

## Fiction or Not? *Fifty Shades* is Associated with Health Risks in Adolescent and Young Adult Females

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### Abstract

**Background:** No prior study has empirically characterized the association between health risks and reading popular fiction depicting violence against women. *Fifty Shades*—a blockbuster fiction series—depicts pervasive violence against women, perpetuating a broader social narrative that normalizes these types of risks and behaviors in women's lives. The present study characterized the association between health risks in women who read and did not read *Fifty Shades*; while our cross-sectional study design precluded causal determinations, an empirical representation of the health risks in women consuming the problematic messages in *Fifty Shades* is made.

**Methods:** Females ages 18 to 24 ( $n=715$ ), who were enrolled in a large Midwestern university, completed a cross-sectional online survey about their health behaviors and *Fifty Shades*' readership. The analysis included 655 females (219 who read at least the first *Fifty Shades* novel and 436 who did not read any part of *Fifty Shades*). Age- and race-adjusted multivariable models characterized *Fifty Shades*' readers and nonreaders on intimate partner violence victimization (experiencing physical, sexual and psychological abuse, including cyber-abuse, at some point during their lifetime); binge drinking (consuming five or more alcoholic beverages on six or more days in the last month); sexual practices (having five or more intercourse partners and/or one or more anal sex partner during their lifetime); and using diet aids or fasting for 24 or more hours at some point during their lifetime.

**Results:** One-third of subjects read *Fifty Shades* (18.6%, or 122/655, read all three novels, and 14.8%, or 97/655, read at least the first novel but not all three). In age- and race-adjusted models, compared with nonreaders, females who read at least the first novel (but not all three) were more likely than nonreaders to have had, during their lifetime, a partner who shouted, yelled, or swore at them (relative risk [RR]=1.25) and who delivered unwanted calls/text messages (RR=1.34); they were also more likely to report fasting (RR=1.80) and using diet aids (RR=1.77) at some point during their lifetime. Compared with nonreaders, females who read all three novels were more likely to report binge drinking in the last month (RR=1.65) and to report using diet aids (RR=1.65) and having five or more intercourse partners during their lifetime (RR=1.63).

**Conclusions:** Problematic depictions of violence against women in popular culture—such as in film, novels, music, or pornography—create a broader social narrative that normalizes these risks and behaviors in women's lives. Our study showed strong correlations between health risks in women's lives—including violence victimization—and consumption of *Fifty Shades*, a fiction series that portrays violence against women. While our cross-sectional study cannot determine temporality, the order of the relationship may be inconsequential; for example, if women experienced adverse health behaviors first (e.g., disordered eating), reading *Fifty Shades* might reaffirm those experiences and potentially aggravate related trauma. Likewise, if women read *Fifty Shades* before experiencing the health behaviors assessed in our study, it is possible that the book influenced the onset of these behaviors by creating an underlying context for the behaviors.

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## Introduction

### *Normalization of violence against women in popular fiction*

**D**ESPITE KNOWN ASSOCIATIONS between consumption of media containing violence and related risk factors, including television and print media, and aggression tendencies,<sup>1–5</sup> along with theories suggesting that consumption of fictional communication can alter beliefs and attitudes,<sup>6–11</sup> no prior study has empirically characterized the association between health risks and reading popular fiction depicting violence against women. *Fifty Shades*—one of the world’s fastest selling fiction series comprising *Fifty Shades of Grey*, *Fifty Shades Darker*, and *Fifty Shades Freed*<sup>12–14</sup> depicts problematic violence against women<sup>15,16</sup> cloaked within the romantic and erotic bondage-discipline-sadism-masochism<sup>17–19</sup> relationship involving Christian Grey and Anastasia Steele. In a comprehensive analysis using the United States Centers for Disease Control and Prevention’s definitions of intimate partner violence<sup>20</sup> and Smith’s battering framework,<sup>21–23</sup> Bonomi and colleagues demonstrated that problematic abuse exists in nearly every interaction between Christian and Anastasia.<sup>15</sup>

Namely, Christian employs strategies typical of abusers, including stalking (he deliberately follows Anastasia and uses a phone and computer to track her whereabouts), intimidation (he threatens her with punishment and violence, including pressuring her into activities she is uncomfortable with), social isolation (he isolates Anastasia from friends and family), and sexual violence (he uses alcohol to impair Anastasia’s consent and intimidates/pressures her into uncomfortable sexual activities).

