

**READING ROMANCE FICTION:
ASSOCIATIONS WITH SEXUAL BELIEFS AND SELF-ESTEEM**

LILLY H. SHOEMAKER

A MASTER'S THESIS SUBMITTED TO
THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
MASTER OF ARTS

GRADUATE PROGRAM IN PSYCHOLOGY
YORK UNIVERSITY
TORONTO, ONTARIO

APRIL 2026

© LILLY SHOEMAKER, 2026

Abstract

Romance novels generate billions in annual revenue and account for over a quarter of all the books sold in the United States in recent years (Doherty, 2023). Romance novels often contain explicit sexual content, which may shape sexual beliefs and attitudes. Given that women are the predominate readers of romance novels, we asked undergraduate women to complete two surveys. Both studies included measures of exposure to romance, beliefs in sexual growth (i.e., that sexual compatibility can be developed), sexual destiny (i.e., that sexual compatibility is pre-ordained), and components of sexual self-concept (i.e., sexual self-esteem, preoccupation, and depression). Reading romance novels for many years was associated with stronger sexual growth beliefs and current frequency predicted lower sexual self-esteem. The influence of sexual experience, perceived realism, and motivations are discussed. Overall, reading romance novels is associated with women's sexual beliefs and self-concept, both of which are tied to sexual health, and satisfaction.

Acknowledgments

Completing this thesis has been both a challenge and a privilege, and I am deeply grateful to those who have provided mentorship and support to make this work possible. First and foremost, I would like to thank my supervisor Raymond Mar, who has been an incredible source of guidance and encouragement. I often find myself reflecting on how much I have grown since I started my master's thesis, much of which can be attributed to the time and care he has taken to support me through my graduate school journey. I would also like to thank my primary committee member Amy Muise, who has shown such excitement and enthusiasm towards this project from the beginning. I am thankful to my defense chair, Cindel White and external committee member Alexandra Rutherford for the time they have taken to improve this work and attend my defense. I also want to thank everyone in the MAR lab for their feedback on this project. This work would not have been possible without the suggestions and critiques that have been provided to me over the years. I want to extend a special thank you to Rebecca Dunk, who has been a wonderful source of guidance as I transitioned to graduate school.

I would not be here today if not for the support of my family and friends. I want to thank both of my parents, who have always supported my dreams of graduate school from the moment that I decided to pursue it. You both have supported me so strongly through my education, no matter where it took me, and for that I will always be grateful. I would also like to thank my friends, Alyssa, Caity, and Jannah for helping me find the joy through the inevitable stressful times of graduate school.

Finally, I would like to thank my partner, Olivia, who has been supporting my research goals since before I started my undergraduate degree. Your unwavering support over the years has been one of the main reasons I have been able to turn the possibility of graduate school into a reality. Thank you, for everything.

Table of Contents

Abstract.....	ii
Acknowledgements	iii
Table of Contents	iv
List of Tables and Figures	v
Introduction.....	1
Study 1 Methods	8
Study 1 Results	14
Study 1 Discussion.....	20
Study 2.....	23
Study 2 Methods	26
Study 2 Results	32
Study 2 Discussion.....	48
General Discussion.....	52
References.....	60
Appendices.....	72

List of Tables and Figures

Table 1: Descriptive correlations between variables	16
Table 2: Study 1 regression results	17
Table 3: Example items from the uses and gratifications scale	28
Table 4: Created motivations items.....	29
Table 5: Study 2 descriptive statistics	32
Table 6: Replication of study 1 regression results	34
Table 7: Correlations between motivations variables.....	36
Table 8: Correlations between moderating variables	37
Table 9: Factor loadings for reading motivations	39
Table 10: Correlations among motivation factors.....	40
Table 11: Regressions moderated by perceived realism.....	42
Table 12: Regressions moderated by emotional insight.....	44
Figure 1: Reading frequency and sexual experience interaction plot.....	18
Figure 2: Reading frequency and perceived realism interaction plot.....	43
Figure 3: Reading frequency and wish fulfilment interaction plot	45
Figure 4: Reading frequency and enjoyment interaction plot.....	46
Figure 5: Years of reading and enjoyment interaction plot	47

Reading Romance Fiction: Associations with Sexual Beliefs and Self-Esteem

Personal beliefs about sexuality and an individual's sexual self-concept play important roles in how individuals interpret sexual experiences (Cyranowski et al., 1999; Uppot et al., 2023). As a result, beliefs about sexuality are linked to both relational and sexual satisfaction (Raposo et al., 2021; Maxwell et al., 2017). One potential influence on these beliefs and attitudes is exposure to fictional narratives. These narratives can take many forms, but romance novels may be particularly influential in guiding beliefs about sex (Ferretti, 2022; Pagen, 2019). Romance novels focus on romantic relationships, but they are not just about romance; these novels commonly include at least one or two sex scenes (Thrasher, 2009; Torre, 2024). We therefore examined whether reading romance novels is associated with implicit sexual beliefs (i.e., sexual growth and destiny beliefs) and the sexual attitudes that contribute to an individual's sexual self-concept (i.e., sexual self-esteem, depression, and preoccupation). Given that romance novels are becoming more popular amongst young women between ages 18 and 34, we chose to examine these constructs using a sample of young adults. Improving upon past work, we examine various aspects of exposure, including early exposure, years of reading, and current reading habits. Sexual attitudes are also shaped by experience, personality, motivations, and perceptions. Thus, we also explored whether the relationships between romance novels and our outcomes differ based on these variables.

Popularity of Romance Fiction

The Bible has long held its place as the best-selling book of the year, selling millions of copies (Foust, 2023), more than any other book or author (Hallowell, 2024). This left many surprised when romance author Colleen Hoover surpassed the Bible in sales for 2022, with her books selling more than 8.6 million copies (Circana, 2022). That same year, she held the six top spots on *The New York Times*'s best-seller list for paperback fiction, selling more books than J.K. Rowling, James Patterson, and Stephen King combined (Alter, 2023; Kaplan,

2023). Hoover's popularity is not an isolated event but reflects the growth in popularity for the romance genre over the last few years.

Romance novels generate billions in yearly revenue and accounted for over 25% of books sold in the United States in 2018 (Doherty, 2023). Sales have continued to grow since then, with a 41% increase in 2021 and a 52% rise in print sales in both 2022 and 2023, even as sales of other books declined (Burnette et al., 2023; Curic, 2023; Doherty, 2023). This increase is largely driven by the growing popularity of romance novels on social media, which has broadened the genre's appeal (Gonzales, 2025). As a result, the primary age range of romance readers has dropped from 35-54 down to 18-54, with these books attracting a wider and younger audience (Curic, 2022). Given their growing popularity, it is important to understand whether and what individuals may learn from reading romance novels.

Learning From Narratives

Whether or not we can learn from fiction has long been a topic of research. Several theories have been developed to explain how we learn from narratives, including social learning theory (Bandura, 1986) and cultivation theory (Gerber et al., 2002). Social learning theory argues that fictional characters provide models for social behaviour. Just like in the real world, consumers of a narrative can observe a character's behaviour and the consequences of their actions (Bandura, 1986). If characters are rewarded for the things they do, these actions are more likely to be adopted by readers (Lee et al., 2014). Similarly, cultivation theory suggests that long-term exposure to media may lead consumers to perceive these portrayals as a form of reality, altering their beliefs and attitudes in response (Geber et al., 2002). Based on these theories, individuals may learn about romantic and sexual relationships based on the ways they are presented in romance fiction. One example of how this learning happens is by adopting the scripts presented in fiction.

Script theory posits that people's behaviours are guided by structured sequences, or scripts, that facilitate social interactions and guide future behaviour (Tomkins, 1962, 1995). We can have scripts for all kinds of behaviours, including sexual scripts that outline what is expected in a sexual encounter (Gagnon & Simon, 1973). Sexual scripts are often acquired from real-life experiences but may also be learned by observing what is presented in media (Gagnon & Simon, 1973; McCormick, 2010). Media that targets teenagers and young adults often present traditional heterosexual scripts (Kim et al., 2007; Seabrook et al., 2016). These scripts portray sexual double standards, depicting men as initiators of romantic and sexual activity and reinforcing gender-specific courtship strategies (Seabrook et al., 2016). The more that audiences consume mass media more broadly, the more they endorse these sexual scripts (Seabrook et al., 2016). Media that is romantic and sexual in nature will emphasize sexual scripts more than media in general, making them more likely to influence the sexual beliefs and attitudes of consumers than other media.

Effects of Romantic and Sexual Media

Researchers have examined how beliefs about sex and romance are associated with consuming romantic media (e.g., movies, television shows, magazines). Two main types of beliefs about how relationships are maintained are beliefs in growth and destiny beliefs (Knee, 1998). People with stronger beliefs in relationship growth see romantic relationships as requiring work and effort to be successful. In contrast, those with stronger beliefs in relationship destiny think that success in a relationship is largely out of their control and predetermined by factors such as fate. People also hold similar beliefs about sexual relationships (Maxwell et al., 2017). Beliefs in sexual growth assert that the maintenance of sexual satisfaction in a relationship is a result of continuous effort. In contrast, beliefs in sexual destiny are rooted in the idea that sexual compatibility is either present or absent from the start and cannot change with time or effort (Maxwell et al., 2017).

Not surprisingly, media consumption is related to these beliefs. Watching and preferring romantic media are both associated with stronger beliefs in soulmates, or a predestined partner meant only for you (akin to destiny beliefs; Holmes, 2007; Kretz, 2019). Watching romantic movies—in this case Hallmark movies—predicts greater endorsement of relationship destiny, even after controlling for daily television consumption (Rios et al., 2024). Beliefs in relationship growth are not linked to frequent consumption of romantic media, but are associated with more frequent viewing of television in general (Rios et al., 2024). It seems most of the past literature has centred around relationship beliefs rather than sexual ones, and on relationship destiny in particular. However, one study did examine sexual perfectionism, or the belief that one must be a perfect sexual partner (Haferkamp, 1999). Beliefs in sexual perfectionism and sexual destiny both reflect fixed ideals and immutable standards for sexual relationships. Among college students, watching more television predicted perfectionistic sexual ideals (Haferkamp et al., 1999), but this study was conducted over twenty five years ago and media consumption has changed quite a bit since then.

It appears that the scripts presented in television and movies espouse the importance of destiny when it comes to romantic relationships (as opposed to growth). How media affects beliefs regarding sex, however, have rarely been explored (cf. Haferkamp, 1999). Our proposed study directly examines how one form of romantic and sexual media, romance novels, relates to beliefs about sex: in particular, beliefs about sexual destiny and growth. The effect of romance novels may also go beyond mere beliefs, influencing sexual well-being.

Media focused on romance, and sex, can influence sexual self-esteem. Participants that read empowering magazine articles about sexual pleasure for women were more likely to believe that women should be assertive in the bedroom and prioritize their own desire (compared to those who read a control article; Kim & Ward, 2012). Unfortunately, however, media does not often empower female sexuality, frequently objectifying women and

presenting unrealistic body standards (Kim et al., 2007; shEqual, 2023). These types of representation have been shown to be harmful. For example, more exposure to sexually explicit magazines and television predicts greater self-consciousness during physical intimacy (Aubrey, 2007a). Even media that does not include sexually explicit portrayals appear to have similar associations, with soap operas and dramas also linked to lower sexual self-esteem for women (Aubrey, 2007b). Magazines, television, and films are associated with sexual attitudes and self-esteem, but what about books?

Reading Romance and Sexual Attitudes

Similar to television, romance novels tend to follow a traditional heterosexual script. An analysis of award-winning romance novels published between 1989 and 2009 found that over 90% of sex scenes followed the Western sexual script (Menard & Cabrera, 2011). Women characters were usually receptive to their male partners actions, they were often undressed by their male partner, rarely initiated sexual activity, and seldomly initiated condom use (especially in older novels; Diekman et al., 2000; Menard and Cabrera, 2011). It has been suggested that these sexual scripts may have a negative impact on the sexual self-esteem and sexual satisfaction of readers (Diekman et al., 2000; Menard and Cabrera, 2011).

In direct contrast to these ideas, qualitative studies show just the opposite: romance readers report positive effects on their sexual self-esteem and satisfaction. In one study, over 75% of participants reported that reading romance had a positive impact on their sex lives, allowing them to be more adventurous and open to trying new things with their partners (Anderton, 2009). Others reported that they were less shy with their partners, were more confident to initiate sexual activity, and felt empowered in their own sexuality (Anderton, 2009). This study primarily sampled married, adult readers between the ages of 25 and 50. However, readers in an undergraduate student sample also report that reading romance bolsters their self-worth and makes them more confident in their relationships (Garciano et

al., 2023). These findings suggest that reading romance bolsters sexual self-esteem, much like reading empowering women's magazines (Kim & Ward, 2012).

Similarly, the concerns that romance novels lead to unrealistic expectations and lower sexual satisfaction (Curry, 2024; Gisele, 2024; Lauzon, 2021) do not seem to be borne out by empirical research. Many women claim that reading romance made them feel more positively towards their partners (Anderton, 2009), and women who read romantic and erotic novels are more sexually satisfied than those who do not (Coles & Shamp, 1984). Romance readers also report developing stronger emotional bonds with their partners after they start reading romance (Garciano et al., 2023). In sum, romance readers appear generally happy with their sex lives, and it seems that reading romance can enhance sexual happiness rather than reduce it.

Due to the sexual nature of romance novels, romance readers may be more interested in sex compared to non-romance readers, contributing to sexual self-esteem and satisfaction. In one study, women who read romance had higher scores on a measure of sex addiction, reported a higher sex drive, and experienced more orgasms per month compared to women who did not (Wu, 2006). Interestingly, romance readers were also less promiscuous, had fewer sexual partners, and had their first sexual encounter at an older age compared to non-readers (Wu, 2006). In contrast, men who read romance did not differ from men who did not, for these variables. Women readers appear to think about and be more preoccupied with sex than non-readers, but they do not differ in sexual behaviour compared to non-readers (Wu, 2006). That said, this relationship may differ based on an individual's previous experiences with sex.

The Role of Sexual Experience

The amount of experience someone has with partnered sex is a promising individual difference that could moderate relationships between romance novels and sexual beliefs and

attitudes. Those with little experience are likely to have sexual beliefs that are more malleable, which may make them open to influence from romance novels. There is some evidence that supports this idea based on older adult readers (ages 25 to 50; Anderson, 2009). Many reported that romance impacted them more when they were younger and had less sexual experience, compared to when they were older. Other research has found similar results for sexual attitudes. As individuals acquire more sexual experience, they develop a more positive sexual self-concept (i.e., improved confidence in oneself in a sexual context; Impett & Tolman, 2006). In line with this, individuals who are currently in a sexual relationship may hold different beliefs and attitudes compared to those who are not. For partnered individuals, recent lived experiences will likely play a greater role in shaping beliefs and attitudes about sex, reducing the impact of romance novels as a source of sexual information. Our Study 1 directly examines whether both sexual experience and current sexual relationship status moderates the associations between reading romance and sexual attitudes and beliefs. Study 2 attempts to replicate and extend the findings of Study 1 and also explores potential moderators.

The Current Research

Across two studies, we will explore how reading romance is associated with beliefs in sexual growth and destiny, as well as attitudes related to the sexual self-concept (i.e., sexual self-esteem, sexual pre-occupation, and sexual depression). Additionally, we will examine several moderating variables, including past and current experiences with sex, motivations for, and perceptions of reading romance, and personality traits.

Study 1

Study 1 examines whether reading romance is correlated with stronger beliefs in sexual destiny and weaker beliefs in sexual growth, using multiple metrics of exposure to romance novels. We also explored if reading romance is correlated with higher sexual self-

esteem, less sexual depression, and greater sexual preoccupation. Because women are the primary consumers of romance novels (Curic, 2023), only women were recruited for this study. Research on these topics has been limited, mostly relying on small samples ($N = 16-120$) and qualitative research. One quantitative study did examine a large sample ($N = 720$) but only compared readers and non-readers in terms of sexual preoccupation and behaviour (Wu, 2006). A great deal of the previous work has adopted this blunt approach to measurement, categorizing people as either readers or non-readers. This study uses a nuanced approach, measuring exposure to these books in four ways: (1) current frequency of reading romance, (2) lifetime exposure to romance, (3) years of reading romance reading, and (4) cumulative exposure; All measures that allow readers to fall along a continuum. These dimensions offer a broader view of reader engagement compared to the categorical approach. Finally, past work suggests that sexual beliefs and attitudes may be more susceptible to influence when people have less personal sexual experience to draw from (Anderton, 2009). In line with these findings, I will examine whether sexual experience and relationship status act as moderators of any relationships between reading, sexual beliefs, and attitudes.

Method

Participants

Participants were undergraduate women from a university in Toronto, Canada who completed a survey and received partial course credit for their participation. The study was pre-registered prior to data collection, including the hypotheses, measures, sampling plan, and analyses (<https://aspredicted.org/9zcx-pt2n.pdf>). We aimed to collect as much data as possible within the time available to maximize statistical power and did not complete an a priori power analysis. In total, 983 people participated in the study. Based on our pre-registered exclusion criteria, participants were excluded for failing to consent at the start and end of the survey ($n = 165$, 17%), failing any inattentive responding checks ($n = 178$, 18%;

Marjanovic et al., 2019), not identifying as a woman ($n = 57$, 6%), and being less than 16 years old ($n = 1$, <1%). Also removed were those suspected of completing the survey more than once (i.e., same IP address, age, start and end time; $n = 5$, <1%) and respondents missing more than 5% of their data from the primary measures ($n = 7$, <1%). The final sample consisted of 568 participants with an average age of 20.07 years ($SD = 4.27$). The majority identified as heterosexual ($n = 440$, 77%) and were single ($n = 326$, 57%). All participants completed the same set of measures.

Measures

Sexual Growth and Destiny Beliefs

Sexual growth and destiny beliefs were measured using the Implicit Theories of Sexuality Scale (Maxwell et al., 2017). Participants read 13 statements that reflect a belief in sexual growth (e.g., “in order to maintain a good sexual relationship, a couple needs to exert time and energy”). They also read 11 statements that reflect sexual destiny (e.g., “an unsatisfying sex life suggests that the relationship was never meant to be”). All items were rated for agreement based on a 7-point Likert scale (1 = *Strongly disagree*, 4 = *Neither agree or disagree*, 7 = *Strongly agree*). These items reflect individual beliefs about sexual relationships in general, and do not refer to a current sexual relationship. The measure has exhibited good internal reliability, with Cronbach’s alpha ranging between .83 and .93 (Maxwell et al., 2017). In this sample, the scale showed good omega reliability for sexual destiny, ($\omega = 0.87$; 95% CI: .86, .89) and sexual growth ($\omega = 0.83$; 95% CI: .81, .86).

