

# Readers' Engagement With and Perception of AI-Generated Narratives in the Context of Digital Literature

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**Abstract**—With the growing capabilities of advanced language models, artificial intelligence (AI) is increasingly contributing to storytelling, raising questions about narrative coherence, emotional resonance, and the impact of authorship disclosure. The research explores how readers engage with and perceive AI-generated narratives in the evolving landscape of digital literature. It examines six key factors: Narrative Coherence (NC), Emotional Resonance (ER), Disclosure of AI Authorship (DAI), Reader Engagement (RE), Narrative Preference (NP), and Narrative Genre Preference (NGP) through a structured survey of 500 participants using a five-point Likert scale. The research has used the SPSS-29 and considers statistical methods like ANOVA, Chi-Square tests, and descriptive statistics. Hypothetical pathway analysis was employed to evaluate reader responses and identify significant patterns. Findings reveal that NC and ER positively influence RE, while DAI negatively affects NP. Among all hypotheses tested, the most significant was H5, demonstrating that reader engagement strongly enhances narrative preference ( $\beta = 0.47, p = 0.000$ ). ANOVA results confirmed meaningful engagement differences across demographic groups ( $F = 4.73, p = 0.003$ ), and Chi-Square tests indicated significant associations for all six variables, especially DAI ( $\chi^2 = 15.87, p = 0.0001$ ). Descriptive statistics highlighted high overall scores for NC and RE, and mixed responses for DAI. These results emphasize the importance of emotional and structural quality in AI storytelling and illustrates reader sensitivity to machine authorship. The research contributes to the understanding of AI's role in narrative creation and offers a data-driven framework for designing engaging, emotionally compelling, and contextually aware AI-generated literature.

**Index Terms**—AI-generated narratives, authorship disclosure, digital literature, reader engagement, narrative perception

## I. INTRODUCTION

Digital literature is redefining narratives in ways that are broader, interactive, and more algorithmic in nature (de Lima et al., 2025). AI technology has recently taken center stage, offering powerful storytelling tools with the ability to generate coherent narrative structure, characters, direction, and dialogue (Floridi, 2025). As a result, these stories generated by AI challenge our understanding of what an author is and the creative process, while creating both interest and skepticism for conscious readers and critics (Welsen et al., 2023). Ultimately, the changes brought forth from new platforms and AI as an authoring tool represent a shift in literature into new methods of engagement and modes of critiquing (Santhosh et al., 2024).

AI has changed the landscape of creative writing, especially with advancements in language modeling that create stories that look and feel like they were authored by a human (Belda-Medina, 2024). The origins of AI-generated stories hark back to older models that frequently relied on rule-based systems from the 1960s through models like ELIZA and SHRDLU that worked within predetermined structures (Regalado et al., 2021). These early models may have simulated human interaction through conversation, but they did not offer a standard of creative writing based on originality and emotionality (Kim et al., 2018). In the last sixty years, we have seen advancements in both computer processing and natural language processing (NLP) to more complex models (Mastrothanas et al., 2025). Now, model applications like ChatGPT, Sudowrite, and NovelAI are utilized to support creators in co-authoring stories and narrative analysis in digital

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representations (Nakamura et al., 2024). This shift has extended the notion of authorship and prompted important considerations regarding originality, emotionality, and artistic ownership in the context of digital literature (Getenet et al., 2024). AI and digital literature are structurally outlining ways of encountering texts (Zhao & Su, 2024). Technology prompts core beliefs about authorship, narrative ownership, and emotionality beyond existing ideas. In offline contexts, the author was stable, and as a reader, dealt with narrative in variant experiences, the meaning of the text was always 'fixed' and common assumptions that informed the reading experience were about the authorial intention behind the writing to inform the experience of interpretation (Wei et al., 2024). Digital contexts and AI narratives throw obfuscation to this model with variability, interactivity, and intentionality that were created without human intervention. Stories made in algorithmic systems change how we read, engage, and connect emotionally (Saddhono et al., 2024). Distinct from static print, AI narratives change information and negotiate understanding whilst responding to a user, their preferences, and even real-time conditions, creating hybrid forms. The flexibility facilitates a more thoughtful interpretive engagement that inspires converging away from passive reading toward actively co-constructing meaning (Raffloer & Green, 2025). AI literature challenges conventional definitions of authorship, originality, and emotionality in expanded literature; it alters the reader-text relationship from passive to active and algorithmic storytelling. This transition complicates the definition of creativity when text is not anthropocentric, blurring the lines around creative autonomy. New ways of thinking are needed to re-imagine how the content views, processes, interprets, and responds to literature or narratives, especially as something artistic is made increasingly more non-humanly possible through AI digital literature.

### A. Research Objective

The aim of the research is to examine how readers engage with and perceive AI-generated narratives in digital formats. It seeks to understand how factors like narrative coherence, emotional quality, and authorship disclosure contribute to engagement and preferences. The study will also examine demographic characteristics, reader patterns, and how genre preference moderates engagement, to inform better design and use of AI-generated storytelling.

