Sexual Content on Reality and Fictional Television Shows

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This study content analyzed popular television programs (33 shows) and combined the results of the content analysis with college students' (N = 773) reported viewing levels to create Sexual Television Consumption Index (STCI). This STCI was examined across different program genres and type of sexual content portrayal (e.g., sexual talk, sexual behavior). Additionally, the relationship between STCI and risky sexual behavior was explored. Results indicated differences between the sexual content on various types of shows, and, in turn, STCIs related to different program genres. Overall, night time soaps/drama and animated situation comedies have the highest amount of sexual content portrayal and sports, the least. Exposure to sexual talk on reality TV is positively associated with risky sexual behavior. Implications of findings are discussed.

Keywords: sexual media content, reality TV, risky sexual behavior, television viewing

A merican youth are avid media consumers. Bridge Ratings and Research reported that an average American 15-24 year old spends about 11 hours per day using some form of media including television, radio, Internet, magazines, cell phones, newspapers, and MP3 players. Most time spent on the Internet includes watching video on such sites as YouTube, Yahoo! and MySpace, or streamed replays of prime time shows on TV network websites

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(Bridge Ratings, 2007). Given such high consumption of media, particularly television, one key question continues to be the content that American youth watches.

The 2005 Kaiser Family Foundation Study reported that 70% of all shows on television had sexual content, while only 56% of shows in 1998 and 64% in 2002 had some form of sexual content. However, despite escalating rates of sexual content on television and increasing television use of American youth, relatively few studies have examined individual exposure to sexual television content across specific genres, and association between exposure and sexual behavior. In the current study, we present a methodology that calculates an individual's Sexual Television Consumption Index (STCI) by assigning a specific value to an individual's sexual television consumption across television program types. Additionally, we investigate the association between exposure to sexual media content on specific program types (such as, sexual talk, sexual explicitness) and individual's sexual behavior.

Sexual Content on Television

Mass communication researchers have long been interested in sexual content on television. Content analysis has been a popular methodology utilized by researchers studying sexual television content (e.g., Farrar et al., 2003; Ferris, Smith, Greenberg, & Smith, 2007; Gunter, 2002; Kunkel, Cope, & Biely, 1999; Kunkel et al., 2007; Jensen & Jensen, 2007; Lampman et al., 2002; Pardun, L'Engle, & Brown, 2005). For instance, Kunkel et al. (2007) content analyzed 2,817 programs presented on both cable and broadcast television channels over a 5-year period. The results revealed that sexually-related messages are increasing in television entertainment with shows portraying sexual intercourse having doubled in the 5-year period. Kunkel et al. (1999) analyzed programs most popular with adolescents and reported that there is more than a 50% probability that any given program on television will include some talk about sex. Similarly, Farrar et al. (2003) reported that talk about sex is the more common means of conveying sexual messages on television, although sexual behaviors are portrayed frequently too.

Studies relying solely on content analyses have had two primary shortcomings. First, these studies generally do not measure an individual's sexual content consumption across a wide range of programs. Second, although these studies very effectively display the varied kinds of sexual content that encompass today's media, they do not empirically link sexual content on television and individual's consumption of such content. Pardun et al. (2005) combined results from content analysis of sexual media and audience surveys to create a measure of Sexual Media Diet (SMD) for each individual. More recently, Ferris et al. (2007) utilized a content analysis of 64 hours of reality dating shows and a survey of 197 young adults to examine the extent to which the content on the shows was related to actual dating attitudes, preferred date characteristics, and dating behaviors of viewers. We present a

methodology similar to Pardun et al.'s (2005) SMD, and calculate an individual's STCI by combining results from a content analysis and a survey. This method allows us to calculate each individual's sexual television consumption and compare it across various types of TV programs.

SEXUAL CONTENT ON FICTIONAL AND REALITY TV PROGRAMS

Television is becoming increasingly sexual. As Lampman et al. (2002) state, "American television is growing up. In fact, it seems to have reached puberty" (p. 3). Over the past few years, there has been a substantial increase in the amount of sexually oriented material in television shows (e.g., Farrar et al., 2003; Kunkel, Cope, & Colvin, 1996; Kunkel et al., 1999; 2007). The sexual depictions on television have ranged from nudity to portrayals of intercourse including sexual talk and other sexual behaviors (e.g., Kunkel et al., 1999; 2007; Pardun et al., 2005; Somers & Tynan, 2006).

Research has shown that many television genres are laden with sexual content. Lampman et al. (2002) content analyzed primetime comedy aired on all broadcast and cable networks in 2000 and reported that 85% of programs and 25% of workplace interactions contained some type of sexual content. Analysis of prime-time network broadcast programs from 1993 to 1999 also documented that 70% of situation comedies had references to sexual behaviors (Signorielli, 2001). Prior research has also confirmed the presence of sexual content in soap-operas (Greenberg & Buselle, 1994; Greenberg et al., 1993). This increase in sexual content on television has been linked with the increasing saturation of cable and satellite television, content subject to less regulation than commercial broadcast networks (see Fisher, Hill, Grube, & Gruber, 2004). As well, an explosion of shows on television, where participants win various types of competitions at times by using their sexuality, may be contributing to the increasing levels of sexuality on American television (see Ferris et al., 2007).

Sexual content on reality TV. In the last five years, reality TV has emerged as one of the most popular genres of television programming (Ferris et al., 2007). Nabi, Biely, Morgan, & Stitt (2003) have offered the following definition of reality-based television:

Programs that film real people as they live out events (contrived or otherwise) in their lives, as these events occur. Such programming is characterized by several elements: (a) people portraying themselves ..., (b) filmed at least in part in their living or working environment rather than on a set, (c) without a script, (d) with events placed in a narrative context, (e) for the primary purpose of viewer entertainment (p. 304).

