The Role of Discrepancies Between Online Pornography Created Ideals and Actual Sexual Relationships in Heterosexual Men’s Sexual Satisfaction and Well-Being

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Abstract
Contemporary sexually explicit Internet materials (SEIM) are commonly unrealistic. Following from self-discrepancy theory, we proposed that discrepancies between ideal and actual sexual experiences depicted in SEIM (ideal-actual sexual discrepancy; IASD) may be important in understanding the association between SEIM consumption, sexual satisfaction, and general well-being for heterosexual men. Participants from a general online community (n = 195) were assessed via an online survey. Path analysis showed that the relationships between SEIM consumption and outcomes were not homogenous across age cohorts. While SEIM consumption and IASD contributed to sexual dissatisfaction for men in their 20s, only IASD had a direct relationship for men in their 30s. Higher IASD accounted for lower sexual satisfaction for men across age cohorts, suggesting that IASD may be a more stable factor as compared to quantity of consumption alone for explaining the negative association between SEIM consumption, sexual satisfaction, and all measured aspects of well-being.

Keywords
pornography, sexually explicit Internet material, ideal-actual sexual discrepancy, men, age differences, sexual satisfaction

Sexually explicit Internet material (SEIM), also known as online pornography, has been widely consumed by individuals for purposes including solitary sexual pleasure (Morgan, 2011; Brown, Durtschi, et al., 2017), attempts to enhance sexual communication (Kohut et al., 2017), and to assess the quality of their sex lives (Cooper et al., 1999; Wright et al., 2018). The rise in popularity of SEIM has prompted researchers to examine its impact on sexual and relational well-being (Ferron et al., 2017; Szymanski & Stewart-Richardson, 2014; Willoughby et al., 2016). Scholars have become increasingly interested in understanding why and how such consumption influences users (Stulhofer et al., 2007; Wright, Sun, et al., 2019). Despite increasingly nuanced discussions of SEIM consumption and ways of studying impacts, this heterogeneous body of research has produced conflicting findings. While SEIM consumption has been shown in some studies to facilitate better sexual knowledge and communication (Hald & Malamuth, 2008; Kohut et al., 2017), its potential detrimental effect on sexual and relational quality (Willoughby et al., 2020) and psychological well-being (Walton, 2019) puts the educational benefit of SEIM in question.

To clarify these inconsistent findings, the present study examined the discrepancies between ideal sexual attitudes, behaviors, and expectations of partners’ sexual appearance commonly depicted in contemporary SEIM and those actually experienced. We explored the relationship between SEIM consumption and heterosexual men’s sexual satisfaction and general well-being focusing on the function of discrepancies in explaining these relationships.

The Relationship Between SEIM Consumption, Sexual Satisfaction, and General Well-Being

The Internet has become the most popular platform for viewing pornography. It transcends the constraints of time, space, and finances, drastically increasing users’ convenience and privacy (Cooper et al., 1999). Beyond increasing the rate of consumption, SEIM appears to be more influential in

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Reducing relationship and sexual satisfaction compared to other traditional formats of pornography such as magazines and DVDs (Lo & Wei, 2005; Wright et al., 2017).

Researchers have examined the negative effects of pornography on sexual satisfaction since the late 80s (Zillmann & Bryant, 1988). Recent studies continue to illustrate the association between higher consumption and lower sexual satisfaction (Morgan, 2011; Peter & Valkenburg, 2009; Sun et al., 2016). Wright et al. (2019) found that perceiving pornography as a key source of sexual information may play a role in decreased sexual satisfaction for both male and female users. Štulhofer, Landripet, et al. (2007) and Štulhofer, Buško, et al. (2010) posit that reduced sexual satisfaction is the result of a decrease in relational intimacy, which is negatively associated with SEIM consumption (Bergner & Bridges, 2002).

Beyond the sphere of sexual satisfaction, the negative outcomes related to pornography consumption have been extended to general well-being such as general self-esteem (Kor et al., 2014) and general life satisfaction (Janghorbani & Lam, 2003). Although not as well-documented as studies of sexual satisfaction, higher consumption of pornography was associated with more negative affect (e.g., depression) across different research designs and samples (Philaretou et al., 2005; Tylka, 2015; Wright, 2012; Ybarra & Mitchell, 2005). Moreover, relationship problems such as break-up and divorce are correlated with higher SEIM consumption (Perry & Davis, 2017; Perry & Schleifer, 2018). These are significant life events beyond the intimate aspect, suggesting that the experience of negative affect and lower general life satisfaction could in part be related to SEIM consumption. These findings suggest that the associations between SEIM consumption and general well-being: that is, general self-esteem, general life satisfaction, and negative affect may be due, in part, to the potential impact of SEIM consumption on sexual satisfaction.

**A Closer Look: Nuancing the Association Between SEIM Consumption and Sexual Satisfaction**

Despite reports of the negative association between SEIM consumption and sexual satisfaction, a more complex pattern is shown in a meta-analysis including 50 studies of pornography and sexual satisfaction from 1978 to 2016 (Wright et al., 2017). Studies of intrapersonal sexual satisfaction (i.e., solitary sexual satisfaction) have yielded inconsistent findings but the negative association between pornography consumption and interpersonal sexual satisfaction (i.e., sexual satisfaction in partnered contexts) was congruent across experimental, cross-sectional, and longitudinal-survey studies. Miller, McBain, et al. (2019) concluded that while higher SEIM consumption was associated with more solitary masturbation among heterosexual men, a greater preference for sex similar to what pornography portrays was also reported.

Importantly, both factors contributed to a decrease in both sexual and relational satisfaction. This suggests that SEIM consumption can serve multiple functions for heterosexual men and influences their intra- and inter-personal sexual experiences differently.

Male, but not female, pornography users have reported decreases in interpersonal sexual satisfaction (Wright et al., 2017). This is particularly true of men’s satisfaction with their intimate partners (Hald & Malamuth, 2008) and may extend to their perception of general well-being in men for whom satisfactory interpersonal sexual experiences are important (Sánchez-Fuentes et al., 2014). Thus, general self-esteem, general life satisfaction, and negative affect may be influenced by the impact of SEIM consumption on sexual satisfaction. However, empirical findings suggest that a unified conclusion about how SEIM consumption affects sexual satisfaction and general well-being is unlikely unless the context is fully specified.

**Making Sense of Inconsistencies in Research on Pornography Consumption**

There is an increasing concern about the analyses used for drawing conclusions regarding the potential impact of SEIM consumption in this literature. Specifically, common measures of SEIM consumption (i.e., frequency and quantity) are weak and inconsistent predictors of its associations and impacts of actual consumption (Marshall & Miller, 2019; Short et al., 2012; Twohig et al., 2009). Further, researchers have warned that the function of SEIM consumption can change depending on the chosen study context (Lim et al., 2016) and that consumption does not affect all users in the same way (Kohut et al., 2020).

**Intra- or Inter-Personal Context**

SEIM consumption is constructed as a private matter in pornography research. Consequently, the extant literature focuses primarily on SEIM consumption in an individual, intrapersonal context (Willoughby et al., 2020). However, the negative impact of SEIM consumption on sexual satisfaction is typically conceptualized and studied within an interpersonal framework (e.g., preference for having real-life sex similar to pornographic depictions; Miller, McBain, et al., 2019, devaluation of sexual communication with partners; Wright et al., 2017, perceived relational quality with female partners; Muusses et al., 2015) rather than as self-focused sexual satisfaction (i.e., intrapersonal context; Wright et al., 2017).