Relationship Growth and Destiny Beliefs

A shortened version of the Implicit Theories of Relationships scale was used to measure beliefs in relationship growth and destiny (Knee, 1998). This includes four items each for growth (e.g., “the ideal relationship develops gradually over time”) and destiny (e.g., “relationships that do not start off well inevitably fail”) relationship beliefs, and employs the

same response scale as the measure of sexual beliefs (Maxwell et al., 2017). Like the sexual beliefs scale, participants were encouraged to reflect on their broader views of relationships, as opposed to thinking of their own current relationship. This measure has been shown to have acceptable internal reliability, ranging between .68 to .71 (Knee, 1998). This sample exhibited slightly lower omega reliability for relationship destiny, ($\omega = 0.64$; 95% CI: .59, .69) and relationship growth ($\omega = 0.61$; 95% CI: .55, .67).

Aspects of Sexuality

The three subscales of the Sexuality Scale (Snell & Papini, 1989) were used to capture aspects of participants' sexual self-concept: sexual self-esteem, sexual preoccupation, and sexual depression. Participants were presented with 10 items assessing sexual self-esteem (e.g., "I think of myself as a very good sexual partner"), and another 10 for sexual preoccupation (e.g., "I think about sex a great deal of the time"). They also responded to eight items that reflect sexual depression (e.g., "I feel sad when I think about my sexual experiences"). Two items from the sexual depression inventory were excluded as per the authors' recommendations, due to low loadings (>0.20 , Snell & Papini, 1989). All questions were answered using a five-point Likert scale (1 = *Disagree*, 3 = *Neither agree or disagree*, 5 = *Agree*) and each subscale has demonstrated good reliability (Cronbach's alpha values between .88 and .92; Snell & Papini, 1989). We found these subscales to have good reliability based on our own sample, with omega values ranging between .88 and .92 (95% CI's ranging between .85 and .94).

Sexual Experience.

Sexual experience was measured using the behavioural subscale of the Revised Sociosexual Orientation Inventory (SOI-R; Penke & Asendorph, 2008). Three questions probed the number of sexual partners a participant has had (e.g., "how many different partners have you had sex within the past 12 months?") using a nine-point Likert scale (1 =

Zero, 5 = Four, 9 = Twenty or more). This subscale has good psychometric properties, with a Cronbach's alpha of .84 for women (Penke & Asendorph, 2008). The focus of the SOI-R is to assess casual or promiscuous sexual behaviours with several partners, and therefore three additional face-valid items were added to assess experiences within a stable sexual relationship. To this end, participants were also asked how often they engage in sexual activity (1 = *I have never engaged in sexual activity*, 4 = *Every three to six months*, 8 = *Every day or nearly every day*), how many sexual partners they have had, and how long had passed since their first sexual experience (1 = *I do not have any sexual experience*, 3 = *Six months to 1 year*, 6 = *Five or more years*). Finally, individuals reported whether they had a current sexual partner. The combined sexual experience items demonstrated adequate reliability, ($\omega = 0.79$; 95% CI [.71, .90]).

Exposure to Romance Novels

To capture a broad range of exposure, exposure to romance novels was assessed in three different ways. First, participants answered one question pertaining to their current frequency of reading romance books (i.e., “how often [on average] do you read romance novels?”). Participants responded using an eight-point scale (1 = *I have never read a romance novel*, 4 = *Every month or less frequently*, 8 = *Every day or nearly every day*). Because the influence of romance novels is likely to occur over time (Gagnon & Simon, 1973; Geber et al., 2002), two additional items were presented to understand how long participants have been reading romance. These were, “For how long have you been reading romance novels, approximately?”, and “How old were you when you first read a romance novel?” For the first time reading age variable, we chose to deviate from our preregistration and remove all responses where reported reading romance for the first time when they were less than 10 years old ($n = 16$).

To assess the participants' cumulative exposure to the romance genre, a modified version of the Author Recognition Test (ART; Stanovich & West, 1989) was administered. The ART does not provide a direct measure of reading but rather estimates the amount of exposure to print media that an individual has had. This indirect measure can predict actual reading behaviour (West, 1993). For this study, the original ART was revised using the names of popular romance authors. To generate the names, a Goodreads list of popular romance novels in 2024 was used (Goodreads, n.d.). To ensure that all the authors wrote exclusively romance, an author was only included if all their published books were considered romance (i.e., romance listed among the top three genres on Goodreads). Participants were asked to read a list of author names and check off ones that they recognized. Respondents are told that there are several foil names on the list, and to only select the names that they know, to prevent guessing. Fifty romance novel authors were included along with 20 foil names.

Subgenres. Due to the broad nature of the romance genre, we also aimed to measure exposure to different subgenres of romance novels. Participants were asked to select all the subgenres that they read and enjoy (e.g., fantasy romance, dark romance, romantic mystery, young adult romance, etc.). A full list of subgenres is provided in Appendix A.

Procedure

Data was collected using the Qualtrics survey software (www.Qualtrics.com). After providing informed consent, all the measures were presented in random order to reduce the likelihood that earlier questions will influence responses to later questions. To avoid any possible discomfort, respondents were given an option to skip the questions about sex and only complete the Implicit Theories of Relationships Scale (Knee, 1998) and the romance novel consumption frequency measures. All participants answered basic demographic

questions (e.g., age, ethnicity, relationship status, etc.) and were given the option to retract their consent at the end of the survey.

Data-Analysis

Zero order correlations were calculated to assess how each of the four reading exposure measures (i.e., current frequency, age of first exposure, years of reading, and print-exposure) relate to sexual growth and destiny, sexual self-esteem, sexual preoccupation, and sexual depression. To examine the potential moderating role of sexual experience on these associations, individuals were divided into those with some sexual experience and those without. We originally planned to look at sexual experience as those with a lot of sexual experience (defined as more than 1.5 SDs above the mean) and those with little (1.5 SDs below the mean). However, we decided to deviate from our preregistration, given that most participants in our data reported having no experience or some experience. As a control, relationship growth and destiny beliefs was also included to examine whether associations with sexual growth and destiny beliefs were unique from their relationship counterparts. A linear regression was then conducted for each of the reading measures on each dependent variable, with sexual experience as a binary moderator. Prior to conducting any regression models, we deviated from our preregistration to recode both the years of reading and reading frequency variables so they could be treated as continuous predictors. Years of reading had categories that were almost evenly spaced apart, with a few exceptions: 3 months, 6 months, and 5+ years. For simplicity, we hoped to combine the former two categories with no reading exposure, and the later with the category, “5 years”. Pairwise comparisons confirmed that those who had been reading for less than one year responded similarly to those who had never read romance before, relative to the other options. As a result, we combined the responses from these categories. Participants who had been reading for five years also responded similarly to those who had been reading for five years or more; we therefore

collapsed across these categories as well. The final categories for the years of reading variable were therefore coded as *Never or less than one year* = 0, *One Year* = 1, *Two Years* = 2, *Three Years* = 3, *Four Years* = 4, and *Five or More Years* = 5. Reading frequency was recoded so that greater numbers represented more days spent reading romance per year (with values ranging from 0 – 365 to represent *Never* to *Everyday*). For full transparency, we included the results of our original, pre-registered regression models (using dummy variables) in Appendix C.

Results

Descriptive Statistics

Reading Frequency. Almost all of the participants reported having read a romance novel ($n = 531$, 93%) with 177 (31%) reading romance once a month or more often. The majority of romance readers have been reading romance for more than five years ($n = 207$, 36%) and started reading romance as a teenager ($M = 14.36$ years old, $SD = 2.69$). After subtracting the number of foil names checked from the number of recognized authors, participants selected an average of 5.61 romance author names (out of 50 possible; $SD = 7.06$).

Sexual Growth and Destiny Beliefs. Participants reported stronger beliefs in sexual growth ($M = 5.53$, $Med = 5.62$, $SD = .63$) compared to sexual destiny ($M = 3.51$, $Med = 3.45$, $SD = .95$). There was also greater variability in sexual destiny beliefs compared to sexual growth beliefs.

Sexual Self-Concept. Participant's sexual self-esteem was moderate on average, ($M = 3.26$, $Med = 3.2$, $SD = .93$; 5-point scale for this and all sexual self-concept measures). Participants reported relatively weak levels of sexual preoccupation ($M = 2.58$, $Med = 2.5$, $SD = .85$) and low sexual depression ($M = 2.13$, $Med = 2.0$, $SD = .83$).

Correlations. Correlations between all of our primary variables appear in Table 1. Initially, we preregistered zero-order correlations between all of the dependent variables and a latent factor underlying all our measures of exposure to romance exposure. However, the four reading exposure variables did not intercorrelate strongly, and are unlikely to load onto one latent factor. Therefore, we conducted an analysis using each measure of exposure separately (pre-registered as exploratory). Overall, associations between reading and sexual beliefs were weak in magnitude. Starting to read at an earlier age was associated with weaker beliefs in sexual destiny ($r = -.11$, 95% CI $[-.19, -.02]$). Similarly, a longer reading history was weakly associated with stronger beliefs in sexual growth ($r = .10$, 95% CI $[.02, .19]$). Current reading frequency had predicted lower sexual self-esteem ($r = -.20$, 95% CI $[-.27, -.12]$) and greater sexual depression ($r = .15$, 95% CI $[.07, .23]$). Our measure of print exposure, the ART, was not correlated with any of the sexual beliefs or self-concept variables. Additionally, sexual preoccupation was not associated with any of the reading variables.

Table 1

Means, standard deviations, and zero order correlations with confidence intervals

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. First Time Reading Age*	85.64	2.69								
2. Years of Reading	5.84	2.28	.43 [.35, .50]							
3. Reading Frequency	3.28	1.90	.10 [.02, .19]	.25 [.17, .33]						
4. ART Score	5.61	7.06	-.02 [-.11, .07]	.05 [-.04, .13]	.24 [.16, .32]					
5. Sexual Growth	5.53	.63	.03 [-.06, .11]	.10 [.02, .19]	-.00 [-0.8, .08]	.00 [-0.8, .08]				
6. Sexual Destiny	3.51	.95	-.11 [-.19, -.02]	-.05 [-.14, .03]	-.03 [-.11, .05]	.04 [-.05, .12]	-.04 [-.12, .04]			
7. Sexual Self-Esteem	3.26	.93	-.07 [-.16, .02]	-.02 [-.10, .07]	-.20 [-.27, -.12]	-.01 [-.09, .07]	.11 [.03, .19]	.18 [.10, .26]		
8. Sexual Preoccupation	2.58	.85	.01 [-.08, .10]	.03 [-.05, .12]	.03 [-.05, .11]	.00 [-.08, .09]	.19 [.11, .27]	.17 [.09, .25]	.34 [.27, .42]	
9. Sexual Depression	2.13	.83	.02 [-.07, .11]	.02 [-.07, .10]	.15 [.07, .23]	.00 [-.08, .09]	-.10 [-.18, -.02]	.04 [-.04, .13]	-.50 [-.56, -.43]	.03 [-.05, .11]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence intervals for each correlation. Direct replications produce values that fall within the 95% CI 83% of the time based on simulations (Cumming & Maillardet, 2006). * Adjusted reading age scores (100 – reported age), so that higher values indicate more years of read.

Linear Regression Analysis

As an exploratory analysis, we examined whether the associations between reading and beliefs in sexual growth and destiny persisted after accounting for relationship beliefs. Separate linear regression models were conducted with sexual growth and destiny beliefs and relationship growth and destiny beliefs, all entered as simultaneous predictors of the reading frequency variables. People who reported stronger beliefs in sexual growth also reported a longer reading history, ($\beta = .13$, 95% CI [.04, .22]). In contrast, sexual destiny was not associated with years of reading history ($\beta = -.08$, 95% CI [-.17, .00]).

Beliefs in sexual destiny was also associated with first reading a romance novel at a younger age, even after controlling for relationship beliefs and sexual growth ($\beta = -.11$, 95% CI [-.21, -.02]). Sexual growth was not strongly associated with first-time reading age, and there was greater uncertainty (a wider confidence interval) around the estimate ($\beta = .03$, 95% CI [-.07, .12]; Table 2).

Table 2

Linear Regression Models Predicting Reading Exposure Variables

Predictor	Reading Frequency (β)	Years of Reading (β)	Reading Age (β)	ART Score (β)
Sexual Growth	.05 [-.04, .14]	.13 [.04, .22]	.03 [-.07, .12]	.01 [-.08, .10]
Sexual Destiny	-.03 [-.12, .06]	-.08 [-.17, .00]	-.11 [-.21, -.02]	.04 [-.05, .13]
Relationship Growth	-.00 [-.09, .09]	-.09 [-.19, .00]	-.02 [-.12, .07]	-.02 [-.12, .07]
Relationship Destiny	.00 [-.08, .10]	.07 [-.02, .16]	.01 [-.09, .11]	-.00 [-.09, .09]
R^2	.00	.02	.00	.00

Note. Values in square brackets indicate the 95% confidence intervals for each correlation. Direct replications produce values that fall within the 95% CI 83% of the time based on simulations (Cumming & Maillardet, 2006).

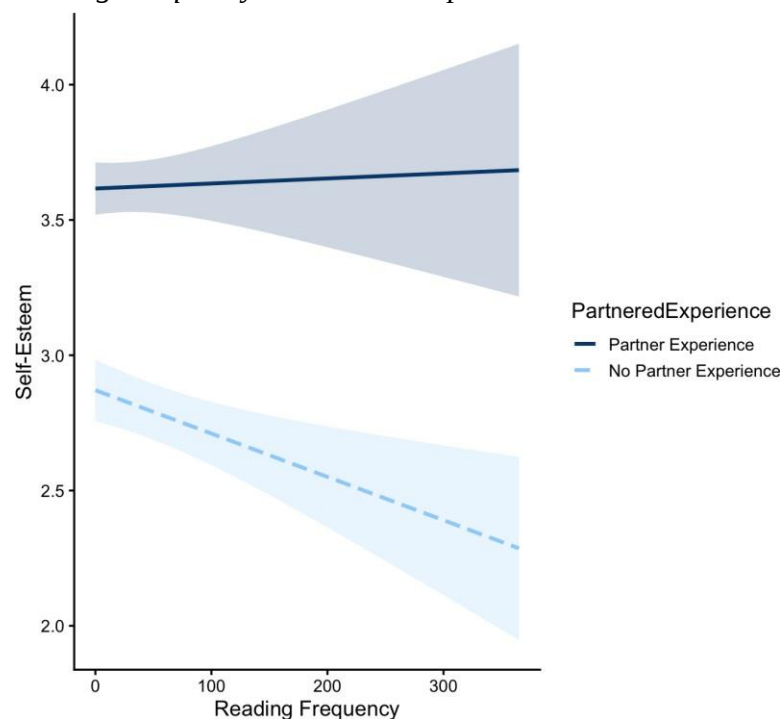
Moderation Analyses

Sexual Experience. As per our pre-registration, we examined whether associations differed depending on whether participants had any experience with partnered sex. In our sample, 317 participants had some partnered sexual experience and 251 had none. Partnered

sexual experience only moderated the association between reading frequency and sexual self-esteem, $\beta = .08$, 95% CI [.00, .15] (Figure 1). Among participants with no partnered sexual experience, reading romance more frequently predicted lower sexual self-esteem ($\beta = -0.15$, 95% CI [-0.25, -0.05]). In contrast, reading frequency was not associated with sexual self-esteem among participants with partnered sexual experience ($\beta = .01$, 95% CI [-0.11, .13]). However, it is important to note that this effect is relatively weak. Full interaction results using the preregistered analysis plan are presented in Appendix C.

Figure 1

Reading Frequency and Sexual Experience Interaction Predicting Sexual Self-Esteem



Current Sexual Relationship. Next, we exploratorily examined whether associations varied by sexual relationship status. Linear regressions models were constructed with relationship status as a binary moderator and reading frequency, years of reading, age of first exposure, and ART scores as predictors. Among the participants, 227 reported being in a current sexual relationship, and 341 were not. Relationship status did not moderate the associations between the exposure to romance novels and sexual self-esteem and sexual

preoccupation. Weak interactions emerged between some of the exposure variables and sexual growth, sexual destiny, and sexual depression. However, all of the reported interactions have wide confidence intervals around the estimate, providing minimal evidence for any effect. These interactions are reported in full in Appendix C.

Subgenres of Romance

As per our pre-registration, we analyzed subgenres that were read and enjoyed by at least 250 participants. The following subgenres met our criteria: fantasy romance, dark romance, mystery romance, and young adult romance. For each we examined whether reading exposure was associated with sexual self-concept and sexual beliefs.

Fantasy Romance. There were 370 participants that reported reading fantasy. In this group, the more years participants had been reading romance the stronger their beliefs in sexual growth, $r = .13$, 95% CI [.03, .23]. Reading romance more frequently was associated with lower sexual self-esteem ($r = -.16$, 95% CI [-.26, -.06]) and greater sexual depression, $r = .11$, 95% CI [.00, .20]. This pattern of associations closely mirrors what was found in the full sample.

Dark Romance. A total of 258 participants read dark romance. Within this group, those who read romance more frequently had weaker beliefs in sexual growth ($r = -.16$, 95% CI [-.28, -.04]) and lower sexual self-esteem, $r = -.18$, 95% CI [-.29, -.06]. Participants who recognized more names on the revised ART also had weaker sexual growth, $r = -.12$, 95% CI [-.24, -.00]. Different patterns of associations emerged for those who read dark romance compared to the overall sample, particularly with respect to sexual growth. However, the confidence intervals are wide for these estimates and should be interpreted with caution.

Mystery Romance. There was a total of 255 participants who read mystery romance. Of these, those who started reading at a younger age had weaker beliefs in sexual destiny, $r = -.16$, 95% CI [-.28, -.03]. Reading more often also predicted lower sexual self-esteem ($r = -$

.22, 95% CI [-.34, -.10]). These findings are also similar to what was observed in the full sample.

Young Adult Romance. A subsample of 397 participants read young adult romance. Those who had read for a longer period of time had weaker beliefs in sexual destiny, $r = -.10$, 95% CI [-.20, -.01]. Similar to our full sample, those who read more frequently reported lower sexual self-esteem ($r = -.17$, 95% CI [-.26, -.07]) and worse sexual depression, $r = .15$, 95% CI [.05, .24].