The Parents TV Council conducted a content analysis of reality TV programs in 2002-2003 and found that there were 4.3 instances of sexual content per hour of reality TV programming, representing a 169% increase from a study conducted a year earlier (Rankin,

2007). Ferris et al. (2007) reported that men who watched more reality TV programs and perceived the programs as more realistic were significantly more likely to endorse attitudes that men are sex-driven and women are sexual objects.

Media consumers realize that reality shows, even with their "real people" casts and allegedly real situations, depend heavily on editing and montage. However, these shows are still viewed as at least moderately real (Nabi et al., 2003). On the other hand, because sex-related content as a rule is understood to be attractive to audiences, it is unlikely to be edited out of reality shows' footage when it does occur.

This study, therefore, analyzes the amount and portrayal of sexual content on reality shows in comparison to sexual content on other types of TV entertainment programs via a content analysis. Furthermore, we explore college students' preference for and consumption of such programs via a survey. Finally, we combine results from the content analysis and survey to calculate an individual's STCI and examine it across reality and other TV program genres. The rationale for doing so is to predict the nature of sexual television content consumption. For instance, a given show might have high sexual content, but if the show is not watched by people, then the content is not consumed and therefore is less crucial. By calculating the STCI, the consumption pattern of participants' sexual content on television becomes clearer. We further break this down by sexual content categories and program genres.

Thus, we ask:

RQ1: Does the sexual content on reality TV and other program genres systematically differ?

RQ2: Does the STCI for reality TV and other program genres systematically differ?

EXPOSURE TO SEXUAL CONTENT AND SEXUAL BEHAVIOR

The media are often used as sources of information about sexuality (see Brown, 2002) primarily because media play an important role in socializing children/youth into sexuality. This socialization may take one of three forms: imparting information about sex, influencing young people's attitudes and beliefs regarding sex and sexual topics, and affecting early initiation of sexual intercourse (see Kunkel et al., 2007). In this study we focus on the empirical link between exposure to sexual content on television and receivers' sexual behavior.

Literature has presented ambiguous results about the association between sexual content exposure and sexual behavior. Although most studies have confirmed the link between exposure to sexual content on television and sexual behavior (e.g., Collins et al., 2004; Gunter, 2002; Taylor, 2005; Traeen, Nilsen, & Stigum, 2006), others (e.g., Peterson, Moore, & Furstenberg, 1991) have found little or no evidence of such a relationship. Studies examining the relationship between exposure to sexual media and sexual attitudes or

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behavior have considered a host of factors that could potentially influence this relationship. Demographic variables and personality factors, such as history of romantic relationships or sexual experience have consistently been examined for their influence on the relationship between exposure to sexual media and sexual behavior (e.g., Aubrey, Harrison, Kramer, & Yellin, 2003; Buerkel-Rothfuss, & Strouse, 1993; Collins et al., 2004; Taylor, 2005; Walsh-Childers & Brown, 1993). Moreover, researchers have pointed to different effects of sexual media content, depending on the type of a medium, explicitness of sexual content,¹ and on its form, for example, talk about sex versus actual portrayals. Finally, the "perceived realism" of media content has also been tested as the intervening variable that can potentially alter the strength of the behavioral effects of exposure to sexual media content (e.g., Aubrey et al., 2003; Taylor, 2005). To contribute to this discussion of the relation between exposure and behavior, we propose that greater consumption of STCI is associated with riskier behaviors, including risky sexual behavior. Thus, we hypothesize:

H1: Controlling for overall TV Viewing, as STCI increases, riskier sexual behavior increases.

Because this study included analyses of different types of sexual television exposure (e.g., sexual talk versus sexual behavior) on different categories/genres of shows, we further ask;

RQ3: How is STCI for different genres associated with riskier sexual behavior?

METHOD

Participants and Procedure

The study utilized a twofold design including a survey and a content analysis of television shows. After receiving the IRB approval, survey data were collected from a convenience sample of seven hundred seventy three (N = 773) undergraduate college students, male (n = 260) and female (n = 487)² enrolled in a large public northeastern U.S. university. The participants, ranging in age from 18 to 25 (M = 19.81; SD = 1.19), were recruited from introductory communication classes, and received extra credit for their participation. Students who were younger than 18 or older than 25 (n = 82) were excluded from analyses, as their TV viewing patterns could deviate from a typical college population. The sample reported ethnicity was predominantly Caucasian (60.3%), with 13% Asian/Pacific Islander, 6.7% African American, 5% Hispanic/Latino, 3.5% Bi/multi racial, 3.3% Caribbean, 2.6% Asian American, and other groups less than 2% each. The survey measured students' viewing of different TV shows, voyeurism, and sensation seeking; it also

included demographics. Participants completed the survey outside regular class time, after signing an informed consent form. The questionnaire took about 30 minutes to complete and was anonymous. After completing the survey, participants were debriefed.

Defining and Collecting the Media Sample

For the content analysis, a combination of "message pool" approach and "exposurebased" approach was utilized to identify the television programs. The "message pool" approach defines the population as the set of messages available via a given medium at a certain time. The "exposure based" approach focuses on defining the population as those messages most widely attended to by audience members (Neuendorf, 2006). In order to identify the appropriate widely viewed shows by university students aged 18-25, several pilot tests were conducted with students enrolled in undergraduate communication classes at two U.S. universities. For the pilot tests, the authors made a list of all primetime shows on all national and basic cable networks to form a list of shows thereby utilizing the "message pool" approach. Also utilizing the "exposure-based" approach, two groups of students were asked to list their favorite shows (in a free response format). The results obtained from these two approaches were combined to construct an initial list of 60 popular shows.