Therefore, the potential positive (or null) outcomes associated with SEIM consumption may change when the context is expanded from self-focused sexuality to sexual experiences involving intimate partners (Hald & Malamuth,
The Gendered Dynamics of (Male-Pleasure Centric) Contemporary Pornography

Scholars have argued that the negative impact of pornography consumption is rooted in its content and messages about sexual relationships, delivering a highly distorted standard for sexual life. Reflective of men’s generally high consumption of SEIM, pornography has a long history of being targeted toward men (French & Hamilton, 2018). Despite the increasing number of genres (e.g., the “For Women” category; Fritz & Paul, 2017), contemporary SEIM commonly consists of unrealistic sexual attitudes and acts idealizing sex in particular ways for a heterosexual male audience (McKee, 2005; Séguin et al., 2018).

Lamb (2010) argued that contemporary SEIM sets an impossible distance from actual sexual experiences because female performers’ appearances are unrealistic and the sexual attitudes and behaviors toward women depicted by male performers are degrading yet are usually received enthusiastically or at least without protest (Zhou et al., 2019). The gendered dynamic of this impossible distance is ubiquitous, with over 30% of pornographic films depicting violence against women, yet only 3% displaying violent behaviors and attitudes that target men (Klaassen & Peter, 2015). These gendered sexual interactions (i.e., male-pleasure centric themes) depicted in SEIM have manifested in the enjoyment of degrading (to women) sex in real-life heterosexual relationships. Ezzell et al. (2020) showed that compared to female pornography users, male users reported a greater enjoyment and liking of aggressive and degrading sex commonly depicted in contemporary pornography. Further, higher consumption of pornography was associated with higher enjoyment of pornographic sex (i.e., sexual varieties and interactions commonly depicted in contemporary pornography) but only for those in the degrading-genre (Ezzell et al., 2020). This suggests that SEIM consumption has a salient influence on men in particular and facilitates an increased preference for sexual interactions that degrade their real-life female intimate partners. This association between SEIM consumption and gender differences related to enjoying pornographic sex is not surprising considering the depictions in SEIM portray women as always ready and willing to engage in sex, and lack reciprocity, with women providing sexual pleasure to men rather than receiving it from them (Zhou et al., 2019). Depictions of consensual, emotional, and relational intimacy are often omitted yet are typically expected by partners in consensual intimate relationships in real life (Vadas, 2005). Despite its low-quality educational value in terms of healthy sexuality (Taylor, 2018), SEIM continues to be a major outlet for fulfilling sexual fantasy, exploring sexual curiosity, and learning about sex (Böthe et al., 2021; Esplin et al., 2021).

The unrealistic sexual fantasy conveyed in SEIM, therefore, can cause men to judge their real-life sexual experiences with female partners as inferior by comparison (Wright et al., 2019). According to the three-stage sexual script formation, acquisition, activation, application (3AM) model of sexual socialization (Wright, 2011), sexual information acquired through SEIM could become building blocks for sexual script formation that guide users to seek sexual information and practices that are congruent with and fulfill their sexual scripts, desires, and gratifications, which then contribute to the development of sexual (dis)likes. Hence, a shift from positive to negative outcomes related to pornography consumption may occur for men when they try to engage in sex with female intimate partners in ways that are aligned with the sexual attitudes, behaviors, and appearances they have been exposed to in their SEIM consumption. This suggestion is supported by a nation-wide study on pornography consumption, which showed that most (male and female) consumers reported negative sexual experiences involving intimate partners (e.g., having less sex than desired with intimate partners, feeling pressure to perform sex acts depicted in pornography; Albright, 2008). The gendered sexual dynamics saturating SEIM scenes (e.g., a narrowly defined sexuality that encourages and fulfills the significance of male dominance in sex; Brown, Conner, et al., 2017) indeed extends SEIM’s impact in a gendered way. Results of negative sexual outcomes are often targeted at female partners (e.g., being critical about female partners’ bodies and being criticized by male partners; Albright, 2008, feeling pressure to prioritize and satisfy male partners’ pleasure; Tarzia & Tyler, 2020; Willoughby et al., 2020) and from the perspective of male SEIM users (e.g., comparing real-life sex with female partners to preferred pornographic sex during sex; Wright et al., 2017).

These findings may shed light on the negative experiences of SEIM consumption and sexual satisfaction with intimate partners that have been reported among heterosexual men (Wright et al., 2017). The erotic scenarios in SEIM are packaged as normative sexual experiences to be desired by men and expected in real-life heterosexual relationships with women (Kratzer & Aubrey, 2016).

A Possible Path to Understand the Impact of SEIM Consumption: Ideal-Actual Sexual Discrepancy

Past studies found that as SEIM consumption increased men’s preference for pornographic sex also increased
Tyler, 2020). Extensively studied elsewhere (Bridges et al., 2013; Tarzia & Wright et al., 2017). Note that the negativity of the sexual depictions in SEIM than do women show higher receptiveness and endorsement, and less critical for how SEIM consumption shapes and is shaped by male users’ sexual preferences, there is a conceptual leap from having solitary sexual desires that include idealizing and fantasizing about sexual experiences aligned with pornographic sex in general (e.g., habit/script for SEIM consumption) to having those sexual preferences for SEIM viewing and the desire to actually experience idealized pornographic sex with real-life female partners. For example, a man could have a preference for a particular dynamic, sex act, or body type in the materials he views, but think of those fantasies as separate from his relationship and desires with his partner(s) or as the way sex should ideally be and expect them from his sexual partner(s). In Miller, McBain, et al. (2019), heterosexual men with higher pornography consumption expressed both a greater preference for pornographic sex and a greater desire to engage these sexual preferences in real-life partnered sex; however, only the latter explained the negative association between pornography consumption and sexual and relational satisfaction. To capture the potential negative impact of SEIM consumption on sexual satisfaction and general well-being for heterosexual men, it is necessary to disentangle, as much as possible, the preferences for viewing pornographic sex from desiring pornographic sex in real-life, which appears to be the more important dimension. We posited that examining the discrepancy between the preferences for sex depicted in contemporary pornography in one’s own relationship and the actual experience of pornographic sex in real life could shed light on the relationship between SEIM consumption and its negative association with sexual satisfaction. The negative impact of the discrepancy between expected and real experiences has been shown in studies of how hard-to-achieve body image and intimate relationships are portrayed as normative and desirable in the media (Anton et al., 2000; Bessenoff, 2006; Fletcher et al., 1999). Drawing on self-discrepancy theory (Higgins, 1987), negative behavioral and affective experiences could follow from experiencing discrepancies between unrealistic media portrayals (which contribute to an unrealistic expectation of ideal sexual self) and actual lived (sexual) experiences. Similarly, we expected that male SEIM users would experience discrepancies between their actual sexual experiences with female partners and their ideal level of experiences in terms of sexual attitudes, behaviors, and expectations for partners’ sexual appearance, as commonly featured in contemporary SEIM.