Study 1 Discussion

Study 1 explored whether reading romance fiction is associated with sexual beliefs and an individual's sexual self-concept. Unlike past research, we measured exposure to romance in four distinct ways, each of which exhibited a different pattern of association with the key variables. Individuals who had been reading romance novels for a longer time tended to hold stronger beliefs that sexual relationships can grow and develop over time (i.e., sexual growth). This effect remained after controlling for age, demonstrating that this is not a function of growing maturity. It also persisted after controlling for relationship destiny, relationship growth, and sexual destiny. Those who had begun reading romance at a younger age were less likely to endorse beliefs in sexual destiny, controlling for the same variables and sexual growth. In contrast, current reading frequency was not correlated with either form of sexual belief. These findings align with theoretical perspectives suggesting that beliefs about sexual and romantic relationships develop gradually through accumulated experiences and are not a result of short-term exposure (Ajzen, 1991; Knee, 1998; Ward, 2002), or in this case, current habits. However, the direction of associations was unexpected. Consistent with prior research on television and movies, we hypothesized that greater exposure to romantic narratives would be related to stronger beliefs in sexual destiny. Our contradictory findings suggest that romance novels may operate differently from other forms of media. In addition

to these findings, we found that people who currently read romance more often reported lower sexual self-esteem and greater sexual depression. These results also contradicted our expectations, given that prior qualitative studies have found that reading romance can promote positive attitudes about sex.

These discrepancies may have been due to sampling differences. Interviews of frequent romance readers have recruited participants that are active members in online romance reading groups (e.g., Anderton, 2009). These participants are likely to feel very positively about romance novels given their choice to participate in these communities and may not represent the wider readership. Moreover, participants in previous studies on romance novels are older, and were mostly in committed relationships (e.g., Anderton, 2009; cf. Garciano, 2023). Our extension of past work using a large university sample may explain some of the differences between current and past findings. This work provides information about the potential impact of romance novels in an emerging adult population, whose sexual experiences may be limited.

Although a few weak interactions emerged between the reading measures and sexual experience, all were characterized by small and uncertain effects. This may have been the result of our emerging adult sample. There was little variance in sexual experience, which prompted us to deviate from our pre-registration and analyze sexual experience categorically (i.e., no sexual experience or any sexual experience). Had there been more variance in sexual experience, we may have seen different associations similar to previous studies for those with broader sexual and relational experiences. Similarly, analyses by subgenre (e.g., fantasy, dark, mystery, and young adult romance) revealed somewhat different patterns of association, however these differences were small and should be interpreted cautiously.

Our revised ART scale did not predict sexual beliefs or elements of the sexual self-concept, despite its associations with the other measures of exposure. Versions of the ART

have been used to assess associations between reading and beliefs (e.g., Stern et al., 2019) and it is often seen as an objective measure of exposure to books (West, 1993). Although it did not predict our key variables in this study, this version of the ART remains a promising measure for future work on romance novels, given its apparent validity (as evidenced by correlations with current reading frequency).

Taken together, these results suggest that reading romance fiction is correlated with people's beliefs regarding sex and elements of their sexual self-concept. However, engagement with literature varies across individuals. For some, reading is a source of entertainment and for others it acts as an educational tool. People also vary in how realistic they perceive romance novels to be, and this may influence how people interpret and learn from these novels. In Study 2, we examine these possibilities by examining whether differences in reading motivations, perceived realism, and personality traits influence how romance reading relates to sexual beliefs and attitudes.

Study 2

Study 2 builds on the results of Study 1 by examining potential moderators of the associations we observed between reading romance and both sexual self-concept and sexual beliefs. Specifically, here we examine whether these associations are influenced by readers' motivations for reading romance (e.g., escapism, fantasy, etc.), their perceptions of the realism and utility of these novels, and personality traits (e.g., need for affect). Media research has historically found that exposure alone does not explain whether and how individuals learn from the media they consume. The Uses and Gratifications Theory describes how individuals actively engage with media in order to satisfy different psychological or social needs, such as a need for entertainment, connection, or information (Rubin, 1983). These motivations influence not only what media is sought out, but also how that content is processed. Readers who read romance to gain information or learn about the real world may be more likely to incorporate the sexual scripts portrayed into their own sexual beliefs and attitudes. In contrast, readers who read romance because they wish to escape reality may engage with the very same content at just a surface level, thereby limiting the influence that these books have on their beliefs.

Some research has examined whether these different motivations moderate the effects of romantic television. However, the results were admittedly somewhat mixed. Viewing reality television about weddings was associated with the belief that love conquers all, and this association was stronger for those who watched for entertainment and to learn (Hefner, 2015). In contrast, another study found that watching romantic films to learn did not moderate the association between exposure and beliefs about relationship destiny (Hefner & Wilson, 2013). That said, the same study did find that viewing based on a motivation to learn did uniquely predict the endorsement of romantic ideals (Hefner & Wilson, 2013).

Another factor that may influence the association between reading romance and sexual beliefs and attitudes is the extent to which these narratives are perceived as realistic. Even when individuals actively engage with media, the sexual scripts presented in romance novels may not meaningfully influence beliefs unless they are seen as applicable to the real-world. According to social learning theory, people can learn by observing others in real life and through the media (Bandura, 1986; Bandura, 2001). When it comes to learning from media, seeing the situations and characters as more realistic increases the likelihood that the observed beliefs and attitudes are adopted. When readers view romance novels as depicting plausible sexual relationships, these portrayals may be more likely to shape their own sexual beliefs and attitudes. Conversely, when romance is perceived to be exaggerated or fantastical, these narratives will likely be discounted.

Some empirical evidence exists to support the idea that perceived realism is an important moderator of media effects. For example, a longitudinal study found that associations between sexual media and permissive sexual attitudes are found only for those who find the media to be realistic (Baams et al., 2015). In another study, the perceived realism of romantic media was associated with idealistic relationship beliefs, despite exposure alone correlating with very few of these same beliefs (Jagadeesan & Suthandiradas, 2018). It may be that the associations with sexual growth and self-esteem observed in Study 1 primarily exist for those who believe that the sex scenes in romance novels are realistic. Perceived utility may further shape these processes, as readers who view romantic fiction as something that can provide insight into their own experiences may be especially likely to incorporate this information into their beliefs and self-concept. In addition to how romantic narratives are perceived, the potential effects of romantic narratives are likely to depend on who is perceiving them.

Individual differences, such as certain personality traits, shape how readers process and learn from romantic and sexual media. For example, those who are higher in trait anxiety tend to be more vigilant of emotional information (Bar-Haim et al., 2007) and may be more likely to learn through observing others (Olsson & Phelps, 2007). By extension, people who are more anxious may be more likely to use romance novels to learn about what is expected of them in romantic or sexual relationships. Another individual difference that might influence how these books are experienced is need for affect (i.e., the tendency to avoid or approach emotion-inducing scenarios; Maio & Esses, 2001). Those who have a greater need for affect tend to seek out experiences that are high in emotion, and this trait impacts how they perceive and engage in social interactions (Maio & Esses, 2001). Popular romance novels frequently contain expressions of emotion or involve the characters working through emotional issues (Carter, 2018). Thus, whether someone approaches or avoids emotions might influence how they engage with romance novels. Past research has found that those who view emotions positively (i.e., are high in need for affect) spend more time processing emotion words compared to those with neutral or negative orientations towards emotions (Lei et al., 2023). However, little research exists on how traits interact with the effects of romantic media. The present study seeks to remedy this gap by also including individual differences.

Associations between reading romance and sexual beliefs and self-concept are unlikely to be explained entirely by exposure. Other factors are likely to play a role, such as why people read these books, the extent to which readers see these books as realistic, and individual differences between readers. Therefore, Study 2 was designed to both replicate and extend the findings from Study 1. First, we examined whether the previously observed associations between reading romance and sexual beliefs and self-concept would replicate in another sample. In addition, we explored the role of various individual differences: perceived realism and utility, motivations for engaging with romance, need for affect, and trait anxiety.

We hypothesized that associations between romance and our variables of interest would be stronger for those who perceived the books as more realistic and are motivated to learn from these books. We also examined other individual differences, but from an exploratory perspective (see below). Finally, because the motivations for reading romance have received little empirical attention, we explored the underlying factor structure of these motivations.

Method

Participants

We collected data from 1127 undergraduate women from a university in Toronto, Canada. The hypotheses, measures, sampling plan, and analyses were pre-registered prior to data collection (<https://aspredicted.org/67g3nb.pdf>). We did not conduct a power analysis before collecting data and instead pre-registered that we would collect as much data as possible until the end of the semester, for the greatest sensitivity to detect effects as possible. Based on our pre-registered exclusion criteria, we removed those who did not consent to participate or have their data used ($n = 236$, 21%), and those who failed any attention checks ($n = 210$, 19%; Marjanovic et al., 2019). Any participants that we suspected were duplicate responses ($n = 3$, <1%), and cases with more than 5% of data missing from primary measures, were also excluded ($n = 23$, 2%). We also removed participants for being under 16 years old ($n = 4$, <1%) and for not identifying as a woman ($n = 50$, 4%). The final sample consisted of 601 participants with an average age of 19.98 years ($SD = 4.15$), with the majority identifying as heterosexual ($n = 484$, 81%) and reported being single ($n = 354$, 59%).

Measures

Participants completed all of the measures that showed meaningful associations with exposure to romance novels in Study 1: sexual self-esteem, sexual depression, and sexual

growth and destiny beliefs¹. Unless otherwise noted, measures had identical item wording and response scales as before.

Sexual Growth and Destiny Beliefs

Like in Study 1, sexual growth and destiny beliefs were assessed using the Implicit Theories of Sexuality Scale (Maxwell et al., 2017). Reliability in the present sample was good for both sexual destiny ($\omega = .85$; 95% CI: .83, .87) and sexual growth ($\omega = .87$; 95% CI: .84, .90).

Sexual Self-Concept

Sexual self-esteem and sexual depression were measured using their respective subscales from the Sexuality Scale (Snell & Papini, 1989). Due to not showing any associations with the reading frequency variables in Study 1, the sexual preoccupation subscale was not included. Both sexual self-esteem ($\omega = .91$; 95% CI: .89, .92) and sexual depression had good reliability ($\omega = .82$; 95% CI: .80, .85).

Motivation For Reading Romance

We assessed motivations for reading romance using an adapted version of the Television Uses and Gratifications Scale (Rubin, 1983). We included the four subscales most relevant to reading romance: relaxation, entertainment, information, and companionship. Participants responded to 2 to 3 items per subscale using a 7-point scale. An example item from each subscale and its internal reliability appears in Table 3.

¹ We also assessed sexual experience using a dichotomous item (yes/no) consistent with the analytic approach used in Study 1. However, this variable was neither preregistered nor examined in exploratory analyses due to the weak associations we observed in Study 1.

Table 3*Example Item and Reliability for the Television Uses and Gratifications Scale*

Subscale	Example Item	Reliability (95% CI)
Relaxation	“I read romance novels because it allows me to unwind.”	$\rho = .63 (.56, .68)^*$
Entertainment	“I read romance novels because it entertains me.”	$\omega = .83 (.78, .87)$
Information	“I read romance novels because it helps me learn things about myself and others.”	$\omega = .77 (.74, .81)$
Companionship	“I read romance novels when there’s no one else to talk to or be with.”	$\rho = .57 (.50, .63)^*$

Note. Reliability values represent estimates of omega with 95% confidence intervals.

*Spearman’s Rho was used for subscales with only two items.

Because we believed there are some additional motivations specific to consuming romantic media not captured by this scale, we developed some novel items to measure them. In order to do so, we first analyzed seven posts on Reddit that discussed motivations for reading romance. Several themes came up repeatedly across each thread, including escapism, predictability, fantasy, emotional experience, and enjoyment of the sex scenes. For each theme, 2-3 items were created to mimic the wording and response method for the pre-existing motivation items. All of the created items and reliabilities for each subscale appear in Table 4. Because several of the motivations conceptually overlap, we conducted an exploratory factor analysis to examine their underlying structure in the present sample. These motivation factors were then used in subsequent moderation analyses.

Table 4*Motivations for Reading Romance Subscales: Items and Reliabilities*

Subscale	Items	Reliability (95% CI)
Escapism	1. "I read romance novels because I want to escape my current reality." 2. "I read romance novels because I want to imagine something different from my current life." 3. "I read romance novels because it helps me forget about real life stress."	$\omega = .81 (.78, .84)$
Predictability	1. "I read romance novels because I want the comfort of a predictable story." 2. "I read romance novels because I know it will end happily." 3. "I read romance novels because I don't have to guess how it will end."	$\omega = .75 (.71, .79)$
Fantasy	1. "I read romance novels in order to fantasize about an ideal life." 2. "I read romance novels to imagine being with an ideal romantic partner." 3. "I read romance novels so I can imagine things that I wish happened in my real life."	$\omega = .86 (.83, .88)$
Emotional Experience	1. "I read romance novels so I can safely experience complex feelings." 2. "I read romance novels to experience emotions I might not in real life." 3. "I read romance novels so I can experience powerful emotions."	$\omega = .78 (.74, .82)$
Enjoyment of Sex Scenes	1. "I read romance novels to experience sexual desire." 2. "I read romance novels to explore sexual fantasies." 3. "I read romance novels as inspiration for my actual sex life."	$\omega = .87 (.85, .89)$

Note. Reliability values represent estimates of omega with 95% confidence intervals.

Perceived Realism and Utility

Perceived realism and utility were both measured using an adapted version of the Perceived Realism Scale (Busselle, 2001). This scale was adapted in a fashion similar to past research on visual pornography (e.g., Peter & Valkenburg, 2010). We specifically asked participants how realistic they found the sex scenes in romance novels to avoid participants reporting on the realism of other components of the novel (e.g., plot, characters). Four items were used to measure perceived realism, (e.g., "sex in romance novels is realistic), and

perceived utility was measured by three items (e.g., “by reading about sex in romance novels, you can learn things you wouldn’t otherwise”). Responses were made on a seven-point scale ranging from *Strongly Disagree* to *Strongly Agree*. In past work, reliability for the perceived realism and utility items is strong ($\alpha = .88$; Peter & Valkenburg, 2010). In our own sample, reliability was good for both perceived realism ($\omega = .85$; 95% CI: .82, .87) and perceived utility ($\omega = .80$; 95% CI: .76, .83).

Trait Anxiety

The Beck Anxiety Inventory, Trait (BAIT) was used to measure trait anxiety (Kohn et al., 2008). This scale assesses the frequency of anxiety-related symptoms in daily life. Participants rated 21 items on a scale ranging from 1 (*never*) to 4 (*almost always*). These symptoms include an inability to relax, nervousness, and fear of losing control. The BAIT had strong reliability in previous studies ($\alpha = .88$; Kohn et al., 2008) as well as in our own sample ($\omega = .93$; 95% CI: .93, .94).

Need for Affect

Need for affect was assessed using the shortened version of the Need for Affect Questionnaire, which measures individuals’ motivation to seek out or avoid emotion-eliciting experiences (Appel et al., 2012). Some items include “emotions help people to get along in life” and “I do not know how to handle my emotions, so I avoid them”. The shortened version of the scale uses ten items, all answered on a scale ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*). This questionnaire has exhibited good reliability in past research ($\alpha = .80$; Appel et al., 2012). Within our own sample, the scale also demonstrates acceptable reliability ($\omega = .77$; 95% CI: .73, .80).

Exposure to Romance Novels

Exposure to romance novels was assessed as in Study 1, including our questions regarding years of reading romance, age of first exposure, and current frequency. As in Study

1, we did not include ages that were under 10 years old for age at which someone first began reading romance ($n = 25$). However, the revised ART was not included as it had no associations with our variables of interest. Similarly, we did not measure subgenres as few effects were observed in Study 1.

Procedure

Data was collected using the QuestionPro survey platform (www.questionpro.com). After providing informed consent, participants reported how often they read romance novels. Following this, all measures were presented in random order. Due to the sexual nature of some questions, respondents were given an option to skip the questions about sex to reduce potential discomfort. These participants completed the measures of exposure to romance novels, the motivation items (excluding the enjoyment of sex scenes motive), need for affect, and trait anxiety measures (Appel et al., 2012; Kohn et al., 2008; Rubin, 1983). All participants answered basic demographic questions (e.g., age, ethnicity, relationship status, etc.) and were given the option to revoke their consent at the end of the survey.

Data Analysis

Zero order correlations in the form of Spearman's rho were calculated to assess how each of the reading exposure measures (i.e., current frequency, age of first exposure, and years of reading) and potential moderators relate to sexual beliefs and well-being (i.e., sexual growth and destiny, sexual self-esteem, and sexual depression). We used perceived realism, motivations, and perceived utility as moderators. Linear regression models were created for each of the reading exposure measures, predicting each dependent variable, with moderators included as an interaction term. As in Study 1, we deviated from the preregistration and recoded both the years of reading and frequency variables so they could be treated as continuous. To ensure full transparency, regression analyses using our original ordinal

variables appear in Appendix D. Before exploring the motivations as moderators, an exploratory factor analysis was conducted on all of the motivation items.

Results

Descriptive Statistics

The mean, median, and standard deviation for the dependent and moderating variables appear in Table 5. Across the sample, participants had stronger beliefs in sexual growth than sexual destiny and reported moderate sexual self-esteem with relatively low levels of sexual depression. The strongest motivations for reading romance were for entertainment and relaxation, with enjoyment of the sex scenes and companionship being less strongly endorsed on average. The sex scenes were not seen as particularly realistic, on average, but this group of readers did perceive the books to have utility. Finally, participants reported low trait anxiety and moderate need for affect.

Table 5

Mean, Median, and Standard Deviation for Dependent and Moderating Variables

Variable	Mean	Median	Standard Deviation
Sexual Growth	5.49	5.54	.70
Sexual Destiny	3.64	3.64	.90
Sexual Self-Esteem	3.21	3.10	.74
Sexual Depression	2.40	2.43	.67
Relaxation Motive	5.14	5.50	1.28
Entertainment Motive	5.77	6.00	1.02
Information Motive	3.99	4.00	1.41
Companionship Motive	3.62	3.50	1.60
Escapism Motive	4.73	5.00	1.45
Predictability Motive	4.23	4.33	1.35
Fantasy Motive	4.54	4.67	1.57
Emotional Experience Motive	4.39	4.67	1.41
Enjoyment of Sex Scenes Motive	3.54	3.67	1.66
Perceived Realism	3.30	3.25	1.10
Perceived Utility	4.16	4.33	1.29
Trait Anxiety	1.87	1.81	.55
Need For Affect	3.69	3.70	.81

Note. All variables are measured on a 7-point scale (*strongly disagree – strongly agree*) with the exception of sexual self-esteem and sexual depression, both measured on a 5-point scale.