### B. Research Contributions

The study establishes and quantifies six psychological and narrative factors that shape engagement with AI-generated stories. It delivers an evidence-based model for digital literary analysis.

- Building on this empirical foundation, the study adopts superior statistical approaches. It provides contextually rich data analysis to identify demographic and behavioural patterns in AI narrative reception. The application of ANOVA, Chi-Square, and pathway analysis ensures a rigorous analytical approach.
- In addition to statistical rigor, the research observes the cultural context for author identification. The study shows AI authorship strongly affects how readers experience the story, emphasizing the need for clear disclosure and well-structured presentation of machine-generated content.
- These findings contribute to a broader framework for human-centered narrative engagement. The research generates implications for developing ethically designed AI-generated narratives that align with user expectations and provoke empathy-focused narrative storytelling.

### C. Research Framework

The research framework was organized as follows: Section 2 demonstrates the related works, which includes the relevant research regarding the objective, Section 3 shows the hypothesis frameworks, Section 4 presents the methodology as it derives from research design to statistical test, Section 5 illustrates the results and discussion of findings, and Section 6 presents the conclusion, which covers limitation and future scope.

## II. LITERATURE REVIEW

The bias in AI-generated narratives was examined by using ChatGPT-4, and focused on depictions of success in Spain (Sardinha, 2024). An experimental analysis revealed overrepresentation of young, heterosexual, Hispanic individuals, and underrepresentation of marginalized groups (Gabino-Campos et al., 2025). Findings highlighted AI's tendency to replicate training-data biases and reinforce social inequalities. Limitations included context specificity and reliance on a single AI model for analysis. The role of AI-generated personal narratives was determined to develop self-insight through stream-of-consciousness inputs by 26 adult participants (Blyler & Seligman, 2024). The ways in which undergraduate students construct their sense of agency and authorship while engaging in AI-assisted writing using ChatGPT. The narrative analysis highlighted ways students managed a transparent, equilibrated position regarding AI's role when doing academic work. To the previous works that over-attributed agency to mechanical components and took a 'more-than-digital' approach. Explore the pedagogical implications and future pathways to integrate AI advancement in critical literacy (Jiang et al., 2024). It examined the transformative implications of AI in the construction of media narratives that examine the impact of algorithms in how content is created, curated, and consumed. The study examined the implications of AI in influencing opinions in the public domain, spreading misinformation, and raising ethical dilemmas. The study highlighted the importance of transparency and accountability regarding AI in the media landscape. AI integration promotes a more responsible approach, enabling critical public discourse and public storytelling (Walia & Jain, 2023). The conversations generated were realistic, engaging, contextually relevant, and closely resembled human-like exchanges

both in their tone and flow. The study highlighted the importance of consistency of character and relevance to narrative and emphasized an increasing proficiency in interactive and script-based content construction. AI models are able to maintain plot structure, create characters, and retain thematic coherence in narratives (Lee, 2020). Comparative evaluations with human-written scripts identified both creative strengths and structural limitations. The research indicated practical potential for AI in screenwriting and media production. Ethical and societal concerns surrounding AI-generated creative content require in-depth examination (Bostrom, 2020). Key issues included accountability, authenticity, and cultural integrity in machine-generated works. The research warned against the unchecked use of AI in artistic fields and recommended ethical development aligned with human values and creative standards. Large language models like GPT-3 demonstrated transformative capabilities in the creative industries (Carlini et al., 2021). Autoregressive algorithms supported writing and content generation with high fluency and coherence. Practical applications included storytelling, copywriting, and idea development, and indicated increasing dependence on AI for augmenting creative output. Legal ambiguity affected AI as it revolutionized the digital marketing landscape by creating AI-generated marketing videos (Najafov, 2024). These videos combined advanced technology with creative storytelling, offering efficiency, personalization, and engagement. As AI continued to evolve, it had the potential to revolutionize brand communication and set new standards for visual narratives.

### Research gap

The diverse engagement and interest in narrative generated by AI is continuing to develop; the research gap in how embedded social biases in training datasets impact reader perceptions in various cultural contexts remains. Developing an understanding in this space is important because the research community has predominantly investigated AI-generated narratives in Western contexts; moreover, this research often does not consider meaningful or diverse participant samples and largely relies on single model analysis. Therefore, the generalizability of the findings is limited. Research areas that focus on narrative coherence and emotional responsiveness have added to the understanding of how AI narratives matter, while having very little understanding of how genre, authorship disclosure, and ethics shape audience perceptions of AI narratives. Most work also does not have longitudinal depth to understand how reader engagement develops over time with AI narratives.