In response, Anastasia experiences reactions typical of abused women,<sup>21–23</sup> including constant perceived threat (for example, that Christian is trying to track her down, is angry with her, and will punish and harm her); altered identity (Anastasia describes herself as a “pale, haunted ghost”; p. 511);<sup>12</sup> stressful managing (Anastasia engages in behaviors to keep peace in the relationship, such as withholding information about her whereabouts to avoid Christian’s anger); yearning for health and normalcy in the relationship; and disempowerment and entrapment as her behaviors become mechanized in response to Christian’s abuse.<sup>15</sup>

Other popular fiction series, such as the *Twilight*<sup>24–26</sup> series, also normalize abuse within the context of romantic relationships, including stalking, physical and sexual assault, emotional manipulation, threats, and intimidation.<sup>27,28</sup> For example, within the *Twilight*<sup>24–26</sup> series, which achieved enormous popularity among teenage girls, Edward, a “breathtakingly handsome vampire,” is depicted as “an obsessed stalker with no interest or friends other than his family and Bella,” the female protagonist and his romantic focus.<sup>27</sup> Edward routinely orders Bella around, growls, snarls, shouts, and uses aggressive looks and physical gestures, such as aggressively grabbing her; some of the physical control strategies cause bruising. Despite such problematic depictions, the *Twilight* series, just like *Fifty Shades*, has infiltrated social life throughout the Western world; this infiltration has been aggravated by the production of five blockbuster romance fantasy films (the *Twilight Saga*) paralleling the *Twilight* fiction series.<sup>29</sup>

### *Internet-based pornography: Another standardizing vehicle for violence against women*

Like *Fifty Shades* and *Twilight*, pornography is another standardizing vehicle for violence against women<sup>4,30,31</sup> In *Pornland: How Pornography has Hijacked our Sexuality*, feminist scholar Dines argues that images of violence in internet-based pornography—including choking, gagging, beating, cutting, and forcing women to consume bodily fluids—have created unrealistic expectations around sex, including subjecting females to violent sexual acts.<sup>4</sup> Dines’ conversations with pornography-exposed young males indicate they expect their female partners to agree to violent sexual acts and their female partners feel equally pressured to do so<sup>4</sup>—paralleling the sex scripts in *Fifty Shades*, where Christian routinely pressures Anastasia to participate in uncomfortable sex acts.

Degrading sexual representations of women through pornography media genres, including images that support violence against women, have been in existence for decades in the United States, beginning with print media in the 1950s, such as *Playboy* and *Hustler*, as well as film, such as the controversial 1972 film, *Deep Throat*.<sup>31</sup> Dines and others argue that these degrading, violent images are becoming ever-more violent and limitless through the proliferation of internet-based pornography.<sup>4,30</sup> While some argue that pornography is fantasy, recent empirical studies<sup>32</sup> and meta-analyses<sup>33</sup> have shown correlations between pornography use and attitudes supporting violence against women.

### *Is interacting with popular fiction associated with violence victimization and related health risks?*

Even with parallels between *Fifty Shades* and pornography, *Fifty Shades* is among the top-selling fiction series in history and is being read mostly by women. The media has referred to *Fifty Shades* as “Mommy porn;”<sup>34</sup> and E.L. James insists that she wrote *Fifty Shades* “for fun,” to provide women with a means to openly express their sexuality, while denying concerns that Christian and Anastasia’s relationship mimics real-world abusive relationships.<sup>35</sup> Others have argued that while Christian and Anastasia’s relationship is being cast as sexually liberating for women, in fact, it is entrapping them further through the abuse standards being perpetuated in the book.<sup>16</sup> So what, one might argue further: Isn’t *Fifty Shades* fictional? What harm can be done to women by consuming fiction? Are women prone to behaviors that cause harm in their lives more likely to consume fiction depicting problematic messages in fiction like *Fifty Shades*?