Similar to Study 1, nearly all participants reported reading a romance novel at least once before ($n = 559$, 93%). A substantial proportion of participants read relatively infrequently, less than once per year ($n = 248$, 41%). But about a third read romance at least once a month ($n = 207$; 34%). The largest proportion of participants have been reading romance for more than five years ($n = 228$, 41%) and started reading as a teenager ($M = 13.96$ years old, $SD = 2.46$).

Pre-Registered Analyses

Replication of Study 1 Findings.

Correlations. We first wanted to determine if the previous associations with sexual attitudes and beliefs replicated in this sample. Similar to Study 1, starting to read at a younger age and more years of reading predicted stronger beliefs in sexual growth, Younger: $\rho = .11$, 95% CI [.02, .20]; Longer: $\rho = .18$, 95% CI [.09, .26]. Unlike in Study 1, there was no association between any of the reading frequency measures and beliefs in sexual destiny. Current reading frequency was correlated with lower sexual self-esteem ($\rho = -.21$, 95% CI [- .28, -.13]), but only weakly associated with sexual depression, $\rho = .07$, 95% CI [.00, .16].

Regression Analyses. Separate linear regression analyses were conducted predicting sexual self-esteem, depression, growth, and destiny beliefs with all three reading exposure measures acting as simultaneous predictors (Table 6). Reading frequency uniquely predicted higher sexual self-esteem and stronger beliefs in sexual growth, as well as weaker sexual destiny, controlling for all other measures of exposure. More years of reading also predicted stronger beliefs in sexual growth. None of the reading exposure measures predicted sexual depression, and the age at which participants first began reading did not predict any of the outcomes.

Table 6*Linear Regression Models Predicting Sexual Self-Concept and Sexual Beliefs*

Predictor	Sexual Self-Esteem (β)	Sexual Depression (β)	Sexual Growth (β)	Sexual Destiny (β)
Reading Age*	-.00 (-.10, .09)	-.00 (-.10, .09)	.06 (-.04, .15)	.03 (-.07, .12)
Years of Reading	.05 (-.05, .14)	-.04 (-.13, .06)	.18 (.09, .28)	-.08 (-.17, .02)
Reading Frequency	-.11 (-.20, -.03)	.04 (-.04, .13)	.05 (-.03, .14)	-.11 (-.20, -.03)
Adjusted R ²	.01	.00	.05	.01

Note. Values in brackets indicate 95% confidence intervals. Direct replications produce values that fall within the 95% CI approximately 83% of the time based on simulations (Cumming & Maillardet, 2006). *Adjusted reading age scores (100 – reported age); higher values indicate more years of reading.

Correlations With Moderators.

Zero order correlations among exposure, moderating, and dependent variables can be found in Tables 7 and 8. Correlations among the nine reading motivation subscales (prior to an exploratory factor analysis) are shown in Table 7. All of the reading motivations were positively correlated with each other (ρ s ranging from .15 to .66). Nearly all of the motivations were positively correlated with the three types of exposure to romance novels. Starting to read at a younger age is most associated with being motivated by the fantasy of reading romance ($\rho = .13$, 95% CI [.05, .22]) and the enjoyment of the sex scenes ($\rho = .12$, 95% CI [.03, .20]). More years of reading on the other hand is most related to reading for entertainment and relaxation, Entertainment: $\rho = .21$, 95% CI [.13, .29]; Relaxation: $\rho = .16$, 95% CI [.08, .24]. Current reading frequency is also most strongly predicted by entertainment ($\rho = .48$, 95% CI [.41, .54]) and relaxation ($\rho = .38$, 95% CI [.31, .46]), with these associations stronger than what was observed for years of reading.

Readers who thought the sex scenes were more realistic exhibited stronger beliefs in sexual destiny ($r = .22$, 95% CI [.14, .30]). Greater perceived utility was associated with stronger beliefs in both sexual growth ($r = .17$, 95% CI [.09, .25]) and sexual destiny ($r = .14$, 95% CI [.06, .22]). Perceived utility was also correlated with lower sexual self-esteem ($r = -.12$, 95% CI [-.20, .04]) and greater sexual depression ($r = .14$, 95% CI [.06, .22]). Greater

need for affect predicted stronger beliefs in sexual growth and sexual destiny, Growth: $r = .20$, 95% CI [.12, .28]; Destiny: $r = -.16$, 95% CI [-.24, -.08]. These individuals also had higher sexual self-esteem ($r = .16$, 95% CI [.08, .24]) and less sexual depression ($r = -.19$, 95% CI [-.26, -.11]). Finally, individuals higher in trait anxiety also reported stronger beliefs in sexual growth ($r = .12$, 95% CI [.04, .20]).

Table 7
Spearman's Rho order correlations of motivations variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Reading Age*											
2. Years of Reading	.52 [.45, .59]										
3. Reading Frequency	.05 [-.04, .14]	.11 [.02, .19]									
4. Escapism	.07 [-.01, .16]	.12 [.04, .21]	.36 [.29, .44]								
5. Entertainment	.10 [.01, .18]	.21 [.13, .29]	.38 [.31, .46]	.44 [.37, .50]							
6. Enjoyment of Sex Scenes	.12 [.03, .20]	.09 [.01, .17]	.23 [.15, .31]	.42 [.35, .50]	.29 [.20, .36]						
7. Fantasy	.13 [.05, .22]	.10 [.02, .18]	.24 [.16, .33]	.66 [.61, .71]	.38 [.30, .45]	.55 [.48, .61]					
8. Information	.11 [.02, .19]	-.00 [-.09, .08]	.24 [.16, .31]	.49 [.42, .55]	.28 [.20, .36]	.60 [.54, .66]	.57 [.50, .64]				
9. Companionship	.06 [-.02, .16]	.07 [-.02, .16]	.20 [.12, .28]	.49 [.42, .55]	.19 [.10, .27]	.44 [.36, .52]	.54 [.47, .60]	.50 [.43, .56]			
10. Predictability	-.00 [-.09, .07]	-.04 [-.12, .05]	.17 [.09, .25]	.26 [.18, .35]	.22 [.13, .30]	.15 [.06, .23]	.55 [.48, .61]	.57 [.50, .64]	.54 [.47, .60]		
11. Emotional Experience	.08 [.00, .17]	.13 [.04, .21]	.30 [.22, .37]	.65 [.59, .71]	.39 [.31, .46]	.51 [.44, .58]	.58 [.51, .65]	.63 [.57, .69]	.56 [.49, .62]	.27 [.19, .36]	
12. Relaxation	.06 [-.02, .16]	.16 [.08, .24]	.48 [.41, .54]	.56 [.49, .62]	.63 [.57, .69]	.32 [.24, .40]	.40 [.32, .48]	.35 [.26, .43]	.35 [.27, .43]	.24 [.15, .32]	.51 [.44, .58]

Note. Values in square brackets indicate the 95% confidence intervals for each correlation. Direct replications produce values that fall within the 95% CI about 83% of the time based on simulations (Cumming & Maillardet, 2006). *Adjusted reading age scores (100 – reported age); higher values indicate more years of reading.

Table 8*Zero order correlations of moderating and dependent variables*

Variable	1	2	3	4	5	6	7
1. Sexual Growth							
2. Sexual Destiny	-.02 [-.10, .06]						
3. Sexual Self-Esteem	.11 [.03, .19]	.15 [.07, .22]					
4. Sexual Depression	-.12 [-.20, -.04]	.09 [.01, .17]	-.58 [-.63, -.52]				
5. Perceived Realism	-.05 [-.14, .03]	.22 [.14, .30]	.03 [-.05, .12]	.03 [-.05, .11]			
6. Perceived Utility	.17 [.09, .25]	.14 [.06, .22]	-.12 [-.20, -.04]	.14 [.06, .22]	.52 [.45, .58]		
7. Need For Affect	.20 [.12, .28]	-.16 [-.24, -.08]	.16 [.08, .24]	-.19 [-.26, -.11]	-.03 [-.11, .05]	-.03 [-.12, .05]	
8. Trait Anxiety	.12 [.04, .20]	.03 [-.06, .11]	-.08 [-.17, -.00]	.08 [-.01, .16]	-.01 [-.09, .08]	.04 [-.05, .12]	-.27 [-.35, -.19]

Note. Values in square brackets indicate the 95% confidence intervals for each correlation. Direct replications produce values that fall within the 95% CI about 83% of the time based on simulations (Cumming & Maillardet, 2006). *Adjusted reading age scores (100 – reported age); higher values indicate more years of reading.

Exploratory Factor Analysis.

We next conducted an exploratory factor analysis of all 25 motivation items from the nine subscales (i.e., relaxation, entertainment, enjoyment of sex scenes, companionship, information, predictability, escapism, fantasy, and emotional experience). This analysis employed a minimum residual estimation to account for slight non-normality in some of the motivations items. For each factor solution, oblimin rotation was applied due to the anticipated intercorrelation between motivations. Solutions specifying one through eight factors were estimated and compared based on model fit indices, factor loadings, and interpretability of the factors. Solutions that specified one to four factors all had poor fit indices and factors that were conceptually weak. Solutions five to eight all had good fit indices. However, the six-factor solution exhibited minimal cross loadings and had the lowest BIC value. For these reasons, we chose the six-factor solution.

The six-factor solution had good model fit (RMSEA = .044, 90% CI [.04, .05], TLI = .96, RMSR = .02, BIC = -698). Item 8 had cross-loadings on factors one and six and was removed. The remaining items all loaded onto one of the six factors, with only minor cross loadings (Table 9). Subscale scores were then computed by averaging the items that loaded onto each factor. Altogether, the factors accounted for 60% of the variance in reading motivations and were quite highly correlated with each other (all correlations between .21 and .57, see Table 10).

Table 9*Factor Loadings and Communalities for Motivations Six-Factor Solution*

	Factor Loading						h ²
	1	2	3	4	5	6	
1. I read romance novels because I want to escape my current reality.	.42	.06	.02	.03	.02	.48	.64
2. I read romance novels because I want to imagine something different from my current life.	.63	.06	-.03	-.02	.10	.22	.65
3. I read romance novels because it helps me forget about real life stress.	.13	.37	.17	-.01	.07	.41	.64
4. I read romance novels because I want the comfort of a predictable story.	.01	.14	.66	-.01	.05	.01	.55
5. I read romance novels because I know it will end happily.	.00	.03	.72	-.06	-.11	-.01	.48
6. I read romance novels because I don't have to guess how it will end.	-.05	-.07	.77	.02	.03	-.04	.54
7. I read romance novels so I can safely experience complex feelings.	.02	.13	.04	.05	.54	.22	.57
8. I read romance novels to experience emotions I might not in real life.	.38	.01	.00	.05	.22	.30	.55
9. I read romance novels so I can experience powerful emotions.	-.01	.17	.02	.16	.44	.22	.53
10. I read romance novels in order to fantasize about an ideal life.	.68	.08	.07	.04	.10	-.02	.66
11. I read romance novels to imagine being with an ideal romantic partner.	.76	.08	.00	.03	.02	-.05	.66
12. I read romance novels so I can imagine things that I wish happened in my real life.	.74	.06	.01	.16	-.04	-.04	.69
13. I read romance novels because it relaxes me.	-.08	.62	.06	.13	.03	.21	.58
14. I read romance novels because it allows me to unwind.	-.05	.58	.05	.03	.14	.28	.62
15. I read romance novels because it entertains me.	.11	.79	-.01	.01	.02	-.08	.67
16. I read romance novels because it's enjoyable.	.05	.84	.02	.01	.00	-.09	.72
17. I read romance novels because it amuses me.	.11	.61	.07	.01	.04	-.04	.47
18. I read romance novels because it helps me learn things about myself and others.	-.03	.13	.00	.04	.70	-.09	.55
19. I read romance novels so I can learn how to do things which I haven't done before.	.11	-.08	.06	.39	.38	.03	.57
20. I read romance novels so I can learn about what could happen to me.	.32	-.13	.08	.06	.57	-.12	.61
21. I read romance novels when there's no one else to talk to or be with.	.15	-.09	.26	.22	.05	.35	.54
22. I read romance novels because it makes me feel less lonely.	.38	-.16	.15	.10	.10	.35	.46
23. I read romance novels to experience sexual desire.	.08	-.05	-.01	.82	-.01	.00	.71
24. I read romance novels to explore sexual fantasies.	-.02	.07	-.06	.89	-.06	.01	.74
25. I read romance novels as inspiration for my actual sex life.	-.02	.02	.08	.76	.08	-.06	.69
Proportion of Variance Explained	.14	.12	.11	.09	.08	.06	

Note. Factor loadings are bolded. h² = communality

Table 10*Correlations Among Extracted Factors after Oblimin Rotation*

Factor	1	2	3	4	5
Factor 1					
Factor 2	.34				
Factor 3	.57	.30			
Factor 4	.54	.35	.56		
Factor 5	.30	.32	.22	.36	
Factor 6	.37	.27	.21	.30	.25

Factor 1 (Wish Fulfilment). The first factor included four items that emphasize the motivation to experience an idealized fantasy (2, 10, 11, 12). This factor involved imagining or thinking about an ideal romantic scenario (e.g., “I read romance novels to imagine being with an ideal romantic partner.”). The factor had good reliability ($\omega_t = .88$) and there was relatively strong endorsement of this motivation, on average ($M = 4.51$, $SD = 1.47$).

Factor 2 (Enjoyment). The second factor had five items (13, 14, 15, 16, 17) that are all related to either entertainment (e.g., “I read romance novels because it's enjoyable.”) or relaxation (i.e., “I read romance novels because it allows me to unwind.”). Omega total indicated strong internal reliability ($\omega_t = .87$). Of the six motivation factors, this one was most strongly endorsed ($M = 5.52$, $SD = 1.03$).

Factor 3 (Predictability). Factor three focused on the predictable nature of romance novels and included three items (4, 5, 6). All items referenced gaining comfort from knowing what will happen in the novel (e.g., “I read romance novels because I don’t have to guess how it will end.”). The internal consistency of this factor was good ($\omega_t = .75$), with moderate levels of agreement ($M = 4.23$, $SD = 1.36$).

Factor 4 (Sexual Exploration). Factor four included three items about enjoying the sex scenes in romance novels (23, 24, 25). The items described the exploration and inspiration that

can be obtained from reading about sex in these novels (e.g., “I read romance novels as inspiration for my actual sex life.”). This factor also exhibited high internal consistency ($\omega_t = .87$), but endorsement was lower than the other motivations ($M = 3.54$, $SD = 1.65$).

Factor 5 (Emotional Insight). The fifth factor was about gaining emotional insight, including motivations to learn (e.g., “I read romance novels so I can learn about what could happen to me.”) and experience complex emotions (e.g., “I read romance novels so I can safely experience complex feelings.”). The factor had good reliability ($\omega_t = .80$) and was endorsed by participants to a moderate degree on average ($M = 4.16$, $SD = 1.31$).

Factor 6 (Comfort Seeking). Factor six included items related to gaining comfort from reading romance (e.g., “I read romance novels because it helps me forget about real life stress.”). Factor loadings for this factor were low compared to the other factors (Table 9), but internal consistency was still high ($\omega_t = .81$). The average agreement for this factor was moderate ($M = 4.19$, $SD = 1.39$).

Moderation Analysis.

Perceived Realism. Linear regressions were conducted to determine if the perceived realism of the sex scenes moderated any of the previous associations between exposure to romance and sexual self-concept or sexual beliefs (Table 11). Perceived realism was found to moderate the association between reading frequency and sexual self-esteem ($\beta = .11$, 95% CI [.01, .21]). Those who perceived the sex scenes in romance novels to be more realistic reported a very weak association between reading frequency and lower sexual self-esteem. However, readers who viewed the sex scenes as less realistic had a stronger association between more frequent reading and lower sexual self-esteem (Figure 2). Reading frequency also continued to

predict sexual self-esteem after accounting for the other variables and the interaction ($\beta = -.12$, 95% CI $[-.21, -.04]$).

Perceived realism did not moderate any associations between exposure and sexual self-concept or beliefs, but it did uniquely predict sexual destiny ($\beta = .23$, 95% CI $[.15, .31]$). People who perceived the sex scenes as more realistic reported stronger sexual destiny beliefs. Years of reading also predicted sexual growth and destiny, controlling for all other exposure variables and perceived realism, Growth: $\beta = .21$, 95% CI $[.12, .30]$; Destiny $\beta = -.12$, 95% CI $[-.21, -.04]$. None of the reading exposure variables, nor perceived realism, predicted sexual depression, and perceived realism did not moderate any of those associations.

Table 11

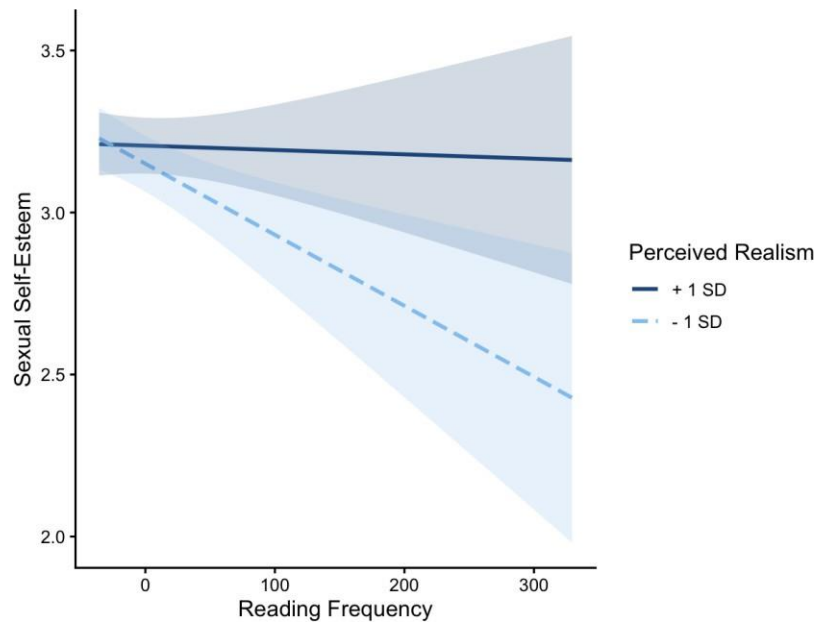
Linear Regression Models Moderated by Perceived Realism

Predictor	Sexual Self-Esteem β	Sexual Depression β	Sexual Growth β	Sexual Destiny β
Reading Age*	-.01 (-.09, .08)	-.03 (-.10, .09)	.02 (-.07, .11)	.01 (-.08, .10)
Years of Reading	.05 (-.11, .08)	.03 (-.13, .06)	.21 (.12, .30)	-.12 (-.21, -.04)
Reading Frequency	-.12 (-.21, -.04)	.03 (-.05, .12)	.07 (-.01, .15)	-.05 (-.14, .04)
Perceived Realism (PR)	.04 (-.04, .13)	.04 (-.05, .12)	-.05 (-.13, .03)	.23 (.15, .31)
Reading Frequency $\times$ PR	.11 (.01, .21)	.00 (-.10, .10)		
Years of Reading $\times$ PR			-.04 (-.12, .04)	-.06 (-.14, .02)
Adjusted R ²	.01	-.01	.050	.067

Note. Beta values represent standardized regression coefficients. Values in brackets represent 95% confidence intervals. Direct replications produce values that fall within the 95% CI about 83% of the time based on simulations (Cumming & Maillardet, 2006). *Adjusted reading age scores (100 – reported age), so that higher values indicate more years of read.