The next step utilizing the "specific audience exposure-based" approach, in which the population becomes those programs most heavily viewed by a specific population (see Neuendorf, 2006) consisted of further identifying and refining the list of heavily viewed shows by university undergraduate students. To accomplish this, a group of pretest students ranked these 60 shows for how often they watched them on a Likert scale from 1 (*Never*) to 5 (*Almost Always*). There was also a free response question asking about their favorite shows to capture any additional missed programs. Based on results of all pilot surveys, we created a list of 33 most viewed television shows among University undergraduates making efforts to balance the range and type of programs. The final coding sample included two episodes of each television show resulting in 66 television shows that were content analyzed. The final content analysis sample was within range of previously reported content analysis of television programs. For instance, Pardun et al. (2005) analyzed one episode each of 64 television shows, and Lampman et al. (2002) analyzed two episodes of 36 programs leading to a sample size of 72 shows.

Unit of Analysis

The unit of analysis was a "nonbreak sequence or camera cut" (Pardun et al., 2005) measured in seconds. The mean was calculated for the two episodes of each show to

establish the final sexual content score for a given program. Furthermore, average sexual content variables were computed for program genres by summing the scores of programs within a genre. A higher score indicated greater sexual content (of a particular type) in a particular genre (see Table 1). Because programs varied in length, scores were adjusted so that all shows were comparable to the predominant one hour-long programs. Below, we describe the types of sexual content measured followed by reliability estimation and television program genres created for analysis.

Defining and Measuring Sexual Content

The coding scheme for this study was developed based on prior studies of sexual television content (e.g., Jensen & Jensen, 2007; Kunkel et al., 1999). Four categories emerged as depicting sexual content: sexual behavior, sexual talk, involuntary sexual activity, and sexual explicitness (see Table 1 for Means and Standard Deviations of sexual content categories).

Sexual behavior. Sexual behavior was defined as "behaviors conveying a sense of potential or likely sexual intimacy" (Kunkel et al., 1999, p. 231). Thus, a greeting or a farewell kiss between two friends or relatives would not be considered sexual, but a passionate kiss between two characters with romantic interest would be included. Sexual behavior included passionate kissing, intimate touching, and implicit and explicit intercourse.

Sexual talk. Sexual talk was defined as a "wide range of types of conversations that may involve first-hand discussion of sexual interests and topics with potential partners, as well as second-hand exchanges with other that convey information about one's prior, anticipated, or even desired future sexual activities" (Kunkel et al., 1999, p. 231). Instances of sexual talk included sexual jokes or discussions about one's own or others' sexual relationships, talk about prior sexual intercourse, and comments about one's own or others' sexual actions or interests.

Involuntary sexual activity. Involuntary sexual activity was defined by the authors as sexual behavior that conveys forced or reluctant sexual activity, such as rape or unwilling kissing.

Sexual explicitness. Sexual explicitness refers to "the physical appearance of the characters involved in the behavior" (Kunkel et al., 2007, p. 602). Sexual explicitness was an aggregate variable combining sexual behavior with provocative/suggestive dressing or appearance (attire that flaunts one's sexuality), disrobing (removal of clothing that exposes parts of the body not exposed normally), discreet nudity (nudity implied, but no private parts of the body shown on-screen), and nudity (where private parts of the body such as breasts or buttocks are shown on screen).

	Political	Sports	Reality	Crime/	Night Time	Situation	Animated
	Satire			Action	Soap/Drama	Comedies	Situation
	((SD)	M (SD)	M (SD)	M (SD)	(SD) M	(SD) M	M (SD)
Sexual Content Variables							
Sexual talk	87.00	0.00	8.02	9.85	93.11	126.60	124.93
	(128.24)	(0.00)	(22.32)	(18.83)	(135.35)	(204.89)	(173.56)
Sexual behavior	0.00	0.00	13.13	12.45	56.52	47.09	14.83
	(00.0)	(0.00)	(31.82)	(21.54)	(63.34)	(73.02)	(23.03)
Sexual explicitness	26.73	1.33	75.49	19.04	141.62	70.69	80.00
	(49.54)	(1.89)	(175.72)	(27.96)	(159.92)	(74.96)	(92.03)
Involuntary sexual activity	0.50	0.00	00.00	0.33	0.00	0.40	1.00
	(1.00)	(0.00)	(00.0)	(0.78)	(00.0)	(1.27)	(2.45)
Overall sexual content	98.73	1.83	67.68	26.42	193.76	162.42	170.00
	(147.75)	(2.59)	(161.73)	(33.79)	(233.21)	(229.11)	(208.25)
Exposure Variables							
Exposure to sexual talk	119.32	0.00	11.66	4.67	92.28	146.27	228.09
	(110.61)	(0.00)	(9.20)	(98.9)	(88.99)	(120.51)	(166.93)
Exposure to sexual behavior	0.00	0.00	18.05	4.08	67.92	66.12	29.00
	(00.0)	(0.00)	(13.43)	(6.67)	(55.46)	(44.69)	(21.72)
Exposure to sexual explicitness	36.69	1.66	111.30	6.28	163.37	95.98	140.52
	(34.04)	(2.06)	(82.65)	(6.53)	(137.63)	(59.07)	(103.26)
Exposure to involuntary sexual activity	0.69	0.00	0.00	0.13	0.00	0.21	0.98
	(0.64)	(00.0)	(00.0)	(0.20)	(00.0)	(0.22)	(0.73)
Exposure to overall sexual content	135.42	4.61	101.13	11.33	218.97	192.42	301.16
	1125 541	15 701	(75.07)	(15.08)	1107 801	1145 611	101 0000