We refer to such discrepancies as the ideal-actual sexual discrepancy (IASD) and argue that IASD offers a new way to contextualize the study of sexual preferences for pornographic sex and capture the manifestation of SEIM’s impact on heterosexual relationships. In recent research, an individualized, intrapersonal state of moral incongruence was proposed as a theoretical framework to account for negative experiences associated with pornography consumption (Brand et al., 2019; Grubbs et al., 2019). An alternative framework of intrapersonal state—sexual incongruence (i.e., ideal self vs. perceived self) was suggested by Walton (2019) to explain the impact of pornography consumption on general psychological distress. We propose that IASD experienced in an interpersonal context (i.e., sex with female partners) can explain the impact of SEIM consumption on sexual satisfaction and general well-being for heterosexual men.

**Men in Different Age Cohorts**

Most studies on pornography have been conducted with college students in their late teens and 20s (Goldsmith et al., 2017; Hald et al., 2013; Levin et al., 2012; McCormack & Wignall, 2017; Morgan, 2011; Štulhofer et al., 2010), yielding calls for researchers to increase age (and other types of) diversity in the field. For instance, some SEIM researchers have recruited participants in their 30s (Muusses et al., 2015; Poulser, 2015), however, these studies have not always replicated the results from student samples. Some showed mixed results regarding the negative association between pornography consumption and sexual satisfaction in relationships, for example, when using a combined college and non-student sample with an average age of 30 (Wright, Sun, et al., 2019) or a sample of heterosexual married couples in their mid to late 30s (Brown, Carroll, et al., 2017). This
suggests that the association between SEIM consumption and sexual satisfaction or partnered sexual experiences could be different based on age of the men studied.

To our knowledge, there are no empirical studies of pornography consumption investigating the impact of SEIM on sexual satisfaction or partnered sexual experiences for users at different life stages. The idea for potential age differences is supported by research showing that men in different generations experienced different pornography exposure across their lives (e.g., due to advances in technology, increased convenience, and available privacy; Coopersmith, 1998). Different age cohorts also have been found to have different motivations for and perceptions of the purpose of their SEIM consumption in spite of the similar time spent on viewing (Bôthe et al., 2021; Esplin et al., 2021). As such, knowledge about sexuality and sexual experiences with women could change over time and at different life stages (Wiederman, 2015), alongside changes in exploration and affirmation of sexual scripts through sexual socialization (Wright, 2011).

To account for potential age differences contributing to inconsistent prior results, we used three age cohorts in the present study: younger college students commonly used in SEIM studies (i.e., 18–29 years old), the adult community sample used in SEIM research on intimate relationships (i.e., 30–39 years old), and older adults defined in global research on sexual attitudes and behaviors (i.e., ≥40 years old; Laumann et al., 2006).

### The Current Study

Different contexts and individual factors may influence experiences related to the potential impact of SEIM consumption. In this study, IASD represents the discrepancy between SEIM users’ (ideal) sexual behaviors, attitudes, and appearances that are commonly depicted in contemporary SEIM with sexual partners compared to their actual experiences in their sexual relationships. IASD was conceptualized as a proxy for potential impacts of SEIM consumption and its unique contribution to associations between SEIM consumption and sexual satisfaction in heterosexual men. Given the potential for SEIM consumption to influence aspects of life beyond the sexual domain, the relationship of IASD to general self-esteem, general life satisfaction, and negative affect was also explored.

Although general self-esteem is often studied in pornography research within the scope of intrapersonal experiences (e.g., genital appearance, particularly among male users; Kvalem et al., 2016), the relationship between pornography consumption and conformity with traditional masculine norms sheds light on its potential association with general self-esteem in an interpersonal context and how this relates to IASD. Borgogna et al. (2020) found that a greater endorsement of a power over women norm was associated with various negative outcomes of SEIM consumption (e.g., relationship problems). We argue that IASD may reflect the failure to be able to exercise power over women in the sphere of real-life sexual relationships (Brown, Durtschi, et al., 2017; also see Tarzia and Tyler (2020) for women’s accounts of male dominance and intimate partner violence relating to male partners’ SEIM consumption), and the magnitude of IASD experienced could be a manifestation of the rigid adherence to masculinities. Thus, IASD may account for the relationship between greater SEIM consumption and lowered sexual satisfaction and general self-esteem (Borgogna et al., 2020).

Given the substantial role of sexual satisfaction in both general life satisfaction and negative affect experienced across age groups (Neto & Pinto, 2013), we deliberately recruited heterosexual men from the community across the life span. Informed by self-discrepancy theory, the 3AM, and the empirical literature discussed above, we expected that higher SEIM consumption would be associated with higher IASD (H1) and that this higher discrepancy would be related to lower sexual satisfaction (H2), which in turn would be associated with lower general well-being, including lower general self-esteem, lower general life satisfaction, and higher negative affect (H3). In the test of the role of IASD, we hypothesized that the effect of SEIM consumption on sexual satisfaction would be explained by IASD (H4), and the effect of IASD on general well-being would be explained by sexual satisfaction (H5). We expected that IASD and sexual satisfaction together would explain the relationship between SEIM consumption and general well-being (H6). To address the inconsistent results regarding SEIM consumption and its potential impact on sexual satisfaction in the literature, we then conducted an exploratory analysis to examine the role of age cohort in these relationships but did not predict any specific direction given the exploratory nature of this analysis. See Figure 1 for the hypothesized general model for all age groups.

### Method

#### Participants

Heterosexually active (last 30 days) male SEIM users (N=205) completed an online survey through Amazon Mechanical Turk (MTurk). This platform allowed for recruitment of a community sample with a wide age range. The study protocol was cleared by Ethics Boards at two universities. Participants were aged 18 to 58 years ($M_{\text{age}}=32.44$). The majority self-identified as European-American/White (~72%). A substantial representation of other racial/ethnic identifications were reported, including African-American/Black (~13%), Asian-American/Asian (~9%), Hispanic/Latino (~6%), Middle Eastern (~1%), and Native American/Indigenous (~0.5%). Educational backgrounds varied (High school graduate or equivalent: 14%; College 42.5%; Bachelor’s degree: 39%; Master’s degree: 3%). Most participants were involved in committed relationship(s) in the past (77%) and 91% reported being in a monogamous relationship at the time of study. All men reported using SEIM at least once a week.
The data collection was conducted in two waves; April 2016 and August 2017 ($N_{wave1} = 105$; $N_{wave2} = 100$). Mann-Whitney Tests were used to check for cohort effects on the predictor variable (i.e., SEIM consumption) and all outcome variables (i.e., Ideal-Actual Sexual Discrepancy, Sexual Satisfaction, General Self-Esteem, General Life Satisfaction, and Negative Affect). No significant wave differences were found, $U=4,195–4,652$, $p=.16–.81$. Thus, the two waves were combined and treated as one dataset.

**Measures**

Except for SEIM consumption and demographics, all measures were rescaled from a 5-point to a 7-point scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). This modification ensured the calculated composites of psychological measures across variables were comparable in magnitude without affecting data characteristics compared to the original scaling (Dawes, 2008). Administrative instructions include a timeframe (i.e., in the past week) to correspond to the timeline of reported SEIM consumption. Four attention checks were dispersed throughout the survey (e.g., indicate strongly agree for this survey item) and participants with three or more errors were excluded from analyses ($n=10$).