Figure 2

Reading Frequency and Perceived Realism Interaction Predicting Sexual Self-Esteem



Emotional Insight. We also wanted to determine whether these associations differ depending on whether someone reads romance looking for emotional insight. Linear regressions using emotional insight as a moderator were thus constructed (Table 12). Reading for emotional insight did uniquely predict sexual self-esteem, whereby those who were more motivated to gain emotional insight reported lower sexual self-esteem ($\beta = -.11$, 95% CI $[-.19, -.02]$). It also predicted greater sexual depression ($\beta = .25$, 95% CI $[.16, .33]$), and stronger beliefs in sexual growth ($\beta = .18$, 95% CI $[.10, .26]$) and sexual destiny ($\beta = .29$, 95% CI $[.21, .37]$). However, this motivation did not moderate any of the associations. In these regressions, reading frequency continued to predict sexual self-esteem, although this association was weaker than before ($\beta = -.08$, 95% CI $[-.17, .01]$).

Table 12*Linear Regression Models Moderated by Perceived Realism*

Predictor	Sexual Self-Esteem β	Sexual Depression β	Sexual Growth β	Sexual Destiny β
Reading Age*	-.00 (-.09, .10)	-.03 (-.12, .06)	.00 (-.10, .09)	-.01 (-.08, .08)
Years of Reading	.05 (-.04, .15)	-.04 (-.13, .06)	.21 (.12, .30)	-.08 (-.17, .02)
Reading Frequency	-.08 (-.17, .01)	-.01 (-.10, .08)	.04 (-.04, .12)	-.15 (-.23, -.07)
Emotional Insight (EI)	-.11 (-.19, -.02)	.25 (.16, .33)	.18 (.10, .26)	.29 (.21, .37)
Reading Frequency $\times$ EI	-.07 (-.18, .04)	.08 (-.03, .33)		
Years of Reading $\times$ EI			.00 (-.07, .08)	-.00 (-.08, .07)
Adjusted R ²	.02	.05	.08	.09

Note. Beta values represent standardized regression coefficients. Values in brackets represent 95% confidence intervals. Direct replications produce values that fall within the 95% CI about 83% of the time based on simulations (Cumming & Maillardet, 2006). *Adjusted reading age scores (100 – reported age), so that higher values indicate more years of read.

Exploratory, Non Pre-Registered Analyses

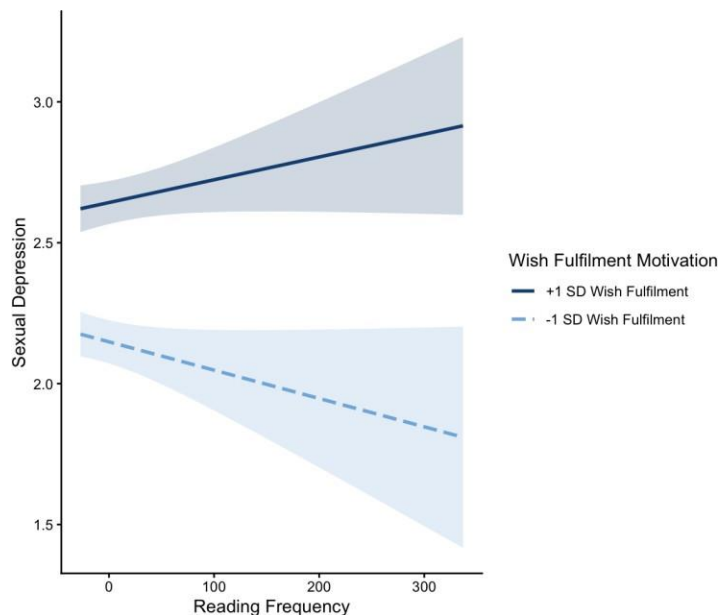
Controlling For Age. Given that both years of reading increase and sexual growth likely strengthen with age, we conducted a non-preregistered analysis allowing years of reading to predict sexual growth, controlling for age. Although beliefs in sexual growth were stronger for older participants, years of reading remained a unique predictor of sexual growth ($\beta = .18$, 95% CI [.09, .28]).

Moderation With Perceived Utility. We also explored whether the perceived utility of romance novels moderated associations between exposure and sexual self-concept or beliefs. Perceived utility did not moderate any of the previously observed associations. However, higher perceived utility predicted lower sexual self-esteem ($\beta = -.10$, 95% CI [-.18, -.01]) and higher sexual depression ($\beta = .14$, 95% CI [.05, .23]). It was also associated with stronger beliefs in sexual growth and sexual destiny, Growth: $\beta = .16$, 95% CI [.08, .25]; Destiny: $\beta = .17$, 95% CI [-.12, .09].

Moderation With Wish Fulfilment Motive. Although we only pre-registered certain motivations for moderation analyses, here we conduct exploratory tests for the other motivations. The motivation for wish fulfilment moderated the association between reading frequency and sexual depression ($\beta = .10$, 95% CI [.02, .19]; Figure 3), and also acted as a unique predictor of lower sexual self-esteem and greater sexual depression (sexual self-esteem: $\beta = -.30$, 95% CI [-.39, -.22] and sexual depression: $\beta = .37$, 95% CI [.29, .45]). It also predicted both stronger sexual growth and destiny beliefs, Growth: $\beta = .16$, 95% CI [.08, .25]; Destiny: $\beta = .17$, 95% CI [.09, .26]. The moderation was such that readers who were more motivated by wish fulfilment had greater sexual depression as reading frequency increased. The opposite pattern was observed for readers low in wish fulfilment motivation, and sexual depression tended to decrease as individuals read romance more frequently.

Figure 3

Reading Frequency and Wish Fulfilment Motivation Interaction Predicting Sexual Depression



Moderation With Enjoyment Motive.

Reading romance for enjoyment also acted as a moderator, interacting with reading frequency to predict sexual self-esteem ($\beta = .20$, 95% CI [.06, .33]; Figure 4). When participants were less motivated by enjoyment, frequency of reading romance predicted lower sexual self-esteem ($\beta = -.45$, 95% CI [-.70, -.20]), however there is quite a lot of uncertainty around this estimate. The correlation between years of reading and sexual growth was also moderated by reading for enjoyment ($\beta = -.09$, 95% CI [-.16, -.02]). There was a stronger correlation between years of reading and sexual growth for those who read less for enjoyment, compared to those motivated by enjoyment ($\beta = .22$, 95% CI [.12, .33]; Figure 5). Reading for enjoyment also independently predicted stronger sexual growth ($\beta = .20$, 95% CI [.12, .29]).

Figure 4

Reading Frequency and Enjoyment Motivation Interaction Predicting Sexual Self-Esteem

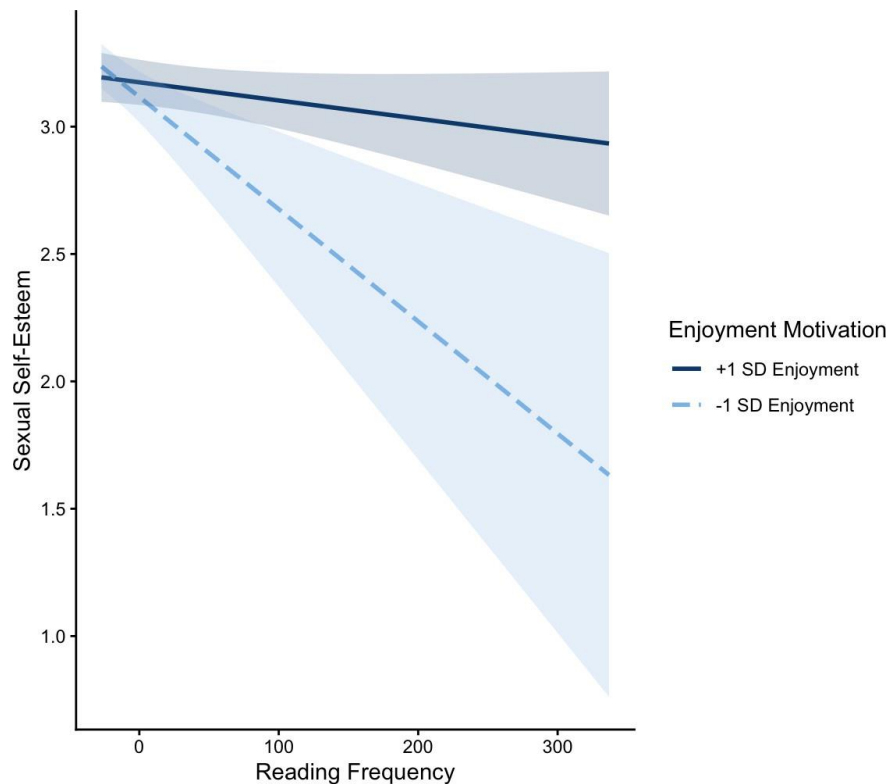
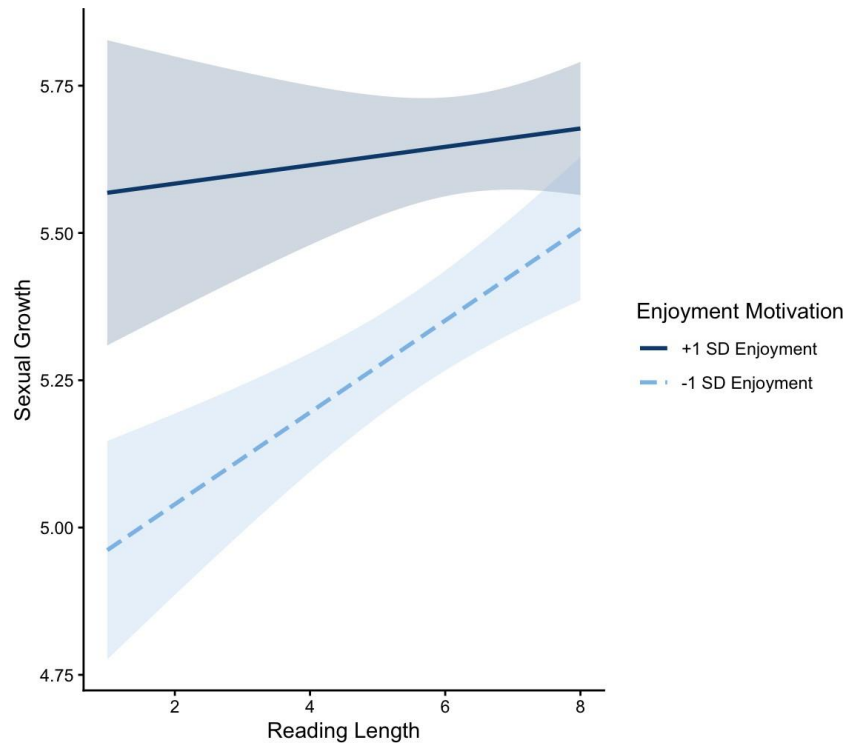


Figure 5

Years of Reading and Enjoyment Motivation Interaction Predicting Sexual Growth



Moderation With Predictability Motive.

Readers more motivated by the predictability of romance novels tended to have stronger sexual destiny beliefs ($\beta = .21$, 95% CI [.12, .29]). But this motivation was not correlated with any other beliefs or attitudes and did not moderate any of the associations between exposure and the outcomes.

Moderation With Sexual Exploration Motive.

Readers who consumed romance novels as a form of sexual exploration also tended to have greater sexual depression ($\beta = .23$, 95% CI [.14, .31]). Sexual exploration was also positively associated with both sexual beliefs, Growth: $\beta = .22$, 95% CI [.14, .31]; Destiny: ($\beta = .24$, 95% CI [.16, .32]). But this motivation did not moderate any associations.

Moderation With Comfort Seeking Motive.

Reading romance as a way to seek comfort predicted stronger sexual destiny beliefs ($\beta = .19$, 95% CI [.10, .27]). In addition, it also predicted lower sexual self-esteem and greater sexual depression, self-esteem: $\beta = -.28$, 95% CI [-.36, -.20]; depression: $\beta = .32$, 95% CI [.24, .40]. Reading for comfort did not moderate any of the associations of interest.

Predicting Reading Frequency. Finally, we explored how the different motivations predicted how often people currently read romance. All six motivation subscales obtained during the exploratory factor analysis were simultaneously regressed on current reading frequency. To address concerns of heteroscedasticity within the model, we applied White's correction to correct standard errors and coefficients. When all of the other motivations were taken into account, reading for relaxation was the only one that uniquely predicted current reading frequency ($b = 19.58$, $SE = 4.59$, 95% CI [12.11, 27.04]).

Study 2 Discussion

The primary aims of Study 2 were to replicate the results of Study 1 and to examine whether other variables moderated these associations. In particular, we examined the potential moderating role of perceived realism, motivations for reading, and perceived utility. Overall, the findings provided a partial replication of Study 1. Consistent with our past findings, reading romance novels more often was associated with lower sexual self-esteem, and more years of reading predicted stronger beliefs in sexual growth. Notably, years of reading continued to predict sexual growth even after controlling for age, so this association cannot be explained by developmental trends. However, unlike in Study 1, reading frequency did not predict sexual depression in this sample.

In terms of moderation, perceived realism emerged as the only variable that meaningfully influenced these associations, specifically the correlation between current reading frequency and

sexual self-esteem. However, this moderation was contrary to our expectations. The negative correlation between reading frequency and sexual self-esteem was strongest among those who perceived the sex scenes to be less realistic. In contrast, for those who perceived the sex to be more realistic, sexual self-esteem declined very little as reading frequency increased. This was the opposite of our prediction that viewing the sex in these books as realistic would exacerbate any negative effects of reading romance. One possible explanation for this finding is that readers who view the sex as unrealistic may experience greater discrepancies between these depictions and their own experience, resulting in upward social comparisons. Alternatively, readers who perceive the content as more realistic may interpret what's depicted in these narratives as attainable rather than idealized, reducing comparison-based threats to self-esteem. The perceived realism of romance novels also predicted beliefs in sexual destiny, with individuals who viewed the sex as more realistic more likely to endorse destiny beliefs, regardless of exposure. This aligns with social learning perspectives suggesting that media messages are more likely to be internalized when they are perceived as plausible (Bandura, 1986; Bandura, 2001).

We did not observe any moderation based on the motivation to gain emotional insight, but this motivation did act as an independent predictor. Those who read romance to gain emotional insight had lower sexual self-esteem, greater sexual depression, and stronger beliefs in both sexual growth and destiny. These direct associations imply that reading for emotional insight may reflect broader identity-related concerns. It is possible that individuals motivated to learn from romance already experience greater uncertainty regarding their sexual self-concept, potentially explaining these results. At the same time, actively seeking insight may increase the likelihood of internalizing relational and sexual scripts presented in romantic narratives, strengthening both growth and destiny-oriented beliefs at all reading frequencies. This implies

that unlike other romantic media, romance novels may reflect aspects of both sexual growth and destiny beliefs.

Exploratory moderation analyses for the other five motivation factors found that they are associated with sexual beliefs and attitudes. Reading for wish fulfilment moderated the association between reading frequency and sexual depression, with those less motivated by wish fulfilment (i.e., reading to fantasize about an ideal romantic relationship) experiencing less sexual depression when reading romance more often. This may be because readers low in wish fulfilment are less likely to compare their real lives to the fantasy presented in romance, allowing them to enjoy the book without engaging in upward social comparisons. Reading for enjoyment exhibited a different pattern. Among readers who were less motivated by enjoyment, more frequent reading was associated with lower sexual self-esteem. Reading less for enjoyment and relaxation means these readers may be turning to romance for other reasons. For example, readers may be looking for guidance or reassurance about romantic relationships, and these individuals may have low sexual self-esteem. Enjoyment motives also moderated the association between years of reading and sexual growth, such that more years of reading correlated with stronger beliefs for readers less motivated by enjoyment. Aside from moderating effects, the motivations subscales uniquely predicted both sexual beliefs and aspects of the self-concept. Many of the motivations predicted outcomes more than just exposure to romance alone, suggesting that future research should consider using motivations alongside exposure when examining media effects.

Perceived utility exhibited a similar pattern to many of the other motivation subscales. Although utility did not moderate any associations, it independently predicted lower sexual self-esteem, greater sexual depression, and stronger beliefs in sexual growth and destiny. Perceiving

romance novels as useful may lead to deeper engagement with the content. Rather than exposure alone influencing sexual outcomes, readers who view romance as useful or instructive seem more likely to integrate its themes into their existing beliefs. Similar to the motivation to gain emotional insight, it is also plausible that individuals experiencing lower sexual self-esteem or greater sexual uncertainty are more likely to see romance novels as useful.

An exploratory factor analysis identified six distinct dimensions of motivations for reading romance. Of these six motivations, reading for enjoyment was most strongly endorsed on average. Enjoyment was also the only unique predictor of reading frequency out of all the motivations. This suggests that reading romance is primarily hedonic rather than being driven by eudaimonic motivations such as meaning, insight, or personal growth. The motivations subscales were positively correlated with all of the exposure variables, which means that they seem to be a valid way of measuring why readers seek out romance novels. Other research that aims to examine the potential effects of romantic media should consider the use of these items.

Taken together, the results of Study 2 demonstrate that exposure to romance novels is associated with the sexual self-concept and beliefs. However, readers' interpretations of, and motivations for, engaging with these books is important for understanding these relations. Perceived realism moderated the association between reading frequency and sexual self-esteem, and the motivation to gain emotional insight and perceived utility both acted as independent predictors. Thus, how readers engage with romance novels is as or more important than exposure alone. Although many of the associations with exposure replicated across the two studies, these were often small in magnitude. Considering individual differences when examining media consumption helps to provide a fuller picture of these effects.

