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Watching Grey's Anatomy as Sexual Assault Prevention? Examining Factors Related to College Students' Attitudes and Intended Behaviors

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The present study aimed to explore the potential for using entertainment television within college sexual assault prevention programming. Factors that impact persuasiveness, including sympathy, empathy, transportation, perceived persuasive intent, perceived realism, and prior viewing were the particular focus. Participants (N = 199, 65% female) participated in an experiment wherein they watched one of two episodes of *Grey's Anatomy* and then answered questions about their attitudes and intentions. Participants in the manipulation group reported greater no sex while intoxicated intentions (an aspect of consent) and protective drinking behavior intentions than those in the control group. The results provide preliminary evidence that television could be effectively used within sexual assault prevention programs. More specifically, stories should be used that encourage sympathy and are realistic. Television shows that are already familiar to students may be particularly beneficial, and the viewing context should facilitate transportation.

Keywords: sexual assault prevention, television, persuasion, entertainment overcoming resistance model

Sexual aggression and assault are pervasive problems on college campuses. Research indicates that as many as 20% of undergraduate women experience sexual assault in college, and they also routinely experience other forms of sexual misconduct, such as unwanted touching (Papp & McClelland, 2020). To address these issues, numerous prevention programs have been proposed and tested over several decades. Based on reviews of this research, some of the topics addressed in effective interventions include rape myths and attitudes, victim empathy, and drinking behaviors (Vladutiu, Martin, & Macy, 2011). In recent years, sexual consent education has also been a focus of prevention efforts (Muehlenhard, Humphreys, Jozkowski, & Peterson, 2016). When considering the major topics involved, it is apparent that entertainment media could be used as a tool for educating undergraduate students. For example, based on theories of media psychology and empirical research, media can influence viewers' levels of empathy (Prot et al., 2014).

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However, to date, there has been little published research on how entertainment media might be used for this purpose on college campuses.

To address this gap, the present study explores the potential effectiveness of television as a tool for educating undergraduate students about sexual assault. The specific outcomes investigated included attitudes, rape myth acceptance, and intended behaviors, including those related to sexual consent and protective drinking strategies. The study included an experiment that assessed the overall impact of viewing, but the primary goal was to investigate the factors that may impact the persuasiveness of media messages on this topic. These factors include facets of the viewing experience that are consistent with the entertainment overcoming resistance model (Moyer-Gusé, 2008), such as sympathy, empathy, transportation, perceived persuasive intent, and perceived realism.

Entertainment Overcoming Resistance Model

The entertainment overcoming resistance model (EORM; Moyer-Gusé, 2008) suggests that entertainment education programs are more effective than traditional persuasion methods because of factors that reduce resistance to being persuaded. Thus, the consumption of narratives may lead to story-consistent attitudes and beliefs. The model includes seven propositions, each describing features of entertainment that lead to the reduction of a particular type of resistance. These features largely fall into one of two categories: character involvement or narrative involvement. Multiple aspects of character involvement are incorporated into the model, including parasocial interaction, liking, identification, and perceived similarity. Narrative involvement is present in the model as transportation or being cognitively and emotionally engaged with the story. Based on the model's overall premise, individuals who are more involved with the characters and the narrative will have more story-consistent attitudes and beliefs. Many studies have empirically tested the propositions of the EORM, and Ratcliff and Sun (2020) published a meta-analysis of nine experimental and 25 cross-sectional studies. Most involved stories about health issues, such as drug and alcohol use and disease prevention, including safe sex practices, and a few others dealt with social issues, including bullying and diversity. One of the major findings of Ratcliff and Sun's (2020) meta-analysis was that greater engagement, especially identification and transportation, was associated with less resistance to persuasion. The present study deals with similar but distinct behaviors to those investigated in prior research on the EORM.

