fewer than 300 addressed media effects on sexual beliefs or activity.



Comstock has suggested that viewers are disinhibited by exposure to media portrayals of casual sex, allowing them to vicariously explore experiences that have been discouraged by parents and by “real life” rules and expectations.^[32] A conceptual model of how easy access to sexually explicit material on the Internet may influence psychosexual development has been proposed by Fisher and Barak.^[33] Young people who seek out sexual content on the Internet experience unconditioned erotic stimulation when exposed to the images. If that experience is positive, they seek out more erotic stimulation through the Internet; if negative, they avoid such stimuli. Specific imagery of certain body parts or sexual acts seen on the Internet can then become conditioned erotic stimuli, resulting in arousal, independent of their association with either a sexual act or the Internet.^[33] Another theory, the Media Practice Model (MPM), developed by Brown and her colleagues, integrates many of these concepts into a more active approach to adolescents’ media use. The MPM proposes that young people’s media use evolves from general to specific through their adolescent development, as they seek out from media necessary information, clarification, and finally, validation on who they are and how they want to live.^[34] Taken as a whole, these theories suggest ways in which media portrayals of sex as prevalent, fun, and risk-free may influence youth to believe that sex without commitments, consequences, or concerns is normative and desirable for adolescents.

SEXUAL CONTENT IN POPULAR MEDIA

Because most theories of media effects assume that different kinds of content will have different kinds of effects, it is important to understand what portrayals are available to youth. Although many analyses of sexual content have been conducted, we focus here only on studies published in the past decade investigating recently available media.

(A) TEEN MAGAZINES

Adolescent-directed magazines are widely read by girls, particularly during their formative pre-teen years. Because the negotiation of sex roles, relationships, and sexual behavior are a source of anxiety and a major developmental task, narratives about and strategies for romance and sexuality are prevalent in teen magazines. Between 1974 and 1994, *Seventeen*, one of the most popular U.S. magazines for teen girls, nearly doubled the number of stories with sexual content and themes, increased its portrayals of female sexual desire and recreational sex, and described a wider variety of sexual activity.^[35] One analysis of *Seventeen* and *YM* magazines described the magazines as simultaneously coaching girls to be sexually alluring while admonishing them to be chaste, thus reflecting contradictory social norms and sexual power dynamics.^[36] Another study of *Seventeen*, *YM*, *Teen*, *Glamour*, and *Mademoiselle* found that sexual content focused exclusively on white heterosexuals and encouraged girls to subordinate their own interests and make themselves attractive to boys.^[37] Messages about boys in *Seventeen*, *YM*, *CosmoGirl*, *ElleGirl*, and *Girls’ Life* predominantly portrayed adolescent males as disposable “boy toys,” who were insecure, emotionally unavailable, and treated intimacy and sexuality as separate. Girls were represented as responsible for attracting, then changing, boys.^[38]

Several studies have examined portrayals of sex in the advertising featured in teen magazines. Compared with general audience publications, advertisements in magazines with a predominantly youth readership were 60 percent more likely to show couples engaged in sexual activity and female models were 3.7 times more likely to be sexually dressed than their male counterparts.^[39] Fashion advertising typically dresses and poses adolescents seductively, portraying older females as younger and more virginal and prepubescent girls as more sexualized.^[40]

(B) TELEVISION

Despite the recent explosion in **new media technologies**[†], TV remains the medium most frequently

[†] Bold, underlined terms are defined in the Glossary (see page 126).

used by adolescents. Synthesis of three content analyses conducted in the late 1990s showed sexual content to be prevalent on TV, with talk about sex being the predominant form of content. Precursor behaviors, such as kissing and touching, were more prevalent than sexual intercourse, which was portrayed or implied in about 12 percent of all shows. Less than 10 percent of the shows that dealt with sexual intercourse addressed any sexual risks or responsibilities.^[41] On the four major advertising-supported networks (ABC, CBS, NBC, and Fox), the proportion of shows containing sexual material and the average number of sex scenes per show increased significantly between the 1997-1998 and 2001-2002 seasons.^[42] During the 2001-2002 season, 71 percent of programs contained sexual content, with an average of 6.1 sex-related scenes per hour.^[43] Another study examining 1,276 youth-directed programs broadcast in 2001-2002 showed that 82 percent of episodes featured sexual talk and 67 percent sexual behavior, with 11 percent implying and 4 percent portraying sexual intercourse.^[44]

Only one study assessed portrayals of gay and lesbian sexuality, finding that 7.5 percent of shows on the fall 2001 schedule of the six major advertising-supported broadcast networks (ABC, CBS, Fox, NBC, UPN, and the WB) had one or more regular characters identified as gay or lesbian.^[45] The number of displays of affection between heterosexual and gay/lesbian couples did not differ significantly, but the majority of heterosexual displays were kisses, while those of gays or lesbians were non-sexual hugs. Nearly two-thirds of the jokes about gay/lesbian lifestyles were made by gays or lesbians.

(C) MOVIES

Sexual content is more explicit in movies than on TV, in part because the motion picture rating system offers the potential for segmenting the audience into those who are deemed mature enough for adult-oriented content. The movie ratings are not consistent, however, as sexual content in R-rated films has steadily increased over the past 10 years or so.^[46] An examination of sexual content in the 50 top-grossing films in 1996 found 30 sex scenes in

films rated R (13 scenes) through PG (five scenes); 17 percent of the scenes, including the only two portraying homosexual behaviors, were rapes.^[47] More than two-thirds of the dramas portrayed sexual activity, which was initiated by men in 23 percent of the scenes and by women in 10 percent. Movie previews on DVDs are often not matched to the rating of the main feature. One study found that more than half (56 percent) of previews shown before G-rated films included sexual imagery at an average rate of 1.5 scenes per minute.^[48]

