

Dark Romance as an AI-Mediated Experience: Identification with Characters and Attitudes towards Romantic AI

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ABSTRACT

The identification with fictional characters has been widely recognized as a powerful psychological phenomenon, influencing self-perception and attitudes toward interpersonal relationships. Within this context, the dark romance genre, characterized by emotionally charged narratives involving ambivalence, power imbalances, and problematic relational behaviors, provides a unique framework for examining how engagement with such narratives impacts attitudes toward intimacy and relational norms. Concurrently, the rising prevalence of AI-mediated conversational agents introduces new dimensions to the study of emotional and romantic connections, raising critical questions about human-AI intimacy and its implications. This study sought to explore the associations between identification with dark romance characters, emotional and sexual experiences involving AI systems, and attitudes toward problematic relational behaviors. A sample of 139 Romanian participants was recruited to investigate these dynamics. Participants completed the Character Identification Scale, the Experiences in Human–AI Relationships Scale (EHARS), selected subscales of the Intimate Partner Violence Attitude Scale–Revised (IPVAS-R), and newly developed measures assessing AI sexual satisfaction, emotional support provided by AI, positive attitudes toward romantic AI entities, and recognition of relational red flags. Mediation analyses indicated that identification with dark romance characters was indirectly associated with greater AI sexual satisfaction through more positive attitudes toward romantic AI, supporting a full mediation model. In contrast, identification did not mediate the relationship between AI emotional support and AI sexual satisfaction, which was characterized by a strong direct association. Moderation analyses revealed that recognition of relational red flags significantly attenuated the positive association between AI sexual satisfaction and victims' acceptance of abusive behaviors, functioning as a protective cognitive factor. No significant association was observed between AI sexual satisfaction and victims' acceptance of physical violence. Overall, the findings suggest that narrative identification and AI-related intimacy are linked through attitudinal mechanisms, while awareness of relational red flags plays a crucial role in limiting the normalization of abusive relational dynamics. These results highlight the importance of examining both media-based identification processes and cognitive protective factors in understanding emerging forms of human–AI intimacy.

Keywords: dark romance, AI for sexual satisfaction, violence and abuse in couple, recognition of red flags

INTRODUCTION

Theoretical background and research hypothesis

Dark romance is a subgenre of romance literature and media marked by intense, often taboo relationships that challenge conventional ideals of love. Central features include morally ambiguous protagonists, pronounced power asymmetries, psychological complexity, and emotionally charged relational dynamics (Wang et al., 2025).

Unlike traditional contemporary or historical romance, dark romance embraces “dark” tropes, such as obsession, captivity, revenge, and coercion, without necessarily resolving them into morally unambiguous or idealized endings. Rather than offering reassurance through stable happily-ever-afters, these narratives frequently leave readers confronting the seductive appeal of relational toxicity. The genre evokes strong emotional responses, including arousal, suspense, empathy, and catharsis, as audiences vicariously experience forbidden desires and psychological turmoil. Its appeal lies not only in transgression, but in the exploration of deeply flawed characters whose struggles resonate with real-world emotional complexities, encouraging both fascination and identification despite the problematic nature of their relationships.

This immersion in complex, often morally ambiguous narratives, where protagonists engage in power imbalances and problematic behaviors, establishes a unique context for examining the psychological underpinnings of reader attitudes toward relational norms and intimacy, particularly among young consumers aged 16–25, as adolescents predominantly use AI as counselors, partners, friends, and emotional companions (Döring & Mohseni, 2025). Given this demographic's extensive digital immersion, the integration of AI systems into interpersonal communication further complicates the perception of relational boundaries, potentially fostering confusion between human and AI interactions (Nkurunziza et al., 2026). The increasing prevalence of AI companions capable of forming seemingly bonded relationships with users, ranging from platonic to romantic, necessitates a deeper examination of their potential benefits and inherent risks, particularly concerning vulnerable individuals (Bradley et al., 2025; Wang & Dehnert, 2026). For example, the recent tragic case of a 14-year-old whose depression was allegedly exacerbated by interactions with a character.ai chatbot highlights the severe ethical implications and potential risks associated with AI companionship for emotionally susceptible users (Wang et al., 2025). The boundary between artificial and genuine relational experiences becomes increasingly blurred as AI systems become more human-like, posing potential psychological risks and consequences for individuals (Zhang et al., 2025).

Narrative identification with characters

Narrative identification refers to the psychological process through which audiences become immersed in fictional worlds, temporarily adopting characters' perspectives, emotions, and goals. In dark romance, identification is often intensified through vivid sensory descriptions, first-person or close third-person narration, and a sustained focus on internal conflict and trauma. Readers may internalize relational patterns presented in the narrative by mapping them onto their own experiences, particularly when themes of vulnerability, loss, or redemption are foregrounded.

The heightened emotional stakes of dark romance amplify this process. Traumatized protagonists and dysfunctional relationships may become compelling precisely because they mirror the ambiguities and contradictions of real-world intimacy. Engagement with such narratives allows readers to explore fear, desire, submission, and moral transgression within a “protective frame” that maintains awareness of fictionality while permitting emotional involvement (Kraxenberger et al., 2021). Importantly, enjoyment of morally ambiguous narratives does not necessarily imply endorsement of harmful behaviours; rather, it often reflects engagement with character development and psychological depth, enabling readers to navigate complex moral terrain without real-world consequences (Black et al., 2018).

Normalization of problematic behaviours

Certain dynamics in dark romance can blur the perception of red flags, transforming warning signs into romantic ideals, and romanticize control, jealousy, and possessiveness as expressions of profound love. This normalization shapes attitudes towards abuse (framed as protective intensity), control (as devotion), and relational violence (as passionate conflict), potentially desensitizing readers to real-world boundaries (Shank et al., 2025). Specifically, the repeated exposure to characters who exhibit dark personality traits, such as narcissism or Machiavellianism, may paradoxically enhance their appeal to certain readers, who might identify with these traits or perceive them as sources of strength within the narrative (Kjeldgaard-Christiansen et al., 2020). This engagement, while offering narrative enjoyment, can subtly influence attitudes towards coercive control and other problematic behaviours, making them appear less objectionable or even desirable when framed within a romantic context (Thobaiti, 2022).

This phenomenon is particularly concerning, as experimental research shows that romantic framing of identical violence scenarios, compared to non-romantic contexts, leads to greater justification of perpetrators, increased victim blaming, support for milder punishments, and broader acceptance of abusive behaviors (Glomb et al., 2025; Kraxenberger et al., 2021). Such portrayals may also contribute to desensitization to relational violence and reduced empathy toward victims, while encouraging the reinterpretation of toxic traits, such as control, jealousy, and obsession, as expressions of love (Bigey, 2024; Maas & Bonomi, 2020; Thobaiti, 2022). From the perspective of cultivation theory, repeated exposure to narratives that romanticize aggression can gradually shape audience perceptions of what constitutes normal or desirable relationship dynamics, reinforcing cultural narratives that normalize power imbalances and frame male dominance alongside female submission as legitimate relational patterns. For example, media portrayals that romanticize abuse, including recurrent depictions of women as victims or sexualized objects and dominant male protagonists in popular series such as *Fifty Shades*, have been associated with increased tolerance of controlling behaviors and the normalization of abusive relational standards in real-life contexts (Bigey, 2024; Maas & Bonomi, 2020; Thobaiti, 2022).

These dynamics are further reinforced through recurring narrative patterns such as the “virgin–beast” trope frequently found in popular romantic fiction. In these narratives, an aggressive or morally ambiguous male character is paired with a naïve or submissive female character within a highly unequal power dynamic that is nevertheless framed as romantic (Maas & Bonomi, 2020). Such portrayals often involve elements of coercion or ambiguous consent, and research has linked engagement with these narratives to adverse outcomes among young adult women, including higher rates of alcohol misuse, eating disorders, and an increased likelihood of experiencing abusive partners (Maas & Bonomi, 2020).