Despite the lack of empirical studies on this topic, scholars suggest that individuals regularly alter their real-world beliefs and attitudes in response to fictional communication.<sup>7–11</sup> Stories are especially influential when readers become drawn into them and cognitive resources, emotions, and mental imagery faculties are engaged.<sup>9</sup> Additionally, while the harms of reading fiction have not been documented empirically, when libraries and schools ban books, the assumption is that fiction can have harmful effects on attitudes and beliefs.<sup>36–38</sup> According to the *Huffington Post*, *Fifty Shades* has been banned in public libraries in several U.S. states,<sup>39</sup> suggesting that the novel may be harmful to readers. The banning of *Fifty Shades* in libraries is in part linked to the pornographic sexual content,<sup>39</sup> but has not, to date, been linked to

other aspects of the abuse represented in it. While we are not advocating to ban *Fifty Shades*, we previously raised questions about the potential for the violence in *Fifty Shades* to normalize violence women are experiencing in their own relationships.<sup>15</sup>

Fiction or not, millions of women are consuming messages in *Fifty Shades* that normalize and glamorize violence against women, under the guise of romance and eroticism. A pressing question remains: What is the empirical correlation, if any, between health risks and reading popular fiction depicting violence against women? The present study characterized the association between health risks in women who read and did not read *Fifty Shades*. Our study is cross-sectional, including the administration of a one-time-only online survey to late adolescent and young adult females enrolled in a large Midwestern university about their *Fifty Shades*' readership and health behaviors.

While our cross-sectional study design precludes causal determinations, an empirical representation of the health risks in women consuming the problematic messages in *Fifty Shades* is made. We concentrated our study sample on females in the 18- to 24-year-old age group because they are immersed in a developmental period characterized by profound identity explorations of love, work and world-views.<sup>40,41</sup> In this developmental period, females are experimenting with new relationships and increased sexual intimacy,<sup>42</sup> with explorations in love becoming more intimate and serious.<sup>41</sup> Recognizing that humans are situated within, interact with, and are influenced by a larger ecological context,<sup>43</sup> this particular developmental period of increased explorations in love and sexual expression, then, becomes critically important, particularly the potential uptake of problematic love and sexual depictions in popular culture, such as *Fifty Shades*<sup>12-14</sup> and pornography.<sup>4,30</sup>

## Methods

### Study sample

Study procedures were approved by the Institutional Review Board of Ohio State University. Females between the ages of 18 and 24 were randomly sampled from the registrar records of Ohio State University during the May and summer semesters of 2013; these females were invited to complete a cross-sectional online survey. We focused on females ages 18 to 24 years of age, since late adolescence/young adulthood represents a critical developmental period when females are commonly entering into their first sexually intimate relationships and patterns for intimacy in future relationships are being established.<sup>40,41,44</sup>

We sampled a total of 1,950 females, with 715 eligible females consenting and completing the online survey. Of 715 females who completed the online survey, we included 655 in the analysis who reported reading at least the first novel in the *Fifty Shades* series ( $n=219$ ) and those who did not read any part of the *Fifty Shades* series ( $n=436$ ). We excluded 60 females who started but did not finish the first novel in the *Fifty Shades* series; this decision was made to create the cleanest exposure groups. In particular, among females who said they read part of the first novel but did not finish it, the level of exposure could vary widely in this group and we did not have information about their lower level of exposure—whether they read the first few pages

and stopped, for example, or whether they completed nearly the entire first novel.

### Survey methods

The online cross-sectional survey included questions about *Fifty Shades*' readership, health behaviors, and basic demographics. Following is a description of the questions in the order that they appeared in the survey; namely, questions about health behaviors, such as intimate partner violence victimization, were asked before questions about *Fifty Shades*' readership to reduce response bias.

**Demographics.** Age, gender, race/ethnicity, sexual orientation, and year in college were assessed first.

**Intimate partner violence (IPV) victimization.** Eight questions were used to assess lifetime (ever) exposure to physical (one question), sexual (two questions), and nonphysical (five questions) abuse, including cyber-abuse, by an intimate partner; please see Table 1 for a complete list of IPV questions. Response options for the IPV questions were binary (yes/no). The IPV questions were derived from prior studies conducted by the authors<sup>44,45</sup> with late adolescents and young adults, including a combination of questions from the Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System<sup>46</sup> and questions from Foshee and Swahn's studies.<sup>47-49</sup> Validity data for the eight violence questions used in our study were presented at the Women's Health Congress in Washington, DC in March 2013,<sup>50</sup> and in brief, a confirmatory factor analysis showed that the eight questions loaded onto hypothesized conceptual abuse factors (physical, sexual and nonphysical abuse).