Research About Media Exposure and Sexual Assault

A few studies have examined the use of entertainment and sexual assault-related outcomes among undergraduate students (e.g., Hust, Lei, et al., 2013; Hust et al., 2014; Hust, Rodgers, Ebreo, & Stefani, 2019). Regarding narrative entertainment, crime drama viewing was associated with greater intent to intervene in a sexual assault situation (Hust, Marett, et al., 2013), and in a follow-up study, associations between crime drama viewing and rape myth acceptance and consent intentions varied by TV show (Hust, Marett, Lei, Ren, & Ran, 2015). It appears from these findings that outcomes, whether positive or negative, depend on the stories told. These studies point to the potential for self-selected entertainment to influence attitudes and behaviors, but can entertainment media be used intentionally to educate students? To date, no studies have sought to answer this specific question. However, a study of Korean adults by Bae, Lee,

and Bae (2014) pointed to factors that may impact success. The researchers asked participants about their experiences viewing a fictional film about real-life sexual assaults that took place at a school for hearing-impaired children. They found that among those who had seen the film, greater sympathy and empathy were associated with greater transportation, which was associated with a greater intention to sign a petition about the rights of disabled individuals. These results point to the potential of sympathy, empathy, and transportation to influence intended behaviors.

Perceived Realism

Another aspect of viewing that may influence whether an individual is persuaded by a narrative is perceived realism—the degree to which the viewer thinks the portrayal is similar to events in the real world (Hall, 2003). Perceived realism is associated with both character and narrative involvement (Busselle & Bilandzic, 2008; Cho, Shen, & Wilson, 2014; Green, 2004) and may therefore impact the persuasiveness of a narrative. Additionally, perceived realism may contribute to persuasion because it makes the viewer feel more at risk of experiencing the depicted situation (So & Nabi, 2013). It is plausible that when viewing a narrative involving sexual assault, viewers who think the story is more realistic will feel more at risk and will thus have a stronger intent to engage in protective behaviors.

The Current Study

The EORM (Moyer-Gusé, 2008) predicts attitudes and beliefs that are consistent with the narrative. Therefore, story content must form the foundation for specific predictions. In the present study, participants were randomly assigned to watch one of two episodes of *Grey's Anatomy* (Rhimes et al., 2005–present). This show has a history of successfully persuading audiences about various health topics (see Hoffman, Shensa, Wessel, Hoffman, & Primack, 2017, for a review), and one episode used in the present study included messages aimed at changing attitudes and behaviors related to sexual assault (Goldberg, 2019). The episode emphasized trauma to the victim, denounced victim blaming, described consent, and illustrated how drinking is sometimes involved in sexual assault. The control group viewed an episode of *Grey's Anatomy* featuring no stories related to sexual assault. With these details in mind, we made the following predictions. First, we expected that participants in the manipulation group would have more story-consistent attitudes and intended behaviors compared with the control group. We made predictions about three specific outcomes: rape myth acceptance (RMA), consent intentions, and protective drinking behavior (PDB) intentions.

H1: Participants in the manipulation group will have lower RMA (H1a), greater consent intentions (H1b), and greater PDB intentions (H1c) as compared with the control group.

Second, based on the features of entertainment that facilitate persuasion (Bae et al., 2014; Moyer-Gusé, 2008; Ratcliff & Sun, 2020), we predicted that among participants who watched the story about sexual assault, experiencing greater sympathy, empathy, and transportation while viewing and perceiving less persuasive intent would be associated with greater story-consistent attitudes and behaviors. Based on prior research, we also expected that perceived realism would be associated with greater story-consistent attitudes and behaviors (Cho et al., 2014; So & Nabi, 2013).

H2: Sympathy (H2a), empathy (H2b), transportation (H2c), and perceived realism (H3d) will be negatively associated with RMA, and perceived intent (H2e) will be positively associated with RMA among the manipulation group.

H3: Sympathy (H3a), empathy (H3b), transportation (H3c), and perceived realism (H3d) will be positively associated with consent intentions, and perceived intent (H3e) will be negatively associated with consent intentions among the manipulation group.

H4: Sympathy (H4a), empathy (H4b), transportation (H4c), and perceived realism (H2d) will be positively associated with PDB intentions, and perceived intent (H2e) will be negatively associated with PDB intentions among the manipulation group.