Statistical approaches can be applied to research topics relating to cultural specificity, limited generalizability, and a narrow model of studies of AI-generated narratives, particularly Chi-Square, Descriptive Statistics, and ANOVA. These techniques can allow addressing shortcomings involving lacking participants not having longitudinal perspectives, as well as the issue of addressing genre, and authorship disclosure connected to AI narratives by employing a more inclusive, data-driven research approach for how readers from different cultural contexts engage with stories created by AI over time.

## III. METHODOLOGY

The research examines the changing relationship between readers and AI-generated narratives in a digital and online literature context. With the emergence of large language models that can produce human-like stories, questions have arisen concerning coherence, emotionality, and narrative authenticity. The research examines issues around the reception of this narrative type by different readers and the impact of AI authorship on meaning-making. The context discussed in the research reflects changes in technology, literary consumption, and authorship in an algorithmic-creativity era. Figure 1 illustrates the working flow of AI-generated narratives with digital literature.

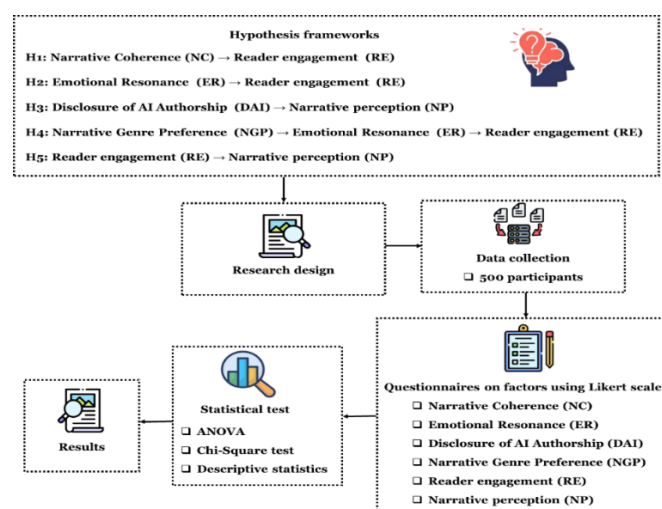


Figure 1. Working Flow of AI-Generated Narratives With Digital Literature

### A. Research Design

The research design takes a quantitative, survey research-based approach to examine readers' engagement and perceptions of AI-generated narratives with digital literature. A structured questionnaire was designed that used a five-point Likert scale to create quantitative data through 500 participants who provided survey responses about aspects of narrative coherence, emotional engagement, and genre preferences. The data comprised descriptive statistics based on the survey responses, combined with ANOVA and Chi-Square tests conducted on demographic variables to isolate patterns. Analytical design provides a comprehensive perspective on how different readers engage and assess AI-generated storytelling.

### *B. Hypothesis Frameworks*

The research investigates how various psychological, technological, and contextual factors influence readers' engagement and perception of AI-generated narratives. It examines the independent variables, such as NC, ER, DAI, NGP, and dependent variables, such as RE and NP. These interrelated factors form the conceptual structure for understanding micro-level dynamics of literary reception in the context of digital literature enhanced by artificial intelligence. The framework proposes how these factors influence RE and NP, both directly and through potential mediating influences. Figure 2 represents the hypothetical framework.

*H1: Higher levels of Narrative Coherence (NC) are positively associated with increased influences Reader Engagement (RE)*

NC is a degree of consistency, logic, and clarity that is related to story elements like plot and character actions, and when faced with temporal progressions. In AI-created narratives, a high degree of coherence facilitates and reduces cognitive load during reading, allowing the reader to engage with and immerse more in the story. This immersion opens greater opportunities for emotional and intellectual investment, two fundamental dimensions of RE. When a story "makes sense," readers are more likely to keep reading, empathize with a character, or even cognitively simulate events occurring in the narrative. Therefore, NC is a cognitive anchor that inherently nurtures and sustains reader engagement in digital narrative environments.

*H2: Emotional Resonance (ER) has a positive impact on Reader Engagement (RE)*

ER refers to the degree of intense, relatable emotions a narrative evokes from its readers, such as elation, fear, empathy, or sadness. When AI-generated stories discover ways to elicit these emotional responses, the reader's emotional circuits are activated, with these emotional circuits being strongly linked to memory, attention, and motivation. Readers are plunged into the story not simply mentally but viscerally as they empathize emotionally with the characters. This emotional arousal can foster prolonged attention and increased involvement in the narrative, which are other components of RE. Therefore, ER is not merely a reaction but an active pull toward the narrative experience.

*H3: Disclosure of AI Authorship (DAI) leads to a decrease in readers' preference for the Narrative Preference (NP)*

Disclosure of Artificial Intelligence (DAI) refers to informing audiences that the stories they are consuming are produced by an AI system. Such disclosures can produce cognitive biases and affect evaluations of the story's quality and credibility. When audiences know the author is human, they often respond differently than when they know the narrative comes from an AI system. As a result, audiences may attribute less credibility, creativity, or emotional depth to stories authored by AI. Even an excellent story may be perceived as lacklustre due to preconceived notions about authorial agency and machine involvement. Therefore, DAI is likely to negatively influence how audiences judge the value, originality, and impact of stories created with artificial intelligence, potentially affecting NP.

