Closure vs. Open Endings in Narrative Preferences

Although evolutionary psychology theories haven't been directly tested, studies showing links between cognitive traits and narrative preferences suggest evolved processes may shape story ending preferences.

Abstract

Four studies address whether factors central to Evolutionary Psychology (EP) can account for preferences for narrative closure versus open endings. The findings indicate that:

1. Goldman and Varnhagen (1983) report that older readers shift from favoring narratives in which protagonists meet goals easily to those featuring obstacles.
2. Wiersema et al. (2012) show that individuals with a high need for cognitive closure express less liking for open endings.
3. Schibler et al. (2023) demonstrate that cliffhanger endings heighten the desire for future installments without altering levels of suspense or enjoyment.
4. Klauk et al. (2016) observe that perceptions of narrative closure are linked to the completeness of the text.

Although none of the studies directly test EP theories, the reported associations between developmental stage, individual differences in cognitive closure, and narrative structure align with the possibility that evolved cognitive and motivational processes may influence preferences for resolved versus open narratives.

Paper search

Using your research question "Can EP theories explain preferences for stories with closure (the end wraps everything up) versus open endings (things remain unresolved)?", we searched across over 126 million academic papers from the Semantic Scholar corpus. We retrieved the 50 papers most relevant to the query.

Screening

We screened in papers that met these criteria:

- **Story Endings Comparison**: Does the study examine and compare participant responses to both open and closed story endings?
- **Empirical Data**: Does the study present original empirical data (quantitative or qualitative) measuring psychological responses to story endings?
- **Narrative Type**: Does the study focus on fictional narratives (rather than personal stories, autobiographies, or historical accounts)?
- **Theoretical Framework**: Does the study incorporate an explicit theoretical framework to explain narrative preferences or responses?
- **Study Population**: Does the study examine adult participants from the general population?
- **Review Type**: Is the paper either (a) an original empirical study OR (b) a systematic review/meta-analysis of narrative preferences?

We considered all screening questions together and made a holistic judgement about whether to screen in each paper.

Data extraction

We asked a large language model to extract each data column below from each paper. We gave the model the extraction instructions shown below for each column.

- **Study Design Type**:

  Identify the specific type of study design used:

- Experimental (between-subjects, within-subjects)
- Correlational
- Field study
- Rating experiment

Look in the methods or design section. If multiple designs are used (e.g., multiple studies), list all designs. Be precise about the specific experimental approach (e.g., "two between-subjects experiments" vs. just "experimental").

- **Participant Characteristics**:

  Extract the following details:

- Total sample size (for each study if multiple)
- Demographic information (age range, mean age, gender distribution)
- Recruitment method (if specified)
- Any specific inclusion/exclusion criteria

If multiple studies are reported, provide details for each study separately. If exact numbers are not available, note "not reported". Use ranges or means with standard deviations where possible.

- **Experimental Conditions**:

  List all distinct experimental conditions:

- Specific narrative endings (e.g., cliffhanger, protagonist victory, antagonist victory)
- Manipulation of cognitive closure (e.g., time pressure condition)
- Control conditions

Provide details about how these conditions were operationalized. Note any specific variations or experimental manipulations used to create these conditions.

- **Outcome Measures**:

  Identify and list all key outcome measures:

- Specific measures of audience response (e.g., suspense, enjoyment)
- Preference ratings
- Aesthetic preference measures
- Cognitive closure assessments

For each measure, note:

- How it was measured (scale, questionnaire)
- Specific metrics or scoring
- Any statistical analyses performed

If multiple studies are reported, extract outcomes for each study separately.

- **Primary Findings Related to Narrative Endings**:

  Extract the main findings specifically addressing:

- Differences in audience responses to different types of narrative endings
- Relationship between cognitive closure and narrative preferences
- Statistical significance of key results (p-values, effect sizes if available)

Focus on results directly relevant to story endings, closure, and audience preferences. Quote key statistical findings or effect sizes if present. If multiple studies are reported, summarize findings for each study.

Results

Characteristics of Included Studies

Study	Study Design	Population/Sample	Ending Types Examined	Primary Measures	Full text retrieved
Goldman and Varnhagen, 1983	Experimental (within-subjects)	32 participants (16 second and fifth-grade students, 16 adults)	No-obstacle (protagonist meets goal) vs. Obstacle (external state prevents goal attainment)	Free and cued recall, causal inferences, story preference	No
Klauk et al., 2016	Rating experiment	No mention found	No mention found (focus on narrative closure)	No mention found (related to text completeness and questions left open)	No
Schibler et al., 2023	Two between-subjects experiments	Study 1: 202 participants (M age = 20.95, SD = 3.88); Study 2: 273 participants (M age = 41.31, SD = 12.35)	Cliffhanger, Protagonist victory, Antagonist victory	Suspense, Enjoyment, Desire for Future Installment (DFFI), Narrative transportation	Yes
Wiersema et al., 2012	Study 1: Correlational field study; Study 3: Experimental (between-subjects)	No mention found	Open ending (Study 1)	Liking for play with open ending, Preference for figurative vs. abstract paintings	No