(D) INTERNET

The Internet has made sexually explicit materials more accessible to youth than ever before, making it an important source of information about reproductive health. Many youth use the Internet to search for information about their bodies and bodily functions, including sex. However, only 14 percent visited a doctor based on what they found, and few of those discussed sex or other topics of greatest concern with the doctor.^[49] Consumer demand for pornography has been a key economic driver of the Internet, as it was for videocassette recorders a quarter of a century earlier. In the late 1990s, it was estimated that the online pornography industry was worth more than \$1 billion and that half of all spending on the Internet was related to sex.^[50] The Internet provides a marketplace for the portrayal and sale of items related to all manner of sexual interests, including and often featuring the unconventional and bizarre.^[51] A national survey found that 75 to 83 percent of adolescents reported having Internet access at home and that 70 percent of them reported being exposed to Internet pornography. More than half of the adolescents said they were unconcerned about it.^[51] In a recent study of 813 university students from across the United States, two-thirds of the men and one-half of the women considered viewing pornography to be acceptable; 87 percent of the men and 31 percent of the women reported seeking out pornography themselves.^[52]

ADOLESCENTS' EXPOSURE TO SEXUAL CONTENT IN MEDIA

Determining young people's actual exposure and response to sexual content in media is the first step to assessing the influence of media on their sexual attitudes and behaviors. Research shows that exposure to sexual material in media starts early. One study found that children ages 6 to 11 are attracted to and watch TV with sexual themes and references, such as dating shows, soap operas, and sitcoms, in part because they are accessing "forbidden fruit" aimed at more mature viewers.^[53] In an early study examining how well young people comprehend sexual content on TV, pre-teens and teens were found to have good grasp of sexual innuendo, but those aged 12 understood significantly less than those aged 14 and 16.^[54]

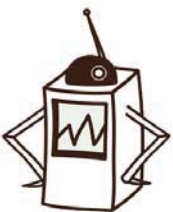
One study found that 75 percent of surveyed college students recalled first seeing explicit sexual media content as minors and 15 percent said that they had enduring thoughts about the sexual content.^[55] They reported physical responses such as sexual arousal, avoidance, tension, and nausea, and emotional responses, including disgust, shock, embarrassment, and interest in the material.

Girls in early adolescence have been found to choose media idols consistent with their stage of romantic interest—focusing on feminine idols before they are interested in boys, then transitioning to masculine idols as their sexuality develops.^[56] Thus, media may serve as a crucible for developing sexuality. As young people grapple with their own emerging sexual identities, they may seek out models in the media, wrestling with their initial attraction-repulsion to sexual issues, evolving into virtual relationships with celebrities, and finally attraction to others in real life. Adolescents acknowledge that they use media to learn about sexuality, relationships, and love.^[57] Youth approach and respond to media from their own life experiences, so ethnicity, gender, class, and developmental stage all influence

their media choices. Although some adolescents do not see people or lives such as theirs reflected in the media, when teens *do* see people or images in media to which they relate, they are more likely to be influenced. White and black middle school students have been shown to have distinct and different TV viewing preferences.^[58] In a study from 2001, the top 10 shows viewed by African-American adolescents all featured African-American characters and none were regularly viewed by more than 16% of the white adolescents. Among the 140 most popular TV shows, only four were regularly watched by more than one-third of each race/gender group.

Testing the theory that we consume media that reflect and validate our experience, studies have investigated whether preference for media with sexual content varies between sexually active and inactive youth. One analysis of media viewing habits among pregnant and non-pregnant African-American and white adolescent girls ages 13 to 19 found that pregnant girls of both races had significantly greater exposure to sexual content in soap operas, primetime TV, and R-rated films, compared to non-pregnant adolescent girls,^[59] although another study found no differences.^[60] Adolescent girls who reached physical maturation earlier showed more interest in sexual media, viewed more R-rated movies, accessed more media information on dating, contraception, and sexually transmitted infections (STIs), and were more likely to perceive of media as normalizing or giving societal permission for sexual activity.^[61]

With the rapid rise of Internet use among children and youth, exposure to explicit sexual material and vulnerability to online sexual interactions with others has been of increased concern to parents and to society. Children now start using the Internet quite young and many report problematic experiences. Dutch studies with children ages 8 to 12 found that half had had negative experiences on the Internet, with girls reporting being disturbed by online content, especially pornography, more often than boys.^[62; 63] As youth get older and more experienced, their



Internet use becomes less accessible to parental oversight, but many still feel unsafe. Among 7th-10th graders in the Midwest who reported using a computer 4.8 days a week on average, 25 percent reported feeling unsafe online, more than half of those due to strangers or acquaintances using the Internet to connect with them in a sexual manner.^[64]

In a U.S. national survey conducted in 1999, 25 percent of youth who used the Internet said they had encountered unwanted exposure to pornography.^[65] By 2005, the proportion of Internet users aged 10 to 17 who reported exposure to online pornography in the previous year had increased to 42 percent.^[67] Although two-thirds of the youth exposed to pornography said the exposure was unwanted, the study did not indicate whether they left the pornographic sites immediately, remained on them, or explored linked pornographic sites.

In a 2005 survey of 745 Dutch adolescents ages 13 to 18, 71 percent of the males and 40 percent of the females said they had been exposed to sexually explicit material on the Internet in the previous six months.^[68] Adolescents who were male, high sensation-seekers, more interested in sex, used sexual material in other media more often, were less satisfied with life, had younger friends, and had a faster Internet connection were more likely to access sexually explicit material online. Among males, advanced pubertal development was associated with more frequent use of online pornography, while among females, increasing sexual experience was associated with less frequent exposure.^[68] Intentional exposure to online pornography was associated with being male, prone to rule-breaking, talking online to unknown people about sex, and using the Internet at friends' homes. Depressed or withdrawn youth were at significantly increased risk for unwanted exposure to pornography (odds ratio [OR]: 2.3), as were those who reported being harassed online (OR: 1.9), receiving unwanted sexual solicitations (OR: 2.7), being victimized offline (OR: 1.4), and using file-sharing programs to download images (OR: 1.9).^[68] Male college students

participating in an online survey have reported online sexual entertainment-seeking at an earlier age than females. Compulsive Internet sexual behavior ranging from "porn surfing" to visiting explicit chat rooms to connecting with others for purposes of virtual or actual sex was found in 3.5 to 17 percent of those in the study.^[52]