*H4: Narrative Genre Preference (NGP) moderates the relationship between the effect of Emotional Resonance (ER) and Reader Engagement (RE)*

NGP, or Narrative Genre Preference, is a reader's commitment to narrative forms, which influences expectations and tolerance for variations in storytellers. In genres like science fiction, fantasy, or experimental fiction, readers can be less concerned with author structures or human nature, leading to higher positive effects of ER on reader engagement. Conversely, readers with deep character realism and literary fiction can require sophisticated and plotted narratives to understand perceived coherence, which can diminish the coherence of a generated narrative. NGP moderates the influence of coherence on engagement based on the genre context.

*H5: Reader Engagement (RE) has a positive influence on Narrative Preference (NP)*

RE is the behavioral, emotional, and cognitive engagement with a narrative. Deep engagement leads to more positive evaluations of the narrative, as readers attribute quality, novelty, and emotionality. This positive bias amplifies a reader's NP and shapes the interpretation of the story's meaning, quality, and literary value. In AI-generated stories, high RE can moderate negative biases, resulting in more generous evaluative assessments. Thus, RE is an important determinant of how reader perceptions are shaped, particularly in AI-generated stories.

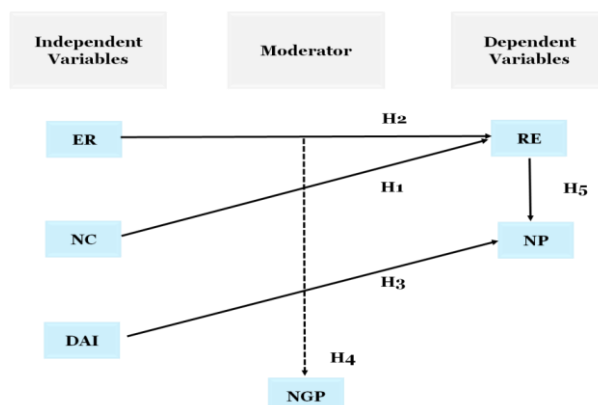


Figure 2. Presentation of Hypothetical Framework

### C. Data Collection

The research is designed to explore how readers engage with reader reception of AI-generated stories in digital literature contexts. The research has considered 500 participants to offer a variety of deeper responses to narrative coherence, feelings, and authenticity of AI-authored stories. By collating a range of reader responses from diverse demographic and literary backgrounds, the research seeks to illustrate how AI's existence alters interpretive experience and narrative satisfaction.

### D. Questionnaires on Factors Using Likert Scale

Table 1 presents twelve Likert questions developed to evaluate six key factors affecting readers' engagement and perception of AI-generated narratives: NC, ER, DAI, RE, NP, and NGP. Each factor is assessed through two targeted questions that explore cognitive clarity, emotional impact, authorship perception, and individual preferences in narrative style and genre. To measure participants' responses, a five-point Likert scale ranging from Strongly Disagree to Strongly Agree was employed. This scale enabled participants to express the extent of agreement with each statement related to narrative quality and AI involvement. The standardized format facilitated consistent and quantitative analysis of subjective experiences across all questionnaire items.

TABLE 1  
QUESTIONNAIRES ON FACTORS USING LIKERT SCALE

Factors	Questionnaires (Q) numbers	Questionnaires
NC	Q1	Does the AI-generated narrative maintain a clear and logical storyline?
	Q2	Is the sequence of events in the narrative easy to follow?
ER	Q3	Does the narrative evoke strong emotional reactions?
	Q4	Do the characters' emotions in the story feel authentic and relatable?
DAI	Q5	Does knowing that the story was generated by AI affect the reading experience?
	Q6	Does the perception of the narrative change when AI authorship is disclosed?
RE	Q7	Does the narrative hold attention from beginning to end?
	Q8	Is it easy to stay immersed in the AI-generated story?
NP	Q9	Does the narrative style align with preferred reading styles?
	Q10	Is there a preference for reading AI-generated narratives over human-written ones?
NGP	Q11	Is the genre of the AI-generated story appealing?
	Q12	Is enjoyment of the story influenced by its genre?

### E. Statistical Tests

The research has used SPSS software version 29 and considers statistical methods such as ANOVA, Chi-Square tests, and descriptive statistics to assess readers' involvement and views of AI-generated tales. ANOVA compared answers across demographic groups, illustrating how age and education impact emotional connection and narrative flow. The Chi-Square Test investigated categorical relationships such as genre choice and reported enjoyment, emphasizing the importance of AI authorship disclosures. Descriptive statistics provided fundamental insights into response trends, highlighting strengths and shortcomings in story coherence, emotional resonance, and reader immersion.