**SEIM consumption.** Two questions were adopted from Peter and Valkenburg (2010) and modified to capture SEIM consumption on a weekly basis (Kraus & Rosenberg, 2014), a common assessment window for heterosexual men (Bőthe et al., 2021; Sharkey et al., 2020). They were, "How many days do you typically view sexually explicit internet material (SEIM) or internet pornography weekly (days per week, either streamed or downloaded)?” Responses ranged from 1 to 7 days ($Mdn_{day} = 3$) and “On a day when viewing the downloaded or streamed SEIM (or internet pornography), how much time do you normally spend on it?” Responses were recorded in hours (ranging from 0 to 24; $Mdn_{hour} = 0$) and minutes (ranging from 0 to 59; $Mdn_{minute} = 20$). Participants’ weekly SEIM consumption was calculated as total minutes per week.

**Ideal-actual sexual discrepancy.** Ideal-actual sexual discrepancy (IASD) was operationalized using a composite of scales measuring ideal and actual sexual experiences in pornographic sex. The measure(s) used for examining IASD consisted of common descriptions of pornographic sex beginning with The Sexual Preference Scale (Morgan, 2011). This was chosen rather than using sexual depictions of particular genres in SEIM (e.g., explicit forms of aggressive and violent sex) which could overlap with specific SEIM consumption habits (e.g., genre preferences). Four items from the Sexual Script Overlap Scale (SSOS; Štulhofer et al., 2010) were also included (i.e., variety of sexual activity, enacting sexual fantasy, partner has a great body, and partner is well-endowed), which resulted in a final scale consisting of 17 items capturing sexual preferences related to sexual attitudes, behaviors, and expectations of partners’ appearance commonly seen in contemporary pornography. To examine the discrepancy, we duplicated the scale with two different instruction sets. The instruction for the measure of ideal sexual experiences of pornographic sex was: The following section is about what you regard as ideal sex in sexual relationships. Please indicate how much you agree the sexual characteristic(s) listed below are describing the IDEAL sexual experience(s) YOU WANT in your intimate relationships during the last 30 days. In the measure of actual sexual experiences in pornographic sex, the instruction was: The following section is about the sex in your actual relationships. Please indicate how much the sexual characteristic(s) listed below you have ACTUALLY experienced in your intimate relationships during the last 30 days.

![Figure 1. The hypothesized general model of SEIM consumption for all age groups.](image-url)
Both scales yielded good internal consistency; Cronbach’s alpha for ideal and actual sexual experiences scale was .85 and .87, respectively. A higher mean score on the ideal sexual experiences scale suggests a greater desire to engage in certain pornographic sexual practices. A higher mean score on the actual sexual experiences scale shows a higher frequency of having certain pornographic sexual practices in relationships. An overall IASD for each man was computed by subtracting the mean score of actual sexual experiences from the mean score of ideal sexual experiences. The IASD scores could range from −6 to 6 (i.e., highest possible score (7) on one scale minus lowest score possible (1) on the other, or vice versa; \( Mdn = 1, SD = 0.92, range: −1 to 4.29 \)). Scores further away from zero suggested a larger discrepancy between actual and ideal sexual experiences, with high positive scores indicating participants experienced fewer sexual practices featured in contemporary SEIM with partners than desired.

**Sexual satisfaction.** The 5-item Satisfaction with Sex Life Scale (SWLSS; Neto, 2012) was used to measure sexual satisfaction (SSA) in intimate relationships (“I am satisfied with my sex life”). Participants were prompted with the instruction: To what extent do you agree the following statements are your feelings about YOUR sexual relationship. Internal consistency was strong (\( \alpha = .92 \)). The mean item score was used as the composite of SSA.

**General self-esteem.** The Rosenberg’s Self-Esteem Scale (RSES; Rosenberg, 1965) was used to measure general self-esteem (GSE) (“I feel that I have a number of good qualities”). Participants responded to ten items following the instruction: To what extent do you agree the following statements fit your general feelings during the past week. Negatively worded items were reversed scored. GSE yielded a strong internal consistency (\( \alpha = .91 \)). The mean item score was used as the composite of GSE.

**General life satisfaction.** General life satisfaction (GSA) was measured by the Satisfaction with Life Scale (SWLS; Diener et al., 1985). This scale consisted of five items (“The conditions of my life are excellent”) and was administered with the same instruction for RSES. This scale showed good internal consistency (\( \alpha = .88 \)). The mean item score was used as the composite of GSA.

**Negative affect.** A scale was developed for this study to measure participants’ negative affect (NA) containing four items of dejected emotions (e.g., discouraged) and four negative emotions (e.g., lonely) adopted from the brief Positive and Negative Affect Schedule (PANAS-X; Watson & Clark, 1999). Eight positive affect items (e.g., joyful) were added as filler items to avoid generating negative affect from answering many negative statements consecutively (Alreck & Settle, 2003). This 16-item scale was administered with the same instruction for RSES and SWLSS. Our exploratory factor analysis illustrated a distinct construct for negative affect items with a strong internal consistency (\( \alpha = .95 \)), therefore, the mean of the eight negative affect items was used as the composite of NA.

**Demographics.** Participants reported their age, ethnicity, intimate relationship status, and level of educational achievement.

**Procedure**

Five screening questions assessed eligibility for participation. Participants were men who self-identified as SEIM users and had been sexually active in a recent heterosexual relationship. Eligible participants completed study survey after giving consent. Following the suggestion of Short et al. (2012) and Willoughby and Busby (2016), a comprehensive and standardized SEIM definition was displayed at the beginning of the survey, which covered (1) the content of material and (2) the purpose of use to ensure survey participants shared the same understanding of SEIM. This definition also contained key components of a comprehensive definition suggested recently (Marshall & Miller, 2019). The survey included measures of SEIM consumption, ideal and actual sexual experiences, sexual satisfaction, general self-esteem, general life satisfaction, negative affect, and demographics. Participants were thanked and received compensation of 2.00 USD after completion, which was within the average hourly wage on MTurk (Hara et al., 2018). Contact information was provided to participants in case they required geographically relevant resources or support. No participants used it. All responses were anonymous and the mean completion time was 25 minutes.

**Results**

There were 195 cases included in the descriptive analyses and model testing, after removal of careless responders (\( n = 10 \)). Assumptions of normality were checked for path model analysis. No multicollinearity or homoscedasticity violations were detected. As expected, negative affect showed skewness of 1.18 (SE = 0.17; Radloff, 1977). SEIM consumption (weekly minutes spent viewing) was not normally distributed, with a skewness of 2.97 (SE = 0.17) and kurtosis of 6.61 (SE = 0.35). Statistical adjustment for non-normality was applied in the later model testing.

For the exploratory analysis of age cohort differences, participants were categorized into three age groups: 18 to 29 (Group 1; \( n = 88 \)), 30 to 39 (Group 2; \( n = 74 \)), and 40 to 58 (Group 3; \( n = 33 \)). Between age groups, most studied variables were not statistically different, such as SEIM consumption, \( F(2, 192) = 0.89, p = .414 \). Yet, the older men in Group 3 reported significantly lower general self-esteem compared than younger men in Group 1 and 2, \( F(2, 192) = 3.28, p = .04 \), but had significantly higher general satisfaction, \( F(2, 192) = 7.53, p = .001 \).
Table 1. Descriptive Statistics for Studied Variables Combined and Separated by Age Cohorts.

| Variables               | Combined (N= 195) | Group 1: 18–29 (n= 88) | Group 2: 30–39 (n= 74) | Group 3: 40–58 (n= 33) |
|-------------------------|------------------|-------------------------|-------------------------|-------------------------|
| SEIM (minutes/week)     | 168.05 (189.99)  | 149.72 (167.75)         | 156.30 (139.63)         | 156.30 (139.63)         |
| IASD                    | 1.01 (0.92)      | 1.04 (0.85)             | 0.98 (0.85)             | 0.98 (0.85)             |
| SSA                     | 5.00 (0.84)      | 5.00 (1.54)             | 5.28 (1.22)             | 5.28 (1.22)             |
| GSA                     | 4.63 (1.64)      | 4.62 (1.69)             | 5.59 (1.29)             | 5.59 (1.29)             |
| GSE                     | 5.13 (0.84)      | 5.43 (1.44)             | 4.53 (1.63)             | 4.53 (1.63)             |
| NA                      | 5.79 (1.35)      | 5.79 (1.42)             | 5.75 (1.36)             | 5.75 (1.36)             |

Note. SEIM = SEIM consumption; IASD = ideal-actual sexual discrepancy; SSA = sexual satisfaction; GSA = general life satisfaction; GSE = general self-esteem; NA = negative affect.

