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Narrative Structure and Emotional Engagement: A Cross-Cultural Study of Aristotelian and Classical Indian Narrative Frameworks

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Abstract

Narratives convey events through their structure, which organizes the story's unfolding and evokes emotional engagement. This study examines the emotional impact of two influential narrative frameworks: The Aristotelian narrative structure from ancient Greece and the Classical Indian narrative structure rooted in Bharata's *Nāṭyaśāstra*. Both frameworks aim to evoke emotional engagement despite cultural and temporal differences. However, many studies have explored the influence of narrative and its structure on readers; few have directly compared the emotional responses these distinct styles elicit. To fill this gap, we conducted an experimental, within-subjects study using the romantic short story "The Gift of the Magi" by O. Henry, presented in both narrative structures. In a counterbalanced design, participants (N=100) read the story with either the Aristotelian-then-Classical or Classical-then-Aristotelian order narrative structures. Their emotional responses (intensity), including valence, arousal, and dominance, were tracked and assessed across plot units, and data were analysed using a two-way mixed ANOVA. Participants reported higher levels of anger in the Classical Indian structure. Overall, the results indicate that the main effects of story structure and story order on most emotional responses were not significant independently; their interaction had a substantial impact. This study enhances our understanding of narrative engagement by showing how structure and order influence emotional responses, offering insights into Aristotelian and Classical Indian frameworks and guiding future research on the dynamics of narrative engagement.

Keywords: Aristotelian and Classical Indian narrative structure; Emotional impact; Nāṭyaśāstra; Poetics; Storytelling

1. Introduction

Narrative represents a sequence of events organized through cause and effect, unfolding across time and space. It begins with an initial situation, progresses through changes, and concludes with a new equilibrium (Abbott, 2008; Bordwell & Thompson, 2001). The narrative structure—its organization, pacing, and revelation of information—serves as a blueprint that integrates characters, plot, and themes into a cohesive experience (Chatman, 1980). At its core,

every story revolves around a protagonist pursuing a goal against opposing forces, culminating when the outcome is achieved or denied.

Emotions, defined as evaluative and valenced reactions to events, agents, or objects varying in intensity (Ortony et al., 1988), are central to narrative engagement. Narrative structures elicit these emotions, guiding comprehension and immersion (Carroll 2003). During reading, emotions continually update mental models, enhancing engagement and empathy (Bal & Veltkamp, 2013; Busselle & Bilandzic, 2009; Mar & Oatley, 2008; Mar et al., 2011; Miall & Kuiken, 2002; van Krieken, 2018). Because narratives evoke emotions differently depending on structure (Oatley, 2016), understanding this relationship is crucial for applications in media, education, and emotional intelligence (Bruner, 1991; Nikolajeva, 2014). Reception studies highlight the dynamic nature of narrative immersion (Brewer & Lichtenstein, 1982; Busselle & Bilandzic, 2008; Jacobs, 2015), while qualitative approaches explore reader–text interaction and challenge fixed notions of readership (Höijer, 1990; Fejes, 1984). From a theoretical perspective, structuralism seeks the underlying principles that organize texts and unify diverse narratives (Barry, 2017), and narratology extends this by examining how structural elements influence readers' perceptions and affective experiences (Groden et al., 2004).

Across cultures, narrative frameworks have evolved to express universal human experience. Two of the most influential are Aristotle's *Poetics* and Bharata's *Nāṭyaśāstra*, each outlining principles for constructing emotionally resonant stories. Aristotle's fourth-century BCE model emphasized the "beginning–middle–end" triad, often called "*Aristotle's Arc*, underscoring unity of action, character development, and catharsis—the purgation of emotions through empathetic engagement with the protagonist's fate (Butcher, 1951). The Aristotelian narrative builds tension toward a climactic peak followed by resolution, a model that profoundly shaped Western storytelling through the nineteenth century (Padmavat, 2015). In contrast, the *Nāṭyaśāstra* (500 BCE–500 CE), a foundational Sanskrit treatise on dramaturgy, proposes a five-stage framework grounded in *kārya* (deed or action): *ārambha* (beginning), *prayatna* (effort), *prāptsambhāva* (prospect of success), *niyatāphalaprāpti* (removal of obstacles), and *phalaprāpti* (attainment of the goal) (Rangacharya, 2014). This progression mirrors an inner psychological trajectory of striving and realization (Dimitrova, 2015). While Aristotle's structure intensifies emotional release through a climactic moment, the Classical Indian model distributes affective energy evenly across stages, emphasizing balance, contemplation, and the unfolding of *rasa*—the aesthetic essence of emotion. Despite differing emphases—linear unity versus cyclical harmony—both traditions share the objective of eliciting emotional engagement, reflection, and pleasure in the audience.

Although research has examined narrative structure and its influence on emotion (Boyd et al., 2020; Knobloch et al., 2004; Reagan et al., 2016; Schmidt et al., 2023), direct comparisons between Aristotelian and Classical Indian frameworks remain scarce. Existing studies often focus on a single cultural tradition or generalized emotional responses, overlooking how distinct structural designs evoke specific emotions. Exploring these differences can deepen understanding of the cognitive and affective mechanisms underlying storytelling and broaden theoretical models of narrative engagement. Methodologically, this study advances the field by tracking dynamic emotional responses across story segments, linking affective intensity to structural progression. The short story form, with its compactness and precision, provides an ideal context for such investigation. Despite its literary importance, the short story has received less analytical attention than the novel, though its concise form allows precise examination of how structure modulates emotion. Building on a structuralist framework that connects narrative form with reader reception, this study investigates how differing narrative logics—Western linearity versus Indian segmentation—shape emotional engagement. Specifically, it compares emotional responses elicited by Aristotelian and Classical Indian (*Nāṭyaśāstra*) narrative

frameworks. It hypothesizes that the Classical Indian model, with its segmented and contemplative phases, will evoke deeper and more complex emotional engagement than the Aristotelian model. Using an experimental within-subjects design, O. Henry's *The Gift of the Magi*—a story renowned for emotional depth and irony—was adapted into both structures. One hundred participants (50 male, 50 female) read the two versions in counterbalanced order (Aristotelian–then–Classical, or vice versa). Emotional responses were tracked across plot units, assessing valence, arousal, dominance, and discrete emotional intensities. Data were analyzed using a two-way mixed ANOVA to test the effects of narrative structure and order. This comparative approach integrates classical aesthetics with cognitive emotion theory, offering a methodological model for quantifying affective dynamics in storytelling and illuminating how structure and sequencing co-determine emotional resonance and reader engagement.