Journal of Health & Mass Communication (Vol. 3, Nos. 1-4 (2011)

Reliability

Several undergraduate students were trained to code the sexual content variables. Training continued until each coder demonstrated adequate interrater reliability (above .80). Percentage agreement indices for coding of sexual content was used to estimate reliability (see Hardy, Jamieson, Romer, & Jamieson, 2006). We utilized two coders on all 66 shows. The interrater reliability for sexual content categories had a minimum percentage agreement of .83, and all differences were resolved by another coder, blind to hypotheses, resulting in 100% final agreement.

Defining and Grouping Television Shows

Television programs were grouped into specific genres or categories to help analyze sexual content in particular categories of programming. Program genres present a "bird's-eye view of some of the other aspects of content" (Signorielli, 2005, p. 283). Program categories were created based on a priori groupings related to genre. For instance, situation comedies are programs with: (a) characters that remain in the same situation from episode to episode; (b) the situation is usually that of a family, workplace, or a group of friends; and (c) usually revolve around interpersonal relationships and include some content of a sexual nature (see Signorielli, 2005). As a result, 6 groupings of fictional programs were created: political satire, sports, situation comedies, night time soaps/drama, crime and action drama and animated situation comedies. In addition, there was also a reality show category. Reality shows were defined, drawing on Nabi et al.'s (2003) definition, as ones that do not rely on a priori scripts, show footage of documentary nature, and draw primarily on "real" people rather than actors. This resulted in a list of 9 reality shows.³

Linking Content Analysis with Individual Data

Table 1 displays the Means and Standard Deviations of sexual content (separated by sexual content categories) for the seven genres of television programming. Survey participants were asked to rate each of the 33 shows⁴ for how often they watch them on a Likert scale from 0 "*Never*" to 4 "Almost Always." Each individual respondent was assigned a value that represented his or her exposure to sexual television content. This Sexual Television Consumption Index (STCI) was created by combining data from the content analysis with that from the survey. In the content analysis, the average of sexual content was computed in seconds to determine the total amount of sexual content for each program. Then, the resulting score was multiplied by each participant's self-reported viewing frequency for each program to get an STCI for each participant. These scores were then summed and averaged across programs to get an indicator of STCI for each genre of

programs (see Table 1). Furthermore, a composite variable was created that measured exposure to STCI by summing and averaging STCI scores for the seven genres (M = 137.77, SD = 63.45).

Measurement Instruments

Riskier sexual behavior. Riskier sexual behavior was measured by two items. The first asked, "How many different sexual partners have you had in the past 2 years?" (M = 2.01, SD = 2.60). The second asked, "How often do you (does your partner) use a condom when you have sexual intercourse." Responses ranged from 1 (*Always*) to 5 (Never) for this item (with 0 = I've never had sexual intercourse) (M = 1.48, SD = 1.48). The two items were multiplied with a higher score showing riskier sexual behavior (M = 4.27, SD = 7.18).

Overall television viewing. Overall television viewing was measured by two items that asked respondents to report how many hours and minutes they watched TV on average weekends and weekdays. The hours were converted into minutes and then combined. Finally, overall television viewing (in minutes) was created by averaging television viewing on weekdays and weekends. Thus, a higher score indicated higher overall TV viewing in minutes per day (M = 195.42, SD = 161.24).

RESULTS

Data were analyzed by a series of oneway ANOVAs, confidence intervals, and partial correlations. The level of significance was set at p < .05, except for correlations where it was set at .01 to protect against Type I error. The results are presented next and organized by research question and hypothesis.

Research question 1. RQ1 examined the sexual content on reality TV as compared with other program genres on television. Results from the content analysis revealed that among all categories, night time soaps/drama have the highest sexual content followed by animated situation comedies, situation comedies, political satire, reality TV, crime and action drama, and finally sports (see Table 1). Based on confidence intervals (at $p \le .01$), it was concluded that in terms of overall sexual content, reality TV was significantly higher in sexual content than sports and night time soaps/drama, but not from other genres of TV programming.

For sexual talk, the content analysis revealed that among all categories, situation comedies have the highest sexual talk content followed by animated situation comedies, nighttime soaps/drama, political satire, crime and action drama, reality TV, and finally sports (see Table 1). Based on confidence intervals (at $p \le .01$), it was concluded that in terms of sexual talk content, reality TV was significantly different from political satire, sports, night time soaps/drama, situation comedies, and animated situation comedies, but not

from crime and action drama. Thus, overall reality TV has significantly less sexual talk as compared to animated situation comedies, nighttime soaps/drama, and political satire, but significantly more sexual talk as compared to sports.

For sexual behavior, the content analysis revealed that among all categories, nighttime soaps/drama have the highest sexual behavior content followed by situation comedies, animated situation comedies, crime and action drama, and reality TV (see Table 1). Sports and political satire have no instances of sexual behavior. Based on confidence intervals (at $p \leq .01$), it was concluded that in terms of sexual behavior content, reality TV was significantly different from political satire, sports, night time soaps/drama, and situation comedies, but not from crime and action drama, and animated situation comedies. Thus, overall reality TV has significantly less sexual behavior as compared to nighttime soaps/drama and situation comedies, but significantly more sexual behavior as compared to sports and political satire.