**Health indicators.** We asked women about a range of health indicators that have been shown to correlate with violence victimization, including disordered eating, binge

TABLE 1. INTIMATE PARTNER VIOLENCE QUESTIONS

<i>Has any partner you've been involved with ever</i>	
Physical/sexual	
...	hit, slap, or physically hurt you on purpose?
...	pressured you to participate in sexual activities by begging or arguing with you, or by threatening to end your relationship?
...	pressured you to participate in sexual activities by threatening you with physical force (i.e., twisting your arm or holding you down)?
Nonphysical	
...	threatened to hit or slap you, to spread rumors about you, to destroy something belonging to you, or to harm you in some other way?
...	tried to control your behavior by always checking up on you, telling you who your friends could be, or telling you what you could do and when?
...	called you names, put down your looks, or said things to hurt your feelings on purpose?
...	shouted, yelled, insulted, or sworn at you?
...	made unwanted phone calls, send unwanted text messages, emails, or gifts, or showed up in person and waited for you when you didn't want them to?

drinking, and frequent intercourse partners.<sup>45,51–54</sup> Information was also collected on women's identification with traditional general roles;<sup>55,56</sup> this analysis is the next step in our research (see discussion section).<sup>57</sup> Binge drinking was assessed using one question from the Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System (YRBS),<sup>46</sup> defined as having five or more drinks on six or more days during the past month; sexual practices were assessed using questions that asked about ever participation in vaginal/penile intercourse or anal sex and the number of partners engaged with in each of these activities; and disordered eating was assessed using two questions from the YRBS about ever use of diet aids or fasting for 24 or more hours to lose weight. For all of the health behavior questions, the response options were binary (yes/no), and for sexual practices, subjects also estimated the number of sexual partners they had. Based on our prior studies with young adults, five or more partners was the cut-point for having a high number of sexual intercourse partners.<sup>44,45</sup> For anal sex, which occurred less frequently and typically with only one partner, this behavior was defined as having any anal sex.<sup>44,45</sup>

**Fifty Shades' readership.** After questions about demographics and health behaviors were asked, subjects answered a question about whether they read the *Fifty Shades* series, including how much of the series they read. For the purpose of the analysis, exposure groups were created as follows: the two exposed groups included (1) subjects who read at least the first novel in the *Fifty Shades* series (but not all three novels) ( $n=97$ ) and (2) subjects who read all three novels in the *Fifty Shades* series ( $n=122$ ). The nonexposed group included subjects who indicated they read no part of the *Fifty Shades* series ( $n=436$ ). We separated the two groups of *Fifty Shades* readers in this fashion for two reasons: First, there was a clear "lower level of exposure" for each of the two groups (women who read at least the first novel comprised one group, and women who read all three novels comprised the second group). Second, there were differences in the degree to which these two groups of women "liked" the books. Namely, in a second question we asked about *Fifty Shades* readership, 70% of the subjects ( $n=86/122$ ) in our sample who read all three novels reported liking the books "quite a bit/very much" versus 36% of subjects ( $n=35/97$ ) who read at least the first novel (but not all three novels). As noted, we excluded 60 women who started the first novel but did not finish it because we did not have a "lower exposure level" for this group—whether they read a few pages or read the entire novel.

### Analysis

Chi-squared tests were used to compare IPV victimization, binge drinking, sexual practices, and disordered eating in subjects who read *Fifty Shades* and those who did not read any part of *Fifty Shades* (Table 2). Next, generalized linear models with a log link and robust sandwich variance estimators were used to obtain relative risks ratios (RRs) for each dichotomous health behavior (e.g., binge drinking) for *Fifty Shades*–exposed compared with unexposed subjects, using a modified Poisson regression approach.<sup>58</sup> While our study design was cross-sectional and we could not determine causality, for the purpose of the analysis, the dependent variables included each of the health behaviors (e.g., binge drinking)

TABLE 2. CHARACTERISTICS OF THE STUDY SAMPLE

	Nonreaders N = 436	Read at least the first book N = 219	p-Value
Age, mean (SD)	21.0 (1.6)	21.0 (1.4)	0.98
Year in college			
Freshman	10 (2.3)	2 (0.9)	0.17
Sophomore	74 (17.0)	20 (9.1)	
Junior	106 (24.4)	57 (26.0)	
Senior	145 (33.3)	98 (44.8)	
Other (e.g., graduate student)	100 (23.0)	42 (19.2)	
Missing	1	0	
Race			
White	315 (73.8)	178 (82.8)	<0.01
Black	28 (6.6)	17 (7.9)	
Asian	69 (16.2)	8 (3.7)	
Other	15 (3.5)	12 (5.6)	
Missing	9	4	
Sexual orientation			
Heterosexual	398 (91.9)	207 (95.0)	0.15
Bisexual	16 (3.7)	5 (2.3)	
Homosexual	8 (1.9)	3 (1.4)	
Asexual	11 (2.5)	3 (1.4)	
Missing	3	1	

p-Value from chi-squared test for race and orientation (heterosexual vs. other), and Kruskal-Wallis test for age and year in college. SD, standard deviation.