#### - ANOVA (Analysis of variance)

ANOVA was used to determine whether significant differences exist in readers' engagement and perceptions of AI-generated narratives based on demographic characteristics such as age, education, and reading habits. This model examines whether differences in mean responses regarding storytelling elements—such as emotional connection and narrative flow—are statistically significant. It compared group means across these categories, providing context for readers' characteristics and behaviors toward AI-generated works. Significant F-values highlight distinct demographic

experiences with AI-written narratives. These findings support more tailored approaches for engaging readers with AI-generated stories. The ANOVA formula is shown in equations (1), (2), and (3).

$$E = \frac{MS_{between}}{MS_{within}} \tag{1}$$

Wherein

$$MS_{between} = \frac{SS_{between}}{df_{between}} \tag{2}$$

$$MS_{within} = \frac{SS_{within}}{df_{within}} \tag{3}$$

Where  $SS_{between}$  is the sum of squares between groups,  $SS_{within}$  shows the sum of squares with group.

- *Chi-Square test*

The Chi-Square test was used to explore associations among categorical variables. These include genre preference and levels of perceived narrative enjoyment in AI-generated stories. Chi-Square is a non-parametric test. It shows if response distributions differ meaningfully from expected patterns. This suggests the nature of the relationship between factors such as disclosure of AI authorship or engagement. This approach allows the researcher to observe key dependencies in reader response, capturing more than average scores. Significant associations reveal how factors like genre or style shape preferences and patterns. The results help identify possible genre-specific strategies for developing AI-generated narratives. The general formula for the Chi-Square statistics is shown in equation (4).

$$W^2 = \sum \frac{(P_j - F_j)^2}{F_j} \tag{4}$$

Where,  $W^2$  is the Chi-Square statistic,  $P_j$  shows the Observed Frequency,  $F_j$  presents the expected frequency, and  $\sum$  is the Summation Overall Categories.

#### F. Descriptive Statistics

Descriptive statistics summarize the participants' responses to all twelve Likert-scale questionnaire items about readers' engagement, and participants' perception in response to the narrative. Mean, standard deviation, and frequency distribution noted the average scores, with the average of the responses and the nature of the variation in responses with measures in every factor, including narrative coherence, emotional engagement, authorship awareness, and others. Descriptive statistics provide a general image of what was happening and allow us to see areas of strength and weakness of the AI-generated NARRATIVE experience. Descriptive statistics can allow for making a rationale for inferential statistics results and interpretation. It provides a useful user-friendly visualization of participant attitudes. Equation (5) presents the formula of descriptive statistics.

$$\bar{w} = \frac{1}{M} \sum_{j=1}^M w_j \tag{5}$$

Wherein,  $M$  is the number of data points, and  $w_j$  is the individual data points.

### IV. RESULTS

The AI-generated narratives are changing the landscape of digital literature by creating new types of storytelling written by machines rather than humans, re-casting ordinary digital literature into a machine-produced experience. These changes present challenges for readers in understanding narrative and storytelling as they relate to narrative quality, emotional engagement, and narrative credibility. The present research aims to understand how factors such as narrative coherence, emotional engagement, and AI author characteristics potentially inform readers' engagement and preference.

#### A. Demographic Characteristics of Participants

Table 2 summarizes the demographic profile of the 500 survey participants. Reading ability was distributed as follows: 15% beginners, 50% intermediate, and 35% advanced readers, indicating balanced experience levels. Gender representation was even, with 47% male and 53% female. Age groups included 38% aged 25–34, 24% aged 18–24, 22% aged 35–44, and 16% aged 45 and older. Fiction was the most popular literature type at 42%, followed by science fiction/fantasy (20%), non-fiction (18%), and poetry or other (10% each). Educational attainment showed 46% held a first degree, 44% had a postgraduate qualification, and 10% had a high school education or lower. Figure 3 displays (a) Reading Proficiency Level, (b) Gender, (c) Preferred Literature Type, and (d) Education Level.

TABLE 2  
SUMMARY OF DEMOGRAPHIC CHARACTERISTICS

Demographic Variable	Categories	Frequency (n=500)	Percentage (%)
Reading Proficiency Level	Beginner	75	15%
	Intermediate	250	50%
	Advanced	175	35%
Gender	Male	235	47%
	Female	265	53%
Age	18–24 years	120	24%
	25–34 years	190	38%
	35–44 years	110	22%
	45+ years	80	16%
Preferred Literature Type	Fiction	210	42%
	Non-fiction	90	18%
	Poetry	50	10%
	Science Fiction / Fantasy	100	20%
	Others (Drama, Experimental, etc.)	50	10%
Education Level	High School or Below	50	10%
	Undergraduate	230	46%
	Postgraduate	220	44%