This romanticization is further complicated by the “virgin-beast trope” that frequently appears in popular romantic fiction, where an aggressive male character and a submissive female character are presented in a power-imbalanced, yet romanticized, heterosexual relationship (Maas & Bonomi, 2020). These narratives, often featuring nonconsensual sexual acts, are frequently associated with adverse health outcomes in young adult women, including higher rates of alcohol abuse, eating disorders, and a greater likelihood of experiencing an abusive partner. (Maas & Bonomi, 2020)

The emergence of AI as a mediator of intimacy

Artificial intelligence has increasingly emerged as a conversational partner, emotional support system, and potential romantic or sexual companion (Wang et al., 2025). Users develop emotional attachments to AI due to its constant availability, perceived non-judgment, and capacity to simulate attentiveness and affection. Empirical findings illustrate the scope of this phenomenon: thousands of daily expressions of love and marriage proposals directed at voice assistants, alongside documented interest in sexual relationships with AI, highlight the relational framing users adopt toward these systems (Tschopp et al., 2023).

AI companions differ from human partners in several fundamental ways. Their programmable and highly customizable nature, allowing users to tailor personality traits, communication style, emotional responsiveness, romantic roles, and even sexual preferences, creates a uniquely adaptive relational environment that can closely align with users’ individual desires and expectations. Combined with the absence of personal needs and the impossibility of rejection, these features enable users to engage in self-disclosure and emotional exploration with minimal interpersonal risk (Zhang et al., 2025). Recent research conceptualizes this dynamic through the “AI amplifier effect,” suggesting that personalized AI companions do not merely simulate intimacy but can intensify users’ pre-existing emotions and relational expectations (Pang et al., 2026). By allowing individuals to construct an “ideal partner” responsive to both emotional and sexual preferences, AI systems may facilitate the exploration of romantic relationships and sexual fantasies that might otherwise remain unexpressed. While such personalization can increase perceived emotional satisfaction and relational authenticity, it may also amplify vulnerabilities, potentially contributing to emotional dependency or social withdrawal in some users (Pang et al., 2026; Zhang et al., 2025).

This form of interaction resembles parasocial intimacy, where perceived reciprocity and emotional responsiveness foster feelings of closeness despite the system’s algorithmic foundations. From the perspective of attachment theory, mechanisms such as projection, transference, and perceived responsiveness may further

strengthen emotional bonds with AI companions, particularly among individuals experiencing loneliness, trauma, or unmet relational needs (Babu et al., 2025; Saracini et al., 2025). In this context, personalization plays a central role in transforming conversational systems from simple technological tools into emotionally meaningful relational partners.

The link between dark romance and Human–AI relationships

Individuals drawn to dark romance may be particularly receptive to AI-mediated intimacy. AI companions offer a controlled environment in which intense emotional engagement, power dynamics, and possessive relational scripts, central to dark romance, can be explored without the unpredictability of human relationships (Wang et al., 2025). Users may replicate narrative-based attachment patterns within AI interactions, leveraging the system's perceived safety to experiment with dominance, submission, or idealized devotion.

This convergence suggests that AI may function as a novel platform for enacting and rehearsing dark romance themes, allowing users to engage with psychologically complex relational dynamics while minimizing interpersonal vulnerability (Babu et al., 2025).

Recognition of red flags

Dark romance narratives frequently romanticize behaviours that would typically be classified as red flags in real-world relationships, including extreme jealousy, control, and asymmetric power relations (Kraxenberger et al., 2021; Shank et al., 2025). Exposure to such narratives may attenuate sensitivity to warning signs by reframing toxic traits as emotionally compelling or redemptive (Black et al., 2018).

Within the context of AI-mediated relationships, this desensitization may have distinct implications. The present study examines whether affinity for dark romance predicts diminished recognition of red flags in AI relationships and greater acceptance of problematic dynamics. It further explores how AI's unique characteristics, such as programmability, perceived devotion, and lack of agency, may reinforce the appeal of dark romance tropes centred on control and idealized attachment (Wang et al., 2025). Finally, the study investigates underlying psychological mechanisms, including techno-emotional projection and transference, through which engagement with dark romance narratives may facilitate the formation of intense bonds with AI companions (Saracini et al., 2025).

Although existing research has independently examined dark romance consumption, narrative identification, attachment theory, and human–AI relationships (Shank et al., 2025; Wang et al., 2025), no studies have systematically integrated these domains to assess how affinity for dark romance influences attitudes toward romantic AI. This paper addresses this gap by positioning narrative identification with dark romance characters as a potential predictor of attachment to AI companions.

Attitudes toward Romantic AI

Attitudes toward romantic AI refer to individuals' affective and cognitive evaluations of AI as potential romantic partners, girlfriends/boyfriends, or intimate companions, often involving the projection of human-like relational roles onto these systems (Shank et al., 2025; Shu et al., 2026; Wang et al., 2025). Studies indicate that users frequently anthropomorphize AI, framing it as a "girlfriend" or "boyfriend" due to its programmability, constant availability, and simulated emotional responsiveness, leading to emotional attachments and expressions of love or marriage proposals (Shu et al., 2026; Tschoop et al., 2023). This predisposition can amplify pseudo-intimacy, fostering exploration of romantic fantasies but also raising impacts such as diminished recognition of relational red flags, increased acceptance of controlling dynamics, and potential interference with real-world relationships (Saracini et al., 2025; Shank et al., 2025; Wang et al., 2025).

The psychological mechanisms underpinning these attitudes are complex, involving elements of attachment theory, specifically how perceived responsiveness and non-judgment from AI systems can fulfill unmet relational needs and foster emotional dependence (Liu et al., 2026). Specifically, the concept of techno-

emotional projection suggests that individuals imbue AI companions with human-like qualities and intentions, thereby facilitating strong emotional bonds that mirror human-to-human attachment dynamics (Saracini et al., 2025). This projective mechanism, combined with AI's consistent availability and non-judgmental interactions, can lead to the formation of profound emotional attachments, echoing the dynamics of parasocial relationships yet intensified by interactive simulation (Babu et al., 2025; Chu et al., 2025). This immersive interaction creates a unique relational context wherein users might develop deep relational dynamics and experience psychological outcomes akin to those in human-human relationships (Zhang et al., 2025). For instance, users have reported developing significant emotional attachments to AI companions, sometimes perceiving these relationships as more fulfilling and less demanding than human interactions, thereby highlighting the AI Amplifier Effect where the AI intensifies existing emotional states (Pang et al., 2026; Wang et al., 2025). This phenomenon, particularly evident in platforms like Replika and CharacterAI, frequently involves users attributing human-like qualities and intentions to their AI companions, which can lead to powerful emotional bonds and perceived reciprocity (Adewale & Muhammad, 2025; Earp et al., 2025).

These dynamic underscores the complex interplay between user psychology and AI design, where anthropomorphic features and responsive algorithms facilitate the development of profound, albeit artificial, relational experiences (Carpenter, 2026; Zhang et al., 2024). This perceived reciprocity, however, raises critical questions regarding the authenticity of these emotional connections, particularly when considering the potential for pseudo-intimacy and emotional solipsism (Babu et al., 2025).

Attachement to AI

Human-AI attachment, a one-way, non-reciprocal emotional bond formed through direct interaction, is increasingly recognized as a critical area of study, particularly given the proliferation of AI in social and emotional companionship (Shu et al., 2026). Individuals prone to such attachments often exhibit a specific psychological profile characterized by unmet emotional needs, such as loneliness, relational voids from real-life experiences, and vulnerabilities stemming from childhood or interpersonal deficits (Fan et al., 2024; Pang et al., 2026; Wang et al., 2025). These users tend to be emotionally invested, frequently younger demographics seeking safe spaces for self-disclosure and identity exploration, including non-heterosexual orientations or those with limited real-world social support (Adewale & Muhammad, 2025; Zhang et al., 2025).