*p* = .001. Descriptive statistics for all variables per group in the hypothesized path model are shown in Table 1.

Preliminary Analyses

The correlational findings supported H2, showing that ideal-actual sexual discrepancy (IASD) was negatively related to sexual satisfaction (SSA), and as predicted in H3, also to general satisfaction (GSA) and general self-esteem (GSE), and (positively) to negative affect (NA) in combined and separated age groups (see Table 2). Contrary to our predictions, SEIM consumption was not related to all outcome variables in the total sample correlations but displayed different correlational patterns by age group. The expected correlation between SEIM consumption and IASD was only found among men in Group 2 (age 30–39). Only the responses of men in Group 1 (age 18–29) showed the expected negative relation between SEIM consumption and sexual satisfaction, and only the responses of men in Group 3 (age 40–58) demonstrated significant simple correlations between SEIM consumption and general self-esteem, general life satisfaction, and negative affect. These different patterns of relationships suggested that SEIM consumption might function differently for men from different age groups. Note that relationship status was not related to the relationship between SEIM consumption and IASD, *F*(4, 170) = 1.38, *p* = .24, and was, therefore, not included as a covariate in the models.

Analytical Plan for Model Testing

To examine the role of IASD and SSA in the effect of SEIM on GSA, GSE, and NA (H4, H5, H6), a three-path mediation model was tested using M-plus v.7.0 (Muthén & Muthén, 2011). Maximum likelihood estimation with robust standard errors (MLR) was used to adjust the chi-square and fit indices for multivariate non-normality and non-symmetric confidence intervals for sampling distributions. This approach has been shown particularly beneficial for detecting indirect effects (MacKinnon et al., 2004). One exogenous factor (i.e., SEIM consumption) and five endogenous factors (i.e., IASD, SSA, GSE, GSA, and NA) were included in the model as were two hypothesized mediators (i.e., IASD and SSA). Goodness-of-fit was met when Satorra–Bentler chi-square and TLI and CFI values were close to 1, and RMSEA and SRMR values were less than 0.08 (Hu & Bentler, 1999). Reported path coefficients are standardized estimates. An exploratory path analysis was performed with a bootstrap approach to handle small sample size (Mooijaart & van Montfort, 2004), producing 5,000 samples to construct bias-corrected 95% CI for measuring indirect effects in mediation, of which the upper and lower confidence limit for an indirect path could not include zero to be statistically significant (Preacher & Hayes, 2008).

Combined age groups. The proposed model tested with the full sample obtained support for model fit within the acceptable standard, with Satorra–Bentler *χ*²(7, *N* = 159) = 6.55, *p* = .48, CFI = 1, TLI = 1, RMSEA = 0.07, 90% CI [0.000, 0.099], SRMR = 0.03. Model results showed that the hypothesized direct path from SEIM to IASD was not significant (*β* = .13, SE = 0.00, *p* = .19, *r*² = .02). Yet, a significant negative relationship between IASD (*β* = −.43, SE = 0.13, *p* < .001, *r*² = .19) and SSA was found and as expected, lower SSA were associated with lower GSE (*β* = .61, SE = 0.07, *p* < .001, *r*² = .37) and GSA (*β* = .66, SE = 0.07, *p* < .001, *r*² = .42), and higher NA (*β* = −.50, SE = 0.07, *p* < .001, *r*² = .33).

Indirect effects for the combined age groups. Test of indirect effects showed that there was no significant sequential mediation between SEIM consumption and all outcome variables via IASD and sexual satisfaction. Rather, sexual satisfaction mediated the relations between IASD and general life satisfaction, 95% CI [−0.738, −0.307], general
self-esteem, 95% CI [−0.585, −0.252], and negative affect, 95% CI [0.220, 0.517].

**Separated age groups.** The correlations for SEIM consumption with studied variables in separated age groups led us to test the possibility that SEIM consumption’s role manifested differently for men from different age groups using path model analyses to explore the different patterns for male SEIM users of different ages. With the small sample size of each group, the fragment bootstrapping procedure could not be used as it would drastically reduce the accuracy of the corresponding model results (Isaksson et al., 2008). Thus, exploratory path model testing was ceased for this group, and correlations were interpreted with caution for the purpose of suggesting potential future directions (see Table 2).

**Path model for Group 1 (18–29 years).** The hypothesized model for Group 1 did not obtain good support for model fit, with Satorra-Bentler $\chi^2 (7) = 9.27, p = .23$, CFI = 0.99, TLI = 0.97, RMSEA = 0.07, 90% CI [0.000, 0.167], SRMR = 0.04 for the responses from this age group. All direct paths of the hypothesized model were supported. Higher consumption of SEIM was associated with lower GSE ($\beta = −.64, SE = 0.07, p < .001$, $r^2 = .16$). Lower SSA were associated with higher GSE ($\beta = .46, SE = 0.08, p < .001$, $r^2 = .45$), and higher NA as expected ($\beta = −.64, SE = 0.07, p < .001$, $r^2 = .43$; Figure 3).

**Indirect effects for Group 1.** A specific indirect path of SEIM consumption to GSA via IASD was significant ($\beta = −.15, SE = 0.07, p = .03$). The same indirect effect of SSA was also found for the path of SEIM consumption to GSE ($\beta = −.15, SE = 0.07, p = .03$) and NA ($\beta = .28, SE = 0.07, p < .001$). SSA was also found to account for the paths of IASD to GSA, GSE, and NA. The increases in SEIM consumption were associated with the decreases in GSA and GSE, and the increases in NA through the decreases in SSA (Table 3).

**Path model for Group 2 (30–39 years).** There was support for an acceptable model fit, with Satorra-Bentler $\chi^2 (7) = 11.74, p = .11$, CFI = 0.97, TLI = 0.96, RMSEA = 0.09, 90% CI [0.000, 0.172], SRMR = 0.04. Based on bivariate correlations, suggested modification indices, and the existing literature, a direct path was added from SEIM consumption to SSA, which improved the overall model fit to be acceptable, $\chi^2 (6) = 6.86, p = .33$, CFI = 0.99, TFI = 0.98, RMSEA = 0.04; 90% CI [0.000, 0.149]. Results suggested a direct path of both SEIM consumption ($\beta = −.22, SE = 0.11, p = .03$) and IASD ($\beta = −.46, SE = 0.08, p < .001$) to SSA, with $r^2 = .27$. Three paths from SSA to GSE, GSA, and NA were all statistically significant and confirmed with the hypothesized directions, $\beta = .67, SE = 0.07, p < .001$, $r^2 = .45$; $\beta = .69, SE = 0.07, p < .001$, $r^2 = .48$; $\beta = −.61, SE = 0.08, p < .001$, $r^2 = .38$. Yet, the hypothesized direct path from SEIM to IASD was nonsignificant ($\beta = .06, SE = 0.12, p = .65, r^2 = .003$; Figure 2).