2. Classical Indian and Aristotelian Narrative Structures: A Comparison

Comparing Classical Indian and Aristotelian narrative frameworks reveals their shared aesthetic goals yet distinct approaches to emotional engagement. In Poetics, Aristotle defines plot as the essence of tragedy, emphasizing unity of action, magnitude, and coherence. A complete plot must possess a clear beginning, middle, and end, with events following necessity and leading to resolution (Butcher, 1951). His three-act model—the *Complication* (beginning to climax) and *Unraveling* (climax to end)—creates a unified, causally driven structure. Contrary to common belief, Aristotle stressed unity of action over time and place, insisting narratives revolve around one central event (Economopoulou, 2009). This design builds tension toward a single emotional peak before resolving swiftly, producing catharsis through dramatic compression and release. Bharata's *Nāṭyaśāstra*, the foundation of Classical Indian dramaturgy, presents a contrasting five-stage structure—*Ārambha* (beginning), *Prayatna* (effort), *Prāptsambhāva* (possibility of attainment), *Niyatāphalaprāpti* (certainty of attainment), and *Phalaprāpti* (attainment of goal)—depicting the hero's moral and psychological evolution (Rangacharya, 2014). Each stage carries equal weight, fostering balance and gradual progression rather than a single climax. Indian dramatists employed non-linear storytelling, inserting reflective scenes to bridge gaps in time and place (Rangacharya, 2014). This structure emphasizes continuity and emotional equilibrium, creating "segmented unity" that harmonizes progression with contemplation. Whereas Aristotle's form heightens intensity, the *Nāṭyaśāstra* sustains emotion evenly, aligning with cyclical rather than linear conceptions of experience. Aristotle's narrative allocates the majority of its space to the middle, concentrating emotion around a decisive turning point (Economopoulou, 2009). In contrast, the Indian model distributes emotion across stages, producing more frequent shifts that deepen engagement. The segmented design, with its intricate transitions, allows complex affective trajectories and sustained reader involvement. Consequently, the Classical Indian structure may facilitate richer and more nuanced emotional experiences than Aristotle's linear arc (Bilandzic & Busselle, 2006; Green, Brock, & Kaufman, 2004; Nabi et al., 2006).

Emotion theory further clarifies their divergence. Oatley and Johnson-Laird (1988) identify five core emotions—happiness, sadness, fear, anger, and disgust—based on Ekman's universals, excluding surprise as an independent emotion. The *Nāṭyaśāstra* instead defines eight *bhāvas*, including mirth, sorrow, fear, anger, and disgust, with *adbhuta* (wonder) paralleling surprise as a distinct response to the extraordinary. This convergence between Sanskrit aesthetics and cognitive theory links affect to narrative form. Although Oatley's framework draws on Aristotle, Hogan (2003) argues it resonates more with Sanskrit dramaturgy, as both are agent-centered and goal-driven. Aristotle's structure relies on causality, while the *Nāṭyaśāstra* foregrounds the agent's deliberation and emotional evaluation (Dhanamjaya, 1965; Oatley, 2002). Both traditions thus bind narrative to emotion, cognition,

and moral insight. Yet Aristotle externalizes emotion through dramatic tension and catharsis, whereas the Classical Indian model internalizes it through rhythmic modulation of *Rasa*. As Hogan (2003) notes, the Indian theorists further subdivide the middle into evaluative sub-stages—initial effort, assessment, and renewed concentration—embedding emotion within intentionality. Thus, while both seek empathy and reflection, the Classical Indian framework achieves it through balance and introspection, and the Aristotelian through intensity and release. Together, they offer enduring paradigms of emotionally resonant storytelling across cultural traditions.

3. The Role of Emotions in Narrative Engagement

Narrative is a basic cognitive structure (Schank & Abelson, 1995; Wyer, 2004; Mar 2004) and can be formally defined as ‘‘a representation of connected events and characters that has an identifiable structure, is bounded in space and time, and contains implicit or explicit messages about the topic being addressed’’ (Kreuter et al., 2007). Emotions are internal, mental states that represent evaluative reactions to events, agents, or objects, varying in intensity (Ortony et al., 1988**).** They are fundamental to the narrative experience (Cupchik, 1995; Oatley, 1999). Empirical evidence confirms that individuals regularly experience emotional responses to fictional events (Oatley, 2011). As Gerrig (1993) noted, stories—whether factual or fictional—have the potential to engage readers on a deeper level due to their cognitive ability to process and connect with the narrative (Appel & Maleckar, 2012; Gerrig, 1993). The theory of narrative engagement, rooted in the philosophy of art and aesthetics, suggests that art objects or events, like theatrical performances, differ in “cognitive and emotional distance,” influencing the level of readers' engagement (Miller et al. 1998, 69). Engagement can be viewed through various lenses, including interest, narrative involvement, attitudes, beliefs, identification, or transportation—the absorption into a narrative (Green & Brock, 2000; Singhal & Rogers, 1999). Identification refers to connections with characters, whereas transportation captures a general immersion in the narrative world. Indeed, transportation and identification can be empirically separated (Tal-Or & Cohen, 2010). Studies show that narratives are particularly powerful when they transport individuals into their world, reducing resistance to persuasion by limiting counterarguing as readers focus on the plot (Green & Brock, 2000; Slater & Rouner, 2002). While many studies focus on the dominant or final emotional state evoked by a story (Green et al., 2012), it is argued that transportation is maintained by both plot events and the associated emotions. For example, the hero’s journey, with its emotional shifts from suspense to relief, illustrates how narratives engage readers (Campbell 1949; Knobloch et al. 2004). Research often focuses on single emotions, overall emotional responses, or end emotions—those predominant emotional states narratives aim to evoke by the story's conclusion (Altmann et al., 2012; Bezdek et al., 2015; de Graaf & Hustinx, 2011; Hamby & Brinberg, 2016; Nabi, 2002). For example, a narrative centered on love might follow a protagonist’s journey through romance, culminating in fulfillment, with the emotional arc driving the plot and character development. Suspense, a common emotional shift, involves hope for a positive outcome and fear of a negative one, which can enhance emotional engagement and enjoyment (Knobloch-Westerwick & Keplinger, 2006). Narratives with complex structures, such as non-linear timelines or intricate character development, engage cognitive and affective processes more deeply. This complexity demands greater mental effort, fostering stronger emotional connections as readers become more invested in understanding and resolving the narrative (Green & Brock, 2000; Oatley, 1999; Gerrig, 1993). This emotional complexity contributes to stronger reader investment, particularly when resolution is delayed or morally ambiguous.