These attachments are often characterized by users projecting emotional realism onto AI companions and developing parasocial relationships, driven by unmet psychological needs (Fan et al., 2024; Saracini et al., 2025). Emotional involvement manifests intensely in conversations, where users share profound feelings like love declarations, marriage proposals, or romantic fantasies, perceiving AI as devoted partners due to its constant availability, non-judgmental nature, and simulated reciprocity (Shu et al., 2026; Tschopp et al., 2023; Wang et al., 2025). This fosters deep bonds, amplified by AI's responsive algorithms that intensify users' emotions—the so-called AI Amplifier Effect (Pang et al., 2026; Wang et al., 2025). Users increasingly seek AI as romantic partners, attributing human-like qualities and intentions, which facilitates exploration of intimacy without real-world risks (Carpenter, 2026; Earp et al., 2025; Zhang et al., 2024).

Notably, this extends to sexual satisfaction, with users enjoying erotic roleplay, preferring AI for certain sexual explorations over human relationships due to its programmability and lack of rejection, as evidenced by self-reports of acceptability and enjoyment in AI-mediated sexual interactions (Adewale & Muhammad, 2025; Liu et al., 2026). This can lead to dependency and a sense of loss when the AI's behavior deviates from expectations, highlighting the emotional vulnerabilities users bring to these interactions (Chu et al., 2025; Zhai et al., 2025). This dynamic is further complicated by the AI's capacity to simulate nuanced social presence and conversational memory, which, despite generating empathy that rivals human performance in third-party evaluations, paradoxically leads users to feel less understood upon realizing their interlocutor is artificial (Chu et al., 2025). This phenomenon highlights the inherent tension between the sophisticated mimicry of human interaction by AI and the user's underlying psychological need for authentic relationality (Saracini et al., 2025).

This tension, consistent with the Technology Acceptance Model which posits that perceived ease of use and perceived usefulness drive initial technology adoption, often precipitates a dual effect where initial engagement is high due to the AI's perceived understanding, but sustained interaction can lead to feelings of

disillusionment or heightened dependency as the artificiality becomes more salient (Zhai et al., 2025). This cognitive dissonance, where users intellectually acknowledge the AI's non-human nature yet emotionally engage with it as if it were sentient, underscores a "cognitive and emotional conflict" that can profoundly shape user behavior and attachment patterns (Fan et al., 2024). This disjunction, wherein the user's emotional investment clashes with the AI's inherent lack of sentience, can result in increased anxiety and reduced self-efficacy among individuals who become overly reliant on AI for emotional gratification (Jia et al., 2025).

METHOD

The aim of this study is to examine how engagement with dark romance narratives and AI-mediated emotional experiences relate to individuals' attachment to artificial intelligence and their attitudes toward romantic AI. Specifically, the study investigates whether identification with dark romance characters, use of AI for emotional support, and anxious attachment to AI predict downstream relational outcomes such as acceptance of abusive behaviours in relationships and the use of AI for sexual satisfaction.

Additionally, the study explores whether recognition of relational red flags functions as a protective or differentiating factor in these associations.

Participants and procedure

The study sample consisted of 139 participants, with demographic characteristics indicating a predominantly young, female, and heterosexual population, which aligns with the typical audience associated with dark romance media consumption. The age distribution shows a strong concentration in the 16–18 age group, which represents 57.6% of the sample. Participants aged 19–24 years account for an additional 23.0%, meaning that over 80% of the respondents are under 25 years old. Older age groups are progressively underrepresented, with participants aged 25–34 constituting 12.9% of the sample, and those over 35 years collectively accounting for less than 10%. Regarding gender identity, the sample is predominantly female (65.5%), followed by male participants (26.6%).

Additionally, non-binary (4.3%) and transgender (3.6%) participants are represented, indicating a degree of gender diversity within the sample. In terms of sexual orientation, the majority of participants identified as heterosexual (69.1%). However, a substantial proportion of the sample reported non-heterosexual orientations, including bisexual (11.5%), pansexual (5.8%), homosexual (6.5%), and asexual (7.2%) identities. Participants reported varying levels of engagement with dark romance content. The most common response was rare consumption (57.6%), followed by occasional consumption (15.1%). More frequent engagement was reported by smaller segments of the sample, with 10.8% consuming dark romance sometimes, 8.6% often, 6.5% very often, and 1.4% on a daily basis.

Measures

AI-related sexual satisfaction was assessed using a three-item self-report measure developed specifically for the present study, due to the lack of existing validated instruments addressing AI-mediated sexual experiences. The items assessed participants' beliefs regarding the acceptability of AI as a source of sexual satisfaction, enjoyment of erotic elements in AI-mediated conversations, and preference for exploring certain sexual aspects through AI rather than within real-life relationships. Although newly constructed, item content was informed by prior research on attitudes toward AI and technology acceptance, particularly the AI Attitude Scale (AIAS-4; Grassini, 2023), adapting its conceptual focus to the domain of intimacy and sexuality. Responses were recorded on a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*), with higher scores indicating greater acceptance of AI as a source of sexual satisfaction. Exploratory factor analysis supported a single-factor structure, with high factor loadings and excellent internal consistency.

Positive Attitudes Toward Romantic AI were measured using a three-item scale assessing participants' evaluations of romantic AI as a source of companionship, emotional understanding, and perceived safety. Items reflected affective and cognitive evaluations of romantic AI interactions. Responses were recorded on a

5-point Likert scale, with higher scores indicating more favorable attitudes toward romantic AI. Factor analysis supported a unidimensional structure with excellent reliability.

AI as a Source of Emotional Support was measured using a five-item scale developed for this study, assessing the extent to which participants perceive AI as emotionally responsive, understanding, and easier to engage with than real people. Items addressed conversational satisfaction, perceived emotional understanding, emotional validation, and ease of self-disclosure toward AI. Responses were provided on a 5-point Likert scale, with higher scores reflecting greater emotional reliance on AI. Factor analysis indicated a unidimensional structure and strong internal reliability.

Recognition of Relational Red Flags was assessed using a five-item self-report measure designed to capture participants' ability to identify controlling, intrusive, and abusive behaviours in romantic relationships. Items reflected well-established indicators of unhealthy relational dynamics documented in the intimate partner violence literature, such as social isolation, monitoring behaviours, controlling appearance or social interactions, and the misinterpretation of extreme jealousy as love (reverse-coded). Due to the absence of a concise, validated scale specifically measuring red-flag recognition, items were constructed based on theoretical and empirical IPV research. Responses were rated on a 5-point Likert scale, with higher scores indicating greater awareness of relational red flags. Exploratory factor analysis supported a single-factor solution with good internal consistency.

Identification with dark romance characters was measured using the Character Identification Scale (adapted from Igartua, 2001), consisting of 14 items assessing cognitive, emotional, and experiential dimensions of narrative identification. Items captured perceived similarity, emotional involvement, perspective-taking, narrative immersion, and vicarious emotional experiences. Participants responded using a 5-point Likert scale, with higher scores indicating stronger identification with characters. The scale demonstrated excellent internal consistency in the present sample.

Attachment to AI was assessed using the Experiences in Human–AI Relationships Scale (EHARS - Yang & Oshio 2025), which measures individual differences in attachment-related orientations toward AI agents. Two subscales were included: anxious attachment to AI, reflecting reassurance-seeking and desire for emotional closeness, and avoidant attachment to AI, reflecting discomfort with intimacy and emotional distancing. Items were rated on a 5-point Likert scale, with higher scores indicating stronger attachment-related tendencies. Both subscales showed strong internal reliability.