General Discussion

In both Study 1 and 2 we demonstrated that exposure to romance novels had small, but consistent, associations with both sexual self-esteem and sexual growth. In Study 1, we found associations between reading and sexual growth, sexual self-esteem, and sexual depression. In Study 2, we examined several moderating variables, but their role was limited. Instead, reader engagement variables (i.e., perceived realism, motivations, and utility) independently predicted sexual outcomes (i.e., sexual growth and destiny, sexual self-esteem and sexual depression). Importantly, reader engagement variables were often stronger predictors than exposure alone. As an important validation of our decision to measure exposure in several different ways, different forms of exposure predicted different putative outcomes. The number of years of reading romance yielded different results than current reading frequency. Longer forms of exposure (i.e., years of reading and reading age) predicted romantic beliefs, which makes sense as beliefs about sexuality are likely to be slowly shaped over time, with frequent exposure. In contrast, current reading frequency was predicted variables that likely fluctuate at shorter time-scales (i.e., sexual self-esteem and depression).

These finding regarding different measures of exposure brings forth considerations for future research on media effects. Several studies on relationship and sexual beliefs use a single item to assess current exposure to romantic media, ignoring how long participants have been consuming this media (Eidelson & Epstein, 1982; Haferkamp, 1999; Rios et al., 2024). However, we have demonstrated that this will not capture certain associations: years of exposure and age of initial exposure will be relevant for certain experiences. Based on these findings, future research should include a wider variety of exposure metrics. In addition, our work demonstrates that it is useful to include measures of how these media are interpreted.

Precisely how individuals engage with media also contributes to what they might learn from this media. Across Studies 1 and 2 we examined various potential moderators, including sexual experience, sexual relationship status, perceived realism and utility, and different motivations. However, we found very limited evidence of moderation. This means that exposure does not necessarily operate differently as reader characteristics vary. Instead, perceived realism, utility, and the motivation to gain emotional insight uniquely predicted elements of the sexual self-concept and sexual beliefs. This points to the possibility that engagement variables may reflect pre-existing orientations toward relationships and sexuality that are themselves associated with both media engagement and sexual self-concept. Such associations align with media engagement theories that emphasize interpretations, plausibility, and personal relevance as central mechanisms of internalization (Bandura, 1986; Geber et al., 2002; Rubin, 1983). Research that only asks readers how often they consume romantic media likely provide an incomplete understanding of its impact.

Although there is a large body of work examining how romantic movies influence beliefs, research on romance novels remains relatively less common. Most research on romantic television and movies finds that exposure is associated with stronger sexual destiny and not associated with sexual growth. This is the opposite of what we observed for romance novels in both studies. It is therefore possible that romance novels may function differently than visual media. Some researchers have argued that reading may be less passive than visual media, and this alone may be enough to explain divergent associations between print and visual media (Slater et al., 2014; Taylor & Carlson, 1997). That said, the content of these books also likely differs from what appears in television and movies. Romance television, for example, often includes dramatic depictions and frequently contains scripts around ending a relationship rather

than maintaining one (Masterson & Messina, 2023). Romance novels, on the other hand, are typically organized around the gradual development of a central, and committed, romantic relationship (Regis, 2003). These content differences could play a larger role than differences in modality when it comes to explaining our results. However, future research on romance novels is needed to better understand why and how print and visual media differ when it comes to romance.

Future research on reading romance will benefit from several measures that we validated in these studies. The romance version of the ART we created was positively associated with reading frequency, making it a promising way to measure exposure to romance novels (Stanovich & West, 1989). The original ART helps to reduce socially desirable responding for reports of reading literary fiction. However, the original ART scale is not genre specific. Our version of this scale includes only the names of popular romance authors, and therefore and in future research that examines reading romance specifically. That said, we did not observe associations between this new measure and our own variables of interest. Additionally, we developed six subscales measuring different motivations for reading romance, all of which were correlated with exposure to these books (Table 7). Exploring who possesses what motivations, and how these motivations relate to different behaviours and possible outcomes, seems promising.

Despite the contributions made by both studies, it is important to acknowledge that several of the observed effects were small in magnitude. Many of the correlation values and standardized estimates were relatively small, and the adjusted R^2 values for our regressions indicate that predictors explained only a little of the variance in sexual beliefs and self-concept. This is not uncommon in media research, as media is only one small part of how individuals

learn about the world around them. Sexual self-concept and sexual beliefs are complex and determined by many different factors, including friends, romantic partners, sex education, and sexual experiences. Therefore, it is unlikely that media alone will be a dominant determinant of these outcomes.

Although many of these associations were small, individuals who read romance novels more often had lower sexual self-esteem compared to those who did not. In these cross-sectional correlational studies, it is unclear if romance novels lower sexual self-esteem, or if those with low sexual self-esteem tend to read more romance, or both. A third factor might also explain the relation between these two variables. Although the causal direction cannot be inferred, this does not preclude the possibility that romance novels can provide empowering depictions of sexuality. Prior research has found that when women are portrayed in media as having sexual agency the sexual self-esteem of viewers improves compared to when women represented as having little sexual agency (Kim & Ward, 2012). Heterosexual romance narratives could incorporate explicit depictions of women initiating sexual activity, or mutual initiation for both partners, as well as affirming communication to promote sexual competence. Similarly, depicting diverse bodies, experiences, and pathways to sexual satisfaction may support sexual self-esteem by normalizing variation rather than idealized standards. Historically, women characters in romance novels have very little variability in physical appearance, (Menard & Cabrera, 2011). In recent years, romance novels have started to include different body types, but this positive shift has not been seen broadly across the romance genre. LGBTQ+ romance novels, or novels that have characters of colour, rarely contain plus-sized characters, suggesting that the representation of fat characters in romance fiction may be restricted to stories with white, heterosexual characters (McDavis-Conway, 2022). Despite improvements to how women characters are presented, many people

would not see themselves represented in romance narratives. Diverse depictions of body types and physical appearance for both men and women may reduce damaging upward social comparisons. Although romance novels are not designed to be educational, the fact that readers can perceive them to be realistic and also read them for emotional insight suggests that these books function as a source of sexual socialization. It is therefore important to consider how to best portray characters and sexual narratives in romance fiction.

This research also contributes to the literature on sexual beliefs, and sexual growth in particular. Prior work has largely focused on the consequences of these beliefs, in terms of sexual responsiveness and sexual satisfaction; which ignores the factors that may be associated with the development of these beliefs (Maxwell et al., 2017, Uppot et al., 2023). In our studies, individuals who had been reading romance for longer reported stronger sexual growth. This data is correlational, which means directionality cannot be determined, but the observed association is consistent with the possibility that long term engagement with romance narratives coincides with greater endorsement of the ideas that sexual relationships can improve through effort, communication, and learning. Romance narratives often depict couples navigating misunderstandings, developing intimacy, and improving their relationships over time. Many popular romance novel tropes involve both characters having to undergo individual and relationship growth before they can be together (e.g., enemies to lovers, forbidden love). Taken together, these may align with a growth oriented view of sexuality. Alternatively, individuals who already hold stronger sexual growth may be especially attracted to romance narratives that emphasize relational development. Regardless of the causal direction, these findings highlight romance reading as a previously understudied correlate of sexual beliefs and suggest that romance novels may be a useful for studying how sexual beliefs are formed and reinforced.

Limitations and Future Directions

One of the major limitations of both studies is that causal direction cannot be inferred from these data. It is possible that instead of romance novels influencing readers' beliefs and attitudes, readers may choose to read romance based on their pre-existing beliefs. It is also possible that there is a bidirectional relationship between reading exposure and sexual outcomes, in that reading strengthens sexual beliefs and attitudes, which in turn influence how often people read romance. In this way, exposure and outcomes may reinforce one another through a reciprocal process, rather than reflecting a unidirectional causal effect. If romance novels depict sexually growth-oriented narratives, readers may adopt these beliefs over time. In turn, these beliefs may shape preferences for narratives that align with existing views, thereby increasing the likelihood of continued engagement with romance novels. Future studies should employ a longitudinal design that tracks these variables across multiple time points. This would help clarify if exposure to romance novels precedes shifts in sexual beliefs and attitudes, or if pre-existing beliefs shape engagement patterns.

One important factor that might influence these associations is the precise form of romantic and sexual media people are consuming (e.g., movies, television). We only asked participants about romance novels, and therefore could not control for other forms of media exposure. Future research that measures exposure to multiple forms of romantic media helps us understanding whether and why the effects of visual media seem to differ from that of romance novels.

Another limitation of this work is a lack of understanding about exactly what romance novels participants read. Within the romance genre there is a great deal of variability, both between and within different subgenres. Although we examined the subgenres of romance in

Study 1 and did not find substantial differences between them, we did not directly examine other factors, such as whether the books contain explicit sexual content. For example, some romance novels allude to sexual activity but do not describe it (i.e., closed door romance), whereas others provide detailed descriptions of sex. Future work should directly examine differences in content.

The sample for both studies was a convenience sample of university women. Although sampling young women was intentional, in order to examine an under-researched population that has only recently started to consume romance, it does come with limitations. Sexual self-concept, sexual beliefs, and how romance is interpreted likely varies across demographic groups. For example, younger audiences may be more motivated to learn about sex and romantic relationships than older participants. It is also important to note that heterosexual and LGBTQ+ romance readers may respond to romance narratives differently. For LGBTQ+ romance readers, romance novels can be a source of identity representation. Although LGBTQ+ romance and intimacy is becoming more common in contemporary romance novels (Harris, 2022), this is not necessarily the case for all LGBTQ+ identities. Stories featuring bisexual women, transgender characters, or asexual characters are still relatively rare, despite increasing social acceptance for queer individuals (Dial, 2021; Foreman, 2021). As a result, LGBTQ+ readers may encounter fewer narratives that reflect their experiences, which could shape how they interpret the sexual norms portrayed in romance fiction.

Conclusion

Sales in romance novels have seen an enormous growth, more than any other genre, and especially with younger audiences (Curic, 2022). We have demonstrated that reading romance is associated with both stronger sexual growth beliefs and lower sexual self-esteem, in young women. Importantly, our research illustrates that the quality of reader engagement may be as

relevant as the quantity of engagement. Romance novels appear to be associated with neither entirely harmful nor entirely beneficial variables. Rather, associations with sexual attitudes and beliefs depend on the psychological frameworks readers bring to and derive from the text. As romance fiction continues to grow in cultural prominence, these findings highlight the importance of treating romance novels as more than entertainment. Instead, they likely play a role in how individuals come to understand and centre meaning for relationships and intimacy.

References

- Goodreads. (n.d.). *2024 romance books*. Goodreads. Retrieved October 18, 2024, from <https://www.goodreads.com/shelf/show/2024-romance>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
- Alter, A. (2023, June 21). *How Colleen Hoover rose to rule the best-seller list*. The New York Times. <https://www.nytimes.com/2022/10/09/books/colleen-hoover.html>
- Anderton G.E. (2009). *Excitement, adventure, indifference: Romance readers' perceptions of how romance reading impacts their sex lives*. [Unpublished doctoral dissertation]. Widener University.
- Appel, M., Gnambs, T., & Maio, G. R. (2012). A short measure of the need for affect. *Journal of Personality Assessment*, 94(4), 418–426. <https://doi.org/10.1080/00223891.2012.666921>
- Aubrey, J. S. (2007a). The impact of sexually objectifying media exposure on negative body emotions and sexual self-perceptions: Investigating the mediating role of body self-consciousness. *Mass Communication & Society*, 10(1), 1–23. <https://doi.org/10.1080/15205430709337002>
- Aubrey, J. S. (2007b). Does television exposure influence college-aged women's sexual self-concept? *Media Psychology*, 10(2), 157–181. <https://doi.org/10.1080/15213260701375561>
- Baams, L., Overbeek, G., Dubas, J. S., Doornwaard, S. M., Rommes, E., & Van Aken, M. (2014). Perceived realism moderates the relation between sexualized media consumption and permissive sexual attitudes in Dutch adolescents. *Archives of Sexual Behavior*, 44(3), 743–754. <https://doi.org/10.1007/s10508-014-0443-7>

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*.

Prentice-Hall, Inc. Bandura, A. (2001). Social cognitive theory of mass communication.

Media Psychology, 3(3), 265–299. doi:[10.1207/S1532785XMEP0303_03](https://doi.org/10.1207/S1532785XMEP0303_03)

Bar-Haim, Y., Lamy, D., Pergamin, L., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H.

(2007). Threat-related attentional bias in anxious and nonanxious individuals: A meta-analytic study. *Psychological Bulletin*, 133(1), 1–24. <https://doi.org/10.1037/0033-2909.133.1.1>

Bleakley, A., Ellithorpe, M. E., Hennessy, M., Khurana, A., Jamieson, P., & Weitz, I. (2017).

Alcohol, sex, and screens: Modeling media influence on adolescent alcohol and sex co-occurrence. *The Journal of Sex Research*, 54(8), 1026–1037.

<https://doi.org/10.1080/00224499.2017.1279585>

Burnett, E., Handel, S., & Summers, J. (2023, June 2). *Even as overall book sales are declining, romance novels are on the rise*. NPR.

<https://www.npr.org/2023/06/02/1179850128/even-as-overall-book-sales-are-declining-romance-novels-are-on-the-rise#:~:text=SUMMERS:%20Demand%20for%20romance%20novels,That's%20according%20to%20Publishers'%20Weekly>.

Busselle, R. W. (2001). Television exposure, perceived realism, and exemplar accessibility in the social judgment process. *Media Psychology*, 3(1), 43–67.

https://doi.org/10.1207/s1532785xmep0301_03

Carter, E. (2018). Expressing emotion in romance fiction : How readers like their heroes and

heroines to communicate passion. *Recherches Anglaises Et Nord-américaines*, 51(1), 87–96. <https://doi.org/10.3406/ranam.2018.1566>

Circana. (2022). *Book Market Data*. Book Market Data.

<https://www.circana.com/industries/books>

Cumming, G., & Maillardet, R. (2006). Confidence intervals and replication: Where will the next mean fall? *Psychological Methods*, 11(3), 217–227. <https://doi.org/10.1037/1082-989x.11.3.217>

Curcic, D. (2023, November 20). *Romance novel sales statistics*. Wordsrated. <https://wordsrated.com/romance-novel-sales-statistics/>

Coles, C. D., & Shamp, M. J. (1984). Some sexual, personality, and demographic characteristics of women readers of erotic romances. *Archives of Sexual Behavior*, 13(3), 187–209. <https://doi.org/10.1007/bf01541647>

Curry, M. (2024, August 5). *I've been single for 4 years. Is my smut-reading habit to blame?* Verywell Mind. <https://www.verywellmind.com/smut-books-ruin-dating-8685580#:~:text=%E2%80%9CConsuming%20a%20lot%20of%20erotic,real%2Dlife%20sexual%20experiences.%E2%80%9D>

Cyranowski, J. M., Aarestad, S. L., & Andersen, B. L. (1999). The role of sexual self-schema in a diathesis—stress model of sexual dysfunction. *Applied and Preventive Psychology*, 8(3), 217–228. [https://doi.org/10.1016/s0962-1849\(05\)80078-2](https://doi.org/10.1016/s0962-1849(05)80078-2)

Dial, L. (2021). *The case of the missing bisexual: The scarcity and representation of bisexual heroines*. UNSUITABLE. <https://sites.duke.edu/unsuitable/bisexual-heroines/#:~:text=In%20recent%20years%2C%20the%20romance,industry%2C%20from%202000%20through%202019.>

Doherty, A. (2023, February 7). *Fascinating romance novel trends to watch in 2023*. Book Riot.

<https://bookriot.com/romance-novel-trends/#:~:text=Looking%20at%20a%20>

[January%20to,novels%20are%20booming%20right%20now](https://bookriot.com/romance-novel-trends/#:~:text=Looking%20at%20a%20January%20to,novels%20are%20booming%20right%20now).

Ferretti, B. (2022, November 21). *How romance novels warp our perception of love*. Strike

Magazines. <https://www.strikemagazines.com/blog-2-1/how-romance-novels-warp-our-perception-of-love>

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(3), 490–510.

<https://doi.org/10.1111/j.1460-2466.2007.00354.x>

Foreman, B. (2021). *Defining Genre and Defining gender: The emergence of the modern transgender romance novel*. UNSUITABLE.

[https://sites.duke.edu/unsuitable/transgender-](https://sites.duke.edu/unsuitable/transgender-romance/#:~:text=Before%20describing%20the%20early%20trans,early%20trans%20romance%20novel%20emerged)

[romance/#:~:text=Before%20describing%20the%20early%20trans,early%20trans%20romance%20novel%20emerged](https://sites.duke.edu/unsuitable/transgender-romance/#:~:text=Before%20describing%20the%20early%20trans,early%20trans%20romance%20novel%20emerged).

Foust, M. (2023, December 28). The Bible is Consistently the Best-Selling Book of the Year.

Crosswalk.com. <https://www.crosswalk.com/headlines/contributors/michael-foust/the-bible-is-consistently-the-best-selling-book-of-the-year.html>

Gagnon, J. H., & Simon, W. (1973). *Sexual conduct: The social sources of human sexuality*. Routledge.

Garciano, S. G., Cuevas, G. C., Geraldizo-Pabriga, M. G., Macabodbod, S. J. J., Yu, J. M. B., &

Pinote, M. J. A. (2023). Romance-themed novels: Influenced on relationship satisfaction.

International Journal of Literature Studies, 3(3), 35–48.

<https://doi.org/10.32996/ijts.2023.3.3.5>

Gerber, G., Gross, L., Morgan, M., Signorielli, N., & Shanahan, J. (2002). In J. Bryant, & D.

Zillman (Eds.), *Growing up with television: Cultivation processes* (pp. 53–78). Hillsdale.

Gisele, U. (2024, January 9). *Relationship unrealistic expectations from novels and books*.

KURA. <https://kura.rw/relationship-unrealistic-expectations-from-novels-and-books>

/#:~:text=These%20romance%20novels%20and%20romantic,dissatisfied%20in%20real%20life%20relationships.

Gonzales, J. (2025, February 28). Romance revival: How 'booktok' has shifted romance in literature, for better or worse. *The State Press*.