Among college students, 59 percent reported receiving unwanted pornography and 10 to 15 percent reported online sexual harassment both by email and instant messages (IM), most frequently by strangers.^[69] Comparing two similar national surveys, sexual solicitations declined overall from 2000 to 2005, but in 2005, youth were 1.7 times more likely to report aggressive solicitations than five years earlier.^[70] Among the U.S. youth Internet respondents to the 2005 survey, 20 percent reported being victimized online, with nearly half of those (45 percent) receiving requests for sexual pictures of themselves.^[71] Only one of the 1,500 respondents reported actually sending a picture.^[71]

Adolescents and young adults who use the Internet the most, particularly those who use it to connect with others for romantic or sexual relationships, are at highest risk of being exposed to unwanted material or solicitations. Because the Internet offers a variety of models for connecting with others and provides the "three As"—Accessibility, Affordability, and (perceived) Anonymity—it is attractive (particularly for those who feel isolated or marginalized) as a way to "try out" relationships. Problems have arisen, however, when youth try to transform Internet-established connections into face-to-face relationships.^[78; 79] One study supports the premise that youth mainly use the Internet for social purposes, with IM being the most prevalent activity, but this study found that more than half the young users had misrepresented who they were online, often portraying themselves as older and more sexually experienced than they actually were.^[73] The explosive growth of social networking sites have made it common, if not expected, for young people to have a MySpace or Facebook page with which to

present themselves to the world. Research on Internet chat rooms, which preceded social networking sites as a virtual venue for meeting and interacting, found that younger adolescents were more likely to provide information about their actual identities, while older teens were more likely to communicate explicitly sexual material.^[74; 75] Some studies have shown that developing an Internet-based social network led to an unhealthy retreat from real-life interaction with peers.^[72]

RELATIONSHIPS OBSERVED BETWEEN MEDIA EXPOSURE AND SEXUAL ATTITUDES AND BEHAVIOR

Given the prevalence of sexual content in popular media available to children and adolescents, it is important to test the hypothesis that young people's exposure to sexual media influences their perceptions and expectations of relationships and contributes to the development of their sexual attitudes and behaviors. Media portrayals of sex as a fun, carefree, and common activity that does not warrant concerns, cautions, contraception, or consequences may cultivate similar beliefs and influence sexual behaviors among youth.^[80] These studies are designed to assess statistical associations between viewing specific media and viewers' sexual attitudes or behaviors, the odds of exposure and outcomes grouping together; they cannot demonstrate causality (that the exposure causes outcomes). In the few cases where researchers controlled for other factors that may have affected the outcomes of interest, such as family connectedness, media literacy, access to sex education or confidential reproductive healthcare, these controls are explained.

In 1991, although they did not measure media content, Peterson and colleagues found an association between duration of TV viewing and early initiation of sexual intercourse among adolescents.^[81] This finding was supported by Brown and

Newcomer, who found that junior high school students who watched television with more sexual content were more likely to have initiated sexual activity than those who watched less sexual media content.^[82] What remained unclear from these cross-sectional studies was whether youth who watched more sexual media content were more likely to have sex or whether those who were having sex were more likely to watch content that reflected their experience.

A decade later, a longitudinal prospective survey of 1,461 youth ages 12 to 17 who were interviewed three times over three years by Collins and colleagues showed that those with high exposure to sexual content on TV were twice as likely to initiate sexual intercourse in an upcoming year. They also became sexually active, on average, six months earlier than their peers with low exposure to televised sexual content.^[83] Girls viewed more sexual content on TV than did boys, and younger adolescents viewed more sexual content than older adolescents. Having a TV in the bedroom and friends who approved of sexual activity predicted higher exposure to sexual content. Building on these findings, a recent analysis using an additional wave of these data found that exposure to high sexual content on TV at baseline is associated with an increased risk of teen pregnancy over the subsequent three years.^[84]

Broadening beyond TV, Brown and colleagues conducted a similar longitudinal study assessing the influence of exposure to sexual content in four media (TV, movies, music, and magazines) popular with 1,017 early adolescents (ages 12 to 14). They found that the quintile of teens who consumed the greatest amount of sexual media content in early adolescence were more than twice as likely as those with lighter sexual media diets to have initiated sexual intercourse by the time they were 16 years old.^[85]

Music is often the medium that defines and may help shape young people's romantic ideals and expectations. Recent research has associated frequent

listening to music that has degrading sexual lyrics with adolescents' higher likelihood of initiating sexual intercourse and with more rapid progress through non-coital sexual activities.^[86] Females who listened to heavy metal music have been found more likely to have sex without contraception^[87] and male heavy metal fans had more sexual partners and lower respect for women than did fans of other musical genres.^[88] When compared to peers, 12- to 14-year-olds exposed to sexual content in popular music were at increased risk for light sexual activity (e.g. kissing, touching), while those exposed to sexual content in movies were at elevated risk for both light and heavy sexual activity (e.g. oral sex, intercourse).^[89]

The influence of TV exposure on sexual attitudes, expectations, and behaviors may depend on the sex roles and sexual expectations portrayed. Adolescent girls who watch more prime-time TV, particularly those who identify strongly with the characters, have been shown more likely to endorse view sex as a recreational activity.^[90] In another study, which compared amounts of TV watched and program formats, viewing more TV, especially soap operas, was related to younger initiation to dating and having a greater number of dating partners. Those who watched romantic programming were more likely to endorse traditional gender role beliefs than those who viewed other formats. In contrast, viewing non-romantic dramas was correlated with participants having less traditional gender roles and more dating partners.^[91] Among college students, watching MTV was the most powerful predictor of females' sexual attitudes and number of sexual partners, but soap opera viewing, self-esteem, and relationship involvement were the best predictors of their male counterparts' number of sexual partners.^[92]