Attitudes toward intimate partner violence were measured using selected subscales from the Intimate Partner Violence Attitude Scale (IPVAS–Revised - Toplu et al., 2017). Consistent with the aims of the present study, only the Abuse and Violence dimensions were included, while the Control dimension was excluded. These subscales assess cognitive acceptance and normalization of emotionally abusive behaviours and physical violence within intimate relationships. Responses were recorded on a 5-point Likert scale, with higher scores indicating greater acceptance of abusive or violent relational behaviours. The selected subscales demonstrated high internal consistency in the current sample.

Internal consistency coefficients (Cronbach's alpha) for the present sample are reported in Table 2, together with descriptive statistics for each scale and subscale.

Data Analysis

Descriptive statistics and Pearson correlations were computed using SPSS. Mediation and moderation analyses were conducted using PROCESS macro for SPSS (version 4.2; Hayes, 2022). Model 4 was used to test mediation effects, and Model 1 was used to test moderation effects involving recognition of relational red flags. Significant interactions were further examined using simple slope analyses at -1 SD, mean, and $+1$ SD of the moderator.

RESULTS

Preliminary Results

Because several measures were newly developed for this study, exploratory factor analyses were conducted to assess their dimensionality. Results indicated that all scales loaded on a single factor with high loadings and satisfactory explained variance (see Table 1), supporting the internal coherence of the newly constructed measures.

Table 1. Exploratory Factor Analysis Results for Newly Developed AI-Related Scales

Scale	Items (k)	% Variance Explained	Factor (range)	Loadings
AI Emotional Support	5	75.7%	.78 – .90	
Recognition of Red Flags	5	61.5%	.73 – .84	
AI Sexual Satisfaction	3	85.8%	.91 – .95	
Positive Attitudes Toward Romantic AI	3	91.9%	.95 – .96	

Given that several scales were newly developed for the purposes of this study, exploratory factor analyses (EFA) were conducted to evaluate their factorial structure and statistical adequacy. Principal Component Analysis indicated that all newly constructed scales exhibited a unidimensional structure, with each scale loading on a single factor. The proportion of variance explained by the extracted factor ranged from 61.5% to 91.9%, exceeding commonly accepted thresholds for satisfactory construct representation. Additionally, all items showed high factor loadings (ranging from .73 to .96), suggesting strong associations between individual items and their respective latent constructs. Taken together, these results indicate that the newly developed measures demonstrate adequate factorial validity and internal coherence, supporting their use in subsequent analyses.

To examine the distribution of the data, descriptive statistics were computed for the study variables, including mean, standard deviation, minimum, and maximum values. Normality was assessed for each variable using skewness and kurtosis coefficients. The values for skewness and kurtosis ranged between –1 and +1, indicating a normal distribution of the data. All scales were scored by summing their items (or subscales), and descriptive statistics are therefore reported as total scores rather than item averages.

Table 2. Descriptive statistics and reliability coefficients for the variables included in the study

Variable	k (items)	Cronbach's α	M	SD
AI sexual satisfaction	3	.917	5.85	3.73
AI emotional support	5	.920	12.04	6.23
Recognition of red flags	5	.841	17.50	5.59
Positive attitudes toward romantic AI	3	.956	5.84	3.89
Anxious attachment to AI	4	.943	10.03	7.72
Avoidant attachment to AI	3	.898	11.18	6.54

Abuse	4	.944	14.30	7.45
Violence	8	.908	8.20	5.61
Identification with dark romance characters	14	.958	43.33	15.40

Following the examination of data distribution, Pearson correlation analyses were conducted to further explore the relationships among the study variables. These analyses provided an overview of the associations between variables. The resulting correlation coefficients are presented in Table 3.

Table 3. Pearson correlations between identification with dark romance characters, AI related experiences, attachment to AI, recognition of relational red flags, and attitudes toward intimate partner violence

Variable	1	2	3	4	5	6	7	8	9
1. AI sexual satisfaction	-								
2. AI emotional support	.732**	-							
3. Red flags recognition	-.033	.147	-						
4. AI romantic attitude	.884**	.789**	.036	-					
5. AI anxious attachment	.875**	.811**	.052	.903**	-				
6. AI avoidant attachment	-.315**	-.353**	.315**	-.355**	-.329**	-			
7. Abuse acceptance	.663**	.487**	-.215*	.665**	.646**	-.209*	-		
8. Violence	.129	.047	-.494**	.093	.062	-.369**	.159	-	
9. Character identification	.341**	.492**	.184*	.403**	.409**	-.133	.299**	-.30	-

Pearson correlation analyses revealed several significant associations among the study variables. Similarity and emotional involvement were strongly and positively correlated ($r = .77$, $p < .01$), indicating a high degree of overlap between perceived similarity with AI and emotional engagement.

AI sexual satisfaction showed moderate to strong positive correlations with AI emotional support ($r = .73$, $p < .01$), AI romantic attitudes ($r = .88$, $p < .01$), and anxious attachment to AI ($r = .88$, $p < .01$). Similarly, AI emotional support was strongly associated with AI romantic attitudes ($r = .79$, $p < .01$) and anxious attachment to AI ($r = .81$, $p < .01$).

AI romantic attitudes were highly correlated with anxious attachment to AI ($r = .90$, $p < .01$) and moderately correlated with abuse acceptance ($r = .67$, $p < .01$). Anxious attachment to AI was also positively associated with abuse acceptance ($r = .65$, $p < .01$).

In contrast, avoidant attachment to AI showed significant negative correlations with AI sexual satisfaction ($r =$

-.32, $p < .01$), AI emotional support ($r = -.35$, $p < .01$), AI romantic attitudes ($r = -.36$, $p < .01$), and anxious attachment to AI ($r = -.33$, $p < .01$).

Recognition of relational red flags was negatively correlated with abuse acceptance ($r = -.22$, $p < .05$) and violence ($r = -.49$, $p < .01$), while showing no significant associations with AI romantic attitudes or anxious attachment to AI.

Finally, character identification demonstrated strong positive correlations with similarity ($r = .95$, $p < .01$) and emotional involvement ($r = .94$, $p < .01$), as well as moderate positive correlations with AI romantic attitudes ($r = .40$, $p < .01$), anxious attachment to AI ($r = .41$, $p < .01$), and abuse acceptance ($r = .30$, $p < .01$).

Following the examination of data distribution and preliminary assumptions, one-way analyses of variance (ANOVA) were conducted to examine differences in AI-related experiences, attachment orientations toward AI, and recognition of relational red flags as a function of frequency of dark romance consumption. These analyses allowed for the comparison of mean differences across six levels of consumption frequency. The results of these analyses are presented in Table 4.

Table4. Differences in AI-related experiences, attachment to AI, and recognition of relational red flags across levels of dark romance consumption

Variable	Rare M (SD)	Occasional M (SD)	Sometimes M (SD)	Often M (SD)	Very often M (SD)	F (5, 133)	p	η^2
Sexual satisfaction (AI)	4.70 (2.65)	5.29 (3.35)	6.27 (3.20)	8.67 (4.52)	10.89 (4.59)	12.239	.001	.32
Emotional support (AI)	10.35 (4.91)	10.86 (6.15)	13.80 (5.40)	14.42 (7.27)	20.78 (6.25)	9.363	.001	.26
Red flags recognition	17.54 (5.58)	20.48 (4.24)	16.53 (5.49)	14.58 (5.16)	19.44 (6.08)	2.245	.053	.08
Romantic attitude (AI)	4.69 (2.67)	5.05 (3.54)	6.93 (4.10)	8.17 (4.65)	11.00 (4.82)	10.999	.001	.29
Anxious attachment (AI)	7.55 (5.36)	9.19 (6.71)	11.60 (7.19)	14.17 (9.16)	21.89 (9.61)	12.740	.001	.32
Avoidant attachment (AI)	11.83 (6.52)	12.52 (6.77)	12.47 (5.64)	8.33 (6.08)	5.78 (4.18)	2.979	.014	.10

One-way ANOVA analyses revealed statistically significant differences across levels of dark romance consumption frequency for most AI-related variables. Significant group effects were observed for AI sexual satisfaction, $F(5, 133) = 12.24$, $p < .001$, $\eta^2 = .32$, AI emotional support, $F(5, 133) = 9.36$, $p < .001$, $\eta^2 = .26$, AI romantic attitudes, $F(5, 133) = 11.00$, $p < .001$, $\eta^2 = .29$, and anxious attachment to AI, $F(5, 133) = 12.74$, $p < .001$, $\eta^2 = .32$.