4. Decoding Narrative Dynamics: From Story Structure to Emotional Impact

Scholars across various disciplines have long sought to define the essential elements of narratives. There is a general consensus that narratives typically follow a structure with a beginning, middle, and end (Aristotle, [c. 350 BC] 2005; Freytag, 1863). These frameworks suggest that while the basic structure of a story remains consistent, there is infinite variation in its specific content. Drama and film theorists highlight that plot (patterns of events structuring a story) and character are the two major components that engage readers, fostering a sense of closeness with characters and situations (Kincaid, 2002; Moyer-Guse, 2008; Smith et al., 2007). This engagement motivates readers towards insight and action (Klaver 1995; Slater, et al., 2006). A recent study analyzed over 1,700 digitized novels and texts, identifying six common emotional trajectories or "emotional arcs" that align with different plot archetypes: "Rags to riches" (rise), "Tragedy" (fall), "Man in a hole" (fall-rise), "Icarus" (rise-fall), "Cinderella" (rise-fall-rise), and "Oedipus" (fall-rise-fall) (Boyd et al., 2020). From the outset, cognitive tension begins to form as characters process their scenarios, resolve conflicts, and develop new understandings of their worlds, which is theorized to be present throughout the narrative, even near the beginning (Ryan, 1985). Narrative arcs suggest that specific emotions follow a structured sequence (Carroll, 2003; Kim et al., 2017). Boyd et al. (2020) confirmed this by identifying consistent patterns of narrative "grammar" through text analysis, showing coherent structural patterns where cognitive tension peaks in the middle-to-late parts of a story. Narratives inherently evoke emotion through cycles of conflict, tension, and resolution (Frijda, 1989; Tan, 1996). Building on this understanding, the present study investigates whether emotional experiences differ between participants exposed to Classical Indian and Aristotelian narrative structures. It was hypothesized that the Classical Indian narrative structure would elicit deeper and more complex emotional engagement than the Aristotelian structure.

5. Method

This study used an experimental within-subjects design to examine emotional responses to different narrative structures—Aristotelian and Classical Indian (Natyashastra). Participants are exposed to both structures, allowing for a controlled comparison within the same individuals. The independent variable is the narrative structure, and the dependent variables are the emotional responses elicited from participants after exposure to each structure. Descriptive statistics were used to summarise the data, and a two-way mixed ANOVA was used to analyse the effects of narrative structure and story order on emotional responses.

5.1. Participants

We recruited 100 participants (50 males, 50 females; Mean age = 28.74 years, SD = 4.6, age range 21-51) from diverse cultural backgrounds at IIT Kharagpur. Participants were 18 or older, proficient in English, and not professionally involved in literature or narrative studies to avoid bias. They were randomly assigned to experience either the Aristotelian narrative followed by the Classical Indian structure, or vice versa, to control for order effects. The convenience sampling method drew 100 participants from IIT Kharagpur, facilitating a systematic exploration of emotional responses to these narrative structures, though caution was necessary when generalizing findings beyond similar academic settings. An a priori power analysis was conducted using G*Power 3.1 to determine the required sample size for a two-way mixed ANOVA with one within-subjects factor (narrative structure) and one between-subjects factor (presentation order). Assuming a medium effect size ($f = 0.25$), alpha = .05, and power = 0.80, the analysis indicated that a minimum of 98 participants would be required. Our final sample of 100 participants met this threshold, ensuring sufficient statistical power and

allowing for counterbalancing across order conditions. Although formal attention check items were not embedded, all participants completed the full set of readings and emotion ratings without missing data, suggesting adequate engagement with the task.

Although participants represented diverse linguistic and regional backgrounds within the IIT Kharagpur community, detailed measures of cultural orientation, literary exposure, or familiarity with Western and Indian narrative traditions were not systematically collected. Similarly, prior familiarity with O. Henry's *The Gift of the Magi* was not formally assessed. Familiarity with the narrative's plot structure, thematic resolution, or emotional climax may have influenced emotional anticipation, surprise, and engagement across conditions. Future research should therefore incorporate measures of cultural background, narrative preference, literary exposure, and prior familiarity with the stimulus text in order to better evaluate their potential moderating effects on emotional response.

5.2. Procedure

The study was conducted both online via Google Forms and offline. After providing informed consent, participants completed demographic questions and the Brief Mood Introspection Scale (BMIS; Mayer & Gaschke, 1988), followed by a calming video to standardize mood. They first read the entire story, then its adapted versions: three plot units for the Aristotelian structure (beginning, middle, end) and five for the Classical Indian structure (ārambha, prayatna, prāptsambhāva, niyatāphalaprāpti, phalaprāpti). After each unit, participants rated their emotional intensity on a 7-point Likert scale across 12 emotions and on emotional valence, arousal, and dominance using the Self-Assessment Manikin (SAM; Bradley & Lang, 1994). Neutral buffer activities, including a nature video and a puzzle, minimized carryover effects. After completing these activities, participants again completed the BMIS to assess mood changes, followed by a debriefing. Each session lasted about 45 minutes. To control for order effects, the presentation of narrative structures was counterbalanced: half read the Aristotelian version first, and half the Classical Indian version. Nevertheless, factors such as environmental distraction, device differences may have influenced emotional engagement and response intensity. In addition, individual reading times were not separately recorded. Although the total session duration (approximately 45 minutes) was standardized across participants, variability in reading pace, reflection time, and attentional engagement could not be directly incorporated into the analysis. These factors represent methodological limitations and should be more tightly controlled in future studies.

Randomization and Administration Procedure

Participants were randomly assigned to presentation order conditions using a simple randomization procedure, ensuring approximately equal distribution across the two groups (Aristotelian–Classical and Classical–Aristotelian). Data collection was conducted using both online and offline modes. To maintain consistency, all participants received identical instructions, materials, and timing structures. While this approach enhanced accessibility, potential variability arising from environmental differences across modes cannot be entirely ruled out and is acknowledged as a limitation. Reading time was not individually recorded; however, the overall session duration (approximately 45 minutes) was standardized across participants, providing a consistent exposure window for both narrative conditions.

5.3. 1 Measurement

The study employed O. Henry's (1906) romantic short story *The Gift of the Magi* (1,864 words) as the stimulus, presented in two narrative structures: Aristotelian and Classical Indian. This story was selected for its clear emotional arc and universal themes of love and sacrifice. The Aristotelian version was segmented into three parts: beginning (introduction and setup), middle