Finally, it is plausible that familiarity would impact the viewing experience in relevant ways. For example, an individual might experience greater sympathy for a character they already like. However, research testing such presumptions was not found. Therefore, we posed a research question.

RQ1: Does prior viewing play a role in the significant associations between sympathy, empathy, transportation, perceived realism, and perceived intent and the dependent variables?

Method

IRB approval was granted before data collection.

Participants

At a small Midwestern liberal arts college, 211 undergraduates were recruited for this study. Students received course credit for participation. After viewing the episode for their assigned condition, the participants were asked to identify the setting of a scene that appeared near the end. A total of 12 participants failed this attention check, so the final sample included 199 participants. The sample included more females (64.8%) than males (34.7%), with one participant identifying as a transgender woman. Age ranged from 18 to 28, with an average age of 19.6 years (SD = 1.34). Most participants (87.9%) identified as White or European American, with the remaining identifying as Black or African American (1.5%), Hispanic or Latina/o or Chicana/o (3.5%), Asian or Asian American (1.0%), American Indian or Alaskan Native (0.5%), or a combination of these (5.5%). The vast majority of participants described themselves as exclusively or predominately heterosexual (96.4%), with less participants identifying as bisexual (2.5%) and exclusively or predominantly homosexual (1%).

Design

A posttest only, control group design was used. Because the primary hypotheses included the manipulation group only, more participants were assigned to that group than to the control group at a rate of approximately 4:1.

Procedure

Participants completed the study online. All participants went through the following process: (1) granting informed consent; (2) reading instructions that asked them to watch the episode alone and with headphones, if possible; (3) viewing a randomly assigned episode; (4) answering questions about the episode and dependent variables; and (5) answering demographic questions. Questions about the stimulus and dependent variables were presented in the following order: sympathy and empathy, transportation, perceived intent, consent behavior intentions, PDB intentions, RMA, perceived realism, viewing circumstances, and prior viewing of *Grey's Anatomy* (Rhimes et al., 2005–present).

Materials

Participants saw a 45-minute episode of *Grey's Anatomy* (Rhimes et al., 2005–present). The manipulation group viewed Episode 19 of Season 15 entitled "Silent All These Years," which primarily focuses on a doctor named Jo who interacts with two rape victims: Jo's mother, a White woman, who describes a sexual assault that happened to her while she was a college student, and Abby, a Black woman Jo treats as a patient, who was just sexually assaulted after drinking at a bar (Finch & Allen, 2019). Victim blaming is explicitly addressed in the episode, which also includes a discussion of sexual consent between a man and his teenage stepson. For the control group, we sought to identify an episode as similar as possible to Season 15 Episode 19 without any references to sexual assault, and we began our consideration with Episode 20. That episode contained callbacks to Episode 19, so we did not use it. Episode 21 was unusual in that it focused on a single storyline that took place outside of the primary setting, so we also elected not to use it. Therefore, the control group viewed Episode 22 of Season 15 entitled "Head Over High Heels" (Burgess & Liddi-Brown, 2019). Major storylines include doctors Meredith and Andrew exploring their relationship, Richard reconnecting with an old friend, and Owen beginning therapy for trust issues. There is a sex scene within the episode, but it contains no depiction of consent or discussion of sexual assault. The episode includes a discussion of alcoholism.

Measures

Sympathy and Empathy

Sympathy and empathy were measured using two ad response scales (Escalas & Stern, 2003) with changes made to reflect television viewing. The 7-point Likert scale included five items each. The sympathy scale measured the degree to which participants felt as though they could identify and understand the characters' problems (Cronbach's alpha = 0.76). The empathy scale reflected the degree to which participants felt as though the events of the show were happening to them (Cronbach's alpha = 0.92).

Transportation

Transportation was measured using Green and Brock's (2000) Transportation Scale. This scale measures transportation that occurs while reading textual narratives. Three items concerned the extent to which readers visualized aspects of the story and are not applicable to audio-visual materials and were

removed. An item that included the phrase "after finishing the narrative" was excluded because we measured transportation almost immediately after viewing. The remaining eight items were adapted to apply to television rather than text. For example, "reading the narrative" was replaced with "watching the show." Participants were asked to respond to the statements on a 7-point scale (1= not at all, 7 = very much) (Cronbach's alpha = 0.73).