For these variables, mean scores showed a monotonic increase as the frequency of dark romance consumption increased, with the highest values consistently observed in the *very often* and *daily* consumption groups. Effect sizes ranged from medium to large, indicating substantial between-group differences.

The ANOVA for avoidant attachment to AI was also significant, $F(5, 133) = 2.98$, $p = .014$, $\eta^2 = .10$, with mean scores decreasing as dark romance consumption frequency increased, suggesting an inverse pattern relative to anxious attachment.

In contrast, the effect of consumption frequency on recognition of relational red flags did not reach conventional levels of statistical significance, $F(5, 133) = 2.25$, $p = .053$, $\eta^2 = .08$, although the effect size suggested a small-to-moderate trend.

Hypothesis Testing

H1. It was hypothesized that identification with dark romance characters would be positively associated with AI sexual satisfaction, and that this relationship would be mediated by attitudes toward romantic AI, such that higher levels of identification would predict more positive romantic AI attitudes, which in turn would predict greater AI sexual satisfaction.

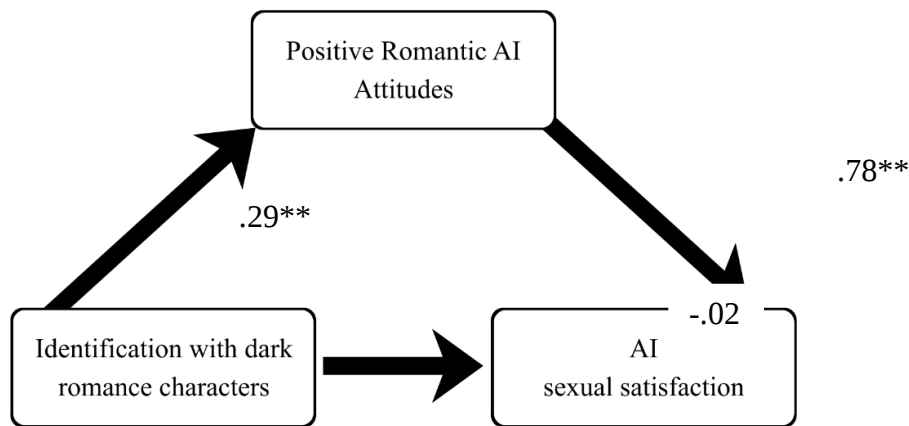


Figure 1. The figure presents a mediation model in which positive romantic attitudes toward AI mediate the relationship between identification with dark romance characters and sexual satisfaction in interactions with AI.

A mediation analysis was conducted using PROCESS Model 4 (Hayes, 2022), controlling for age, gender, sexual orientation, and frequency of dark romance consumption. Identification with dark romance characters significantly predicted attitudes toward romantic AI ($\beta = .29$, $p < .001$), even after accounting for the covariates. Attitudes toward romantic AI, in turn, strongly predicted AI sexual satisfaction ($\beta = .78$, $p < .001$). The direct effect of identification with dark romance characters on AI sexual satisfaction became nonsignificant once attitudes toward romantic AI were included in the model ($\beta = -.02$, $p = .64$) whereas the indirect effect remained statistically significant ($\beta = .22$, 95% CI [.08, .36]), as indicated by bootstrapped confidence intervals. Taken together, these findings support a full mediation model, suggesting that identification with dark romance characters is associated with greater AI sexual satisfaction through its effect on attitudes toward romantic AI, even when controlling for relevant demographic and consumption-related variables.

H2. It was hypothesized that AI emotional support would be positively associated with AI sexual satisfaction, but that this association would be mediated by identification with dark romance characters, indicating a primarily direct relationship between emotional reliance on AI and sexual satisfaction with AI.

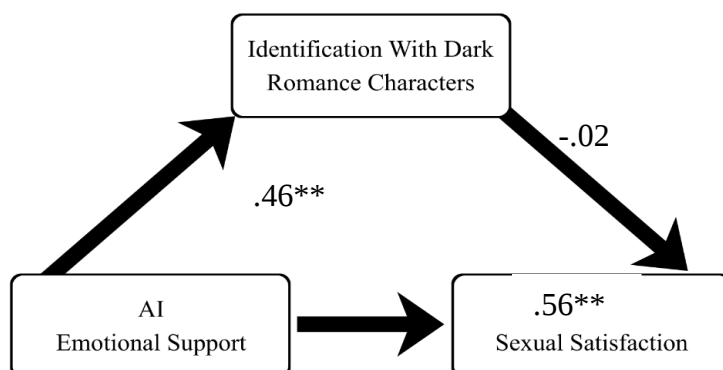


Figure 2. The figure presents a mediation model in which positive romantic attitudes toward AI mediate the relationship between identification with dark romance characters and sexual satisfaction in interactions with AI.

A mediation analysis using PROCESS Model 4, controlling for age, gender, sexual orientation, and frequency of dark romance consumption, indicated that identification did not mediate the association between AI emotional support and AI sexual satisfaction. Although AI emotional support significantly predicted identification ($\beta = .46, p < .001$), identification was not a significant predictor of AI sexual satisfaction ($\beta = -.02, p = .79$). The indirect effect was not significant, $\beta = -.01, 95\% \text{ CI } [-.07, .04]$. In contrast, the direct effect of AI emotional support on AI sexual satisfaction remained strong and significant ($\beta = .56, p < .001$), suggesting a direct association between emotional reliance on AI and sexual satisfaction with AI.

H3. It was hypothesized that recognition of relational red flags would be negatively associated with acceptance of violent behaviours in romantic relationships, whereas AI sexual satisfaction would not be a significant predictor of violence acceptance, after controlling for demographic and consumption-related variables.

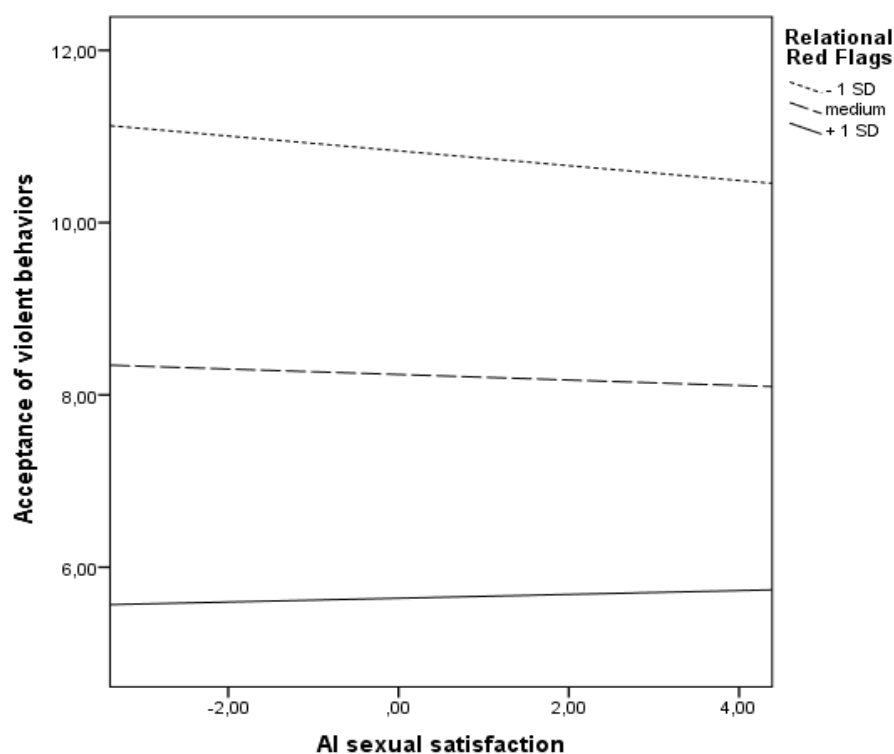


Figura 3. Relationship between AI Sexual Satisfaction and Acceptance of Violent Behaviours at different levels of Relational Red Flags