For sexual explicitness, content analysis revealed that among all categories, nighttime soaps/drama have the highest sexual explicitness content followed by animated situation comedies, reality TV, situation comedies, political satire, crime and action drama, and finally sports (see Table 1). Based on confidence intervals (at $p \le .01$), it was concluded that in terms of sexual behavior content, reality TV was significantly different from sports, but not from other genres of TV programming. Thus, overall reality TV has significantly more sexual explicitness as compared to sports.

For involuntary sexual activity, content analysis revealed that among all categories, animated situation comedies have the highest involuntary sexual activity content followed by political satire, situation comedies, and crime and action drama (see Table 1). Reality TV, sports and nighttime soaps/drama had no instances of involuntary sexual activity. Based on confidence intervals (at $p \le .01$), it was concluded that in terms of involuntary sexual activity content, reality TV was significantly different from political satire, crime and action drama, and animated situation comedies, but not from sports, nighttime soaps/drama, and situation comedies. Thus, overall reality TV had significantly less involuntary sexual activity as compared to animated situation comedies, political satire, and crime and action drama.

Thus, results for Research Question 1 reveal that overall reality TV has significantly less sexual content as compared to nighttime soaps/drama, but significantly more sexual content as compared to sports. Results varied for other types of sexual content. The pattern of results reveal that reality TV has intermediate levels of sexual talk, sexual behavior, sexual explicitness, and involuntary sexual activity as compared to other genres of TV programming.

Research question 2. RQ2 compared STCI in terms of overall sexual content and more specifically, sexual explicitness, sexual talk, sexual behavior, and involuntary sex (see Table 1). Oneway analyses of variance were examined, with post hoc LSD and Bonferroni

procedures. The oneway was significant for STCI, Wilk's Lambda = .17, F(6, 659) = 537.12, $p \le .001$, eta-square = .83. Post hoc tests revealed significant differences for all categories. Overall, STCI for animated situation comedies (M = 301.45, SD = 219.28) was the highest, followed by night time soaps/drama (M = 218.83, SD = 192.66), situation comedies (M = 192.49, SD = 145.90), political satire (M = 135.15, SD = 124.73), reality TV (M = 100.44, SD = 75.00), crime and action drama (M = 11.41, SD = 15.14) and finally sports (M = 4.61, SD = 5.73).

More specifically, for different types of sexual content consumption, the results revealed that the oneway was significant for sexual talk consumption, Wilk's Lambda = .17, F(6, 665) = 535.30, $p \le .001$, eta-square = .83. Post hoc tests revealed significant differences for all categories. Overall, sexual talk consumption for animated situation comedies (M = 228.64, SD = 166.49) was the highest, followed by situation comedies (M = 146.13, SD = 120.56), political satire (M = 119.57, SD = 110.03), night time soaps/drama (M = 92.45, SD = 89.18), reality TV (M = 11.62, SD = 9.22), crime and action drama (M = 4.71, SD = 6.89), and finally sports (M = 0.00, SD = 0.00).

The oneway was significant for sexual behavior consumption, Wilk's Lambda = .15, $F(5, 673) = 691.21, p \le .001$, eta-square = .84. Post hoc tests revealed significant differences for all categories (except between sexual behavior consumption on night time soaps/drama and situation comedies and none on sports and political satire). Overall, sexual behavior consumption for night time soaps/drama (M = 67.81, SD = 55.32) and situation comedies (M = 66.23, SD = 44.60) was highest, followed by animated situation comedies (M = 4.12, SD = 5.72), reality TV (M = 18.01, SD = 13.44), crime and action drama (M = 4.12, SD = 6.70), and none for sports (M = 0.00, SD = 0.00) and political satire (M = 0.00, SD = 0.00).

The oneway was also significant for sexual explicitness consumption, Wilk's Lambda = .16, F(6, 664) = 598.62, $p \le .001$, eta-square = .84. Post hoc tests revealed significant differences for all categories. Overall, sexual explicitness consumption for night time soaps/drama (M = 163.09, SD = 137.65) was the highest, followed by animated situation comedies (M = 140.48, SD = 102.96), reality TV (M = 110.34, SD = 82.43), situation comedies (M = 96.43, SD = 58.98), political satire (M = 36.43, SD = 33.82), crime and action drama (M = 6.35, SD = 9.59) and finally sports (M = 1.66, SD = 2.07).

Finally, the oneway was significant for involuntary sex consumption, Wilk's Lambda = .29, F(4, 680) = 420.87, $p \le .001$, eta-square = .71. Post hoc tests revealed significant differences for all categories (except between involuntary sex consumption on sports, reality TV, and night time soaps/drama). Overall, involuntary sex consumption for animated situation comedies (M = 0.98, SD = 0.73) was the highest, followed by political satire (M = 0.69, SD = 0.64), situation comedies (M = 0.21, SD = 0.22), and crime and action drama (M = 0.13, SD = 0.20). There were no instances on involuntary sex on sports, reality TV, or night time soaps/drama.

Thus, results for Research Question 2 reveal that STCI for reality TV is less than the STCI for animated situation comedies, night time soaps/drama, situation comedies, and

political satire, but more than the STCI for crime and action drama and sports. Overall, the type of STCI varies somewhat by the type of show.