Perceived Persuasive Intent

Perceived intent was measured using a semantic differential scale that asked participants the degree to which they believed the show was designed to entertain (1) versus persuade (7; Moyer-Gusé & Nabi, 2010).

Perceived Realism

Perceived realism was measured using the most relevant statements from Busselle's (2001) Perceived Realism Scale. Participants responded to "Characters in drama programs, like Grey's Anatomy, are very similar to people in the real world," "The personal problems characters have in drama programs, like *Grey's Anatomy*, are very similar to problems real people have," and "The issues that come up in drama programs, like Grey's Anatomy, are very similar to issues in the real world," on a 7-point scale (Cronbach's alpha = 0.89).

Dependent Variables

RMA was measured using two subscales of the Subtle Rape Myths Scale (McMahon & Farmer, 2011): *she asked for it* and *it wasn't really rape*. Sample statements include, "When girls go to parties wearing slutty clothes, they are asking for trouble," and, "If a girl doesn't physically fight back, you can't really say it was rape." Participants responded to 11 statements on a 5-point Likert scale. The factor structure of the scale was analyzed using principal components analysis with direct oblimin rotation. After one cross-loaded item was eliminated, two factors with eigenvalues over 1.0 emerged. One item loaded on the incorrect factor and was removed. The remaining items were used to create two variables: *she asked for it* (4 items, Cronbach's alpha = 0.79) and *not really rape* (5 items, Cronbach's alpha = 0.82).

Sexual consent behavior intentions were measured using a scale developed by Hust et al. (2014) that contained three subscales. Participants responded to 10 statements on a 7-point Likert scale. The factor structure of the scale was examined using a principal components analysis with direct oblimin rotation. After one problematic item was removed, three factors with eigenvalues over 1.0 were found, which were consistent with those reported by Hust et al. One subscale, *seeking consent*, had an item with a lower factor loading than the others, and including that item produced low internal consistency. The corresponding statement was, "I would not have sex when my partner and I are too intoxicated to give consent." This item was relevant to the present study because intoxication and consent were addressed in the episode. The statement was treated as a separate, single-item dependent variable called *no sex while intoxicated*. The remaining items were used to create variables representing *seeking consent* (2 items, $r = 0.68$, $P < .001$),

refusing unwanted activity (3 items, Cronbach's alpha = 0.81), and *adhering to consent* (3 items, Cronbach's alpha = 0.79).

PDB intentions were measured using two items from the *avoiding serious negative consequences* subscale of the Protective Behavioral Strategies Scale (Martens et al., 2005). Participants were asked to indicate how often they intended to engage in two specific behaviors when using alcohol or "partying" on a 6-point scale (1 never, 6 always). The two behaviors were "make sure that you go home with a friend" and "know where your drink has been at all times," $r = 0.66$, $P < .001$.

Covariates

To assess prior viewing, participants were asked what percentage of all *Grey's Anatomy* (Rhimes et al., 2005–present) episodes they had seen. Viewing circumstances were measured by asking participants what kind of screen they used to watch the episode and whether they used headphones or not. Demographics were measured through questions about gender, race, age, and year in school.

Results

Preliminary Analyses and Data Analyses

We first explored variations in how participants watched the episode, including laptop (89.9%), computer monitor or television (8.0%), and smartphone (1.5%), with one participant specifying "other." Based on a series of correlation analyses, there were no statistically significant associations between the type of screen participants used to view the episode and any of the predictor or dependent variables. Next, we examined sound and found that most participants (66.3%) used headphones or earbuds. Based on a series of two-tailed t-tests, there was only a statistically significant difference based on how the participants listened. Those who used headphones reported greater sympathy ($M = 6.33$, SD = 0.59) than those who did not ($M = 6.12$, SD = 0.77), $t(197) = -2.08$, $P = .04$.