and the independent variable included *Fifty Shades*' readership. Logistic regression models were not used because the health behaviors (e.g., binge drinking, intimate partner violence victimization) were not rare, and the odds ratios from these models would not closely approximate relative risks (or equivalently, prevalence ratios).

Two separate Poisson analyses investigated the relationship between *Fifty Shades*' readership and each of the health behaviors; in one analysis, health behaviors were compared in subjects who read at least the first *Fifty Shades* novel (but not all three novels) to subjects who read none of the *Fifty Shades* series, and in the second analysis, health behaviors were compared in subjects who read the entire *Fifty Shades* series (all three novels) compared with subjects who read none of the series. In both Poisson analyses, the models were adjusted for age and race/ethnicity, which are theoretically and empirically associated with IPV victimization and related health risks.<sup>59–63</sup> Analyses were completed using Stata statistical software, version 12.0.<sup>64</sup>

## Results

### Characteristics of the study sample

Consistent with the undergraduate population of Ohio State University, the average age of subjects was 21 years and most identified as heterosexual (Table 2). One-third of subjects read *Fifty Shades* (18.6%, or 122/655, read all three novels, and 14.8%, or 97/655, read at least the first novel but not all three) (data not shown in Table 2). *Fifty Shades*' readers were more likely to be white (82.8%) compared with nonreaders (73.8%).

TABLE 3. ASSOCIATIONS BETWEEN HEALTH RISKS AND FIFTY SHADES' EXPOSURE

	Nonreaders N=436 n (%)	Read book one (but did not complete all three books) N=97 n (%)	Read all three books N=122 n (%)	Read book one (but not all three) vs. nonreaders RR* (95% CI)	Read all three books vs.nonreaders RR* (95% CI)
<b>Violence victimization</b>					
Hit, slapped, or physically hurt you on purpose	33 (8.5)	13 (14.1)	8 (7.0)	1.59 (0.83, 3.02)	0.86 (0.40, 1.83)
Sexual pressure, begging/threats	117 (30.5)	25 (27.2)	41 (35.3)	0.89 (0.61, 1.31)	1.17 (0.87, 1.58)
Sexual pressure, physical force	22 (5.7)	6 (6.5)	12 (10.7)	0.99 (0.38, 2.54)	1.84 (0.89, 3.80)
<b>Psychological</b>					
Threats to harm	58 (14.9)	16 (17.4)	23 (20.2)	1.18 (0.69, 2.00)	1.39 (0.89, 2.18)
Controlling behavior	132 (33.9)	30 (33.0)	39 (34.5)	0.94 (0.67, 1.32)	1.02 (0.76, 1.36)
Called names, insulted, etc.	147 (37.8)	35 (38.0)	43 (37.7)	1.02 (0.75, 1.37)	1.05 (0.80, 1.38)
Shouted, yelled, swore, etc.	196 (50.5)	58 (63.0)	67 (57.8)	1.25 (1.03, 1.51)	1.14 (0.95, 1.38)
Unwanted phone calls, text messages, etc.	121 (31.1)	38 (41.3)	35 (30.2)	1.34 (1.00, 1.79)	0.98 (0.71, 1.35)
<b>Binge drinking</b>					
5+ drinks on 6 or more days in past 30 days	44 (10.4)	18 (18.8)	25 (21.0)	1.59 (0.97, 2.62)	1.70 (1.07, 2.72)
<b>Disordered eating (ever)</b>					
Fasted 24+ hours to lose weight	52 (12.0)	22 (22.7)	25 (20.5)	1.80 (1.14, 2.83)	1.55 (0.99, 2.41)
Taken diet aids to lose weight	63 (14.6)	27 (28.1)	32 (26.2)	1.77 (1.17, 2.66)	1.65 (1.13, 2.43)
<b>Risky sexual practices</b>					
Intercourse (5 or more partners)	92 (22.1)	26 (28.9)	44 (38.6)	1.22 (0.83, 1.79)	1.63 (1.20, 2.21)
Anal sex (1 or more)	69 (16.2)	22 (23.7)	28 (23.7)	1.43 (0.91, 2.23)	1.37 (0.92, 2.05)

\*Relative risk, adjusted for age and race (white vs. non-white).  
CI, confidence interval.