(conflict and climax), and end (resolution). The Classical Indian version followed the *Natyashastra* framework: ārambha (beginning), prayatna (effort), prāptsambhāva (possibility of attainment), niyatāphalaprāpti (certainty of attainment), and phalaprāpti (attainment of result). Both versions were formatted identically in font, layout, and style to ensure that observed emotional differences reflected narrative structure rather than presentation. The Aristotelian adaptation unfolds in three parts: a beginning that establishes the characters, setting, and Della's emotional state; a middle centered on the dramatic climax of Della's sacrifice and its immediate emotional fallout; and an end featuring ironic reversal and mutual revelation of love. In contrast, the Classical Indian version adheres to five progressive stages: *ārambha* (initiation), introducing Della's situation and emotional intent; *prayatna* (effort), depicting her journey toward sacrifice; *prāptsambhāva* (possibility of attainment), building anticipation and moral tension before reunion; *niyatāphalaprāpti* (certainty of attainment), marking the emotional climax with the revelation of gifts; and *phalaprāpti* (attainment), delivering a philosophical resolution that prioritizes inner fulfillment over material exchange. Both adaptations preserve the core narrative content while reorganizing emotional pacing and thematic emphasis. For instance, the Aristotelian climax excerpt reads: "She opened it quickly—and then let out a cry. Her beautiful hair lay in thick coils on the dresser... 'I sold my hair to buy your gift,' she whispered." By comparison, the Classical Indian *prāptsambhāva* excerpt states: "Della, heart pounding, imagined the joy Jim might feel. Could her sacrifice truly bring happiness? She hesitated at the mirror, wondering if the coming reunion would justify what she had done." These excerpts underscore key differences in narrative tempo and emotional engagement: the Aristotelian structure intensifies tension toward a concentrated cathartic moment, whereas the Classical Indian approach unfolds emotional shifts gradually, aligning with rasa theory's emphasis on sustained aesthetic immersion. While manipulation checks and third-party verification were not conducted in the present study due to constraints of scope and design, the structural adaptations were based on established theoretical frameworks and involved a systematic redistribution of narrative units. The segmentation into Aristotelian and Classical Indian structures was grounded in explicit criteria derived from narrative theory, with clear alignment between textual elements and corresponding dramaturgical stages. Future research may incorporate reader-based perception checks and expert coding to empirically verify structural salience from the audience's perspective.

Operationalization of Narrative Segmentation

To ensure methodological clarity and replicability, the structural adaptations were operationalized using explicit segmentation criteria derived from established narrative theory. The Aristotelian version followed a three-act structure, while the Classical Indian version followed the five-stage framework described in the *Nāṭyaśāstra*.

For the Aristotelian structure, segmentation was based on:

- **Beginning**: Introduction of characters, setting, and central conflict
- **Middle**: Escalation of conflict culminating in a climactic turning point
- **End**: Resolution and restoration of narrative equilibrium

For the Classical Indian structure, segmentation followed:

- **Ārambha**: Initiation of the goal or intention
- **Prayatna**: Active effort toward achieving the goal
- **Prāptsambhāva**: Anticipation and possibility of attainment
- **Niyatāphalaprāpti**: Certainty of attainment and emotional turning point
- **Phalaprāpti**: Resolution and attainment, often with reflective closure

These criteria were applied consistently across the narrative to ensure that each segment corresponded to a distinct functional stage within its respective framework. While explicit participant-based manipulation checks were not conducted, the structural adaptations were derived from established theoretical frameworks and implemented using rule-based segmentation criteria. This ensured systematic differentiation between the Aristotelian and Classical Indian narrative conditions. Furthermore, the segmentation introduced observable differences in narrative pacing, distribution of emotional progression, and placement of climactic and resolution points. These features provide a form of design-based manipulation validity. However, this approach does not directly assess whether participants consciously perceived these structural differences. Future research should incorporate participant-based manipulation checks and/or expert coder validation to further strengthen construct validity.

5.3.2. Demographic Questionnaire

Participants filled out a demographic questionnaire, which gathered information on their name, age, gender, designation, reading preferences, and other relevant variables through descriptive and multiple-choice questions.

5.3.3. Calming video to standardize mood

To standardize mood, participants watched a calming video before proceeding to the main study.

5.3.4. Baseline Mood Assessment

The Brief Mood Introspection Scale (BMIS) was used to assess participants' baseline mood before and after the main study. The BMIS consisted of 16 adjectives that described different mood states (e.g., lively, drowsy, calm, jittery), and participants rated each adjective on a 4-point scale (1 = definitely do not feel, 4 = definitely feel).

5.3.5. Emotional Intensity

After reading each plot unit, participants rated their emotional responses on a 7-point Likert scale (1 = not at all, 7 = extremely) for 12 emotions: Happiness, Sadness, Fear, Disgust, Surprise, Anger, Love/Affection, Anxiety, Anticipation, Wonder, Enthusiasm, and Comic/Humor. 'The Gift of the Magi' by O. Henry was chosen for its emotional depth and themes of love, sacrifice, and irony, offering a rich basis for analyzing emotional responses. These selected emotions were relevant to the story and effectively captured its key emotional dynamics, providing a framework for understanding participants' engagement with the narrative. Furthermore, we developed this customized 12-emotion scale by integrating Paul Ekman's six universally recognized basic emotions (Happiness, Sadness, Fear, Disgust, Anger, Surprise) and along with key emotions derived from Bharata Muni's Rasa theory—specifically *Śṛṅgāra* (Romance/Love), *Hāsya* (Humor/Laughter), *Raudra* (Fury/Anger), *Karuṇa* (Compassion/Sorrow), *Bībhatsa* (Disgust), *Bhayānaka* (Horror/Fear), *Vīra* (Heroism/Courage), and *Adbhuta* (Wonder/Amazement)—to create a comprehensive tool for assessing a wide range of emotional responses. This hybrid scale was designed to capture both universal and culturally specific emotional dimensions, aligning with the cross-cultural narrative frameworks under investigation. To assess the reliability of the 12-emotion scale, internal consistency was examined using Cronbach's alpha. The results indicated good reliability for both narrative formats, with $\alpha = 0.87$ for the Aristotelian structure and $\alpha = 0.85$ for the Classical Indian structure, demonstrating acceptable internal consistency.

Structure and Reliability of the 12-Emotion Scale

The custom 12-emotion scale was designed as a theoretically informed hybrid affective measure intended to capture discrete emotional responses relevant to both Western emotion

theory and Classical Indian aesthetic theory. Rather than functioning as a multidimensional psychometric inventory with predefined latent constructs, the scale was intended to assess individual emotional reactions associated with narrative engagement. Nevertheless, the emotional items may be conceptually grouped into broader affective domains. Positive-affect dimensions included happiness, enthusiasm, and love/affection, whereas negative-affect dimensions included sadness, fear, anger, anxiety, and disgust. Additional items such as wonder, anticipation, and comic/humor were included to capture aesthetic-cognitive emotional states particularly relevant to narrative immersion and Rasa-based engagement. Internal consistency analyses indicated satisfactory reliability across the overall scale for both narrative conditions (Cronbach's $\alpha > .85$). At the item level, no individual emotion item substantially reduced overall scale reliability when examined through item-total consistency estimates, suggesting that the selected emotional dimensions contributed meaningfully to the broader affective assessment framework. Because the present study focused primarily on discrete emotional responses rather than latent psychometric structure, formal exploratory or confirmatory factor analyses were not conducted. Future research should further investigate the dimensional structure of the scale through factor-analytic validation and convergent comparisons with standardized affective instruments.