We proceeded to test our hypotheses. Hypothesis 1 was evaluated by conducting a one-tailed independent samples t-test for each dependent variable to compare the control and manipulation groups (Table 1). Where the variances were not equal, the degrees of freedom were adjusted. The remaining analyses were conducted with only the manipulation group. We examined the correlations between the predictor variables and the dependent variables (Table 2). We then conducted a series of hierarchical regression analyses (Table 3). In step one, we entered gender, year in school, and identifying exclusively as non-Hispanic White, which were chosen based on exploratory analyses. In step two, we added the predictor variables. Multicollinearity statistics were examined for each model, and no issues were found. Finally, we conducted mediation analyses using PROCESS Model 4 (Hayes, 2018) to examine whether prior viewing was associated with the dependent variables via significant predictor variables (Table 4).

Table 1. Dependent Variable Descriptive Statistics and T-Tests.

		N	*M*	*t*	Cohen's *d*
Seeking consent	Control	40	6.70 (0.50)	−0.39 (197)	−0.07
	Manipulation	159	6.74 (0.58)		
No sex while intoxicated	Control	40	5.98 (1.35)	−1.95 (54)*	0.38
	Manipulation	159	6.43 (1.15)		
Refusing unwanted activity	Control	40	5.94 (0.95)	−0.52 (197)	−0.09
	Manipulation	159	6.04 (1.05)		
Adhering to consent	Control	40	6.83 (0.44)	−0.82 (197)	−0.14
	Manipulation	159	6.88 (0.34)		
RMA—she asked for it	Control	40	1.67 (0.69)	1.63 (197)	0.29
	Manipulation	159	1.48 (0.66)		
RMA—not really rape	Control	40	1.15 (0.36)	−1.00 (197)	−0.18
	Manipulation	159	1.23 (0.43)		
Protective drinking behavior	Control	40	5.32 (1.09)	−1.77 (197)*	−0.31
	Manipulation	159	5.61 (0.86)		

Note. * $P < .05$, ** $P < .01$, *** $P < .001$.

Table 2. Bivariate Correlations Between Predictor and Dependent Variables in the Manipulation Condition.

	Seeking consent	No sex while intoxicated	Refusing unwanted activity	Adhering to consent	RMA—she asked for it	RMA—not really rape	Protective drinking behavior
Sympathy	0.07	0.11	0.22**	0.19*	−0.08	0.16*	0.19*
Empathy	−0.19	0.17*	−0.08	0.05	−0.19*	0.21**	0.17*
Transportation	0.17*	0.14	−0.01	0.29***	−0.32***	0.23**	0.23**
Persuasive intent	0.00	−0.12	0.04	0.06	0.04	0.03	0.06
Perceived realism	0.13	0.01	0.08	0.13	0.10	0.20*	0.20*

Note. * $P < .05$, ** $P < .01$, *** $P < .001$

Table 3. Hierarchical Regressions Predicting Dependent Variables.

	Seeking consent	No sex while intoxicated	Refusing unwanted activity	Adhering to consent	RMA—she asked for it	RMA—not really rape	Protective drinking behavior
	β	B	B	β	B	β	β
Covariates[a]							
Gender[b]	−0.10	0.01	−0.13	0.03	−0.28***	−0.14	0.42***
Year in school	−0.23**	−0.16*	−0.05	−0.10	−0.07	−0.01	−0.12
White or European American[c]	0.04	0.07	0.13	−0.01	0.01	0.07	0.10
Adj. R^2	0.04	0.01	0.02	−0.01	0.06	0.01	0.18
F	3.50*	1.82	1.97	0.56	4.60**	1.40	12.99***
	(3, 155)	(3, 155)	(3, 155)	(3, 155)	(3, 155)	(3, 155)	(3, 155)
Predictors							
Sympathy	0.05	0.07	0.24**	0.16*	−0.03	−0.12	0.11
Empathy	−0.24*	0.16	−0.18	−0.16	−0.01	0.00	0.05
Transportation	0.28**	0.10	0.04	0.34***	−0.27**	−0.22*	0.04
Perceived persuasive intent	−0.05	−0.16*	0.01	0.01	0.09	0.10	−0.04
Perceived realism	0.07	−0.09	0.05	0.02	−0.00	−0.13	0.06
ΔR^2	0.08	0.07	0.07	0.12	0.07	0.10	0.03
F	3.09**	2.20*	2.27*	2.80**	3.47**	2.63*	5.59***
	(8, 150)	(8, 150)	(8, 150)	(8, 150)	(8, 150)	(8, 150)	(8, 150)

Note. [a] Coefficients reported for step one. [b] 0 = male, 1 = female; [c] 0 = Yes, 1 = No. * $P < .05$. ** $P < .01$. *** $P < .001$.