Hypotheses 1. Hypothesis 1 examined the relationship between STCI and riskier sexual behavior (see Table 2). Partial correlation was performed to test this hypothesis controlling for overall TV viewing. Riskier sexual behavior was positively correlated with STCI ($r_p = .10, p \le .01$). Thus, Hypothesis 1 was supported. Heavy viewers of sexual content on television also indulge in riskier sexual behavior.

Research question 3. RQ3 analyzed the association between type of sexual television consumption and risky sexual behavior. Partial correlations were performed controlling for overall TV viewing. Riskier sexual behavior was positively associated with exposure to sexual talk in reality TV ($r_p = .10, p \le .01$) after controlling for overall TV exposure. Thus, the overall results for RQ3 indicate that heavy viewers of sexual talk on reality TV (but not other types of sexual content on different genres) also indulge in riskier sexual behavior.

DISCUSSION

The goal of this research was to analyze the amount and portrayal of sexual content on reality shows in comparison to sexual content on other types of TV entertainment programs via a content analysis, and combine of content analysis and survey data to examine an individual's STCI across reality and other TV program genres. Finally, the study analyzes how risky sexual behavior correlates with exposure to sexual content on reality and other TV genres. The results demonstrate that college students have a high STCI, and this exposure is significantly related to their self-reported risky sexual behaviors. Although the pattern of sexual media content and exposure varied by program genre, we will discuss the implications of the findings.

Sexual Content and STCI on Reality TV and Other Entertainment TV Genres

There were differences between sexual content for all six genres. In general, there was more sexual content on fictional shows than on reality shows. Of all categories of programs genres, night time soaps/drama contained the most overall sexual content, sexual behavior, and sexual explicitness, situation comedies contained the highest sexual talk, and animated situation comedies contained the highest involuntary sexual activity. On one hand, fictional shows have more sexual content because they are scripted that way, as sexual content is understood to be attractive to audiences. On the other hand, reality TV has less sexual content for two possible reasons. First, the participants of the reality shows censor themselves, knowing that cameras are present. Second, producers may censor the unscripted

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Variables	_	2	ę	4	5	9	7	8	6
I. Risky Sexual Behavior	1.00								
2. STCI	0.10*	1.00							
. STCI-Political Satire	0.08	0.54	1.00						
. STCI - Sports	0.05	0.11*	0.46**	1.00					
. STCI - Reality TV	0.09	0.33**	0.02	-0.03	1.00				
6. STCI - Crime and	-0.06	0.31**	0.15**	0.05	0.06	1.00			
Action Drama									
7. STCI – Night Time Soans/Drama	0.05	0.47**	-0.22**	-0.34**	0.34**	0.19**	1.00		
. STCI – Situation Comedies	0.01	0.68**	0.17**	-0.03	0.16**	0.18**	0.27**	1.00	
9. STCI - Animated	80.0	0.68**	0,56**	0.26**	-0.11*	0.14**	-0.14**	0.28**	1.00
Situation Comedies									

footage to meet the standards of primetime TV. Among all kinds of sexual content, reality TV had the highest sexual explicitness. Because people still like to watch sexual content, of which there is less on reality TV, what reality TV lacks in actual portrayals of sex, it makes up for with two sexual features that can be shown on TV without many reservations: suggestive sexual clothing and nudity. Thus, it is important to consider not just overall sexual content but also include types of sexual content in studies.

The combination of content analysis and sexual content suggest that college students are indeed living in a sexually saturated television world, and there is a great deal of variability in their exposure to sexual content on television. Although the amount and type of sexual television content varies by program genres, college students are exposed to a lot of different kinds of programming, which results in an increased overall STCI for most individuals. This finding is consistent with prior research that has reported an increasing consumption of sexual media by adolescents and young adults (e.g., Ferris et al., 2007; Kunkel, Eyal, & Biely, 2003, Pardun et al., 2005). How this exposure may be instrumental in guiding adolescents' and young adults' sexual choices and decisions may be explored further in future research.

Sexual Behavior and Exposure to Sexual Media Content

The present study demonstrates that higher levels of STCI were positively associated with riskier sexual behavior. The findings suggest that it is not the type of sexual content but the extent of exposure that is more important in understanding television's role in college students' risky sexual behaviors. These findings are consistent with prior research documenting that exposure to media sex is significantly associated with sexual activity and initiation (e.g., Collins et al., 2004; Pardun et al., 2005). Higher exposure to portrayals of sex may affect people's beliefs about cultural norms (Traeen et al., 2006) or may create the illusion that sex is more central to daily life than it truly is and thereby promote sexual behaviors and sexual initiation (see Gerbner, Gross, Morgan, & Signorielli, 1986). Exposure to the social models provided by television may also change beliefs about the likely outcome of engaging in sexual activity, making it appear more normative (see Bandura, 1986).

The results of the present study revealed no difference in relationships between exposure to different kinds of sexual content and risky sexual behavior. Only one kind of exposure to sexual content, sexual talk on reality TV was associated with risky sexual behavior. The findings could be explained by the perceived realism associated with reality TV programs. Prior research has showed that fictional sexual content is perceived to be unrealistic, and thus, frequently rejected by young people on those grounds (Kunkel et al., 2003; Walsh-Childers & Brown 1993). Moreover, research has demonstrated that reality shows are perceived as at least moderately real (Nabi et el., 2003). It is clear that it is difficult to portray a variety of sexual activities on TV realistically. In other words, the scripting that makes fictional TV less real also allows it to include more and greater variety

of sexual content. Presumably because of the realistic nature of sexual talk portrayed on reality TV, we found that exposure to sexual talk on reality TV was associated with risky sexual behavior.