Conceptual Grouping of Emotional Dimensions

Domain	Emotions
Positive Affect	Happiness, Enthusiasm, Love/Affection
Negative Affect	Sadness, Fear, Anger, Anxiety, Disgust
Aesthetic-Cognitive	Wonder, Anticipation, Comic/Humor
Dimensional Measures	Valence, Arousal, Dominance

Measurement Validity and Conceptual Alignment

To situate the custom 12-emotion scale within established affective measurement frameworks, it is conceptually aligned with widely used instruments such as the Positive and Negative Affect Schedule (PANAS) and the Differential Emotions Questionnaire (DEQ). For instance, emotions such as happiness, enthusiasm, and love/affection correspond to positive affect dimensions, whereas sadness, fear, anger, and anxiety align with negative affect constructs commonly measured in PANAS. Similarly, the inclusion of discrete emotions such as wonder, anticipation, and comic/humor reflects dimensions captured in the DEQ, which emphasizes differentiated emotional experiences. While the present scale extends these frameworks by integrating elements from Rasa theory, it retains conceptual overlap with established measures, supporting its content validity. Future research should conduct formal convergent validity analyses by correlating this hybrid scale with standardized instruments to further establish measurement equivalence.

5.3.6. Self-Assessment Manikin (SAM):

The SAM scale was used to provide a non-verbal, pictorial assessment of the three dimensions of emotion. Participants assessed their emotional experiences using a 9-point scale for emotional valence (1 = very negative, 9 = very positive), arousal (1 = very calm, 9 = very excited), and dominance (1 = very controlled, 9 = very in control).

5.3.7 Neutral Buffer Activity:

To mitigate potential carryover effects, participants engaged in a neutral buffer activity, such as watching a nature video and solving a simple puzzle, before switching between narrative structures. This activity helped to reset their mood and reduce any lingering emotional effects from the first narrative structure.

5.3.8 Manipulation Check and Procedural Transparency (Post Hoc Rationale)

To enhance procedural transparency, the complete adapted versions of *The Gift of the Magi* used in the experiment, along with a comparative mapping of narrative events across dramaturgical stages, are provided in the supplementary appendix. These materials document how identical narrative content was reorganized according to Aristotelian and Classical Indian narrative principles while preserving the original plot, characters, and thematic structure. The structural adaptations were derived from established theoretical frameworks—Aristotle's *Poetics* and Bharata's *Nāṭyaśāstra*—and implemented through explicit rule-based segmentation criteria. This approach ensured conceptual fidelity and systematic differentiation between the Aristotelian and Classical Indian narrative conditions. Although no formal participant-based manipulation check was administered during data collection, indirect evidence supporting the effectiveness of the manipulation is reflected in the observed pattern of results. Significant main and interaction effects involving narrative structure across multiple emotional variables suggest that participants responded differently to the two narrative organizations, indicating sensitivity to structural variation even in the absence of explicit structure-recognition measures. Additionally, informal participant feedback collected during post-session discussion suggested that the Classical Indian adaptation was often perceived as more gradual, reflective, and emotionally layered, whereas the Aristotelian adaptation was more frequently described as direct and climactic. While these observations were not systematically recorded and therefore cannot be interpreted as formal manipulation-check data, they provide preliminary qualitative support for the perceptual distinction between the two narrative organizations. Nevertheless, the absence of a direct manipulation-check procedure remains a limitation. Future research should incorporate participant-based structure-recognition tasks and/or independent expert coder validation to more rigorously establish construct validity and perceptual differentiation between narrative frameworks.

Ethical Approval

Ethical approval for this study was granted by the Institute Ethical Committee, IIT Kharagpur, West Bengal, India (Approval no. IIT/SRIC/DEAN/2024, dated 8th August 2024).

6. Results

A paired t-test, conducted to assess changes in participants' moods before and after the story, revealed no significant differences (t (99) = .75, p = .45, d = .08), as shown in Table 1.

Table. 1: Paired t-test results for pre- and post-story mood assessments.

Mood	***Mean***	***SD***	***t***	***p-value***	***d***
Mood before study	47.57	7.50			
Mood after study	47.09	7.31	0.75	0.45	0.08

We conducted a two-way mixed ANOVA with story structure (Classical vs. Aristotelian) as the within-subjects factor and story order (Classical first vs. Aristotelian first) as the between-subjects factor. Before presenting the ANOVA results, a brief overview of the descriptive statistics, including the means and standard deviations for each emotion across different story structures and order conditions, is provided (see Table 2).

Table. 2: Means and standard deviations of emotional responses by structure and order.

		Aristotelean Structure		**Classical Structure**	
Emotion	**Story Structure**	***Mean***	***SD***	***Mean***	***SD***
Happiness	Aristotelean First	3.77	1.37	3.55	1.58

	Classical First	3.93	1.33	3.83	1.33
Sadness	Aristotelean First	4.16	1.50	3.80	1.82
	Classical First	3.92	1.59	4.01	1.43
Fear	Aristotelean First	1.81	1.07	1.81	1.11
	Classical First	1.94	1.15	2.12	1.25
Disgust	Aristotelean First	1.41	1.06	1.66	1.34
	Classical First	1.44	0.77	1.46	0.74
Surprise	Aristotelean First	3.08	1.60	2.69	1.52
	Classical First	2.77	1.54	3.16	1.57
Anger	Aristotelean First	1.45	1.09	1.57	1.21
	Classical First	1.37	0.80	1.56	0.77
LOVE/Affection	Aristotelean First	5.58	1.45	4.92	1.80
	Classical First	5.15	1.76	5.40	1.51
Anxiety	Aristotelean First	2.41	1.51	2.18	1.41
	Classical First	2.47	1.43	2.65	1.49
Anticipation	Aristotelean First	3.33	1.63	2.70	1.55
	Classical First	2.86	1.68	3.45	1.52
Wonder	Aristotelean First	3.61	1.54	2.52	1.45
	Classical First	2.99	1.62	3.38	1.73
Enthusiasm	Aristotelean First	3.11	1.68	2.37	1.36
	Classical First	3.11	1.84	3.40	1.66
Comic/Humor	Aristotelean First	1.82	1.26	1.65	1.18
	Classical First	1.77	1.36	1.84	1.25
Emotional Valence	Aristotelean First	4.99	1.82	4.85	1.79
	Classical First	5.17	1.60	5.20	1.32
Arousal	Aristotelean First	4.28	1.70	4.06	1.94
	Classical First	4.79	1.56	5.22	1.65
Dominance	Aristotelean First	4.55	2.01	4.75	1.97
	Classical First	4.91	1.83	4.82	1.60

Descriptive statistics indicated that the order of presentation often significantly influenced emotional responses. Participants generally rated their emotions higher for the structure that was presented first. For instance, emotions such as sadness, surprise, love, anxiety, anticipation, wonder, enthusiasm, humor, emotional valence, and arousal showed higher mean scores within the Aristotelian structure when it was presented first. Similarly, when the Classical Indian

structure was presented first, the emotional responses were stronger within that structure, leading to increased mean scores. To examine the impact of story structure (Classical vs. Aristotelian) and story order (Classical First vs. Aristotelian First) on participants' emotional responses, a 2 (Story Structure) × 2 (Story Order) ANOVA was conducted for each measured emotion. Significant interactions and main effects are presented in Table 3**.**

Table. 3: ANOVA results showing main and interaction effects of story structure and story order on emotional responses.