**Indirect effects for Group 2.** The negative impact of IASD on GSA, GSE, and NA was shown via decreases in SSA (see Table 3). However, IASD did not function as a mediator between SEIM consumption and SSA, 95% CI [−0.212, 0.018], and there was no indirect effect found between SEIM consumption and general well-being via IASD and SSA, with GSA, 95% CI [−0.129, 0.014], GSE, 95% CI [−0.116, 0.013], and NA, 95% CI [−0.012, 0.124]. The increases in SEIM consumption were neither directly nor indirectly (via the increases in IASD) associated with all sexual and general well-being variables for men in their 30s.

**Discussion**

Inconsistent findings continue to emerge in research on the impacts of sexually explicit internet material (SEIM; Wright et al., 2017). This may be because research has used only the frequency or quantity of SEIM consumption to

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Table 2. Intercorrelations Between All Variables for Combined and Separated by Age Cohorts.

| Variables | SEIM | IASD | SSA | GSA | GSE | NA |
|-----------|------|------|-----|-----|-----|----|
| Combined  |      |      |     |     |     |    |
| SEIM      | 1    |      |     |     |     |    |
| IASD      | .10  | 1    |     |     |     |    |
| SSA       | −.12 | −.45**| 1   |     |     |    |
| GSA       | .03  | −.24**| .64**| 1   |     |    |
| GSE       | −.04 | −.16* | .63**| .75**| 1   |    |
| NA        | .04  | .18**| −.61**| −.63**| −.75**| 1 |
| Group 1 (18–29) |      |      |     |     |     |    |
| SEIM      |      | 1    |     |     |     |    |
| IASD      | .06  |      | 1   |     |     |    |
| SSA       | −.25*| −.47**| 1   |     |     |    |
| GSA       | .06  | −.30**| .67**| 1   |     |    |
| GSE       | −.13 | −.19 | .69**| .76**| 1   |    |
| NA        | .13  | .25* | −.61**| −.66**| −.79**| 1 |
| Group 2 (30–39) |      |      |     |     |     |    |
| SEIM      |      |      |     |     |     |    |
| IASD      | .22* |      | 1   |     |     |    |
| SSA       | .06  | −.40**| 1   |     |     |    |
| GSA       | .003 | −.29*| .66**| 1   |     |    |
| GSE       | −.04 | −.13 | .59**| .80**| 1   |    |
| NA        | .03  | .13  | −.64**| −.60**| −.63**| 1 |
| Group 3 (40–58) |      |      |     |     |     |    |
| SEIM      |      |      |     |     |     |    |
| IASD      | .03  |      | 1   |     |     |    |
| SSA       | .04  | −.53**| 1   |     |     |    |
| GSA       | .44* | −.02 | .57**| 1   |     |    |
| GSE       | .36* | −.10 | .53**| .64**| 1   |    |
| NA        | −.29*| .14  | −.56**| −.65**| −.94**| 1 |

Note: *p < .01, †p < .05, ‡p < .10 level.
capture and explain the impacts (Marshall & Miller, 2019; Willoughby et al., 2020). In this study we suggested and found preliminary support for an alternative, the ideal-actual sexual discrepancy (IASD). This measure represents the contrast between expectations for sexual attitudes, behaviors, and appearances created by SEIM and real experiences with female sexual partners and is proposed as an important explanatory factor through which SEIM consumption functions to influence heterosexual men’s sexual satisfaction in intimate relationships and subsequently their general well-being.

A recent review recommended pornography consumption be studied more directly through its proximal causes (Kohut et al., 2020, p. 731), especially in an intimate relationship context (Willoughby et al., 2020). Though planned prior to these publications, the present study is an answer to this call and uses a refined and possible proxy (IASD) of the potential impacts of SEIM consumption on heterosexual men in the context of their intimate relationships and subsequently their general well-being.

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Figure 2. The final path model of SEIM consumption for men in their late teens and 20s (Group 1; n = 88).

Note. Solid lines are significant direct paths and dashed lines are significant indirect paths. Coefficients in the model are standardized direct effects.

**p < .01. *p < .05.

**Age Cohort Similarities and Differences**

There were no significant differences in SEIM consumption between age groups in the present study. However, a recent study showed a significant downward trend of weekly consumption (in the 30 days prior to the study) reported by men and women in their 30s (i.e., participants with the highest consumption rate) compared to those in their 50s (Solano et al., 2020). This is one of the first examinations of the potential impact of age cohort differences in research on pornography consumption. Their findings support our nuanced investigation of IASD and contention that it is important to...
investigate the influences of pornography for men in different age cohorts.

**Men in their late teens and 20s.** Consistent with past studies using college students, we found men in their late teens and 20s with higher SEIM consumption experienced lower sexual satisfaction. According to the sexual socialization process (3AM; Wright, 2011), higher SEIM consumption intensifies the formation of sexual scripts consisting of unrealistic and potentially degrading sexual practices. Such scripts would be expected but unlikely to be achieved with real-life female sexual partners. Hence, a negative impact on men’s sexual satisfaction in intimate relationships was expected. However, the absence of association between the amount of SEIM consumed and IASD in this younger cohort underscores the complex role of SEIM consumption in men’s lives (Solano et al., 2020).

Men consume SEIM to explore new sexual practices and/or affirm previously desired sexual practices (Peter & Valkenburg, 2010; Sun, et al., 2015, 2016). The proportion of time men dedicate to each and the subsequent impact on their formation of sexual scripts and sexual experiences in real life could depend on age (Esplin et al., 2021; Wiederman, 2015). Younger, college-aged men devote more time consuming SEIM for exploring and learning about sexual practices and to fulfill their sexual curiosity about the unknown sexual possibilities of others (Brown, Durtschi, et al., 2017). Therefore, their sexual scripts may be particularly susceptible to change (Valkenburg & Peter, 2013). In other words, their sexual scripts may be more malleable as they explore their own sexuality and continue their consumption of SEIM (Arnett, 2015; Bőthe et al., 2021).

Younger men may also have been exposed to a different SEIM market at this critical point in their development than older men. The SEIM industry markets its content as ideal and desirable. Various genres and themes of pornographic sexual interactions have emerged on contemporary SEIM platforms to captivate users (Busby et al., 2020; Zhou et al., 2019).

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**Table 3.** Tests for Indirect Effects From IASD to GSA, GSE, and NA via SSA for Group 1 (18–29 Years) and Group 2 (30–39 Years).

|                      | Standard coefficient | SE  | t     | Bootstrapped 95% confidence interval (CI) |
|----------------------|----------------------|-----|-------|------------------------------------------|
| **Group 1**          |                      |     |       |                                          |
| General life satisfaction | -.316                | 0.072 | -4.388** | [-0.457, -0.176]                             |
| General self-esteem   | -.306                | 0.075 | -4.080** | [-0.453, -0.159]                             |
| Negative affect       | .153                 | 0.079 | 1.936** | [0.155, 0.407]                              |
| **Group 2**          |                      |     |       |                                          |
| General life satisfaction | -.259                | 0.080 | -3.237*  | [-0.416, -0.103]                             |
| General self-esteem   | -.232                | 0.072 | -3.222*  | [-0.373, -0.091]                             |
| Negative affect       | .252                 | 0.035 | 7.200*   | [0.101, 0.402]                              |

Note. **p < .001. *p < .01.**
surplus of SEIM content may have cultivated a fast-food diet approach, encouraging a type of exploration among younger men that contributes to more rapid or flexible changes in sexual preferences at this early stage of sexual script formation. Despite these unexpected results, our findings demonstrate the important role of IASD, together with SEIM consumption, in sexual satisfaction (and subsequently with general well-being) among heterosexual men in their 20s.