Females who had substantial exposure to sexual content on TV have been found to expect sex at a relatively early stage in relationships, but not to have expectations regarding variety of sexual behaviors. On the other hand, men who watch a substantial amount of televised sexual content expect

more variety in behaviors, but their expectations about the timing of sexual activity in a relationship are similar to men who watch less sexual content.^[93] Exposure to televised sex has been found to predict having sexually active friends, safe-sex self-efficacy, and less romantic, more cynical expectations from sex.^[94]

Jackson and others have expressed specific concern that the media's portrayal of females as passive recipients and males as active instigators of sexual activity may interfere with the successful negotiation of safe sex.^[95] One study found that young women who watched more TV, particularly soap operas and prime-time dramas, were less likely to feel in control of and happy with their sexual activity than their peers who watched less TV.^[96] Females reported less sense of control over their own sexual encounters after watching TV program episodes of sexual women attracting males and men avoiding commitment in relationships.

The sexual content that influences attitudes and behaviors appears to vary by adolescents' culture. Some research has found that exposure to suggestive dialogue and explicit sexual content were associated with sexual outcomes, but the direction of the effect varied among races and genders.^[97] Much of this research has been done with white youth, however, so knowledge about differences in media influence by race and ethnicity differences is limited.

Research has shown that online self-representation among young African-American females either enthusiastically embraces or explicitly rejects sexual stereotypes that have been created by media.^[98] Frequent music video viewing has been associated with African-American youth holding traditional gender role attitudes, endorsing sexual stereotypes, and being attracted more to "flash" than to "substance".^[99] African-American females who saw many portrayals of sexual stereotypes in music videos were more likely to have negative body image and to have multiple sexual partners

than those who saw fewer such portrayals.^[100] When compared to infrequent viewers, African-American female adolescents who more frequently watched rap music videos were found to be twice as likely to have multiple sexual partners and 1.5 times as likely to have contracted a STI.^[101] One study found that African-American females who viewed pornography were more likely to have sex more often, to have more sexual partners, to not practice safe sex, to test positive for Chlamydia, and to want to become pregnant than did those who did not watch pornography.^[102]

For many young users, the Internet is as familiar and comfortable a place in which to meet new people, make friends, and nurture relationships as the local shopping mall. As a result of its ease, ubiquity, and illusion of privacy, the Internet has emerged as a new, but little understood, environment for meeting sexual partners. Ninth graders in Minnesota who used chat rooms to connect with others were more likely than those who did not frequent chat rooms to demonstrate risk behaviors, including substance abuse and sexual intercourse.^[103] Outbreaks of STIs have been traced to chat rooms specializing in specific sexual interests because they have served the traditional functions of bars, clubs and bathhouses by introducing people of similar sexual persuasions who arrange to meet for high risk anonymous encounters.^[104; 105]

After controlling for age, gender, race, and socioeconomic status, a survey of 471 7th and 8th grade girls found that perceived societal permission for sexual activity communicated in popular media was found to be strongly associated with sexual intentions and activity. The amount of media consumption accounted for 13 percent of the variance in intending to have sex in the near future, 10 percent of the variance in light sexual activity, and 8 percent of the variance in heavy sexual activity.^[61] A similar analysis showed that media normalization of and permission for sexual activity may be more powerful than parental influence. Data from the National Longitudinal Study of Adolescent Health demonstrated that adolescents whose parents limited their

TV viewing to less than two hours a day had about half the rate of sexual initiation as adolescents whose parents strongly disapproved of sex, but did not limit TV viewing, resulting in the adolescent watching more than two hours of TV a day.^[106]

Exposure to sexual content in media has consistently been associated with increases in sexual risk behaviors among youth. In longitudinal studies, the exposure to sexual media as a child or early adolescent predicts earlier sexual initiation, more sexual partners, and higher risk of pregnancy or STIs. Media have become a ubiquitous superpeer from which young people learn what to expect and what is expected of them. By normalizing and giving permission for sexual activity, permission that seems to override parental disapproval, media may be the most powerful and universal influence on young people's sexual attitudes and decision-making.

EXPERIMENTAL STUDIES OF THE RELATIONSHIP BETWEEN SEXUAL MEDIA AND SEXUAL BEHAVIOR

We have seen that young people are significantly exposed to sexual content in media and that exposure correlates with their sexual attitudes and behaviors. Most of these findings have been based on content analyses, cross-sectional surveys (a sample of adolescents at one point in time), and a few longitudinal panel studies (the same sample of adolescents measured at more than one time point). Such studies can point in the direction of media effects, but lack the controls necessary to be able to claim that the media *caused* the sexual attitude or behavior. Experimental research under controlled laboratory conditions is necessary to most confidently establish a hypothesized causal relationship between sexual portrayals in media and changes in sexual expectations, attitudes, and behaviors. Unfortunately, experimental studies in this domain are extremely limited, in part because the outcomes of interest are subtle shifts in attitudes and long-term changes in behavior.