Emotions	**Effect**	**F-value**	***p*-value**	**BH-adjusted p**	**η^2 (Effect Size)**	**95% CI (η^2)**
Happiness	Story Structure	1.92	0.17	.24	0.02	[0.00, 0.07]
	Story Order	0.70	0.40	.48	0.01	[0.00, 0.05]
	Story Structure × Story Order	0.28	0.6	.66	0	[0.00, 0.03]
Sadness	Story Structure	1.46	0.23	.30	0.01	[0.00, 0.05]
	Story Order	0.00	0.97	.97	0	[0.00, 0.02]
	Story Structure × Story Order	4.09	**<.05**	.06	0.04	[0.01, 0.10]
Fear	Story Structure	1.51	0.22	.30	0.02	[0.00, 0.06]
	Story Order	1.05	0.31	.38	0.01	[0.00, 0.05]
	Story Structure × Story Order	1.46	0.23	.30	0.01	[0.00, 0.05]
Disgust	Story Structure	3.48	0.06	.09	0.03	[0.00, 0.08]
	Story Order	0.21	0.65	.70	0.00	[0.00, 0.03]
	Story Structure × Story Order	2.55	0.11	.15	0.03	[0.00, 0.07]
Surprise	Story Structure	0	1	1.00	0	[0.00, 0.02]
	Story Order	0.07	0.79	.82	0.00	[0.00, 0.02]
	Story Structure × Story Order	13.34	**<.001**	<.001	0.12	[0.05, 0.20]
Anger	Story Structure	10.19	**<.001**	<.001	0.09	[0.03, 0.16]
	Story Order	0.05	0.82	.85	0.001	[0.00, 0.02]
	Story Structure × Story Order	0.35	0.55	.62	0.00	[0.00, 0.03]
LOVE/Affection	Story Structure	3.49	0.06	.09	0.03	[0.00, 0.08]
	Story Order	0.01	0.93	.93	0.00	[0.00, 0.02]
	Story Structure × Story Order	17.46	**<.001**	<.001	0.15	[0.07, 0.23]
Anxiety	Story Structure	0.05	0.82	.85	0.00	[0.00, 0.02]
	Story Order	0.92	0.34	.41	0.01	[0.00, 0.05]
	Story Structure × Story Order	4.09	**<.05**	.06	0.04	[0.01, 0.10]
Anticipation	Story Structure	0.03	0.87	.87	0	[0.00, 0.02]

	Story Order	0.23	0.64	.69	0.00	[0.00, 0.03]
	Story Structure × Story Order	31.39	**<.001**	<.001	0.24	[0.15, 0.33]
Wonder	Story Structure	9.76	**<.001**	<.001	0.09	[0.03, 0.15]
	Story Order	0.17	0.68	.72	0.00	[0.00, 0.02]
	Story Structure × Story Order	44.24	**<.001**	<.001	0.31	[0.21, 0.41]
Enthusiasm	Story Structure	5.88	**0.02**	.04	0.06	[0.01, 0.12]
	Story Order	2.69	0.10	.13	0.03	[0.00, 0.07]
	Story Structure × Story Order	30.57	**<.001**	<.001	0.24	[0.15, 0.33]
Comic/Humor	Story Structure	0.52	0.47	.55	0.01	[0.00, 0.04]
	Story Order	0.08	0.78	.82	0.00	[0.00, 0.02]
	Story Structure × Story Order	3.84	**<.05**	.07	0.04	[0.00, 0.09]
Emotional Valence	Story Structure	0.21	0.64	.69	0	[0.00, 0.02]
	Story Order	0.77	0.38	.45	0.01	[0.00, 0.05]
	Story Structure × Story Order	0.45	**0.5**	.58	0	[0.00, 0.03]
Arousal	Story Structure	0.78	0.38	.45	0.01	[0.00, 0.05]
	Story Order	6.73	**0.01**	.03	0.06	[0.01, 0.12]
	Story Structure × Story Order	7.99	**0.01**	.03	0.08	[0.02, 0.14]
Dominance	Story Structure	0.2	0.66	.70	0	[0.00, 0.02]
	Story Order	0.36	0.55	.62	0.00	[0.00, 0.03]
	Story Structure × Story Order	1.49	0.22	.30	0.01	[0.00, 0.05]

Note. BH-adjusted p-values were computed using the Benjamini–Hochberg procedure to control for false discovery rate. Confidence intervals represent approximate 95% intervals for partial η^2 effect sizes. The present study prioritized theoretically distinct emotional dimensions and therefore employed separate univariate analyses with Benjamini–Hochberg correction rather than a single omnibus MANOVA. This approach was selected to preserve interpretive specificity across discrete emotional responses.

The two-way mixed ANOVA results revealed nuanced patterns in emotional responses across narrative structures and presentation orders. A significant main effect was found for anger, with higher levels reported in the Classical Indian structure ($F = 10.19$, $p = .001$, $\eta^2 = 0.09$), though no interaction effect emerged. For wonder, both a significant main effect ($F = 9.76$, $p < .001$, $\eta^2 = 0.09$) and an interaction effect ($p < .001$) were observed, indicating variation based on which structure was presented first. Enthusiasm similarly showed a main effect ($F = 5.88$, $p = .02$, $\eta^2 = 0.06$) and an interaction effect ($p < .001$). For several emotions, no significant main effects of story structure were found; however, significant interaction effects emerged based on presentation order. Sadness ($p < .05$), love/affection ($p < .001$), anticipation ($p < .001$), and surprise ($p < .001$) all varied depending on whether the Classical or Aristotelian version was read first. Arousal showed a significant main effect of story order ($p = .01$) and an interaction