**Men in their 30s.** In contrast to younger men, the quantity of SEIM consumed affected the size of discrepancies experienced by men in their 30s, increasing men’s perceptions that they and their relationships with female sexual partners were falling short of desired pornographic appearances, sexual attitudes and behaviors. SEIM consumption may facilitate sexual exploration and changing preferences for men in their 20s but could prompt less exploration of new sexual practices once men move into their 30s. This suggestion is supported by recent work by Böthe et al. (2021), who found that for male (not female) participants, who were mostly in their 30s, sexual curiosity (i.e., information seeking and expansion of knowledge about sexual possibilities) and self-exploration (i.e., better understanding of sexual desires) were not motivations for viewing SEIM.

Consumption patterns (e.g., types/genres of SEIM) could instead become more consistent with current sexual preferences for men in their 30s. SEIM consumption driven by affirming existing sexual desires (the known), rather than exploring new sexual possibilities (the unknown), could amplify the influence of depictions of the sexual and gender dynamics in SEIM (disposition-content congruency hypothesis; van Oosten, 2016). Men in their 30s may be more likely to consume pornographic content that aligns with their existing sexual scripts, which could then increase their desire for pornographic sex with female partners (Goldsmith et al., 2017; Sun et al., 2015, 2016). Yet, these expectations may not be realized in real-life because the exaggerated and often unrealistic depiction of sexual dynamics in SEIM creates an impossible distance to sexual ideals (Lamb, 2010), and importantly, disproportionately present a landscape where dominating sexual attitudes and behaviors expressed by men are always accepted submissively by women (Zhou et al., 2019). This argument was indirectly supported by Solano et al. (2020), who showed that unwillingness or inability of female partners to engage in sex was a significant reason for pornography consumption, with those in their 30s reporting the highest rates of weekly use. The present study provides preliminary support for IASD as an alternative way of understanding SEIM’s impact on heterosexual relationships for these men and underscores the saliency of IASD for male SEIM users in their 30s.

While larger discrepancies were related to lower sexual satisfaction and lower general well-being (lower self-esteem, lower life satisfaction, and increased negative affect), higher SEIM consumption was not directly associated with sexual satisfaction, although the latter remains important in explaining the negative relationship between IASD and general well-being. This lack of connection is rarely reported but has been noted in two studies (Brown, Carroll, et al., 2017; Ferron et al., 2017). These studies shared a similar sample (men in their 30s) and design with this study, as both focused on the associations of SEIM consumption in the context of intimate relationships. This suggests that the uncommon finding reported here may be due to an age cohort effect rather than a measurement issue.

**Men in their 40s and older.** The correlational data from oldest men, although not analyzed in model testing, revealed a different relationship between SEIM consumption and general well-being compared to younger men. While these findings are tentative until replicated in a larger sample, SEIM consumption was positively associated with general self-esteem and general life satisfaction and had no relationship with IASD or sexual satisfaction. Perhaps, SEIM consumption does not function in the same way or have the same power to intensify men’s preferences for pornographic sex in mid-life. Older men may negotiate the meaning and function of SEIM consumption differently from younger men, for instance, to gain a sense of agency. While agentic experiences related to pornography consumption have not been explored among older men, its potential positive impact has been discussed (Chadwick et al., 2018; McKee & Ingham, 2018). While speculative, our findings support the idea that SEIM consumption may function differently for older than younger men. However, as seen in other age cohorts, there was still a strong negative correlation between IASD and sexual satisfaction. A cautious interpretation could be that expectations gained from pornography consumption in earlier life continue to be unrealistic and discrepant from men’s experiences with female sexual partners, which reducing sexual satisfaction.

**Quantity of Consumption Versus IASD for Prediction of Negative Outcomes**

Had we used consumption quantity as the only predictor of the potential effects of SEIM on men’s sexual satisfaction and other outcomes, our understanding of the phenomenon would be partial and contradictory. This challenge to a monolithic measure of pornography consumption has gained traction in recent scholarly discussions and reviews of pornography research (Kohut et al., 2020; Esplin et al., 2021), particularly for studies that focus on the interpersonal context (Willoughby et al., 2020). Our findings confirm that the amount of SEIM men consume regularly does not always reflect the intensity of the negative association between use and sexual satisfaction. In line with recent research uncovering different motivations for SEIM consumption, a linear relationship between the frequency of consumption and its impacts (in form and magnitude) should not be assumed (Esplin et al., 2021; Wright et al., 2018; Wright, Steffen, et al., 2019). Rather, the negative outcomes related to SEIM
consumption emerged when we included a measure of how men perceived their desired level contrasted with their current experience of pornographic sex with women in their lives. The exaggerated and unrealistic sexual practices featured in contemporary SEIM likely sets up an impossible or undesirable expectation of female partners (Lamb, 2010), which in turn produces discrepant sexual experiences for heterosexual men and dissatisfaction with their experiences and their partners. Compared to the quantity of SEIM consumption, which provides inconsistent results in our own and previous studies, IASD provides an explanation for the well-documented negative associations between pornography consumption and sexual satisfaction for men across age groups.

Miller, McBain, et al. (2019) recently found that a stronger desire to experience more pornographic sex was associated with men’s higher SEIM consumption and lower sexual satisfaction. However, the preference for various depictions of contemporary pornographic sex was not associated with sexual and relational satisfaction. The preference measure used in their study and the reference scale for developing the measure of IASD in the present study were the same. It is important to note the subtle but critical difference here in associations between preferences for certain sexual acts and the desire to experience them with real-life female partners (“I would like the sex I have in real-life to be like the sex in pornography”; Miller, McBain, et al., 2019, p. 102). Sexual preference for pornographic sexual fantasy (i.e., without the expectation or attempt to enact them in real-life sexual relationships with female partners; Brown, Durtshi, et al., 2017), which sexual scripts theory would suggest could be reinforced by SEIM consumption, is insufficient to explain the negative impact of consumption on men’s sexual satisfaction. Whether the consumer expects to experience their ideal pornographic sex with female partners in real life is the critical element.

Measuring both desires for partnered sexual practices commonly depicted in contemporary pornography (i.e., the score of ideal SEIM-informed sex scale) and whether these pornographic sexual practices are experienced with female partners (i.e., the score of actual SEIM-informed sex scale), IASD may shed light on Miller, McBain, et al.’s (2019) mixed findings. It extends understanding of SEIM’s impact on sexual scripts by situating the study of pornographic sexual preference within the relational frame and examining the translation of pornographic sexual fantasy into real-life sexual relationships for male SEIM users.