Table 4. Mediation Analysis of Prior Viewing Predicting Dependent Variables via Sympathy.

Dependent variable:	Refusing unwanted activity	Adhering to consent	RMA—not really rape	Protective drinking behavior
Predicting Sympathy				
Grey's Anatomy viewing	0.01**	0.01**	0.01**	0.01**
Predicting Dependent Variable				
Grey's Anatomy viewing	−0.01	0.00	0.00	0.00
Sympathy	0.54***	0.13**	−0.12	0.16
Indirect Effects				
Viewing → sympathy → dependent variable	0.002*	0.001*	0.000	0.001

Note. * $P < .05$, ** $P < .01$, *** $P < .001$. Controlling for gender, year in school, and identifying as White / European American.

Comparing Control and Manipulation Groups

H1 predicted that participants in the manipulation group would have lower RMA (H1a), greater consent intentions (H1b), and greater PDB intentions (H1c). As reported in Table 1, the only statistically significant differences were for *no sex while intoxicated* and PDB, with participants in the manipulation group reporting stronger intentions than those in the control group. Thus, H1 received limited support.

Rape Myth Acceptance

H2 predicted that sympathy, empathy, transportation, and perceived realism would be negatively associated with RMA, and perceived intent would be positively associated with RMA within the manipulation group. Empathy and transportation were correlated with lower endorsement of *she asked for it,* and sympathy, transportation, and perceived realism were correlated with lower endorsement of *not really rape*. In the hierarchical regressions predicting *she asked for it* and *not really rape*, transportation was the only predictor that remained significant when controlling for demographic variables and considering the predictors together.

About our expectations for RMA, H2 was supported with regard to transportation (H2c) and partially supported with regard to sympathy (H2a), empathy (H2b), and perceived realism (H2d). The hypothesis about perceived intent (H2e) was not supported.

Sexual Consent Intentions

H3 predicted that sympathy, empathy, transportation, and perceived realism would be positively associated with consent intentions, and perceived intent would be negatively associated with consent intentions among the manipulation group. The results revealed different associations by type of intended behavior. Regarding *seeking consent*, transportation predicted stronger intentions in the correlation analysis and hierarchical regression. Empathy also emerged as a significant negative predictor in the hierarchical regression. Concerning *no sex while intoxicated*, empathy was correlated with greater intentions, but in the hierarchical regression, lower perceived intent predicted stronger intentions. About *refusing unwanted activity*, sympathy was correlated with greater intentions and was the only significant predictor in the hierarchical regression. Finally, in regard to *adhering to consent*, sympathy and transportation were correlated with stronger intentions and were also significant predictors in the hierarchical regression.

Regarding our predictions for consent intentions, the hypotheses related to sympathy (H3a), empathy (H3b), and transportation (H3c) received some support in the form of associations with one or more subscales. The hypothesis about perceived intent (H3e) received very little support because it was only a significant predictor of one subscale when controlling for other variables. Finally, the hypothesis about perceived realism (H3d) was not supported.

Protective Drinking-Related Behavior Intentions

H4 predicted that sympathy, empathy, transportation, and perceived realism would be positively associated with PDB intentions, and perceived intent would be negatively associated with these intentions among the manipulation group. Sympathy, empathy, transportation, and perceived realism correlated with greater protective drinking behavior intentions. However, in the hierarchical regression, none of the predictors remained significant. On the whole, there was some support for the predictions related to PDB intentions and sympathy (H4a), empathy (H4b), transportation (H4c), and perceived realism (H4d). There was no support for the hypothesis related to perceived intent (H4e).