A few intriguing experiments on the effects of listening to sexual music on adolescents' sexual attitudes have been conducted. Two of these experiments suggest that the sexual content in media may "prime" sexual thoughts in subsequent activities. One experiment, for example, found that older adolescents who listened to music with sexually provocative lyrics were more likely than those who listened to less sexually-oriented music to evaluate people in personal ads on their sexual attractiveness, calling them "sexy" and "desirable".^[107] In the other experiment, white college students who listened to African-American women's sexual rap were more likely to judge the performers as "boy crazy", ascribing greater badness to them than to African-American women who performed "devoted love" music.^[108]

Exposure to specific sexual content in music can affect expectations and beliefs about relationships. In one experiment, after brief exposure to misogynistic "gangsta rap" lyrics, males were more likely to endorse a model of adversarial relationships between the sexes.^[109] Brief exposure by male college students to sexually violent and Christian heavy metal rock music resulted in increased gender role stereotyping and acceptance of violence against women.^[110] In another experiment, after exposure to gender-stereotyped music videos, males were more likely to endorse adversarial sexual beliefs and females were more likely to accept interpersonal violence, when compared to a control group.^[111] In an experiment designed to determine whether users' behavior would change after exposure to sexually demeaning media, male college students were given the choice to play neutral, assaultive, or sexually violent film excerpts for a female research partner. After listening to misogynistic rap music, 30 percent showed an assaultive clip to their female partner as compared to 7 percent of the young men who had heard neutral rap music.^[112]

One of the few experiments that has been conducted on sexual content on broadcast television found that college students who were shown sexual

TV content and perceived it as realistic, were more likely to endorse permissive sexual attitudes and to estimate that more of their female peers were sexually active than did youth who did not see the sexual TV content.^[113]

In another experiment, male and female college students with different media experience responded differently to viewing of TV clips portraying stereotypes of women as sex objects, men as sexually motivated, or dating as a contest. Females who watched more TV and more music videos and identified strongly with female characters were more likely to endorse the portrayed sexual stereotypes. For males, only more hours of music video watching correlated with stronger endorsement of sexual stereotypes after viewing the TV clips.^[99]

Unfortunately, much of the limited experimental research on the effects of sexual media content has focused on the most sexually explicit content and the most extreme sexual attitudes and behaviors. Although research on pornography offers only limited insight about the effects of mainstream media exposure on common sexual behaviors, such studies are relatively easy to conduct. Experimental subjects are shown pornographic films and researchers measure short term outcomes that are clearly distinguishable, such as belief in myths that rape victims want to be raped. Such research has shown that male adolescents were more likely to believe that women enjoy forced sex after seeing an excerpt in which a woman was portrayed as aroused by non-consenting intercourse.^[114] In another study, males who watched films that portrayed violence against women as justifiable and with positive consequences showed significantly increased belief in rape myths and acceptance of violence against women as compared with males who saw films with no sexual violence. Females had the opposite reaction to the same films.^[115] Examining broadcast television using a similar conceptual model, it was found that viewing music videos and/or professional wrestling was associated with increased acceptance of rape among adolescent males in a large



survey study.^[116] Exposure to violent and nonviolent pornography was not found to influence “likelihood to rape” measures, however.^[117]

Exposure to portrayals of male power and female submissiveness, sexually explicit or non-explicit, have resulted in short-term increases of rape-supportive attitudes.^[118] Long-term exposure to media portrayals of sexual violence has been shown to result in desensitization and decreasing empathy for rape victims.^[119] A recent experimental study found that men shown sexually explicit films degrading to women were more dominant in their subsequent interactions with a woman than men who saw non-degrading sexually explicit films. Those who were shown only the non-degrading but sexually explicit content were more dominant and anxious than those who had viewed only non-sexual content.^[120] Both male and female viewers reported that they were more sexually aroused by the non-aggressive rather than aggressive sexually explicit portrayals.^[121]

Experimental research is limited by artificiality of laboratory conditions and oversimplification of outcomes. Epidemiologic research is confounded by a host of co-occurring variables. Neither is sufficient, in and of itself, but together they present a consistency of findings that leads to the conclusion that unrealistic and incomplete entertainment media portrayals of sexual activity, implications, and outcomes contribute to elevated sexual risk-taking among young people who consume media.

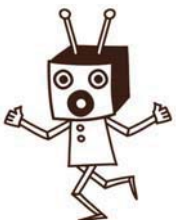
IMPLICATIONS AND RECOMMENDATIONS

Children and youth spend more time using media than they do engaged in any other activity. They have more opportunity to learn about themselves, their sexuality, and the nature of relationships from media than they do from school, parents, or any other source, particularly in communities where sex education is limited or prohibited. Sexual content is prevalent and easy to access in a variety of media

platforms from TV to the Internet, even at very young ages. In the Media Age, young people can obtain sexual images, narratives, and information more easily than ever before. Today’s children and young people can access more explicit pornography with a single mouse click than most of their parents have seen in their lifetimes. Driven by the need for novelty to capture a larger audience share, sexual portrayals in media are increasingly frequent and explicit—what was shocking and attention-grabbing last week is old news today.

Because children and youth spend so much time with TV, music, and the Internet, media may be the source of first impressions and ongoing perceptions that are critical to the development of a young person’s sexual attitudes, expectations, and behaviors. One area of concern yet to be researched is the effect of early, formative exposures to sex occurring in the form of Internet pornography. The Internet is primarily a venue of commerce. Sex is presented as a commodity that can be bought, sold, and traded. If young people’s initial explorations of sex happen in the context of the sexual marketplace rather than learning about connecting and developing relationships with others, how are they to develop healthy concepts of romance, relationships, and responsibilities around sex? Seen in this context, the phenomenon of “friends with benefits,” in which young people with no romantic relationship have sex with each other out of boredom or a need for “something to do,” is hardly surprising.

Beyond providing first exposures to sexual material, for many youth the media establish norms for behavior and tacitly give permission for sexual activity by implying that “everybody is doing it.” Research indicates that exposure to sexual media influences young people to overestimate the prevalence of sexual activity among their peers and to lower their own resistance to initiating sex. Given the limited, but significant evidence linking exposure to sexual content in entertainment media with subsequent changes in sexual attitudes and increases in risk behaviors, it is important that



parents, healthcare providers, and others committed to the healthy development of children and adolescents understand and respond to entertainment media as a powerful environmental influence on young people's health and well-being.