<https://www.statepress.com/article/2025/02/the-new-age-of-romance>

Haferkamp, C. J. (1999). Beliefs about relationships in relation to television viewing, soap opera viewing, and self-monitoring. *Current Psychological Research & Reviews*, 18(2), 193–

204. <https://doi.org/10.1007/s12144-999-1028-9>

Hallowell, B. (2024, December 2). *Bible sales are skyrocketing: What's going on?* Faithwire.

<https://www.faithwire.com/2024/12/02/bible-sales-are-skyrocketing-whats-going-on/>

Harris, E. (2022). *'I just want something that's gay and happy': L.G.B.T.Q. romance is booming*. The New York Times (Digital Edition).

<https://go.gale.com/ps/i.do?id=GALE%7CA754491518&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=15538095&sw=w&p=AONE&userGroupName=anon%7E122ea3b3&aty=open-web-entry>

Hefner, V. (2015). Tuning into fantasy: Motivations to view wedding television and associated romantic beliefs. *Psychology of Popular Media Culture*, 5(4), 307–323.

<https://doi.org/10.1037/ppm0000079>

- Hefner, V., & Wilson, B. J. (2013). From Love at First Sight to Soul Mate: The Influence of Romantic Ideals in Popular Films on Young People's Beliefs about Relationships. *Communication Monographs*, 80(2), 150–175.
<https://doi.org/10.1080/03637751.2013.776697>
- Holmes, B. (2007). In search of my “one and only”; Romance-related media and beliefs in romantic relationship destiny. *The Electronic Journal of Communication*, 17.
<https://researchportal.hw.ac.uk/en/publications/in-search-of-my-one-and-only-romance-related-media-and-beliefs-in>
- Jagadeesan, N., & Suthandiradas, J. (2018). Exposure Time to Romance Depicted in Media and its Influence on Beliefs about Romantic Relationships among Adults. *International Journal of Indian Psychology*, 6(4). <https://doi.org/10.25215/0604.021>
- Impett, E. A., & Tolman, D. L. (2006). Late adolescent girls' sexual experiences and sexual satisfaction. *Journal of Adolescent Research*, 21(6), 628–646.
<https://doi.org/10.1177/0743558406293964>
- Irwanto, K. A., Aditomo, A., & Natalya, L. (2020). “Why fiction is better than reality”: The influence of reading fiction narrative on empathy. *ANIMA Indonesian Psychological Journal*, 35(2). <https://doi.org/10.24123/aipj.v35i2.2909>
- Kaplan, A. (2023, June 29). Colleen Hoover outsold the Bible last year — but she's happy still living as a ‘homebody’ in her small town. *Yahoo News*.
https://www.yahoo.com/news/colleen-hoover-outsold-bible-last-135221268.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLnNvbS8&guce_referrer_sig=AQAAACXWjiHMG3bstenP7C6cA1Bq8omNpvpbQNDCwc2rycL

pjqwdjfiqYhkGT1d0M5I3fbe9G2Oe9CkrY5nCbwutiDbUVGhMGJqeKawX19BhYrYrE
C6kMJqIoK20S81_cRlC-Wkh4yggagVYugD_x4IFxD9eKFiw0Zhd3byjHBJ6CLKFK

- Kim, J. L., & Ward, L. M. (2012). Striving for pleasure without fear. *Psychology of Women Quarterly*, 36(3), 326–336. <https://doi.org/10.1177/0361684312442856>
- Kim, J. L., Sorsoli, C. L., Collins, K., Zylbergold, B. A., Schooler, D., & Tolman, D. L. (2007). From sex to sexuality: Exposing the heterosexual script on primetime network television. *The Journal of Sex Research*, 44(2), 145–157. <https://doi.org/10.1080/00224490701263660>
- Knee, C. R. (1998). Implicit theories of relationships: Assessment and prediction of romantic relationship initiation, coping, and longevity. *Journal of Personality and Social Psychology*, 74(2), 360–370. <https://doi.org/10.1037/0022-3514.74.2.360>
- Kohn, P. M., Kantor, L., DeCicco, T. L., & Beck, A. T. (2008). The beck anxiety inventory–trait (BAIT): A measure of dispositional anxiety not contaminated by dispositional depression. *Journal of Personality Assessment*, 90(5), 499–506. <https://doi.org/10.1080/00223890802248844>
- Kretz, V. E. (2019). Television and movie viewing predict adults’ romantic ideals and relationship satisfaction. *Communication Studies*, 70(2), 208–234. <https://doi.org/10.1080/10510974.2019.1595692>
- Lee, K., Talwar, V., McCarthy, A., Ross, I., Evans, A., & Arruda, C. (2014). Can classic moral stories promote honesty in children? *Psychological Science*, 25(8), 1630–1636. <https://doi.org/10.1177/0956797614536401>

- Lei, A., Willems, R. M., & Eekhof, L. S. (2023). Emotions, fast and slow: processing of emotion words is affected by individual differences in need for affect and narrative absorption. *Cognition & Emotion*, 37(5), 997–1005. <https://doi.org/10.1080/02699931.2023.2216445>
- Maio, G. R., & Esses, V. M. (2001). The need for affect: individual differences in the motivation to approach or avoid emotions. *Journal of Personality*, 69(4), 583–614. <https://doi.org/10.1111/1467-6494.694156>
- Marjanovic, Z., Bajkov, L., & MacDonald, J. (2019). The conscientious responders scale helps researchers verify the integrity of personality questionnaire data. *Psychological Reports*, 122(4), 1529-1549. <https://doi.org/10.1177/0033294118783917>
- Masterson, A. M., & Messina, N. M. (2023). Love and sexual scripts: A content analysis of 19 Netflix teen series. *Journal of Children and Media*, 17(2), 161–179. <https://doi.org/10.1080/17482798.2023.2165517>
- Maxwell, J. A., Muise, A., MacDonald, G., Day, L. C., Rosen, N. O., & Impett, E. A. (2016). How implicit theories of sexuality shape sexual and relationship well-being. *Journal of Personality and Social Psychology*, 112(2), 238–279. <https://doi.org/10.1037/pspi0000078>
- Mar, R. A., Oatley, K., & Peterson, J. B. (2009). Exploring the link between reading fiction and empathy: Ruling out individual differences and examining outcomes. *Communications*, 34(4), 407–428. <https://doi.org/10.1515/comm.2009.025>
- McCormick, N. B. (2010). Preface to sexual scripts: Social and therapeutic implications. *Sexual & Relationship Therapy*, 25(1), 91–95. <https://doi.org/10.1080/14681990903563707>

- McDavis-Conway, S. (2022). Self-conscious, unapologetic, and straight: fat protagonists in romantic fiction. *Fat Studies*, 12(2), 233–242.
<https://doi.org/10.1080/21604851.2022.2047337>
- Ménard, A. D., & Cabrera, C. (2011). ‘Whatever the approach, tab B still fits into slot A’: Twenty years of sex scripts in romance novels. *Sexuality and Culture*, 15(3), 240–255.
<https://doi.org/10.1007/s12119-011-9092-3>
- Olsson, A., & Phelps, E. A. (2007). Social learning of fear. *Nature Neuroscience*, 10(9), 1095–1102. <https://doi.org/10.1038/nn1968>
- Pagan, A. (2019, February 15). *A brief history of the romance novel*. The New York Public Library. <https://www.nypl.org/blog/2019/02/15/brief-history-romance-novel-recommendations>
- Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientations: A more differentiated look at sociosexuality and its effects on courtship and romantic relationships. *Journal of Personality and Social Psychology*, 95(5), 1113–1135.
<https://doi.org/10.1037/0022-3514.95.5.1113>
- Peter, J., & Valkenburg, P. M. (2010). Processes underlying the effects of adolescents’ use of sexually explicit internet material: the role of perceived realism. *Communication Research*, 37(3), 375–399. <https://doi.org/10.1177/0093650210362464>
- Raposo, S., Rosen, N. O., Corsini-Munt, S., Maxwell, J. A., & Muise, A. (2021). Navigating women’s low desire: Sexual growth and destiny Beliefs and Couples’ Well-Being. *The Journal of Sex Research*, 58(9), 1118–1129.
<https://doi.org/10.1080/00224499.2021.18841>

- Rios, J. W., Smith, C. V., & Locke, T. N. (2024). Is seeing believing? Hallmark movie viewership and relationship beliefs. *Psychological Reports*.
<https://doi.org/10.1177/00332941241256630>
- Regis, P. (2003). *A Natural History of the Romance Novel*. University of Pennsylvania Press.
<http://www.jstor.org/stable/j.ctt3fhkc1>
- Rubin, A. M. (1983). Television uses and gratifications: The interactions of viewing patterns and motivations. *Journal of Broadcasting*, 27(1), 37–51.
<https://doi.org/10.1080/08838158309386471>
- Sakaluk, J. K., Kim, J., Campbell, E., Baxter, A., & Impett, E. A. (2019). Self-esteem and sexual health: A multilevel meta-analytic review. *Health Psychology Review*, 14(2), 269–293.
<https://doi.org/10.1080/17437199.2019.1625281>
- Seabrook, R. C., Ward, L. M., Reed, L., Manago, A., Giaccardi, S., & Lippman, J. R. (2016). Our scripted sexuality. *Emerging Adulthood*, 4(5), 338–355.
<https://doi.org/10.1177/2167696815623686>
- shEqual. (2023, May 25). *Sexualisation & objectification of women in media*.
<https://shequal.com.au/sexualisation-objectification/>
- Slater, M. D., Johnson, B. K., Cohen, J., Comello, M. L. G., & Ewoldsen, D. R. (2014). Temporarily expanding the boundaries of the self: Motivations for entering the story world and implications for narrative effects. *Journal of Communication*, 64(3), 439–455.
<https://doi.org/10.1111/jcom.12100>
- Snell, W. E., & Papini, D. R. (1989). The sexuality scale: An instrument to measure sexual-esteem, sexual-depression, and sexual-preoccupation. *The Journal of Sex Research*, 26(2), 256–263. <https://doi.org/10.1080/00224498909551510>.

- Stanovich, K. E., & West, R. F. (1989). Exposure to print and orthographic processing. *Reading Research Quarterly*, 24(4), 402. <https://doi.org/10.2307/747605>
- Stern, S. C., Robbins, B., Black, J. E., & Barnes, J. L. (2018b). What you read and what you believe: Genre exposure and beliefs about relationships. *Psychology of Aesthetics Creativity and the Arts*, 13(4), 450–461. <https://doi.org/10.1037/aca0000189>
- Taylor, M., & Carlson, S. M. (1997). The relation between individual differences in fantasy and theory of mind. *Child Development*, 68(3), 436–455. <https://doi.org/10.1111/j.1467-8624.1997.tb01950.x>
- Thrasher, S. (2009, January 27). *Ask the editor - sex scenes in a romance novel*. The Blood-Red. <https://bloodredpencil.blogspot.com/2009/01/ask-editor-sex-scenes-in-romance-novel.html>
- Tomkins, S. S. (1962). Affect imagery consciousness. *The British Journal of Psychiatry*, 1. <https://doi.org/10.1192/bjp.109.463.837>
- Tomkins, S. S., & Smith, B. (1995). *Exploring affect: The selected writings of Silvan S Tomkins*. <http://dx.doi.org/10.1017/cbo9780511663994>
- Torre, A. (2024, May 7). *Is your romance novel too steamy?* Authors A.I. <https://authors.ai/is-your-romance-novel-too-steamy>
- Uppot, A., Raposo, S., Rosen, N. O., Corsini-Munt, S., Balzarini, R., & Muise, A. (2023). Responsiveness in the face of sexual challenges: The role of sexual growth and destiny beliefs. *The Journal of Sex Research*, 61(2), 228–245. <https://doi.org/10.1080/00224499.2023.2175194>

- Ward, L. M. (2002). Does television exposure affect emerging adults' attitudes and assumptions about sexual relationships? Correlational and experimental confirmation. *Journal of Youth and Adolescence*, 31(1), 1–15. <https://doi.org/10.1023/a:1014068031532>
- West, R. F., Stanovich, K. E., & Mitchell, H. R. (1993). Reading in the real world and its correlates. *Reading Research Quarterly*, 28(1), 34. <https://doi.org/10.2307/747815>
- Wu, H. (2006). Gender, romance novels and plastic sexuality in the United States: A focus on female college students. *Journal of International Women's Studies*, 8(1), 125–134.

Appendix A

Author Recognition Test Names

- | | | |
|-----------------------|----------------------------|------------------------|
| 1. Talia Hibbert | 25. Beth O'Leary | 49. Sally Thorne |
| 2. Ana Huang | 26. Dahlia Whitmore* | 50. Rosie Danan |
| 3. Julia Quinn | 27. Aubrey Haven* | 51. Lynn Painter |
| 4. Nicholas Sparks | 28. Emma Lord | 52. Caity Claire* |
| 5. Laurel Hope* | 29. Rina Kent | 53. Lydia Winslow* |
| 6. Elle Kennedy | 30. Krista Ritchie | 54. Shantel Tessier |
| 7. Ali Hazelwood | 31. Sarah J. Maas | 55. Sophie Cousens |
| 8. Emily Perring* | 32. Lily Carter* | 56. Lyssa Kay Adams |
| 9. Quinn Mercer* | 33. Penelope Stroud* | 57. Elise Fallow* |
| 10. Mhairi McFarlane | 34. Josie Silver | 58. Danielle L. Jensen |
| 11. Carley Fortune | 35. Jasmine Guillory | 59. Isadora Vale* |
| 12. Olivia Grace* | 36. Kate Clayborn | 60. Alyssa Clara* |
| 13. Selene Rivers* | 37. H.D Carlton | 61. Evangeline Frost* |
| 14. Tessa Bailey | 38. Tillie Cole | 62. Sarah Adams |
| 15. Hannah Grace | 39. Tammara Webber | 63. Sylvia Day |
| 16. Leslie McClennin* | 40. Lila Northwood* | 64. Elena Armas |
| 17. Abby Jimenez | 41. Mira Lockwood* | 65. Lauren Layne |
| 18. Emily Henry | 42. Jennifer L. Armentrout | 66. Tia Williams |
| 19. Jennifer Hartman | 43. Jen DeLuca | 67. Helen Hoang |
| 20. Sable Hartman* | 44. Mariana Zapata | 68. Colleen Hoover |
| 21. Zara Kingsley* | 45. Sarah Hogle | 69. E.L. James |
| 22. Christina Lauren | 46. Jojo Moyes | 70. Kiera Cass |
| 23. Evie Dunmore | 47. Casey McQuiston | |
| 24. Kristen Callihan | 48. Kandi Steiner | |

Note. Names marked with a * are foil names. Names were presented in randomized order.

Appendix B
List of Subgenres Presented in Study 1

1. Romantasy (fantasy romance)
2. Dark romance
3. Paranormal romance
4. Historical romance
5. Erotic romance
6. Regency romance
7. Sci-fi romance
8. Romantic mystery
9. Western romance
10. Young adult romance
11. Religious romance
12. Contemporary romance
13. LGBTQ+ romance
14. M/M LGBTQ+ romance
15. F/F LGBTQ+ romance
16. Gothic romance
17. Romantic suspense
18. Closed door romance

Appendix C

Study 1 Dummy Coded Moderation Analyses

Regression analyses were conducted to determine if an individual's sexual experience or current sexual relationship status moderated the associations between the reading frequency, years of reading, and the key dependent variables. Reading exposure variables were dummy-coded, with effects interpreted relative to the omitted reference category (never read a romance novel) and moderators were coded (0 = no experience or no sexual relationship, 1 = some experience or current sexual relationship). Tables C1–C8 report unstandardized regression coefficients and 95% confidence intervals. Most interaction estimates were small and accompanied by wide confidence intervals. Models used listwise deletion, and sample sizes therefore vary across outcomes.

Table C1

Reading Frequency × Sexual Experience Interactions

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Preoccupation b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	3.06 (2.59, 3.53)	1.96 (1.49, 2.43)	2.30 (1.85, 2.75)	4.88 (4.54, 5.23)	3.18 (2.64, 3.72)
Partnered Experience (PE)	.85 (.28, 1.42)	.61 (.04, 1.19)	-.52 (-1.07, .03)	.79 (.37, 1.21)	.77 (.11, 1.42)
Once a Year × PE	-.04 (-.65, .57)	-.21 (-.82, .40)	.11 (-.47, .70)	-.48 (-.93, -.03)	-.89 (-1.59, -.19)
Every Two Months × PE	-.13 (-.79, .53)	-.21 (-.87, .45)	.21 (-.43, .84)	-.88 (-1.37, -.40)	-.34 (-1.10, .41)
Every Month × PE	.02 (-.74, .77)	-.02 (-.77, .73)	-.05 (-.78, .67)	-.51 (-1.06, .04)	-.99 (-1.86, -.13)
2–3x per Month × PE	-.35 (-1.08, .39)	-.30 (-1.03, .44)	.04 (-.67, .74)	-.41 (-.95, .13)	-.84 (-1.68, .01)
Once a Week × PE	-.42 (-1.31, .46)	-.08 (-.96, .81)	.22 (-.63, 1.08)	-.79 (-1.44, -.14)	-.39 (-1.41, .63)
1–3 Days/Week × PE	-.42 (-1.27, .44)	-.25 (-1.11, .61)	.18 (-.65, 1.00)	-.62 (-1.25, .01)	-.83 (-1.82, .15)
Everyday × PE	.80 (-.03, 1.63)	-.32 (-1.15, .51)	.02 (-.77, .82)	-.51 (-1.12, .10)	-.72 (-1.67, .23)

N = 568

Note. Intercept term represents those who have no partnered sexual experience who have never read romance. Reading frequency was dummy-coded, and all interaction terms reflect reading frequency × sexual relationship status.

Table C2*Years of Reading × Sexual Experience Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Preoccupation b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	2.89 (2.55, 3.24)	2.09 (1.75, 2.43)	2.32 (1.99, 2.64)	5.23 (4.98, 5.48)	3.32 (2.93, 3.71)
Partnered Experience (PE)	.72 (.29, 1.14)	.61 (.19, 1.03)	-.32 (-.73, .08)	.34 (.03, .65)	.19 (-.29, .68)
≤6 Months × PE	-.19 (-1.28, .90)	-.06 (-1.13, 1.01)	.12 (-.92, 1.15)	-.37 (-1.16, .43)	.22 (-1.02, 1.45)
1 Year × PE	.08 (-.54, .71)	-.18 (-.80, .44)	-.06 (-.65, .53)	-.13 (-.59, .33)	-.25 (-.96, .46)
2 Years × PE	-.11 (-.76, .54)	-.07 (-.71, .57)	-.05 (-.66, .57)	.08 (-.40, .55)	-.33 (-1.07, .41)
3 Years × PE	.58 (-.04, 1.21)	-.27 (-.88, .34)	.05 (-.54, .64)	-.02 (-.48, .43)	.04 (-.66, .75)
4 Years × PE	-.03 (-.61, .56)	-.59 (-1.17, -.02)	.03 (-.53, .58)	.04 (-.39, .47)	-.40 (-1.06, .27)
5 Years × PE	.23 (-.37, .84)	-.06 (-.65, .54)	-.44 (-1.01, .13)	-.38 (-.82, .06)	-.01 (-.69, .68)
≥5 Years × PE	.12 (-.37, .61)	-.25 (-.73, .23)	-.23 (-.70, .23)	-.15 (-.50, .21)	-.06 (-.61, .50)

N = 568

Note. Intercept term represents those who have no partnered sexual experience and have never read a romance novel. Years of reading was dummy-coded, and all interaction terms reflect years of reading × sexual relationship status.