A moderation analysis was conducted using PROCESS Model 1, controlling for age, gender, sexual orientation, and frequency of dark romance consumption. Results indicated that the interaction between AI sexual satisfaction and recognition of relational red flags was not statistically significant ($\beta = .01, p = .64$), suggesting that red-flag recognition did not moderate the association between AI sexual satisfaction and violence acceptance. Moreover, AI sexual satisfaction was not a significant predictor of violence ($\beta = -.02, p = .83$). In contrast, recognition of relational red flags emerged as a significant negative predictor of violence acceptance ($\beta = -.46, p < .001$), indicating that higher red-flag awareness was associated with lower tolerance for violent relational behaviours, independent of AI-related sexual experiences.

H4. It was hypothesized that recognition of relational red flags would moderate the association between AI sexual satisfaction and acceptance of abusive behaviours, such that the positive association between AI sexual satisfaction and abuse acceptance would be stronger at lower levels of red-flag recognition and weaker at higher levels of red-flag recognition.

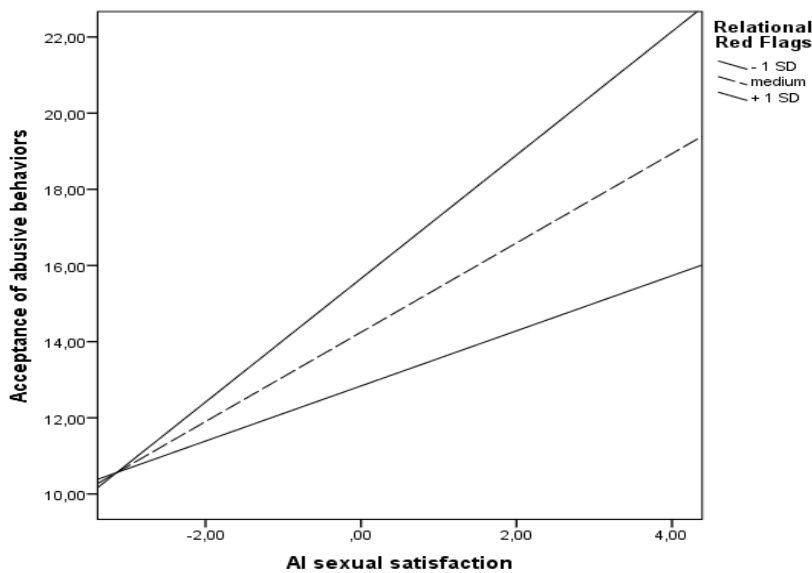


Figura 4. Moderating effect of Relational Red Flags on the relationship between AI Sexual Satisfaction and Acceptance of Abusive Behaviours

A moderation analysis was conducted using PROCESS Model 1 (Hayes, 2022), controlling for age, gender, sexual orientation, and frequency of dark romance consumption. Results revealed a significant main effect of AI sexual satisfaction on acceptance of abusive behaviours ($\beta = .56$, $p < .001$), indicating that higher levels of AI-related sexual satisfaction were associated with greater acceptance of abuse. A significant main effect of recognition of relational red flags was also observed ($\beta = -.25$, $p = .002$), such that higher red-flag recognition predicted lower acceptance of abusive behaviours. Importantly, the interaction between AI sexual satisfaction and red-flag recognition was statistically significant ($\beta = -.08$, $p < .001$), accounting for an additional 4.6% of the variance in abuse acceptance.

Simple slope analyses indicated that the positive association between AI sexual satisfaction and abuse acceptance was strongest at low levels of red-flag recognition, attenuated at average levels, and weakest at high levels of red-flag recognition, although the association remained significant across all levels of the moderator. These findings suggest that recognition of relational red flags functions as a protective cognitive factor, reducing, but not eliminating, the association between AI-related sexual satisfaction and tolerance for abusive relational dynamics.

DISCUSSION

The present study sought to clarify the complex relationships between engagement with dark romance narratives, attitudes toward romantic AI, and AI-related sexual satisfaction, while also examining the role of AI emotional support and the protective function of relational red-flag recognition in shaping the acceptance of problematic relational behaviours. Overall, the findings highlight differentiated psychological pathways through which fictional narratives and AI-mediated intimacy intersect, underscoring the importance of cognitive and emotional mechanisms in moderating these effects.

Results indicate that identification with dark romance characters indirectly predicts AI sexual satisfaction through attitudes toward romantic AI, whereas AI emotional support exerts a direct and robust influence on AI sexual satisfaction, independent of narrative identification. Additionally, heightened recognition of relational red flags consistently predicts lower acceptance of violence and abuse, positioning it as a critical cognitive safeguard against the normalization of harmful relational dynamics. Together, these findings suggest that while both narrative engagement and AI interaction shape intimate attitudes, individual-level cognitive awareness plays a decisive role in mitigating risk (Döring & Mohseni, 2025).

The mediation observed in H1, where identification with dark romance characters predicts more favorable attitudes toward romantic AI, which in turn predict greater AI sexual satisfaction, aligns with established

psychological frameworks of narrative transportation and character identification. Identification with morally ambiguous or anti-heroic characters facilitates emotional immersion and attitude internalization, enabling affective responses elicited by fiction to transfer onto real-world or quasi-real relational targets.

From this perspective, repeated exposure to dark romance narratives may foster cognitive schemas in which intensity, power asymmetry, and emotional volatility become associated with desirability and intimacy. When users encounter AI companions capable of simulating responsiveness and emotional depth, these schemas may be activated, enhancing sexual satisfaction through the normalization of fantasy-driven intimacy. The persistence of this mediation after controlling for demographic variables underscores the psychological robustness of this pathway, suggesting that narrative identification operates as a stable mechanism shaping relational preferences.

Importantly, AI companions offer a uniquely low-risk environment in which such preferences can be enacted. The absence of real-world consequences, combined with the AI's consistency and adaptability, may reinforce attachment and satisfaction by allowing users to engage in intense relational dynamics without the unpredictability inherent in human relationships (Kim et al., 2023; Döring et al., 2024).

In contrast to initial expectations, H2 revealed a strong direct relationship between AI emotional support and AI sexual satisfaction, with no mediating role of narrative identification. This finding is consistent with attachment-theoretical accounts of human–AI relationships, wherein emotionally responsive AI companions may function as secure bases, directly fostering trust, comfort, and positive affect that generalize across relational domains.

The absence of mediation suggests that emotional support from AI operates through largely implicit processes rather than through conscious emulation of fictional characters. Psychologically, AI may function as a form of transitional object, fulfilling unmet emotional needs and facilitating intimacy without reliance on narrative proxies. The magnitude of the effect highlights AI's capacity to act as a holistic intimacy provider, raising important questions about the blurring of emotional and sexual boundaries within AI-mediated relationships.

These findings further suggest that perceived emotional authenticity, even when users are aware of the AI's algorithmic nature, plays a central role in relational satisfaction. This challenges traditional assumptions about intimacy as requiring reciprocal human subjectivity and points toward an evolving conceptualization of relational fulfillment in technologically mediated contexts (Babu et al., 2025; Wang et al., 2025).