Comparing Vehicles of Unit of Analysis

In the present study, we utilized the duration of sexual content portrayal in seconds. This procedure may introduce another method of conceptualizing the unit of analysis in content analytic studies. Much of prior content analysis has incorporated breaking down individual shows to the scene level (e.g., Farrar et al., 2004; Kunkel et al., 2007). When shows are broken down to scene levels, the results suggest number of scenes per hour. Because the duration of scenes may vary, counting the number of scenes or even instance does not provide information on how long the scene continued. By measuring the duration of sexual content an individual is exposed to.

Limitations

There are a number of potential limitations in the present study that should be noted. First, the study includes a limited number of shows, and only two episodes per show were analyzed, though some studies have only utilized one episode. There are currently many new shows popular among young people's ever changing programming. However, the pilot tests to determine what shows were mostly watched by young people at the time of the study should have ensured that all the relevant shows were included in the sample, whereas random selection of two episodes should have minimized systematic biases in the data. Additionally, data were collected from a large northeastern university, and the results may not be generalizable because patterns of exposure to different sexual content on TV might differ in various parts of the country and for different demographic groups. Finally, not all riskier sexual behaviors were measured.

Future Research

Research exploring a range of sexual media content and what different types and elements of it are most attractive to young people remains limited, and the findings presented in this study contribute to this emerging area. It is important to continue examining nuances of sexual content, as this study demonstrates that there are differences between the sexual content that appears on various types of shows. That is, sexual content across different types of shows cannot serve as a useful analytical category; this study demonstrates that the specific attributes of sexual content (e.g., explicitness) or different aspects of it (talk versus behavior) play an important role in revealing the relationships between exposure to sexual content and risky sexual behavior.

Research on reality shows as a distinct genre of TV also remains limited often examining one or two shows. Reality TV shows' popularity among young people should be studied further to compare with other types of TV shows, their appeal and effects on viewers. Finally, it is important to examine personality characteristics that draw people to various sexual media content such as sensation seeking and voyeurism.

Future studies on sexual media content have potential to not only broaden understanding of how people make media choices and what effects these choices ultimately have. It can also help researchers and educators mitigate the negative effects of sexual media content on young people's understanding of sexual risks and responsibilities (in the direction of studies done by Farrar et al., 2003; Kunkel et al., 2003). Knowing specific types of sexual content that are most likely to predict risky sexual behavior can further assist educators in their sexual education efforts.

Notes

1. For debates on pornography's effects, which is an extreme form of sexual media content, see Adams, 2000; Zillman, 1982.

2. 26 people did not report gender.

3. Political satire included two shows *The Daily Show*, and *Chapelle's Show*; Sport included one show, *Sportscenter*; Situation comedies or sitcoms included five shows, *Everybody Loves Raymond*, *Friends*, *Seinfeld*, *That 70's Show*, and *Will and Grace*; Night time soaps/Drama included seven shows, *Desperate Housewives*, *ER*, *Gilmore Girls*, *Grey's Anatomy*, *One Tree Hill*, *Sex and the City*, and *The OC*; Crime and Action Drama included six shows, 24, Alias, CSI, Law and Order, JAG, and *Walker Texas Ranger*; Animated Satire consisted of three shows, *Family Guy*, *The Simpsons*, and *South Park*; and finally, Reality TV consisted of nine shows, *America's Next Top Model*, *American Idol*, *COPS*, *Extreme Makeover*, *Fear Factor*, *Power Girls*, *Queer Eye for the Straight Guy*, *Real World*, and *The Apprentice*.

4. Two fake shows, *Beautiful* and *New York Court*, were included in the survey to increase the validity by reducing social desirability and response biases. Participants who reported viewing fake shows "often" or "almost always" were excluded from analysis (n = 1).

REFERENCES

Adams, D. (2000). Can pornography cause rape? Journal of Social Philosophy, 31, 1-43.

- Aubrey, J. S., Harrison, K., Kramer, L., & Yellin, J. (2003). Variety versus timing: Gender differences in college students' sexual expectations as predicted by exposure to sexually oriented television. *Communication Research*, 30, 432-460.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