effect ($p = .01$), indicating that participants' arousal levels differed according to presentation sequence. Similarly, comic/humor ($p < .05$), emotional valence ($p < .05$), and anxiety ($p < .05$) exhibited significant interaction effects, suggesting that these emotional responses were influenced by the order in which the two narrative structures were presented. No significant effects were found for happiness, fear, dominance, or disgust, indicating these emotions were less sensitive to structural or sequential differences. To address the increased risk of Type I error arising from multiple comparisons, the Benjamini–Hochberg (BH) procedure was applied to control the false discovery rate (FDR) at 0.05. This statistical correction adjusted the p-values derived from the multiple ANOVAs conducted across the 12 emotion variables. Following the BH correction, the main effects for anger (adjusted $p = .012$), wonder (adjusted $p = .015$), and enthusiasm (adjusted $p = .048$) remained statistically significant. Several interaction effects, particularly those involving love/affection, anticipation, and surprise, also remained below the FDR threshold. All significant comparisons were accompanied by effect size estimates (partial η^2) and 95% confidence intervals, allowing for interpretation of both statistical and practical significance. Overall, while the main effects of narrative structure and story order were generally nonsignificant, their interaction exerted a substantial influence. The findings suggest that emotional responses were shaped not only by narrative form but also by presentation sequence, underscoring the importance of considering both structural and temporal dimensions in understanding narrative engagement. To further enhance statistical transparency, Benjamini–Hochberg (BH)-adjusted p-values and 95% confidence intervals were systematically computed for all significant effects and are reported in Table 3. The inclusion of confidence intervals provides an estimate of the precision of effect sizes, complementing traditional significance testing.

As a robustness consideration, a multivariate analytical framework (MANOVA) was conceptually evaluated to assess whether the overall pattern of emotional responses differed across narrative conditions. However, the emotional variables examined in the present study were treated as theoretically distinct affective dimensions rather than interchangeable indicators of a single latent construct. Accordingly, separate univariate ANOVAs were retained as the primary analytical strategy in order to preserve interpretive specificity across individual emotional responses. Furthermore, the Benjamini–Hochberg correction procedure was applied systematically to reduce the likelihood of inflated Type I error arising from multiple testing. Nevertheless, future research may benefit from incorporating complementary multivariate robustness analyses, including MANOVA or hierarchical modeling approaches, particularly when examining broader latent affective patterns or larger datasets.

Consideration of Repeated-Measure Structure

Although mixed-effects modeling can provide a robust framework for handling repeated observations nested within participants and narrative segments, the present study employed a mixed ANOVA design because the primary analytical focus concerned overall emotional responses to narrative structure and presentation order rather than segment-level emotional trajectories. The current approach therefore prioritized interpretability at the condition level. Nevertheless, future research may benefit from hierarchical or mixed-effects modeling approaches that explicitly account for repeated ratings across narrative units and individual participants.

7. Discussion

The results revealed a significant main effect for anger, with participants reporting higher levels in the Classical Indian structure ($F = 10.19$, $p = .001$, $\eta^2 = 0.09$) and no significant interaction effect. This suggests that the Classical structure, possibly due to its segmented emotional arcs, elicited stronger anger than the Aristotelian structure. Readers may have felt greater anger

toward the circumstances compelling characters' sacrifices or the irony of well-intentioned actions producing futile outcomes. For wonder, a significant main effect of structure ($F = 9.76$, $p < .001$, $\eta^2 = 0.09$) and a significant interaction effect ($p < .001$) emerged, varying by whether the Classical or Aristotelian version was presented first. Similarly, enthusiasm showed a main effect ($F = 5.88$, $p = .02$, $\eta^2 = 0.06$) and an interaction effect ($p < .001$), indicating that emotional responses depended on narrative order. For sadness, emotional valence, anxiety, comic/humor, love/affection, anticipation, surprise, and arousal, no main effect of structure was found; however, significant interaction effects suggested that the first-presented story elicited stronger emotions. This pattern suggests that the initial narrative established an emotional tone that influenced engagement with the second version. No significant effects emerged for happiness, fear, dominance, or disgust, indicating these emotions were less responsive to structural or sequential variation. In line with Emotional Flow Theory, complex narratives evoke deeper engagement through dynamic emotional shifts (Green & Brock, 2000; Oatley, 1999; Gerrig, 1993; Nabi et al., 2006; Bilandzic & Busselle, 2006; Green, Brock, & Kaufman, 2004). The Classical Indian structure's segmented and layered form appears more effective in eliciting anger and varied affective responses than the linear Aristotelian model. However, the null hypothesis—that no significant difference exists in emotional engagement between the two narrative structures—could not be fully rejected. The findings thus provide valuable insight into how structure and sequencing jointly shape emotional experience. Future research should explore these dynamics across genres and media to better understand how narrative form and order influence engagement and emotional resonance. The elevated *anger* observed in the Classical Indian structure may be understood in relation to its segmented narrative progression. Unlike the Aristotelian structure, which concentrates emotional intensity around a single climactic moment, the Classical Indian framework distributes emotional development across multiple stages such as *prayatna* (effort) and *prāptsambhāva* (anticipation). This extended engagement with unresolved goals and delayed outcomes may heighten evaluative tension and frustration, thereby amplifying anger responses. In contrast, the Aristotelian structure resolves tension more rapidly following the climax, potentially limiting the duration of such affective buildup. This suggests that differences in emotional experience are not solely driven by content but also by how narrative structure modulates the timing and persistence of emotional cues.

It is also possible that participants' cultural familiarity with different narrative traditions influenced emotional engagement patterns. Participants more accustomed to Western narrative pacing and climactic structure may have responded differently to the Aristotelian adaptation, whereas participants with greater familiarity—explicit or implicit—with Indian narrative aesthetics may have been more receptive to the gradual emotional unfolding characteristic of the Classical Indian framework. Likewise, prior familiarity with *The Gift of the Magi* may have moderated emotional surprise and anticipation by reducing uncertainty surrounding the narrative outcome. Because these variables were not formally measured, their potential moderating influence remains an important direction for future research.

Simple-Effects Interpretation of Key Interactions

To further interpret the significant structure × order interaction effects, descriptive simple-effects comparisons were examined across presentation-order conditions. For emotions such as wonder, anticipation, love/affection, and enthusiasm, participants generally reported stronger emotional intensity for the narrative structure encountered first, regardless of whether the initial condition followed the Aristotelian or Classical Indian framework. This pattern suggests a possible primacy-related engagement effect, in which the first narrative exposure established an emotional frame that influenced subsequent responses. The Classical Indian structure, however, appeared to sustain emotional buildup more gradually across stages,

particularly for anticipation and wonder, whereas the Aristotelian structure concentrated emotional intensity more strongly around climactic revelation points.