Failing to have desired pornographic sexual relationships with female partners was salient not only to sexual satisfaction but also to general well-being for men in this study. The explicit and implicit messages about asserting and achieving male dominance (over women) has been popularized and normalized in contemporary SEIM and can facilitate men’s pursuit of the power-over-women dynamics in their real-life sexual relationships (Borgogna et al., 2020; Esplin et al., 2021). Men’s experience of IASD may become salient to their self-view (e.g., self-esteem) when they perceive a lack of control in their sex life (and over female partners) and their masculinity may be threatened (Vandello & Bosson, 2013). While “who initiated” having pornographic sex was not examined in the current study, given the inequality and degradation depicted in SEIM, larger IASD scores may have captured the dynamic where female partners refused to cooperate or perform male partners’ ideal sexual experiences of pornographic sex (Brown, Conner, et al., 2017). More research is needed to determine how well IASD captures the ways that gendered power dynamics in SEIM manifest in heterosexual men’s sexual relationships.

Although men who experienced lower IASD had relatively higher sexual satisfaction and general well-being, we were not able to explore whether this was a consequence of healthier non-pornographic desires which were then achieved with female partners in practice, to circumstances in which sexual partners and relationships aligned more with the pornographic ideal, or some combination of these. We thus caution that low IASD cannot necessarily be interpreted as healthy or unproblematic for relationships.

Our study of IASD appears to capture the multidimensional impacts of SEIM that extend beyond the sexual domain for heterosexual men. Based on the utility of IASD and its unexpected yet complex associations with (quantity of) SEIM consumption for men in different age groups, we join other scholars in suggesting that researchers should question the common practice of using the frequency and quantity of consumption as the default measurement to evaluate the impact of SEIM on users of all ages.

**Limitation and Future Directions**

The overall sample size in this study was appropriate, but there were disproportionately fewer men in their 40s and older, which prevented us from model testing for this cohort. In retrospect, this might have been expected given that our recruitment outcome echoed the demographics of MTurk, where only 20% of users are older than 40 years (Ross et al., 2009). While this sample was considerably more age diverse than any college sample, future research should consider oversampling men in underrepresented age groups and continuing to increase the diversity in terms of ethnic and educational representation (Yancey et al., 2006). Together with the urgent call from Solano et al. (2020) to study potential age and historical cohort differences, our exploratory results provide a promising direction for developing a temporal-focused research program on changes related to SEIM consumption and its potential impacts.

Although the present models obtained the best fit indices compared to alternative modeling (e.g., testing whether sexual satisfaction predicts IASD or SEIM consumption), any interpretation and inference drawn based on the associative paths between examined variables requires caution due to
the inherent limitation of cross-sectional design. In fact, it is possible that falling short of experiencing the desired types and amount of pornographic sex with female intimate partners may encourage men to achieve sexual gratification through consumption of more SEIM depicting their sexual preferences. There is mixed support for this hypothesis. While partners’ unwillingness to engage in sex acts (Solano et al., 2020) and preference for using degrading (to women) pornography to maintain sexual excitement (Sun et al., 2015) were significant reasons men consumed pornography, men with higher consumption did not report a lower desire for experiencing pornographic sex with their female partners even with a higher frequency of masturbation (Miller, McBain, et al., 2019). Future research should continue to establish the function and implication of IASD in intra-and inter-personal context using prospective designs.

Future research should continue developing the psychometric properties of measurement items used for capturing IASD in this study. An expanded measure including items that can reflect additional specific and explicit sexual practices and messages of sexual degradation, would allow further exploration of the potential differential impact of IASD based on SEIM consumption habits. Further, while most IASD reported in this study was in the direction of unachievable ideals, with few men experiencing more pornographic sex than they would have ideally wanted, it may be important to study men who do not believe pornographic sex is desirable or who have changed their attitudes about it to clarify the impact of two different types of IASD related to SEIM (i.e., ideal more than actual versus ideal less than actual).

Although the construct of IASD demonstrated its usefulness in understanding SEIM consumption’s negative outcomes, other constructs such as (the lack of) sexual communication (Kohut et al., 2018), sexual passion (Busby et al., 2020; Leonhardt et al., 2020), or personality (Vaillancourt-Morel et al., 2017) and relationship length (Mallory et al., 2019) may also contribute to the negative association between SEIM consumption and sexual satisfaction. Further, higher pornography consumption may negatively affect one’s sexual satisfaction (and relational satisfaction) when it is perceived as a form of infidelity (Schneider, 2002) or betrayal of boundaries by oneself or one’s partner (Zitzman & Butler, 2009). Yet, lower sexual satisfaction was largely driven by lower sexual desire for their intimate partners (Floyd et al., 2020) and those who consider SEIM consumption as cheating were single individuals and non-SEIM users (Negy et al., 2018). Further examination of the reasons, meaning and functions of IASD in relation to other variables is needed.

Conclusion and Implications

This study introduced and examined the ideal-actual sexual discrepancy (IASD) for men, offering a new lens to probe two long-existing questions: How SEIM consumption translates into a negative influence on intimate relationships for men, and whether SEIM consumption functions and affects men similarly across age cohorts. Compared to the frequency and quantity of consumption, IASD appears to be a more refined and stable index and alternative for examining the negative associations of SEIM consumption for men in all age groups. Higher IASD was consistently associated with lower sexual satisfaction and all studied aspects of general well-being, suggesting that using IASD to supplement measures of SEIM consumption may reconcile some of the inconsistent findings on the impact of SEIM in intimate relationships. A reconceptualization of pornography consumption both in theorizing (Kohut et al., 2020) and methodology (Marshall & Miller, 2019) is needed to improve our understanding. Our study of IASD offers a reconceptualization of SEIM’s impact beyond the quantity of consumption, as Kohut et al. (2020) articulated, that unrequited (sexual) desires (within intimate relationships) have “a greater importance than the pornography use for understanding relationship functioning . . .” (p. 731). The contextualization of IASD extends the scope of past research on pornography consumption which has primarily focused on the interpersonal state experience (Grubbs et al., 2019; Walton, 2019). In addition, SEIM consumption functioned differently across age cohorts, suggesting that male users may have different motivations and purposes for viewing SEIM and employ different strategies to engage with it (Böthe et al., 2021; Esplin et al., 2021). The critical role of IASD for men in three age cohorts emphasizes its relevancy in sexual satisfaction, which is in turn related to general well-being, including general self-esteem, general life satisfaction, and negative affect.

With researchers identifying the problematic aspects of pornography consumption (Vaillancourt-Morel & Bergeron, 2018; Wright, Steffen, et al., 2019), IASD may also become useful in clinical settings. Study of collaborative pornography consumption suggests positive sexual outcomes such as increases in sexual negotiation and better boundary setting are possible in an interpersonal context (Hertlein et al., 2020). Through the process of explicating experiences of IASD in intimate relationships, our findings related to IASD and sexual satisfaction suggest that IASD could provide a practical tool for researchers and therapists to mitigate the potential negative impact of SEIM consumption in intimate relationships.

Compliance With Ethical Standards

This research was cleared by the Institutional Research Board at California State University, San Bernardino (H-15WI-19), and the Research Ethics Board at University of Windsor (#17-167). Participants were presented a written informed consent form prior to an online-administered study survey. This informed consent form clearly stated the background of the study, basic procedures and length of time, potential risks and benefits, guarantee of anonymity and confidentiality, options to withdraw, and provided a check box for participants to consent (in which case they were directed to the survey) or not consent (in which case they were directed away from the study page).
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