Findings related to H3 demonstrate that recognition of relational red flags strongly predicts lower acceptance of violent behaviours, independent of AI sexual satisfaction and without moderation effects. This pattern reflects cognitive appraisal and metacognitive monitoring processes, whereby individuals with heightened awareness of relational warning signs activate protective schemas that inhibit the normalization of aggression.

Although dark romance narratives may model tolerance for violence through repeated exposure to problematic relational scripts, red-flag recognition appears to interrupt this social learning process by promoting critical evaluation rather than passive internalization. The absence of a moderating effect from AI sexual satisfaction suggests that engagement with AI, even in sexually satisfying ways, does not inherently exacerbate acceptance of violence. This may be attributable to AI's non-embodied and controllable nature, which decouples simulated intimacy from real-world cues associated with physical aggression.

These results emphasize the central role of individual cognitive frameworks in shaping how media content and AI interactions influence attitudes toward interpersonal violence. They also underscore the importance of media literacy and reflective engagement as protective factors in navigating morally complex fictional narratives.

The significant moderation observed in H4 indicates that recognition of relational red flags attenuates, but does not eliminate, the positive association between AI sexual satisfaction and acceptance of abusive behaviours. This interaction can be understood through cognitive dissonance and dual-process models of judgment. High levels of AI sexual satisfaction may encourage pleasure-biased processing, increasing the likelihood of

rationalizing abusive tropes derived from fictional or simulated experiences. However, strong red-flag recognition introduces cognitive dissonance that is resolved in favor of ethical and normative standards.

Simple slope analyses suggest a graded effect: individuals with lower red-flag awareness rely more heavily on heuristic processing, whereas those with higher awareness engage in analytic scrutiny of relational dynamics. Although the proportion of variance explained is modest, the effect highlights the practical value of red-flag education as a harm-reduction strategy.

These findings suggest that interventions aimed at improving recognition of problematic relational patterns, within both fictional media and AI interactions, may effectively mitigate the potential normalization of abuse. While AI companions may offer emotional relief and companionship, careful consideration must be given to how such technologies shape relational expectations, particularly to prevent over-reliance or withdrawal from human relationships (Yuan et al., 2025; Liu et al., 2025).

CONCLUSIONS AND LIMITS

This paper has examined the complex interplay between dark romance consumption, narrative identification, and attitudes toward romantic AI companions, shedding light on the psychological mechanisms through which fictional narratives and AI-mediated intimacy intersect. The findings contribute to an emerging body of research on human–AI relationships by demonstrating that engagement with dark romance narratives and emotional reliance on AI are meaningfully associated with attitudes toward AI intimacy, while cognitive factors such as relational red-flag recognition play a crucial protective role against the normalization of harmful relational dynamics.

These results underscore the importance of continued investigation into the long-term psychological and relational consequences of human–AI interaction, particularly regarding AI’s capacity to meet social and emotional needs and its implications for individual well-being (Zhang et al., 2025). Future research should examine whether and how AI companions can model adaptive relational behaviours, such as emotional availability, consistency, and non-judgmental responsiveness, and whether exposure to such interactions can positively influence expectations and practices within human relationships (Ho et al., 2025). At the same time, careful ethical scrutiny is required to assess how AI-mediated intimacy may reshape perceptions of commitment, vulnerability, and interdependence, especially when users begin to construe these interactions as equivalent to human relationships (Döring & Mohseni, 2025; Manzini et al., 2024).

The tendency for users to develop emotionally meaningful attachments to AI companions raises important concerns about potential psychological risks, including boundary blurring between simulated and real relationships, emotional over-reliance, and shifts in social expectations (Chu et al., 2025; Pataranutaporn et al., 2025; Zhang et al., 2024). While AI companionship may alleviate loneliness and provide emotional support, its predictable and controllable nature may also foster unrealistic standards for human intimacy or inadvertently contribute to social withdrawal. These dual possibilities highlight the need for nuanced research that examines both the benefits and unintended consequences of AI-mediated relationships (Ho et al., 2025).

Several limitations of the present study should be acknowledged. First, the cross-sectional design precludes causal inferences regarding the directionality of the observed associations. Longitudinal and experimental research is needed to determine whether engagement with dark romance and AI companions actively shapes relational attitudes over time. Second, reliance on self-report measures may introduce biases related to social desirability or introspective accuracy. Third, the study did not directly assess behavioral transfer from AI interactions to human relationships, leaving open questions regarding the extent to which relational scripts learned in AI-mediated contexts generalize to offline social behavior. Participants reported varying levels of engagement with dark romance content, with the most common response being rare consumption (57.6%), followed by occasional consumption (15.1%), sometimes (10.8%), often (8.6%), very often (6.5%), and daily (1.4%). This skewed distribution toward low consumption may limit the relevance, statistical power, and generalizability of observed relationships involving dark romance variables.

Despite these limitations, the present findings offer valuable insights into the psychological dynamics underpinning the convergence of fictional media and artificial companionship. Ultimately, this study advocates for a balanced and critically informed approach to the development and use of AI companions, one that acknowledges their potential to support emotional well-being while proactively addressing the psychological, ethical, and social risks associated with their integration into intimate life.

REFERENCES

1. Babu, J., Joseph, D., Kumar, R., Alexander, E., Sasi, R. K., & Joseph, J. (2025). Emotional AI and the rise of pseudo-intimacy: Are we trading authenticity for algorithmic affection? *Frontiers in Psychology*, 16. DOI: 10.3389/fpsyg.2025.1679324
2. Bigey, M. (2024). Reading dark romance: The ambiguities of a fascinating genre. DOI: 10.64628/aak.sc3tdt766
3. Black, J. E., Helmy, Y., Robson, O., & Barnes, J. (2018). Who can resist a villain? Morality, Machiavellianism, imaginative resistance and liking for dark fictional characters. *Poetics*, 74, 101344. DOI: 10.1016/j.poetic.2018.12.005
4. Chu, M. D., Gerard, P., Pawar, K., Bickham, C., & Lerman, K. (2025). Illusions of intimacy: Emotional attachment and emerging psychological risks in human–AI relationships. *arXiv (Cornell University)*. DOI: 10.48550/arxiv.2505.11649
5. Döring, N., & Mohseni, M. R. (2025). Anti-AI bias toward couple images and couple counseling: Findings from two experiments. *Archives of Sexual Behavior*. DOI: 10.1007/s10508-025-03318-9
6. Döring, N., Le, T. D., Vowels, L. M., Vowels, M. J., & Marcantonio, T. L. (2024). The impact of artificial intelligence on human sexuality: A five-year literature review 2020–2024. *Current Sexual Health Reports*, 17(1). DOI: 10.1007/s11930-024-00397-y
7. Earp, B. D., Mann, S. P., Aboy, M., Awad, E., Betzler, M., Botes, M., Calcott, R., Caraccio, M., Chater, N., Coeckelbergh, M., Constantinescu, M., Dabbagh, H., Devlin, K., Xiao-jun, D., Dranseika, V., Everett, J. A. C., Fan, R., Feroz, F., Francis, K., ... Clark, M. S. (2025). Relational norms for human–AI cooperation. *arXiv (Cornell University)*. DOI: 10.48550/arxiv.2502.12102
8. Gavin, S. M. (2021). The influence of media violence on intimate partner violence. *Journal of Interpersonal Violence*. DOI: 10.1177/08862605211018144
9. Glomb, K., Sekulak, M., Augustyn, A., & Michalkiewicz, N. (2025). Does love forgive all? The role of romantic love narratives in the legitimization of intimate partner violence. *Psychology, Crime & Law*. DOI: 10.1080/1068316X.2025.2529443
10. Grassini, S. (2023). Development and validation of the AI attitude scale (AIAS-4): A brief measure of general attitude toward artificial intelligence. *Frontiers in Psychology*, 14, 1191628.
11. Ho, J. Q. H., Hu, M., Chen, X., & Hartanto, A. (2025). Potential and pitfalls of romantic artificial intelligence companions: A systematic review. *Computers in Human Behavior Reports*, 19, 100715. DOI: 10.1016/j.chbr.2025.100715
12. Igartua, J. J. (2010). Identification with characters and narrative persuasion through fictional feature films.
13. Kim, J., Merrill, K., & Collins, C. (2023). Investigating the importance of social presence on intentions to adopt an AI romantic partner. *Communication Research Reports*, 40(1), 11. DOI: 10.1080/08824096.2022.2159800
14. Kjeldgaard-Christiansen, J., Fiskaali, A., Høgh-Olesen, H., Johnson, J. A., Smith, M., & Clasen, M. (2020). Do dark personalities prefer dark characters? A personality psychological approach to positive engagement with fictional villainy. *Poetics*, 85, 101511. DOI: 10.1016/j.poetic.2020.101511
15. Kraxenberger, M., Knoop, C. A., & Menninghaus, W. (2021). Who reads contemporary erotic novels and why? *Humanities and Social Sciences Communications*, 8(1). DOI: 10.1057/s41599-021-00764-3
16. Liu, A. R., Pataranutaporn, P., & Maes, P. (2025). The heterogeneous effects of AI companionship: An empirical model of chatbot usage and loneliness and a typology of user archetypes. *Proceedings of the AAAI/ACM Conference on AI Ethics and Society*, 8(2), 1585. DOI: 10.1609/aies.v8i2.36658
17. Maas, M. K., & Bonomi, A. E. (2020). Love hurts? Identifying abuse in the virgin–beast trope of popular romantic fiction. *Journal of Family Violence*, 36(4), 511. DOI: 10.1007/s10896-020-00206-9