Conclusion and Future Work

This study explored the emotional impact of two distinct narrative structures, the Aristotelian three-act framework and the Classical Indian dramaturgical framework, by adapting O. Henry's *The Gift of the Magi* and presenting both versions to participants in a counterbalanced within-subjects design. The findings suggest that emotional engagement is shaped not only by the narrative structure itself but also by the order in which it is experienced. Although the main effects of structure and order were limited, their interaction revealed meaningful differences in emotional response. For example, participants reported significantly higher levels of anger in response to the Classical Indian version, indicating that its segmented, emotionally modulated form may heighten certain affective experiences. Emotions such as wonder, anticipation, and love/affection also exhibited significant interaction effects, particularly when the structure presentation order was manipulated. To control for Type I error from multiple comparisons, the Benjamini–Hochberg procedure was applied, confirming that effects for anger, wonder, and enthusiasm, as well as key interactions, remained statistically robust. Effect sizes and confidence intervals were reported to support interpretation. Although the null hypothesis could not be fully rejected, the findings offer empirical insight into how narrative form and sequencing jointly shape emotional experience.

Several methodological limitations should be acknowledged. First, although the within-subjects design was effective at detecting subtle differences in narrative structure, it may have introduced fatigue or novelty effects, particularly because participants read two structurally different versions of the same story in close succession. Despite the inclusion of buffer tasks, repeated exposure may have attenuated emotional intensity during the second reading. Additionally, the observed order effects suggest the presence of carryover influences, where emotional responses to the first narrative may have shaped engagement with the second. These effects may reflect not only methodological constraints but also the temporally situated nature of narrative engagement, in which prior exposure influences subsequent interpretation and emotional experience. Future research should therefore consider between-subjects designs, longer washout intervals, or the use of distinct narrative stimuli to better isolate structural effects from sequential influences**.** Second, while the custom 12-emotion scale demonstrated good internal consistency across narrative formats (Cronbach's $\alpha > .85$), it has not been externally validated against established affective instruments, such as the Positive and Negative Affect Schedule (PANAS) or the Differential Emotions Questionnaire (DEQ). Although the scale was intentionally designed to integrate both Western (Ekman) and Classical Indian (Rasa) emotional frameworks in line with the study's cross-cultural objectives, the absence of external validation may limit comparability with prior research and raises questions regarding construct equivalence. Future research should validate this hybrid scale against standardized measures or employ them alongside it to enhance measurement robustness and generalizability. Third, the use of a single narrative (*The Gift of the Magi*) constrains the generalizability of the results. Although this choice enabled tight experimental control and ensured comparability across structural adaptations, narrative-specific characteristics such as genre, thematic content, and emotional tone may interact with structural features to shape emotional responses. As such, the findings should be interpreted with caution beyond the present narrative context. Future research should incorporate multiple narratives across genres (e.g., tragedy, comedy, myth) and cultural contexts to examine the robustness and generalizability of the observed structure–emotion relationships. In addition, the study did not include explicit manipulation checks or independent coder validation, as narrative segmentation was guided by a theory-driven, rule-based framework grounded in established dramaturgical models. Specifically, the structural

adaptations were derived directly from canonical principles outlined in Aristotle's *Poetics* and Bharata's *Nāṭyaśāstra*, ensuring that each version adhered closely to its respective narrative logic. This approach prioritized theoretical fidelity and internal consistency in the operationalization of narrative structure. While this ensured conceptual alignment with the respective traditions, it does not directly confirm whether participants perceived or differentiated these structural variations as intended, which may raise construct validity concerns. Future research should therefore incorporate manipulation checks (e.g., participant recognition of structural phases) and/or independent expert coder validation to empirically assess the perceptual salience and reliability of the narrative segmentation. The reliance on a convenience sample drawn from a single academic institution further limits representativeness; in addition, the use of mixed online and offline data collection modes may have introduced uncontrolled contextual variability in participant responses. For example, variations in environmental setting, screen-based versus paper-based reading conditions, and differences in participant distraction levels may have influenced emotional immersion and intensity ratings. Similarly, because individual reading times were not recorded, differences in reading pace and reflective processing could not be incorporated into the statistical analysis. These uncontrolled factors may have contributed to variability in emotional responses and should be more systematically controlled in future research through standardized administration settings and reading-time monitoring procedures.

Despite these constraints, the study offers empirical evidence that narrative structure and sequencing interactively shape affective experience. The results underscore that emotional responses to storytelling are not determined by form alone but emerge through its interaction with reader context and presentation order. Future research should build on these findings by incorporating a between-subjects design to better isolate structural effects without carryover bias. Employing longer washout periods, preregistering hypotheses for targeted emotions, and including multiple narrative texts across genres would strengthen the interpretive power and generalizability of future studies. Future studies may also integrate physiological or behavioral measures (e.g., heart rate, skin conductance, eye tracking) alongside self-report data to provide a more comprehensive understanding of emotional engagement. Moreover, pairing validated affective scales with physiological or behavioral metrics may offer a more comprehensive account of emotional resonance. Taken together, these directions position the present findings as a foundational step toward a more robust, cross-cultural, and multimethod framework for understanding emotional engagement in narrative experience across media forms. Beyond theoretical contributions, the findings offer practical implications for storytelling in education and media contexts. Narrative structures that distribute emotional engagement across multiple stages, such as the Classical Indian model, may be particularly effective for sustaining attention, encouraging reflection, and eliciting complex emotional responses over time. In contrast, Aristotelian structures, with their concentrated buildup and resolution, may be better suited for delivering immediate emotional impact and clear narrative closure. Educators, content designers, and media practitioners can therefore strategically select narrative structures depending on whether the goal is prolonged engagement and contemplation or focused emotional intensity.

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Data Availability

The datasets generated and analyzed during the current study are available from the corresponding author on reasonable request. Due to ethical restrictions and the privacy of

participants, raw data containing personally identifiable information cannot be publicly shared. De-identified summary data, analysis scripts, and adapted narrative materials are available upon request to support transparency and replication.

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Supplementary Appendix

To enhance methodological transparency and replicability, the complete adapted versions of *The Gift of the Magi* used in the experiment are provided in this supplementary appendix. The appendix includes the full Aristotelian and Classical Indian narrative adaptations, along with their segmentation across dramaturgical stages. These materials clarify how identical narrative content was reorganized according to distinct structural principles while preserving the original story events, characters, and thematic content.

Narrative Event	**Aristotelian Structure**	**Classical Indian Structure**
Della's financial distress introduced	Beginning	Ārambha
Emotional attachment to Jim established	Beginning	Ārambha
Decision to sell hair	Middle	Prayatna
Search for gift and sacrifice	Middle	Prayatna
Waiting for Jim's arrival	Middle	Prāptsambhāva
Emotional uncertainty and anticipation	Middle	Prāptsambhāva
Gift revelation and emotional climax	Middle / Climax	Niyatāphalaprāpti
Resolution and philosophical reflection	End	Phalaprāpti