The Role of Prior Viewing

RQ1 asked what role prior viewing of the program would have in the associations between the predictor variables and the dependent variables. Prior viewing was associated with two of the predictor variables: sympathy, $r = 0.21$, $P = 0.011$, and empathy, $r = 0.17$, $P = 0.038$. To determine which dependent variables were associated with sympathy and empathy, we examined the correlation analyses reported above. We then analyzed mediation models, predicting only those dependent variables (i.e., prior viewing → sympathy or empathy → dependent variable). Significant indirect effects were found in two of the analyses that included sympathy. Prior viewing was associated with greater sympathy while watching the episode, which, in turn, predicted greater *refusing unwanted activity* and *adhering to consent*. No significant indirect effects were found in the analyses that included empathy as a mediator. The answer to the research question is that prior viewing leads to greater sympathy, which is associated with some of the dependent variables.

Discussion

The purpose of this research was to investigate the effectiveness of entertainment as a tool for educating college students on topics related to sexual assault. It is important to note at the outset that most of the participants in this study were women. However, even with fewer men, expected gender differences were found. Gender was unrelated to sexual consent intentions, but women endorsed *she asked for it* to a lesser degree and reported stronger protective drinking behavior intentions. Whereas the findings of this study are more compellingly generalized to undergraduate women, men were included, and gender was considered in some of the analyses.

Based on the EORM (Moyer-Gusé, 2008), we hypothesized that watching a relevant story would lead to narrative-consistent attitudes and intended behaviors. However, comparisons between the control and manipulation groups showed that the influence of viewing was limited. The only significant differences were that those who watched the story about sexual assault reported greater intentions to have *no sex while intoxicated* and engage in protective drinking behaviors. Although not all of our hypotheses were supported, these are nonetheless important results. The issue of sexual assault on college campuses is a pressing one, and any means for influencing students' behaviors, including those related to drinking, is needed (Bird, Gilmore, George, & Lewis, 2016).

There are several potential explanations for the lack of significant differences between the control and manipulation groups. One is that there was little room for improvement related to some dependent variables. For example, most participants in both conditions strongly disagreed with all of the statements on the *not really rape* scale. It is possible that students within our sample understood this issue before the start of the study and thus no positive attitude change was possible or that social desirability bias influenced their responses. Since reducing rape myth acceptance has been a part of many educational efforts (Orchowski et al., 2020), it is plausible that today's students are more aware of these rape myths and that they should not endorse them. In the future, rape myths may become universally disavowed, and prevention programs may simply reinforce attitudes rather than change them in this regard. Additionally, in this experiment, the only intervention was viewing the episode. Effective prevention programs often employ single-gender discussion groups (Vladutiu et al., 2011). Future research should examine the usefulness of entertainment media within broader programs, such as viewing a television show and then discussing the depicted issues.

There are also important takeaways from our closer examination of the mechanisms by which attitude and intended behavior change might occur. Consistent with the propositions of the EORM (Moyer-Gusé, 2008), participants who experienced greater sympathy, empathy, and transportation and who perceived the show to have greater realism reported more story-consistent attitudes and behaviors in some cases. The only proposed mechanism that was not correlated with any of the dependent variables was perceived persuasive intent. (Although it was a significant predictor of *no sex while intoxicated* when the mechanisms were considered together.) Participants generally recognized that the purpose of the episode was to persuade, with the vast majority indicating that it was meant more to persuade than entertain. Thus, the associations that we found between experiences while viewing and attitudes and intended behaviors occurred despite perceived intent. The relatively transparent effort on the part of the producers to persuade audiences did not negate the other mechanisms in this case.