Media rating systems have been established by the entertainment industry to indicate the age-appropriateness of media content. Media producers encourage parents to use them, claiming they are accurate and effective, but many parents rightfully distrust the ratings. In a study that asked parents to independently rate the appropriateness of TV programs, movies, and computer/video games for use by children, current industry rating systems were consistently more lenient, varying by as much as 50 percent from what parents thought was right for their children.^[122-124] In part, distrust of the ratings results from the fact that, as currently designed and implemented, entertainment media ratings are focused on social values rather than objective health outcomes. As a result, ratings are inconsistent, shifting in the winds of changing social norms. If parents do not share the values of the ratings board, they feel, rightly, that the ratings do not measure what they feel to be important. Another problem posed by the values-based ratings is the observed "backlash effect" of youth seeking material with more mature ratings to taste "the forbidden fruit" and establish themselves as individuals able to make choices independent from what their parents want for them.^[125]

Internet safety measures have included technological fixes, such as software to filter or block the Internet from those it might threaten young people,^[126] although there is legitimate concern that such software may hinder use of the Internet by youth to search for critical health information.^[127] Increased supervision by adults and restrictions on media access result in reduced exposure, both in duration and content.^[128] Both filtering software and education on Internet safety were found to reduce youth exposure to pornography.^[67] Monitoring a chat room as been shown to effectively decrease the

amount of profanity, but did not affect the prevalence of sexual language and conversation.^[74;75]

Comprehensive assessments of the research findings have come to the conclusion that rating systems, legal or industry restrictions, and technological "fixes" cannot be totally effective in protecting youth from the deleterious effects of media. Building on the research, key recommendations from the American Academy of Pediatrics and the American Psychological Association are for adults to help children and adolescents limit their exposure to sexual content in media, to teach them to deconstruct and decipher the messages they receive from media and popular culture, and for media producers to balance media portrayals of sex with accurate and practical information about the potential consequences of sexual activity.^[23-26]

Young viewers and their families need to be educated about how to use media wisely and safely.^[129] When asked directly about the relationship between sex in media and sexual behavior, nearly two-thirds (65 percent) of both adolescent and adult viewers denied any relationship, but 45 percent believed that sexual content in media could help start good conversations between youth and adults, with 19 percent believing that children could learn something good from this exposure.^[130] In practice, family discussions about media content and regulation of media consumption are often used as a way for parents to communicate moral values to their pre-teen children.^[131] As a public health intervention, themes communicated through broadcast television programming are much more effective when parents have watched the program with the young person and discussed it, as demonstrated by a single episode of *Friends* that portrayed condom failure resulting in pregnancy.^[132] Nearly one-third of the viewers surveyed (1.67 million 12- to 17-year-old viewers saw the episode) were able to recall the information that condoms were between 95 percent and 100 percent effective. Almost half of the adolescents that watched and discussed the episode with an adult recalled the condom efficacy information,

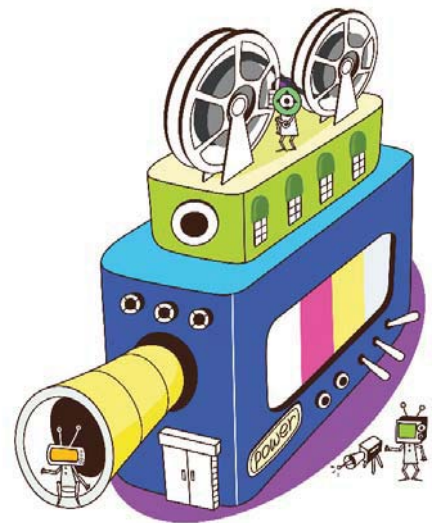
which was nearly twice the proportion of those who did not discuss the episode with an adult.^[132] Condom advertisements on TV were approved of by 83 percent of parents, 89 percent of female adolescents, and 92 percent of male adolescents.^[133] Although parents' perceptions of their 11- to 16-year-old children's Internet exposure to negative sexual content were significantly lower than children's actual exposure, children whose parents reported high family cohesion and shared Internet activities were significantly less likely to be exposed to negative Internet content than those with lower family cohesion and fewer shared Internet experiences.^[134]

Media use policies in the home can positively affect viewing habits. Families that are connected, communicative, and aware can be the most protective factor in a child's life.^[135] However, as children progress into and through adolescence, the authority of parents and other adult figures diminishes, so the best protections are those that we can instill in youth themselves. Education has been proposed and implemented as a key part of health intervention.^[136] As has been demonstrated with smoking portrayals,^[137] "pre-inoculating" viewers with an educational "reality check" immediately before the risky media exposure is perhaps the most effective educational intervention.^[138] **Media literacy**, the discipline of critical viewing of media and reducing unhealthy media exposure, is starting to show promise as an intervention on other media-related health effects, such as obesity and aggression. There is every reason to believe that increasing young people's media literacy would be a successful strategy to counter the influence of media on sexual attitudes and behaviors as well.

Media have our young people's time and attention. Ultimately, as is discussed in greater detail in the following chapters, the most effective response to media influence will be to use media to educate for sexual health.^[139-141] TV has been shown to be a powerful tool for changing hearts and minds about rape,^[142] homosexuality,^[143] and open communication about safe sex practices.^[130] Popular music

can be used to explore sexual topics and promote health, as has been done in such curricula as "Exploring your Sexuality Through Current Rock".^[144]

Today, we have more capability to connect, communicate, and entertain ourselves than ever before in history. Although their current quantity and quality of media exposure places adolescents at increased risk, it is a risk that, with increased awareness, education, and empowerment, they can manage. Media and the popular culture they create are so ubiquitous and insistent that many parents and caregivers often feel overwhelmed; it can be tempting to give up. However, the youth know, and we must all remember, that media are tools that we can use instead of letting them use us. New media technology and applications, from video-capable cell phones to Web 2.0 sites that promote creation and distribution of original media created by youth, present real opportunities for taking back the media and bringing forth the voice of the youth we serve. Through using media to connect, communicate, and build community, young people can simultaneously learn to assess the real from the false and, instead of allowing media to control them, control the media to share the knowledge, experience, and strategies that will allow them to grow up to be healthy, responsible, and safe.