Study Design:

- We found experimental designs in 2 out of 4 studies
- We found 1 rating experiment and 1 correlational study

Population:

- We found population information for 2 out of 4 studies
- We didn't find population information for 2 studies

Ending Types:

- We found different ending types across studies:
  - No-obstacle vs Obstacle
  - Cliffhanger, Protagonist victory, Antagonist victory
  - Open ending
- We didn't find specific ending types for 1 study

Primary Measures:

- We found a variety of primary measures across studies, including:
  - Recall and causal inferences
  - Suspense, enjoyment, and narrative transportation
  - Liking and preference
- We didn't find specific primary measures for 1 study

Thematic Analysis

Developmental and Cognitive Factors in Ending Preferences

- Developmental trends :
  - Goldman and Varnhagen (1983) reported a developmental trend towards increased preference for obstacle stories as children grow older.
  - This finding suggests that cognitive development may influence attraction to narratives with challenges or unresolved aspects.
- Need for Cognitive Closure (NFC) :
  - Wiersema et al. (2012) introduced NFC as a predictor of narrative preferences.
  - They reported that individuals high in NFC liked the ending of a play with an open ending less than their low-NFC counterparts.
  - This suggests individual differences in cognitive processing styles may influence preferences for narrative closure.

Narrative Structure and Closure Effects

- Cliffhanger endings :
  - Schibler et al. (2023) reported that cliffhanger endings increased the desire for future installments more than resolved endings (protagonist or antagonist victories) in both of their studies.
  - They found no significant differences in enjoyment or suspense between cliffhanger and resolved endings.

- Narrative closure :
  - Klauk et al. (2016) indicated that narrative closure is related to the completeness of the text and questions left open.
  - This supports the idea that closure involves both plot resolution and satisfaction of audience curiosity.

Synthesis of Findings

Key Finding	Supporting Studies	Theoretical Framework	Strength of Evidence
Developmental trends in narrative preferences	Goldman and Varnhagen, 1983	Developmental psychology, Potential Evolutionary Psychology implications	Moderate (limited by sample size and single study)
Need for cognitive closure predicts preference for resolved endings	Wiersema et al., 2012	Cognitive psychology, Potential Evolutionary Psychology implications	Moderate (limited by lack of detailed methodology)
Cliffhangers increase desire for future engagement without affecting enjoyment	Schibler et al., 2023	Affective Disposition Theory, Potential Evolutionary Psychology implications	Strong (larger sample sizes, detailed methodology)
Narrative closure related to text completeness and open questions	Klauk et al., 2016	Narrative theory	Weak (limited information available)

We analyzed 4 studies on narrative preferences and endings. Our findings include:

Key Findings:

- We found 4 distinct key findings, each reported in one study: developmental trends in narrative preferences, need for cognitive closure predicting preference for resolved endings, cliffhangers increasing desire for future engagement, and narrative closure related to text completeness and open questions.

Theoretical Frameworks:

- We found 4 different theoretical frameworks used across the studies: developmental psychology, cognitive psychology, Affective Disposition Theory, and narrative theory.
- We found potential Evolutionary Psychology (EP) implications mentioned in 3 out of 4 studies.

Strength of Evidence:

- We found 1 study with strong evidence, 2 with moderate evidence, and 1 with weak evidence.
- The study with strong evidence had larger sample sizes and detailed methodology.
- Limitations in the moderate and weak evidence studies included small sample sizes, lack of detailed methodology, or limited information available.

The studies we examined report various factors influencing preferences for narrative closure, including developmental stage, cognitive processing styles, and individual differences. These findings may be relevant to Evolutionary Psychology theories, though the studies we examined did not directly test such theories.

It's important to note the limitations of the available evidence. The studies vary in their methodological rigor and level of detail provided, with some relying on small sample sizes or offering limited information about their procedures. Additionally, the lack of direct testing of EP hypotheses in relation to narrative ending preferences limits our ability to draw strong conclusions about the evolutionary basis of these preferences.

References

D. Wiersema, J. Schalk, and G. A. Kleef. "Who's Afraid of Red, Yellow and Blue? Need for Cognitive Closure Predicts Aesthetic Preferences," 2012.

K. Schibler, Lindsay S. Hahn, and M. Green. "Investigating Responses to Narrative Cliffhangers Using Affective Disposition Theory." *Media Psychology*, 2023.

S. Goldman, and C. Varnhagen. "Comprehension of Stories with No-Obstacle and Obstacle Endings," 1983.

Tobias Klauk, Tilmann Köppe, and Thomas Weskott. "Empirical Correlates of Narrative Closure," 2016.