Table C3*First Time Reading Age × Sexual Experience Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Preoccupation b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	2.84 (2.70, 2.98)	2.36 (2.22, 2.50)	2.31 (2.18, 2.45)	5.37 (5.26, 5.47)	3.39 (3.23, 3.54)
Partnered Experience (PE)	.74 (.56, .92)	.38 (.20, .56)	-.32 (-.50, -.15)	.28 (.15, .42)	.15 (-.05, .36)
Author Recognition × PE	.02 (-.00, .04)	.00 (-.02, .02)	-.02 (-.04, -.00)	-.01 (-.02, .01)	-.01 (-.04, .01)

N = 505

Note. Reading age was adjusted (100 – reading age) so higher values represent greater years reading.

Intercept terms represent those who started reading at age 11 who are not currently in a sexual relationship.

Interaction terms reflect first time author recognition × sexual relationship status.

Table C4*Recognition Score × Sexual Experience Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Preoccupation b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	3.61 (−0.40, 7.62)	.58 (−3.28, 4.45)	−.13 (−3.97, 3.71)	4.03 (1.21, 6.86)	6.40 (1.91, 10.89)
Partnered Experience (PE)	2.52 (−2.43, 7.47)	2.58 (−2.19, 7.35)	2.81 (−1.93, 7.54)	1.51 (−1.97, 5.00)	.56 (−4.98, 6.10)
Reading Age × PE	−.02 (−.08, .04)	−.03 (−.08, .03)	−.04 (−.09, .02)	−.01 (−.06, .03)	−.01 (−.07, .06)

N = 568

Note. Intercept term represents those who are not in a current sexual relationship and recognized no names from the author list. Author recognition reflects the number of correctly identified authors after subtracting any selected foil authors. All interaction terms reflect first time recognition score × sexual relationship status.

Table C5*Reading Frequency × Sexual Relationship Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Pre-Occupation b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	3.10 (2.71, 3.49)	1.92 (1.53, 2.32)	2.23 (1.87, 2.58)	5.04 (4.75, 5.33)	3.50 (3.04, 3.95)
Sexual Relationship (SR)	.99 (.46, 1.52)	.83 (.30, 1.37)	−.51 (−.99, −.03)	.70 (.31, 1.09)	.38 (−.24, .99)
Once a Year × SR	−.16 (−.73, .40)	−.45 (−1.02, .12)	−.14 (−.66, .37)	−.40 (−.82, .02)	−.57 (−1.23, .09)
Every Two Months × SR	−.020 (−.64, .60)	−.35 (−.98, .28)	−.29 (−.86, .28)	−.53 (−.99, −.06)	−.13 (−.85, .60)
Every Month × SR	.23 (−.49, .95)	−.22 (−.95, .51)	−.26 (−.92, .40)	−.35 (−.89, .19)	−.60 (−1.44, .25)
2-3 Times per Month × SR	−.39 (−1.13, .35)	−.58 (−1.34, .18)	−.46 (−1.14, .23)	−.06 (−.61, .50)	−.95 (−1.82, −.08)
Once a Week × SR	.14 (−.88, 1.17)	.17 (−.87, 1.21)	−.12 (−1.05, .82)	−.70 (−1.46, .07)	−.49 (−1.69, .71)
1-3 Days per Week × SR	−.66 (−1.54, 0.22)	−.63 (−1.52, .26)	−.45 (−1.26, .36)	−.50 (−1.15, .16)	−1.01 (−2.04, .02)
Everyday × SR	.42 (−.52, 1.36)	−.72 (−1.67, .23)	−.27 (−1.13, .59)	−.45 (−1.15, .24)	−.76 (−1.85, .34)

N = 568

Note. Intercept term represents those who are not in a sexual relationship who have never read romance. Reading frequency was dummy-coded, and all interaction terms reflect reading frequency × sexual relationship status. SR = sexual relationship.

Table C6*Years of Reading × Sexual Relationship Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Pre- Occupation b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	2.95 (2.68, 3.22)	2.34 (2.07, 2.62)	2.32 (2.08, 2.57)	5.31 (5.10, 5.51)	3.49 (3.17, 3.81)
Sexual Relationship (SR)	.86 (.47, 1.26)	.30 (-.10, .71)	-.46 (-.82, -.10)	.31 (.02, .61)	-.10 (-.56, .36)
≤6 Months × SR	.56 (-.59, 1.72)	.23 (-.95, 1.40)	-.47 (-1.52, .58)	-.03 (-.89, .83)	.08 (-1.28, 1.43)
1 Year × SR	-.12 (-.71, .47)	.07 (-.53, .66)	-.35 (-.88, .19)	.12 (-.32, .56)	-.12 (-.81, .56)
2 Years × SR	-.02 (-.70, .66)	.31 (-.39, 1.00)	-.44 (-1.06, .17)	.15 (-.36, .66)	-.27 (-1.07, .53)
3 Years × SR	.55 (-.05, 1.15)	.02 (-.59, .63)	-.25 (-.80, .29)	-.19 (-.64, .25)	.31 (-.39, 1.01)
4 Years × SR	-.11 (-.68, .45)	-.14 (-.72, .43)	-.09 (-.61, .42)	.00 (-.42, .43)	-.07 (-.73, .59)
5 Years × SR	.14 (-.45, .73)	.16 (-.43, .76)	-.60 (-1.13, -.07)	-.03 (-.47, .41)	-.12 (-.81, .57)
≥5 Years × SR	.05 (-.40, .51)	.17 (-.29, .63)	-.32 (-.73, .09)	-.03 (-.37, .31)	.07 (-.46, .60)

N = 568

Note. Intercept term represents those who are not in a sexual relationship and have never read romance
Years of reading was dummy-coded, and all interaction terms reflect years of reading × sexual relationship
status. SR = sexual relationship.

Table C7*First Time Reading Age × Sexual Relationship Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Pre- Occupation b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	5.75 (3.14, 8.36)	3.20 (0.61, 5.79)	1.70 (-0.69, 4.08)	4.69 (2.82, 6.57)	6.46 (3.46, 9.46)
Sexual Relationship (SR)	.69 (-4.69, 6.07)	-2.77 (-8.12, 2.58)	-2.13 (-7.05, 2.80)	2.26 (-1.61, 6.13)	1.05 (-5.15, 7.25)
Reading Age × SR	.00 (-.06, .07)	.04 (-.03, .10)	.02 (-.04, .07)	-.02 (-.07, .02)	-.01 (-.09, .06)

N = 505

Note. Reading age was adjusted (100 – reading age) so higher values represent greater years reading.
Intercept terms represent those who started reading at age 11 who are not currently in a sexual relationship.
Interaction terms reflect first time reading age × sexual relationship status. SR = sexual relationship.

Table C8*Recognition Score × Sexual Relationship Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Pre- Occupation b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	2.90 (2.78, 3.01)	2.42 (2.31, 2.54)	2.40 (2.30, 2.51)	5.40 (5.32, 5.49)	3.46 (3.33, 3.59)
Sexual Relationship (SR)	.86 (.68, 1.03)	.37 (.19, .54)	-.64 (-.80, -.48)	.31 (.18, .44)	.04 (-.16, .24)
Author Recognition × SR	.01 (-.01, .03)	.01 (-.01, .03)	-.02 (-.04, -.00)	-.00 (-.01, .01)	-.02 (-.05, -.00)

Note. Intercept term represents those who are not in a current sexual relationship and recognized no names from the author list. Author recognition reflects the number of correctly identified authors after subtracting any selected foil authors. All interaction terms reflect first time recognition score × sexual relationship status.

Appendix D

Study 2 Dummy Coded Moderation Analyses

Regression analyses were conducted to determine if perceived realism, perceived utility, and emotional insight motivation moderated the associations between the reading frequency, years of reading, and the key dependent variables. Reading exposure variables were dummy-coded, with effects interpreted relative to the omitted reference category (never read a romance novel). Tables D1–D6 report unstandardized regression coefficients and 95% confidence intervals. Models used listwise deletion, and sample sizes therefore vary across outcomes.

Similar to the results using reading frequency and years of reading as continuous predictors, there is relatively little evidence of moderation. Perceived realism does seem to moderate the effect of reading frequency on sexual self-esteem (See Table D1). Additionally, perceived realism also moderates the associations between years of reading and sexual growth and destiny beliefs. However, these moderations have small estimates and wide confidence intervals.

Table D1

Reading Frequency × Perceived Realism Interactions

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	3.03 (3.21, 3.39)	2.37 (2.29, 2.55)	5.44 (5.35, 5.52)	3.66 (3.55, 3.77)
Perceived Realism (PR)	-.02 (-.10, .06)	.00 (-.07, .07)	-.01 (-.09, .08)	.17 (.08, .27)
Every Two Months × PR	.05 (-.10, .19)	.02 (-.11, .16)	-.06 (-.20, .08)	-.01 (-.18, .17)
Every Month × PR	.14 (-.02, .30)	-.02 (-.17, .13)	-.03 (-.18, .13)	.04 (-.16, .23)
2–3× per Month × PR	-.15 (-.39, .09)	.23 (.00, .46)	-.10 (-.33, .14)	.01 (-.28, .31)
Once a Week × PR	.28 (.01, .55)	-.03 (-.28, .23)	-.05 (-.31, .22)	.27 (-.06, .60)
1–3 Days/Week × PR	-.02 (-.31, .25)	.05 (-.22, .31)	.03 (-.25, .31)	-.25 (-.59, .10)
Everyday × PR	.41 (.12, .71)	-.08 (-.36, .20)	-.01 (-.30, .29)	.03 (-.34, .39)
Adjusted R ²	.04	.01	.00	.06

N = 559

Note. The intercept term represents participants who had a mean perceived realism score and read once a year or less often. Reading frequency was dummy-coded, and all interaction terms reflect reading frequency × perceived realism of romance novels.

Table D2*Years of Reading × Perceived Realism Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	3.29 (2.88, 3.71)	2.31 (1.93, 2.69)	4.98 (4.59, 5.37)	3.87 (3.38, 4.37)
Perceived Realism (PR)	-.02 (-.42, .37)	.16 (-.21, .52)	.43 (.06, .80)	.91 (.45, 1.38)
6 Months × PR	.14 (-.37, .65)	-.52 (-.99, -.06)	-.27 (-.74, .20)	-.98 (-1.58, -.38)
1 Year × PR	.00 (-.45, .45)	-.04 (-.46, .37)	-.62 (-1.05, -.20)	-.65 (-1.18, -.11)
2 Years × PR	-.05 (-.49, .38)	-.11 (-.51, .29)	-.44 (-.85, -.04)	-.73 (-1.24, -.21)
3 Years × PR	-.08 (-.51, .34)	-.05 (-.44, .34)	-.52 (-.92, -.12)	-.63 (-1.13, -.13)
4 Years × PR	.02 (-.41, .46)	-.07 (-.47, .33)	-.40 (-.81, .01)	-.93 (-1.45, -.41)
5 Years × PR	.03 (-.40, .46)	-.14 (-.54, .26)	-.46 (-.86, -.05)	-.69 (-1.20, -.17)
5+ Years × PR	.11 (-.29, .52)	-.17 (-.54, .20)	-.47 (-.85, -.10)	-.78 (-1.26, -.30)
Adjusted R ²	.00	.00	.06	.07

N = 557

Note. Years of reading was dummy-coded. Interaction terms reflect years of reading × perceived realism. The intercept represents participants who have been reading romance for three months who had a mean perceived realism score.

Table D3*Reading Frequency × Emotional Insight Motivation Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	3.29 (3.20, 3.39)	2.40 (2.32, 2.49)	5.49 (5.40, 5.58)	3.74 (3.63, 3.85)
Emotional Insight (EI)	-.03 (-.09, .04)	.08 (.02, .14)	.13 (.06, .19)	.22 (.14, .30)
Every Two Months × EI	-.03 (-.16, .10)	.10 (-.01, .22)	.00 (-.12, .12)	-.13 (-.28, .02)
Every Month × EI	.09 (-.06, .25)	-.03 (-.17, .11)	.00 (-.15, .15)	-.11 (-.29, .08)
2–3× per Month × EI	-.07 (-.25, .10)	.11 (-.05, .27)	-.04 (-.21, .12)	-.05 (-.27, .16)
Once a Week × EI	.19 (-.05, .43)	-.02 (-.24, .20)	-.15 (-.38, .09)	.15 (-.13, .44)
1–3 Days/Week × EI	-.27 (-.60, .07)	.08 (-.22, .39)	.01 (-.31, .33)	.16 (-.24, .57)
Everyday × EI	-.15 (-.47, .17)	.08 (-.21, .37)	-.27 (-.57, .03)	.29 (-.09, .67)
Adjusted R ²	.02	.05	.04	.09

N = 559

Note. The intercept term represents participants with an emotional insight score of zero who read once a year or less often. Interaction terms reflect reading frequency × emotional insight. The intercept represents participants in the reference frequency category who had a mean emotional insight score.

Table D4*Years of Reading × Emotional Insight Motivation Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	3.54 (2.97, 4.12)	2.34 (1.83, 2.85)	5.09 (4.56, 5.62)	4.23 (3.55, 4.90)
Emotional Insight (EI)	.17 (−.12, .45)	.05 (−.20, .31)	.16 (−.10, .43)	.42 (.09, .76)
6 Months × EI	−.15 (−.64, .35)	−.22 (−.66, .23)	.15 (−.30, .61)	−.54 (−1.12, .04)
1 Year × EI	−.19 (−.52, .14)	.09 (−.20, .39)	−.07 (−.37, .23)	−.22 (−.61, .16)
2 Years × EI	−.20 (−.53, .13)	.05 (−.24, .35)	−.06 (−.37, .24)	−.13 (−.52, .25)
3 Years × EI	−.29 (−.61, .03)	.26 (−.03, .54)	−.20 (−.49, .10)	−.29 (−.66, .09)
4 Years × EI	−.24 (−.56, .09)	−.03 (−.32, .26)	−.10 (−.40, .20)	−.38 (−.77, −.00)
5 Years × EI	−.21 (−.52, .11)	−.04 (−.32, .25)	−.07 (−.36, .22)	−.12 (−.49, .25)
5+ Years × EI	−.22 (−.52, .07)	.08 (−.19, .34)	−.03 (−.30, .24)	−.24 (−.58, .11)
Adjusted R ²	.00	.06	.08	.09

N = 557

Note. Years of reading was dummy-coded. Interaction terms reflect years of reading × emotional insight. The intercept represents participants who had been reading romance for three months and had a mean emotional insight score.

Table D5*Reading Frequency × Perceived Utility Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	3.29 (3.20, 3.38)	2.38 (2.30, 2.47)	5.46 (5.38, 5.55)	3.67 (3.56, 3.78)
Utility	−.09 (−.16, −.02)	.05 (−.01, .11)	.13 (.06, .19)	.08 (−.00, .17)
Every 2 Months × Utility	.04 (−.09, .16)	.07 (−.05, .19)	−.03 (−.15, .09)	−.04 (−.19, .12)
Every Month × Utility	.16 (.03, .29)	−.05 (−.17, .07)	−.14 (−.27, −.01)	.12 (−.04, .28)
2–3 Times/Month × Utility	−.09 (−.31, .12)	.16 (−.05, .36)	−.07 (−.28, .14)	.07 (−.20, .34)
Once/Week × Utility	.35 (.02, .68)	.04 (−.27, .35)	−.12 (−.44, .21)	.44 (.02, .85)
1–3 Days/Week × Utility	−.24 (−.49, .01)	.26 (.03, .49)	−.11 (−.35, .13)	−.08 (−.39, .23)
Everyday × Utility	.37 (.07, .68)	−.35 (−.63, −.07)	−.03 (−.33, .26)	−.12 (−.49, .26)
Adjusted R ²	.05	.04	.03	.04

N = 559

Note. Reading frequency was dummy-coded. Interaction terms represent frequency × utility effects. The intercept reflects participants who never read at mean utility.

Table D6*Years of Reading × Perceived Utility Interactions*

Predictor	Sexual Self-Esteem b (95% CI)	Sexual Depression b (95% CI)	Sexual Growth b (95% CI)	Sexual Destiny b (95% CI)
Intercept	3.20 (2.76, 3.64)	2.32 (1.92, 2.73)	5.20 (4.79, 5.61)	3.57 (3.03, 4.10)
Utility	-.14 (-.41, .12)	.08 (-.16, .32)	.47 (.23, .71)	-.07 (-.38, .25)
6 Months × Utility	.24 (-.19, .66)	-.36 (-.75, .03)	-.16 (-.55, .24)	-.11 (-.63, .41)
1 Year × Utility	.04 (-.28, .35)	.00 (-.28, .29)	-.44 (-.73, -.15)	.11 (-.27, .49)
2 Years × Utility	-.06 (-.38, .25)	.10 (-.19, .39)	-.43 (-.72, -.13)	.28 (-.10, .66)
3 Years × Utility	.12 (-.17, .41)	-.00 (-.27, .26)	-.44 (-.71, -.17)	.18 (-.17, .53)
4 Years × Utility	.13 (-.18, .44)	-.17 (-.46, .11)	-.35 (-.64, -.06)	-.14 (-.52, .23)
5 Years × Utility	.00 (-.28, .29)	.02 (-.24, .29)	-.35 (-.61, -.08)	.22 (-.13, .57)
5+ Years × Utility	.11 (-.16, .38)	.01 (-.24, .26)	-.41 (-.67, -.16)	.22 (-.11, .55)
Adjusted R ²	.01	.02	.08	.05

N = 559

Note. Years of reading was dummy-coded. Interaction terms represent years of reading × utility effects. The intercept reflects participants who have been reading romance for three months or less at mean utility.