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2.0 USING MEDIA TO ADDRESS ADOLESCENT SEXUAL HEALTH: LESSONS LEARNED ABROAD

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INTRODUCTION

In describing the need to engage in global education and learn from others who are different, John Dewey, an American philosopher, psychologist, and educator, said:

"We must unsettle ourselves and leave home to find home again. This is a shaking of one's own frame of mind, of one's unflagging faith, and familiar ways of thinking, in an encounter with different others. This encounter does not mean, however, to trivialize one's own culture and traditions; rather it aims at enriching it by leaving it."

Although Dewey discussed a literal leaving of home, his words also ring true on a metaphorical level. Specifically, professionals who work in domestic adolescent reproductive health programs can "leave home" and learn from international programs. Although the strategies used and the populations served may extend beyond the "familiar ways of thinking," the lessons learned from international efforts to address adolescent sexual health issues can enrich and improve programs here at home.

BACKGROUND

Because adolescents often are misinformed about sexual health and feel uncomfortable discussing sexual matters with their parents, mass media can be effective tools for providing accurate information around issues such as sexually transmitted infections (STIs) and contraception.^[1;2] Studies have found that youth—when asked to identify sources they use for sexual health information—list mass media among their top choices.^[3-5] For example, one study of Japanese high school and university students found that after friends/acquaintances, magazines and television were cited most often as sources of sex-related information, while parents, teachers, healthcare providers, and sex education classes in school lagged far behind.^[4] A survey of high school students in Zimbabwe found that newspapers, television, radio, and magazines were reported most often as being the first source of information they turn to when searching for information regarding AIDS.^[3] Previous studies also have found an association between mass media exposure and preventive behavior, including condom use and condom use intentions among adolescents.^[6;7]

Public health organizations around the globe have crafted mass media interventions addressing reproductive health issues for a variety of audiences, including youth.^[8-20] These interventions have employed a variety of **media strategies** (e.g. **entertainment-education (E-E)**, **social marketing**), and **media channels**[†] (e.g. radio, magazines, television, Internet). Some interventions have been evaluated for effectiveness while others have not. In this chapter, we focus on the evaluation research literature describing the effects of international reproductive health mass media interventions on adolescents and youth.

To date, no other literature review has focused exclusively on international mass media interventions addressing adolescents' reproductive health. Several recent literature reviews have considered the success of international and domestic interventions addressing reproductive health issues, but

[†] Bold, underlined terms are defined in the Glossary (see page 126).

the preponderance of the interventions reviewed therein were for adult audiences, with no separate analysis for adolescents and for adults.^[21-24] Overall, these reviews find that interventions have achieved some success in affecting reproductive knowledge, attitudes, and/or behavioral practices, yet interventions have not been universally successful. The lack of success for an intervention was posited as perhaps due to faulty design, implementation, or evaluation.^[21; 22; 24] Nevertheless, these reviews suggested that well designed and implemented mass media interventions have the potential to affect individuals' knowledge, attitudes, and behaviors.

FRAMEWORK GUIDING THE LITERATURE REVIEW: INTERVENTION CHARACTERISTICS

To produce a review of the literature with direct linkages to practice, we decided to frame our analysis around seven characteristics that are commonly accepted as important components of health interventions. Previous research, either on youth reproductive health interventions or on mass media reproductive health interventions for general populations, supports these characteristics as important components.^[6; 16; 21; 22; 24-28] International organizations have provided similar recommendations for developing quality health interventions focused on youth.^[29-31]

Although commonly accepted by the international community as important components of quality health interventions, it is worth noting that the impact of most of these characteristics on actual outcomes has not been empirically examined. The reasons for this lack of empirical evidence are twofold. First, most of these characteristics are linked to the process of developing an intervention, and *process* is not typically included in summative evaluations, which tend to examine *outcomes*. Second, obtaining empirical evidence would require testing the relative strength of a characteristic by developing, implementing, and evaluating two versions of the same program, one with and one without the characteristic; few programs have resources

necessary for such an approach. Nevertheless, the existing literature still suggests there is value to using these characteristics to guide our analysis. We propose these characteristics be considered as additional indicators of an intervention's potential for excellence, in addition to achieving success in knowledge, attitudinal, or behavioral outcomes. Therefore, our review considers interventions' empirical evidence (outcome data) in tandem with their application of the seven characteristics to yield practical recommendations for practitioners interested in developing youth sexual health mass media interventions.

- **Use of theory:** Theory has been found to be important in designing, implementing, and evaluating health interventions, including those using mass media.^[32; 33] Having a theoretical foundation can “provide a road map for studying problems, developing appropriate interventions, and evaluating their successes.”^[32] Theory can help identify effective communication messages and approaches for specific audiences, as well as the knowledge, attitudinal, or behavioral concepts to evaluate. Theory can also help identify *pathways* as well as potential *barriers* to achieving the expected change.
- **Inclusion of contextual factors:** Although individuals are typically the focus of interventions seeking to improve sexual health, research suggests that an individual focus alone is insufficient.^[34] Individuals' choices, attitudes, decisions, and behaviors are theorized to depend not only on their own characteristics, but also on their interactions with contextual factors in the environment around them—their family, social networks, school, community, as well as larger society.^[35] These contextual factors provide distinct norms and rules, either explicit or implicit, that can influence, directly or indirectly, an adolescent's attitudes, beliefs, or even their ability or tendency to engage in certain behaviors.^[36; 37] Moreover, the political environment, including government policies, may be barriers for promoting sexual health

issues for youth.^[30; 38] Sexually active adolescents' contraceptive use, for example, may be shaped by multiple factors, such as perceived peer norms, concerns about parents' reactions, health providers' willingness to dispense contraceptives to minors, access to family planning clinics, and government policies regulating minors' access to contraception. Therefore, interventions could address factors not only at the individual level but also on a larger scale—such as aiming to change parental attitudes, health care provider practices, or school policies.