### Multivariable analysis

Table 3 presents the results of the multivariable analysis comparing health behaviors in nonreaders and readers of the *Fifty Shades* novels. In analyses adjusted for age and race/ethnicity, compared with nonreaders, subjects who read at least the first novel (but not all three novels in the *Fifty Shades* series) were more likely to have, at some point during their lifetime, a partner who shouted, yelled, or swore at them (RR = 1.25) and who delivered unwanted calls/text messages (RR = 1.34). They were also more likely than nonreaders to have engaged, at some point during their lifetime, in fasting (RR = 1.80) and using diet aids (RR = 1.77). Among readers of all three novels, compared with nonreaders, subjects who read all three novels in the *Fifty Shades* series were more likely to report binge drinking in the last 30 days (RR = 1.70), and to report using diet aids (RR = 1.65) and having 5 or more intercourse partners during their lifetime (RR = 1.63).

### Discussion

#### Summary of our study findings and comparison to other studies

Our analysis showed that young women who read at least the first novel in the *Fifty Shades* series (but not all three novels) were at increased risk of having, at some point during their lifetime, a partner who shouted, yelled, or swore at them and who delivered unwanted calls/text messages—behaviors that are consistent with definitions of verbal/emotional abuse

and stalking, respectively.<sup>20</sup> While we did not ask women specific questions about why they stopped reading the *Fifty Shades* series, it is possible that women who read the first novel (but not all three novels) were less motivated to continue reading the series because of their abuse experiences. We do know from our data that only 36% of women who read the first novel (but not all three novels) liked the books “quite a bit/very much” compared with 70% of women who read all three books. While only speculation, it is possible that their lack of draw to the books related to their discomfort with abuse in the book; in-depth interviews with readers about their reasons for reading (or not reading) all three books would be needed to fully answer this question.

Other health behavior risks were also associated with *Fifty Shades*' readership in our study. Namely, compared with nonreaders, women who read *Fifty Shades* (whether they completed the first novel or all three novels) had higher rates of disordered eating during their lifetime, and those women who read all three novels were more likely to report binge drinking in the past 30 days and five or more intercourse partners in their lifetime. Disordered eating, binge drinking, and a high number of intercourse partners have been shown to correlate with violence victimization in studies of adolescents and young adults.<sup>51–54</sup> Moreover, our findings that readers of *Fifty Shades* (a novel series that perpetuates hypersexualization of women) seem preoccupied with body image (through their reports of disordered eating) are consistent with recent longitudinal studies showing that female consumption of sexualizing magazines predicts their

internalization of physical appearance ideals over time, including valuing appearance over competence, and a tendency to engage in intensive body surveillance.<sup>6</sup>

### Study limitations

Our study is cross-sectional, including the administration of a one-time-only online survey and lack of time-specific data about when *Fifty Shades*' readership occurred relative to the health risks we measured. We are therefore unable to report causality in the relationship between *Fifty Shades*' readership and the health behaviors examined in the study (violence victimization, binge drinking, sexual practices, and disordered eating). Namely, we cannot state whether reading *Fifty Shades* caused women to experience some of the health indicators we assessed (e.g., disordered eating), or whether women predisposed to these health indicators were more drawn to read *Fifty Shades* than other women. Regardless, the order of the relationship may be inconsequential; if women experienced adverse health behaviors first (e.g., disordered eating), reading *Fifty Shades* might reaffirm those experiences and potentially aggravate related trauma, as consuming fiction is purported to impact sensory intake.<sup>7–11</sup> As well, if women read *Fifty Shades* before experiencing the health behaviors assessed in our study, it is possible that the book influenced the onset of these behaviors by creating an underlying context for the behaviors; in our analysis of real-world violent couples, we showed that underlying contexts, such as the uptake of traditional gender roles as supported through Biblical scriptures, supported severe violence in couples.<sup>56</sup>

Despite our inability to specify causality, our study is nevertheless among the first to assess associations between engagement in popular fiction and a range of potentially harmful health indicators. Further, our analysis raises questions about consuming media that reinforces violence against women—especially for those women who may have already experienced abuse in intimate relationships or who are engaging in risky behaviors, such as binge drinking, known to be associated with violence exposure.<sup>45,51–54</sup>