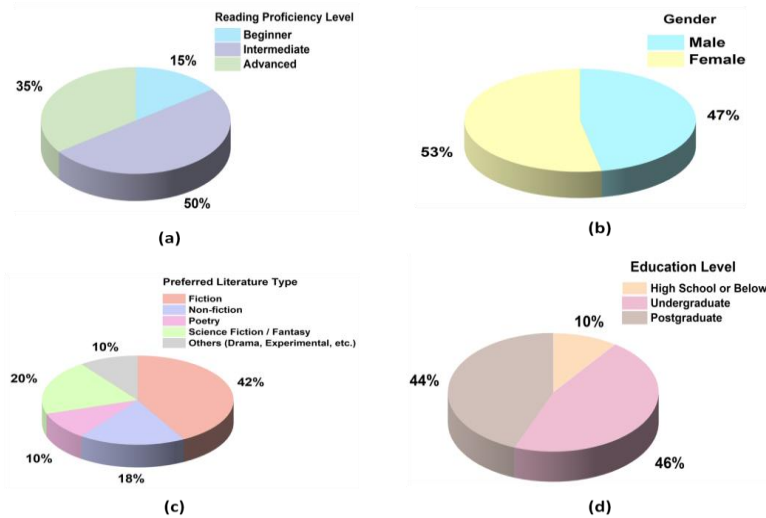


Figure 3. Presentation of (a) Reading Proficiency Level, (b) Gender, (c) Preferred Literature Type and (d) Education Level

B. ANOVA

Table 3 shows the ANOVA results for reader engagement across demographic groups. The between-groups sum of squares is 22.68 and has 3 degrees of freedom, giving us a mean square of 7.56. The within-groups sum of squares is 794.32 with 496 degrees of freedom, giving us a mean square of 1.60. Therefore, the F-value becomes 4.73 with a p-value of 0.003. This indicates a statistically significant difference between engagements based on demographic factors. This means factors such as age, educational level, or reading habits are meaningful differences in how participants engage with the narrative generated by AI. The total amount of variance in the model is the amount of variance considered by the overall sum of squares, which is 817.00.

TABLE 3  
QUANTITATIVE VALUES IN ANOVA OF READER ENGAGEMENT

Source of Variation	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F-value	p-value
Between Groups	22.68	3	7.56	4.73	0.003*
With Groups	794.32	496	1.60	-	-
Total	817.00	499	-	-	-

C. Descriptive Statistics

Table 4 shows the descriptive statistics for six reader perception variables related to AI narratives. NC had a high mean of 4.08 and a standard deviation of 0.73 which indicated a strong agreement on clarity of AI stories; ER had a mean of 3.94, suggesting moderate emotional engagement; DAI had the lowest mean of 3.21, indicating that readers were mixed on the effects of knowing that the story was AI generated; RE mean was relatively high (4.02), suggesting that readers were engaged and immersed in the narratives; NP (mean 3.76) and NGP (mean 3.88) showed positive perceptions of AI storytelling; an overall favourable perception was noted across genres. The overall findings suggest that there was a generally favourable reception of AI narratives relative to Narrative Coherence and Narrative Engagement.

TABLE 4  
DESCRIPTIVE STATISTICS FOR READER PERCEPTION VARIABLES

Variables	Mean	Standard Deviation	Minimum	Maximum
NC	4.08	0.73	2.0	5.0
ER	3.94	0.81	1.0	5.0
DAI	3.21	0.95	1.0	5.0
RE	4.02	0.69	2.0	5.0
NP	3.76	0.78	1.0	5.0
NGP	3.88	0.72	2.0	5.0

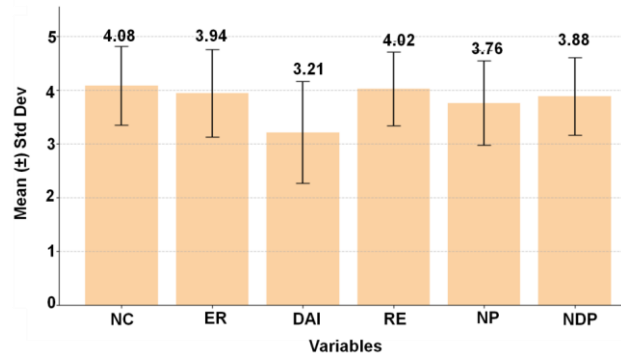


Figure 4. Graphical Representation of Descriptive Statistics

D. Chi-Square Test

Table 5 provides a summary of the results of the Chi-Square test of six predictor variables hypothesized in relation to reader perception, emotional perception, and engagement with AI generated narratives. NC resulted in a  $\chi^2$  value of 10.24 (df = 2, p = 0.006) demonstrating a significant relationship with patterns of reader response. ER showed an even stronger association as it had a  $\chi^2 = 12.13$ , p = 0.002 indicating emotional content significantly influences reader engagement. When readers were informed of AI authorship to be as a Digital Author and then explained the model, DAI had the most significant degree of association with reader response as  $\chi^2 = 15.87$ , df = 1, p = 0.0001. Evidence reinforces the significance of DAI as an influential variable. The results for RE had a  $\chi^2 = 9.66$ , p=0.008 further demonstrating the role of reader engagement in reader evaluations of narratives. In addition to the variable of DAI there were also statistically significant associations reported for Reader NP ( $\chi^2 = 7.41$ , p = 0.025) and Reader NGP ( $\chi^2 = 6.98$ , p = 0.031). The data in Figure 5 supports the idea that all six variables have a statistically significant relationship with how readers are interacting and assessing the AI generated digital narratives.