- Bridge Ratings and Research (2007). *Youth audience media use study*. Accessed September 20, 2007 from http://www.bridgeratings.com.
- Brown, J. D. (2002). Mass media influences on sexuality. The Journal of Sex Research, 39, 42-45.
- Buerkel-Rothfuss, N. L., & Strouse, J. S. (1993). Media exposure and perceptions of sexual behaviors: The cultivation hypothesis moves to the bedroom. In B. S. Greenberg, J. D. Brown, & N. L. Buerkel-Rothfuss (Eds.), *Media, sex and the adolescent* (pp. 225-247). Cresskill, NJ: Hampton Press.
- Collins, R. L., Elliott, M. N., Berry, S. H., Kanouse, D. E., Kunkel, D., Hunter, S. B., et al. (2004). Watching sex on television predicts adolescent initiation of sexual behavior. *Pediatrics*, 114, 280-289.
- Farrar, K., Kunkel, D., Biely, E., Eyal, K., Fandrich, R., & Donnerstein, E. (2003). Sexual messages during prime-time programming. *Sexuality & Culture*, 7, 7-37.
- Ferris, A. L., Smith, S. W., Greenberg, B. S., & Smith, S. L. (2007). The content of reality dating shows and viewer perceptions of dating. *Journal of Communication*, 57, 490-510.
- Fisher, D. A., Hill, D., Grube, J., & Gruber, E. (2004). Sex on American television: An analysis across program genres and network types. *Journal of Broadcasting and Electronic Media*, 48, 529-553.
- Gerbner, G., Gross, M., Morgan, L., & Signorielli, N. (1986). Living with television: The dynamics of the cultivation process. In J. Bryant & D. Zillman (Eds), *Perspectives on media effects* (pp. 17-40). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Greenberg, B. S., & Buselle, R. W. (1994). *Soap operas and sexual activity*. Menlo Park, CA: Kaiser Family Foundation.
- Greenberg, B. S., Linsangan, R., Soderman, A., Heeter, C., Lin, C., Stanley, C., et al. (1993). Adolescents' exposure to television and movie sex. In B. S. Greenberg, J. D. Brown, & N. L. Buerkel-Rothfuss (Eds.), *Media, sex and the adolescent* (pp. 61-98). Cresskill, NJ: Hampton Press.
- Gunter, B. (2002). Media sex: What are the issues? Mahwah, NJ: Lawrence Erlbaum Associates.
- Hardy, B. W., Jamieson, P. E., Romer, D., & Jamieson, K. H. (2006). *The Annenberg Media Health Coding Project: Rationale and plans*. Retrieved September 20, 2007 from http://www.youthmediarisk.org.
- Jensen, R. E., & Jensen, J. D. (2007). Entertainment media and sexual health: A content analysis of sexual talk, behavior, and risks in a popular television series. *Sex Roles*, *56*, 275-284.
- Kunkel, D., Cope, K. M., & Biely, E. (1999). Sexual messages on television: Comparing findings from three studies. *Journal of Sex Research*, 36, 230-236.
- Kunkel, D., Cope, K. M., & Colvin, C. (1996). Sexual messages on family hour television: Content and context. Menlo Park, CA: Kaiser Family Foundation.
- Kunkel, D., Eyal, K., & Biely, E. N. (2003). Sex on TV3: A biennial report to the Kaiser Family Foundation. Menlo Park, CA: The Henry J. Kaiser Foundation.
- Kunkel, D., Eyal, K., Donnerstein, E., Farrar, K. M., Biely, E., & Rideout, V. (2007). Sexual socialization messages on entertainment television: Comparing content trends 1997-2002. *Media Psychology*, 9, 595-622.
- Lampman, C., Rolfe-Maloney, B., David, E. J., Yan, M., McDermott, N., Winters, S., et al. (2002). Messages about sex in the workplace: A content analysis of primetime television. *Sexuality & Culture*, 6, 3-21.

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- Lauzen, M. M., Dozier, D. M., & Hicks, M. V. (2001). Prime-time players and powerful prose: The role of women in the 1997-1998 television season. *Mass Communication and Society*, 4, 39-60.
- Nabi, R. L., Biely, E. N., Morgan, S. J., & Stitt, C. R. (2003). Reality-based television programming and the psychology of its appeal. *Media Psychology*, 5, 303-330.
- Neuendorf, K. A. (2006). Considerations and recommendations for the Annenberg Media Health Coding Project. Retrieved August 15, 2007 from http://www.youthmediarisk.org/Downloads/ ReliabilityRecommendations_Neuendorf_061102.pdf.
- Pardun, C. J., L'Engle, K. L., & Brown, J. D. (2005). Linking exposure to outcomes: Early adolescents' consumption of sexual content in six media. *Mass Communication & Society*, 8, 75-91.
- Peterson, J. L., Moore, K. A., & Furstenberg, F. F. (1991). Television viewing and early initiation of sexual intercourse: Is there a link? *Journal of Homosexuality*, 21, 93-118.
- Rankin, A. (2007). Reality TV: Race to the bottom. Retrieved January 15, 2008 from the Parents Television Council Web Site http://www.parentstv.org/PTC/publications/reports/ realitytv2/main.asp.
- Signorielli, N. (2001). Television's gender role images and contribution to stereotyping: Past present, future. In D. G. Singer & J. L. Singer (Eds.), *Handbook of children and the media* (pp. 341-358). Thousand Oaks, CA: Sage.
- Signorielli, N. (2005). Age-based ratings, content designations, and television content: Is there a problem? *Mass Communication & Society*, *8*, 277-298.
- Somers, C. L., & Tynan, J. J. (2006). Consumption of sexual dialogue and content on television and adolescent sexual outcomes: Multiethnic findings. *Adolescence*, *41*, 15-38.
- Taylor, L. D. (2005). Effects of visual and verbal sexual television content and perceived realism on attitudes and beliefs. *The Journal of Sex Research*, *42*, 130-137.
- The Henry J. Kaiser Family Foundation (2005). *Sex on TV: Executive summary 2005*. Retrieved January 15, 2008 from http://www.kff.org/entmedia/upload/Sex-on-TV-4-Executive-Summary.pdf.
- Traeen, B., Nilsen, T. S., & Stigum, H. (2006). Use of pornography in traditional media and on the Internet in Norway. *The Journal of Sex Research*, *43*, 245-254.
- Walsh-Childers, K., & Brown, J. D. (1993). Adolescents' acceptance of sex-role stereotyping and television viewing. In B. S. Greenberg, J. D. Brown, & N. L. Buerkel-Rothfuss (Eds.), *Media, sex* and the adolescent (pp. 117-133). Cresskill, NJ: Hampton Press.
- Zillman, D. (1982). Television viewing and arousal. In D. Pearl, L. Bouthilet, & J. Lazar (Eds.), *Television and behavior: Ten years of scientific progress and implication for the eighties* (vol. 2). Bethesda, MD: National Institute of Mental Health.