18. Manoli, A., Pauketat, J. V. T., Ladak, A., Noh, H., Hwang, A. H., & Anthis, J. R. (2025). "She's like a person but better": Characterizing companion-assistant dynamics in human–AI relationships. *arXiv* (Cornell University). DOI: 10.48550/arxiv.2510.15905
19. Manzini, A., Keeling, G., Alberts, L., Vallor, S., Morris, M. R., & Gabriel, I. (2024). The code that binds us: Navigating the appropriateness of human–AI assistant relationships. *Proceedings of the AAAI/ACM Conference on AI Ethics and Society*, 7, 943. DOI: 10.1609/aies.v7i1.31694
20. Massa, N., Bisconti, P., & Nardi, D. (2022). The psychological implications of companion robots: A theoretical framework and an experimental setup. *International Journal of Social Robotics*, 15(12), 2101. DOI: 10.1007/s12369-021-00846-x
21. Moss, L. (2022). The medium and the message: An investigation of mainstream media use, relationship scripts, and intimate partner violence among Black adolescents.
22. Pang, C. C., Gao, Y., Wang, X., & Hui, P. (2026). The AI amplifier effect: Defining human–AI intimacy and romantic relationships with conversational AI. *arXiv* (Cornell University). DOI: 10.48550/arxiv.2603.08084
23. Pataranutaporn, P., Karny, S., Archiwaranguprok, C., Albrecht, C., Liu, A. R., & Maes, P. (2025). "My boyfriend is AI": A computational analysis of human–AI companionship in Reddit's AI community. *arXiv* (Cornell University). DOI: 10.48550/arxiv.2509.11391
24. Saracini, C., Cornejo-Plaza, M. I., & Cippitani, R. (2025). Techno-emotional projection in human–GenAI relationships: A psychological and ethical conceptual perspective. *Frontiers in Psychology*, 16. DOI: 10.3389/fpsyg.2025.1662206
25. Scaravelli, G. (2025). BookTok and dark romance. *Gaudeamus: Journal of the Faculty of Letters*.
26. Shank, D. B., Koike, M., & Loughnan, S. (2025). Artificial intimacy: Ethical issues of AI romance. *Trends in Cognitive Sciences*, 29(6), 499. DOI: 10.1016/j.tics.2025.02.007
27. Taccini, F., & Mannarini, S. (2024). News media representation of intimate partner violence: A systematic review. *Sexuality Research and Social Policy*. DOI: 10.1007/s13178-023-00922-z
28. Thobaiti, F. A. (2022). Portraying the male abuser in contemporary women's fiction. *ELOPE: English Language Overseas Perspectives and Enquiries*, 19(2), 197. DOI: 10.4312/elope.19.2.197-210
29. Toplu Demirtaş, E., Hatipoğlu-Sümer, Z., & Fincham, F. D. (2017). Intimate partner violence in Turkey: The Turkish intimate partner violence attitude scale-revised. *Journal of Family Violence*, 32(3), 349–356.
30. Tschopp, M., Gieselmann, M., & Sassenberg, K. (2023). Servant by default? How humans perceive their relationship with conversational AI. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 17(3). DOI: 10.5817/cp2023-3-9
31. Wang, X., Pang, C. C., & Pan, H. (2025). "My dataset of love": A preliminary mixed-method exploration of human–AI romantic relationships. *arXiv* (Cornell University). DOI: 10.1145/3757532
32. Yang, F., & Oshio, A. (2025). Using attachment theory to conceptualize and measure the experiences in human–AI relationships. *Current Psychology*.
33. Yuan, Y., Zhang, J., Aledavood, T., Zhang, R., & Saha, K. (2025). Mental health impacts of AI companions: Triangulating social media quasi-experiments, user perspectives, and relational theory. *arXiv*. DOI: 10.48550/arxiv.2509.22505
34. Zhang, R., Han, L., Han, M., Zhan, J., Gan, H. M., & Lee, Y. (2024). The dark side of AI companionship: A taxonomy of harmful algorithmic behaviors in human–AI relationships. *arXiv* (Cornell University). DOI: 10.48550/arxiv.2410.20130
35. Zhang, Y., Zhao, D., Hancock, J. T., Kraut, R. E., & Yang, D. (2025). The rise of AI companions: How human–chatbot relationships influence well-being. *arXiv* (Cornell University). DOI: 10.48550/arxiv.2506.12605
36. Zhou, Y. (2025). From pseudo-intimacy to cyber romance: A study of human–AI companions, emotion shaping, and engagement practices.

APPENDIX

AI as a Source of Sexual Satisfaction

1. I believe AI can be used for sexual satisfaction.

2. Conversations with AI can include erotic elements that are enjoyable for me.
3. I would prefer to explore certain sexual aspects through AI rather than in a real-life relationship.

AI as a Conversational Partner / Emotional Support

1. An AI can provide satisfying responses in a conversation.
2. I have felt that AI offers me emotional support.
3. Conversations with AI can be as enjoyable as talking to a real person.
4. I feel that AI understands me.
5. It is easier for me to open up to an AI than to a real person.

Recognition of Red Flags in Relationships

1. Insisting on having a partner's passwords is a sign of control.
2. Isolation from friends and family is an abusive behavior.
3. Checking a partner's phone or messages without permission is a red flag.
4. Extreme jealousy should not be interpreted as proof of love. (*reverse-coded item*)
5. Controlling how a partner dresses or who they meet is a sign of abuse.

Positive Attitudes Toward Romantic AI

1. A romantic AI can provide genuine companionship.
2. Interacting with a romantic AI can make me feel understood.
3. A romantic AI can be a pleasant and safe experience.

Use of Artificial Intelligence Tools

Artificial intelligence tools (ChatGPT Plus, Scite AI, Consensus, Claude, Gemini, and Jenni AI) were used to support language editing and to assist in identifying potentially relevant academic sources. All retrieved references were subsequently verified and evaluated independently by the author. The conceptual development, literature screening, data extraction, and statistical analyses were conducted independently by the author.