TABLE 5  
CHI-SQUARE TEST RESULTS FOR HYPOTHESIZED VARIABLES

Variables	$\chi^2$ Value	Degrees of Freedom (df)	p-value
NC	10.24	2	0.006
ER	12.13	2	0.002
DAI	15.87	1	0.001
RE	9.66	2	0.008
NP	7.41	2	0.025
NGP	6.98	2	0.031

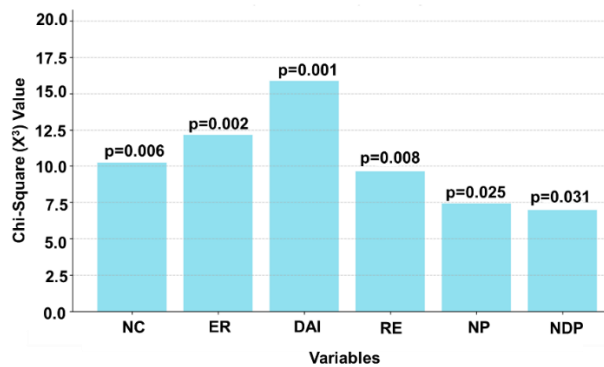


Figure 5. Graphical Representation of Chi-Square Values

E. Hypothetical Pathway Evaluation Results

Table 6 and Figure 6 present the results of the hypothetical pathway analysis which examined the direct and moderated effects of variables impacting reader engagement and reader perception of AI-generated narratives. H1 found a strong positive effect of Narrative Coherence ( $\beta = 0.42$ ,  $p = 0.000$ ) on Reader Engagement indicating that a well-structured narrative increases immersion. Similarly, H2 found that Emotional Resonance positively relates to engagement ( $\beta = 0.37$ ,  $p = 0.000$ ), supporting the premise that narratives generated by AI that consistently elicit emotional reactions can lead to clearly elevated levels of reader engagement. H3 found that Disclosure of AI Authorship was negatively related to Narrative Preference ( $\beta = -0.28$ ,  $p = 0.001$ ), suggesting that the reader's knowledge of machine authorship causes the perceived value of the narrative to be reduced. Lastly, H5 demonstrated a positive influence of greater Reader Engagement on Narrative H4 showed a significant moderated pathway ( $\beta = 0.31$ ,  $p = 0.002$ ), to support that Narrative Genre Preference influences the effect of Narrative Coherence on Engagement. Preference ( $\beta = 0.47$ ,  $p = 0.000$ ), signifying that the higher levels of immersion can produce congruent evaluations. All the hypotheses were statistically supported, confirming the conceptual model for the research.

TABLE 6  
HYPOTHETICAL PATHWAY EVALUATION RESULTS

Hypothesis	Variables	Path	Path Coefficient ( $\beta$ )	Standard Error	t-Value	p-Value	Support/Not Support
H1		NC $\rightarrow$ RE	0.42	0.06	7.00	0.000	Support
H2		ER $\rightarrow$ RE	0.37	0.07	5.29	0.000	Support
H3		DAI $\rightarrow$ NP	-0.28	0.08	-3.50	0.001	Support
H4		ER $\rightarrow$ NGP $\rightarrow$ RE	0.31	0.09	3.44	0.002	Support
H5		RE $\rightarrow$ NP	0.47	0.05	9.40	0.000	Support