### Study implications: Practical approaches to preventing violence against women

Recognizing that humans are situated within, interact with, and are influenced by a larger ecological context,<sup>43</sup> the study sample we concentrated on—late adolescent and young adult females—is particularly important, as they represent a developmental period concentrating on intense explorations in love and sexual expression<sup>40,41</sup> and therefore may be especially susceptible to the uptake and reproduction of problematic love and sexual expectations depicted in popular culture such as *Fifty Shades*.<sup>12–14</sup>

One possible strategy to assist adolescents and young adults in constructively engaging with popular media is through the development of critical media analysis skills. Several media producers and critics have developed systems to rate popular media on the inclusion or absence of what once were historically accepted biases pertaining to topics like gender standards, sexuality standards, and race and ethnicity.<sup>65–69</sup> One such rating system that has received recent attention in popular media because of its effective im-

plementation in Sweden's film industry is the Bechdel test.<sup>65,67</sup> The Bechdel test is a test of gender neutrality—originating in a 1985 comic titled “The Rule,” in which one of Alison Bechdel's characters pronounced that she only watched films where two named women engaged in conversation with one another about something other than men.<sup>65,67</sup>

The *Fifty Shades* series<sup>12–14</sup> would clearly fail the Bechdel test. Despite the existence of such critical media rating systems, no existing system asks consumers of popular media to raise questions about the depiction of violence against women or other vulnerable populations. We recognize that the depiction of violence against women in and of itself is not problematic per se, especially if the fictional creation attempts to shed light on the lived reality of a significant portion of women in this country and across the world; however, if the depiction reinforces the acceptance of the status quo, rather than challenging it, it is concerning, especially considering that, among the *Fifty Shades*' readership in our sample, violence exposure and risky health behaviors associated with violence were more prevalent.

In addition to assisting adolescents and young adults in constructively engaging with popular media through critical media analysis skills, other types of ongoing constructive conversations are needed with women and men about sexuality, sexual behavior, body image, and gender role expectations—including power, control, abuse, and healthy communication, planning, and coping in relationships. Drawing from intersectionality theory,<sup>70</sup> these conversations must intersect with other critical conversations about all factors impacting identity, such as race, class, and disability.<sup>70–73</sup> These conversations must start in grade and middle school, within the context of successful prevention programs, such as Safe Dates, which targets abuse prevention through healthy relationship skills training and gender role examination,<sup>47,74</sup> or Coaching Boys into Men, which trains high school coaches to have discussions with male athletes about stopping violence against women.<sup>75</sup>

Within ongoing conversations and prevention efforts, incorporating material from popular media, such as the messages conveyed in *Fifty Shades*<sup>12–14</sup> along with hypersexualized representation of women and girls in print and visual media, is essential to address underlying issues that place women and young girls at risk of unhealthy relationships. In particular, attention must be given to the possibility that normalized representation of abuse in *Fifty Shades* illegitimizes the experiences of women suffering from abuse in their own relationships and possibly hinders their ability to recognize abuse when it is occurring.

### Implications for future studies

Future studies that could be conducted to expand upon what we have presented here include collecting data on other exposures that potentially correlate with the health risks observed in our study, such as child abuse exposure and trauma<sup>76–84</sup> and specific experiences of race and class.<sup>55,59–61,71–73,85</sup> With additional resources, future studies could also consider a longitudinal design, with time-specific data collected on when readership and health risks occurred; this would allow for a comprehensive assessment of the direction of the relationship between readership and health risks.

Finally, the two next steps in our own research agenda include analyzing the association between women's identification with traditional gender roles<sup>55,56</sup> and their draw to the *Fifty Shades*' novels through data collected in the study presented here;<sup>57</sup> and conducting qualitative interviews with young women to describe, in depth, themes associated with their draw (or lack of draw) to problematic narratives occurring in *Fifty Shades* and in popular music—such as in Rihanna and Eminem's music video, *Love the Way You Lie*,<sup>86</sup> which romanticizes physical, sexual, and emotional threats, including an intent to kill within a couple's romantic relationship. In this latter stream of qualitative research, and in other research we are currently conducting on dating violence, we are oversampling women from diverse racial/ethnic backgrounds because they are at disproportional risk for violence victimization.<sup>59–61</sup>

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