- **Involvement of youth:** Since the mid-to-late 1990s, international organizations such as the World Health Organization, the United Na-

tions (UN), and UNESCO, have called for youth participation in the design, implementation, and evaluation of programs intended for youth.^[29-31]

- **Involvement of other stakeholders:** Besides the intended audience of an intervention, there are often other key stakeholders whose involvement may be helpful, if not essential, to the eventual success of an intervention.^[25; 28] Involvement can take many forms, from approval of the intervention's focus and content to active participation as a collaborative partner on various activities.^[25] Examples of other stakeholders include parents, teachers, business owners, government officials, religious leaders, or other leaders from the local community.

METHODS

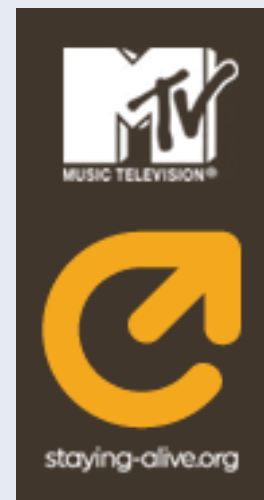
We identified relevant articles and papers by using predetermined key words to search online bibliographic databases, specific journals, and websites of organizations known to have conducted international mass media reproductive health programs for youth. Selecting publications was a two-step process. First, we read the abstract or summary of each publication to assess potential relevance. Second, we read and vetted potentially relevant publications to determine which interventions to include in our review. We used the following selection criteria:

- The intervention was implemented outside of the United States.
- The target audience included adolescents (ages 13 to 19) and/or young adults (ages 20 to 24). General population interventions were only included if the analysis offered findings specific to adolescent/young adult populations.
- The available publications for an intervention presented either formative or summative evaluation findings specific to adolescent/young adult populations. The articles were published within the past 20 years (October 1987 through October 2007).
- For summative evaluation, it was assessed whether participation/exposure to the intervention was associated with knowledge, attitudes and/or behavior related to sexual health (e.g. abstinence, condom use, limited number of sexual partners).
- Mass media (e.g., television, radio, print, Internet) played an integral role in the implementation of program objectives.

CASE STUDY:

MTV'S *STAYING ALIVE* MULTI-COUNTRY CAMPAIGN

OVERVIEW: In 2002, MTV's geared its global *Staying Alive* campaign to address the global impact of HIV/AIDS and promote prevention for youth ages 16 to 25. MTV broadcast the campaign worldwide over its 37 channels (the number of channels has since grown to 41) and made the entire campaign available rights-free to any third-party broadcaster who signed an agreement with MTV. As a result, approximately 800 million households worldwide had access to the campaign.^[14;20] The evaluation studies included data from Senegal, Brazil, and Nepal.



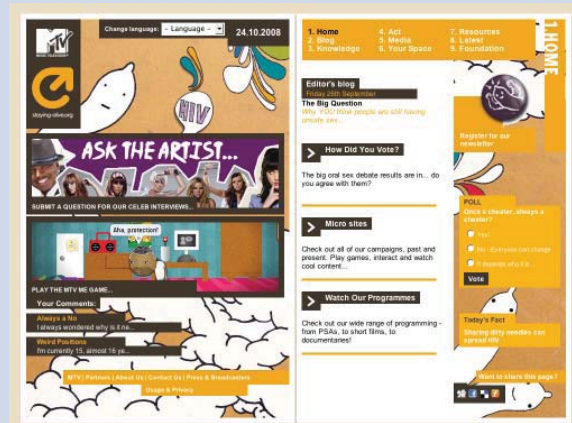
The primary objectives of this HIV/AIDS related campaign focused on increasing awareness and preventive behavior, reducing stigma and discrimination, and empowering young people to take action.^[15]

MTV, along with other partners such as YouthNet, Family Health International, the Kaiser Family Foundation, the Bill and Melinda Gates Foundation, Levi's Jeans, and Population Services International's YouthAIDS project, envisioned a multi-media/multi-channel campaign that could be tailored to individual countries, depending on their needs, cultural values, and access to media. As a result, a variety of mass media activities were designed, including the following:

- A series of six public service announcements (PSAs) aired on MTV;
- A campaign Web site linked to **MTV.com** with links to information and resources;
- An hour-long documentary aired on MTV entitled "StayingAlive 4" which offered narratives of young people living with HIV/AIDS in different regions of the world; and

- Concerts held in Seattle, Washington, and Cape Town, South Africa which were aired on MTV on December 1, 2002, World AIDS Day. The concert comprised of approximately 60% content related to HIV/AIDS and 40% music.^[15]

Additionally, in an attempt to help countries adapt the campaign to meet local needs, MTV created linkages to local youth programs.



FINDINGS: Because of the ability to tailor the campaign to country-specific needs, the interventions differed in the three evaluation countries (Senegal, Brazil, and Nepal). For example, in Senegal, local partners and community leaders found much of the MTV material too controversial and decided to instead develop their own campaign using the MTV material as inspiration. Given the different levels of access in each country, exposure also varied across sites, ranging from 12 percent to 82 percent. Exposure was greatest in Dakar, Senegal where 3rd party broadcasters broadcast the media in various outlets for a longer duration.^[14; 20]

Positive impacts of the *Staying Alive* campaign were found in all three evaluation countries. For example, there was a positive association for all three sites between exposure to the campaign and HIV prevention beliefs. This association remained even after controlling for other factors such as gender, education, and previous sexual behavior. In addition, in all three sites, communication about HIV with more types of people was higher among people exposed to the campaign compared to those without exposure. Some impacts were site specific. For example, in Senegal, exposure to the *Staying Alive* campaign was also associated positively with gender equity beliefs. This same association was not found in the other two sites.^[49]

Overall, the PSAs were deemed as the least successful component of the campaign by the collaborative partners.^[15] Qualitative data further detailed that the PSAs were generally viewed as too Western and unrealistic. On the other side, qualitative data found that youth were emotionally involved with the youth narratives in the documentaries.