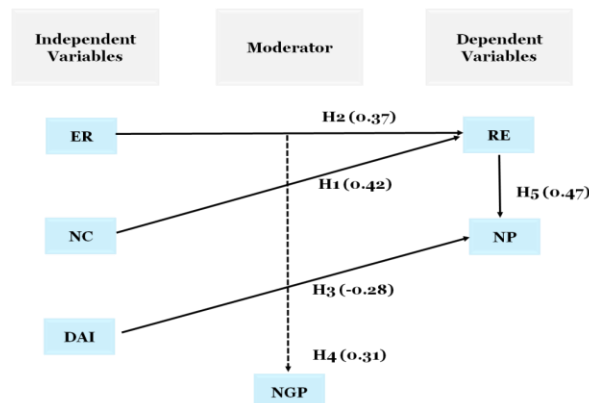


Figure 6. Hypothetical Pathway Evaluation Results

## V. DISCUSSION

The growing use of AI in digital literature reveals both promising engagement and problematic patterns. Research shows that AI-generated narratives can foster emotional resonance and self-insight, enhanced reader immersion, and reflective experience. However, persistent issues such as algorithmic bias, underrepresentation of diverse groups, and the influence of authorship disclosure raise concerns about inclusivity and authenticity (Gabino-Campos et al., 2025). Reader engagement is influenced not only by the coherence or aesthetic of the narrative, but also by the perceived credibility of its source, human or machine. While readers often respond positively to well-structured or emotionally rich content, knowledge that the narrative is AI-authored can negatively impact narrative preference. These effects highlight a need for more nuanced narrative design and transparency in AI authorship (Blyler & Seligman, 2024). Despite encouraging results, limitations such as small or culturally narrow samples, reliance on a single AI model, and short-term evaluations limit the generalizability of current findings. Broader cross-cultural, longitudinal, and genre-diverse research is essential to fully understand how AI storytelling affects diverse reader populations (Jiang et al., 2024). A critical, human-centered approach is needed to align AI literary production with inclusive and meaningful reader experiences.

The series of statistical analyses conducted in this research to measure reader engagement and perception of AI-generated stories utilized several different analytic techniques. The ANOVA test indicated a statistically significant difference in engagement across demographic groups:  $F(3, 649) = 4.73$ ;  $p = 0.003$ . The descriptive statistics indicated that Narrative Coherence ( $M = 4.08$ ,  $SD = 0.73$ ) was rated with the highest mean, suggesting that AI-generated stories were clear, while Disclosure of AI Authorship ( $M = 3.21$ ,  $SD = 0.95$ ) was rated with the lowest mean, indicating mixed readers' opinions on AI authorship. Chi-Square tests identified statistically significant associations for all variables. For example, the largest  $\chi^2$  value for DAI = 15.87 ( $p = 0.0001$ ) suggests significant engagement for the group authorship variable DAI. Although the Chi-Square test is generally a more simplistic way of measuring associations, it does suggest that the disclosure of authorship does have a strong effect on readership, and perceptions are dependent on the AI author's contribution. Finally, the Hypothetical Pathway Analysis verified all hypotheses proposed in this research, where Reader

Engagement's positive effect on Narrative Preference had the highest described coefficient for  $\beta = 0.47$  ( $p = 0.000$ ), impact on readership decision making about reading engagement, and favourably perceiving AI-generated narratives. Among the proposed hypotheses for the research, the best hypothesis was H5: that RE positively influences NP. The hypothesis also had the strongest statistical measurement with a path relationship coefficient  $\beta = 0.47$ ,  $t$ -value = 9.40, and a significant measurement  $p = 0.000$ , indicating a strong and meaningful positive relationship between readers' immersion in narratives and positively favouring view and impression of AI-generated narratives.

## VI. CONCLUSION

Research demonstrates that AI-generated narratives can engage readers in a meaningful way if they are crafted meaningfully, with clarity, emotional engagement, and genre conventions in mind. The statistical analyses confirmed the relationships between NC, the audience's ER as it relates specifically to the narrative coherence of AI-generated stories, and RE, and when reading machine-generated narratives, DAI had a decidedly negative effect on NP. With the various hypotheses tested, reader engagement was the most important factor shaping readers' perceptions of AI-written stories, with the intellectual interest generated impacting the greatest effect as a strong path coefficient ( $\beta = 0.47$ ) determined from the hypothetical pathway analysis. In the ANOVA analysis, the effects of demographics yielded statistical differences on reader engagement, while the Chi-Square analysis also confirmed strong relationships between all six predictor variables and reader responses, with no surprise toward authorship knowledge. The descriptive statistics also revealed that readers do appreciate logic and 'emotional engagement.' However, they are sensitive to the knowledge that the narrative was written by a machine. Overall, the research explains the principle of narrative design. It considers narrative events that are clearly structured, employ a clear and memorable emotional 'punch', and are presented formally. These events are not always expected to lead to greater engagement when readers consciously process the authorship knowledge of the machine origin. This research focuses on various aspects of design and disclosure; it highlights the importance of forethought to create better engagement and perceptions. The findings also provide a greater understanding of the stimuli and context, particularly when reading on digital devices. These factors affect human expectations of creativity, emotion, and coherence in constructing AI-generated digital literature consistent with reader reception and expectations. Much of the literature for both AI-generated narratives and for human expectations associated with generating narratives on behalf of human authors requires careful negotiation. It is necessary to generate other kinds of knowledge based on the reader's reception and engagement degrees in each phase of the reading experience. One of the significant limitations of the research was the scope of short-term reader responses and the lack of longitudinal tracking of reader responses. It is possible that it can take time for readers' views to change. Furthermore, the sample was culturally limited, and thus generalizability was limited across readership and reader populations. To spark deeper insights and inspire impactful designs, future research can actively explore how readers from diverse cultures and genres interact with AI-generated narratives and dynamically track engagement over time.

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