When considering all potential mechanisms simultaneously, transportation emerged as the strongest predictor of four dependent variables: *seeking consent*, *adhering to consent*, *she asked for it*, and *not really rape.* Sympathy was the strongest predictor of just one dependent variable: *refusing unwanted activity* (a sexual consent intention). In the episode, one of the victims described how she was unsuccessful in stopping the assault, even when she said no and fought back. This could have led viewers to feel less self-efficacy about the issue. Instead, participants who felt more sympathy for the characters reported greater intention to say no to unwanted sexual advances. This could be interpreted as consistent with the proposition of the EORM that identification changes outcome expectancies (Moyer-Gusé, 2008). Participants who had sympathy for the characters took away the message that it was important to reject unwanted advances, even if the characters were not successful in doing so because of the negative outcomes they saw. Empathy and perceived realism were not the strongest predictors of any of the dependent variables, so they played a lesser role in this study.

The research question asked whether before *Grey's Anatomy* (Rhimes et al., 2005–present), viewing would play a role in the significant associations found between the predictor and dependent variables, and it did. Results revealed that participants who had watched more of the show experienced more sympathy while viewing this episode. As found in the mediation analyses, participants who had

watched more of the show experienced more sympathy, which, in turn, was associated with some story-consistent intended behaviors. The effects of prior viewing were small and indirect only. Nonetheless, whereas prior viewing has sometimes been treated as a covariate in research on narrative persuasion (e.g., Futerfas & Nan, 2017), this finding suggests that it may play a somewhat more significant role.

The findings of this study have important practical implications for sexual assault prevention programming involving entertainment media. First, if entertainment is to be used to educate undergraduates, it should be done in a way that facilitates transportation. Whereas levels of transportation vary from individual to individual (Dal Cin, Zanna, & Fong, 2004), some steps can be taken to encourage transportation. One part of transportation is becoming engrossed and not distracted by things in the environment (Green & Brock, 2000). To facilitate fewer distractions, students could be asked to watch the episode as they would a movie in a theater, silently, with mobile phones off, in a dimly lit space, and with ample volume. Second, our findings related to sympathy and empathy point to the importance of choosing stories that portray victims. Depicting the devasting effects of sexual assault appears to be useful in changing attitudes and intended behaviors. Third, the fact that perceived realism was a significant (albeit less strong) predictor points to the importance of choosing entertainment media that students would find realistic. Because of its quality, using existing entertainment media may be beneficial in this regard. Finally, prior viewing was indirectly associated with intended behaviors, which indicates that choosing media that college students are already familiar with could be beneficial. Overall, maximizing transportation, sympathy, empathy, and perceived realism may also maximize the positive effects of viewing.

Limitations

Although this research has important implications, it is not without limitations. One drawback of the present study was the posttest only design. The hypotheses and findings of the present study were consistent with attitude and behavior changes predicted by the EORM (Moyer-Gusé, 2008), but in future studies, a pretest, posttest experimental design should be used. The order of the questionnaire items was also a limitation. In future studies, the order of the items could vary for the sake of comparison. The sizes of the control and manipulation groups were different sizes by design, but this does mean that the comparisons of these groups need to be interpreted with caution. Additionally, the small sample size of the control group limited our ability to detect differences between the two groups. As compared with the manipulation group, we noted that the range of responses was more compressed among the control group. Furthermore, whereas in a few cases the mean scores between dependent variables were nearly identical, null findings about some of the rape myths and consent intentions may have been because of a lack of power.

The generalizability of the study is also limited. Whereas this research was conducted with the target population for many sexual assault prevention programs, these particular students attended a Midwestern liberal arts college at the time of the study. They are a relatively homogenous group in terms of race and other demographics, such as sexual orientation. Future research should seek to replicate these findings with different samples and include other individual differences that may impact the effects of viewing. Additionally, this study relied on one specific episode of television, and within that episode, the race of one of the survivors differed from the race of most participants. The effects found here may not fully

extend to other television shows. Further, prior studies have shown that participant race may moderate the relationship between survivor race and perceptions (Franklin & Garza, 2021). In future research, the moderating role of participants should be considered. Finally, this study examined short-term effects. It would be beneficial to conduct longitudinal research to determine whether the effects found are enduring.

Conclusion

On the whole, this study provides support for the overall contention that entertainment media could be used as a tool for sexual assault prevention on college campuses. Using existing media, especially television, may have a positive impact through narrative and character involvement, as predicted by the EORM (Moyer-Gusé, 2008). Prior viewing enhances some of these effects.

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