

# Motivational Alignment, Not Demographic Similarity, Predicts Narrative Interest

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**Abstract:** Why do people become interested in some stories but not others? A long-standing assumption is that narrative engagement is driven by demographic-similarity between the audience and the protagonist. Across two preregistered experiments (N = 953), we systematically manipulated the protagonist's gender, race, age, and motivation in short story pitches, and asked participants—who varied in their own gender, race, age, and motivational priorities—to rate their interest. This preregistered controlled design allowed us to compare demographic-similarity with a theoretically grounded alternative: motivational alignment, defined as the match between a protagonist's current motivation and the observer's own motivational priorities. Motivational alignment reliably predicted narrative interest and remained a significant predictor even when demographic-similarity was included in the same model. We also found no evidence that demographic-similarity predicts interest, even when specific information about the protagonist's motivation was absent. These findings identify motivational alignment as a central determinant of narrative interest.

## Introduction

People often appear to be most engaged by stories and models that resemble them. This assumption—that similarity fuels attention, interest, and learning—has played a central role in both narrative psychology (Dore, 2022; Grusec & Brinker, 1972; Maccoby & Wilson, 1957; Seitz et al., 2020) and social learning theory (Bandura et al., 1961, 1963; Fairlie et al., 2014; Henrich, 2016; Hoffman & Oreopoulos, 2007). Across various paradigms, including recall and persuasion research, studies in imitation and media effects have repeatedly found that observers preferentially attend to models who share their gender (e.g. Grusec & Brinker, 1972; Hoffner, 1996; Hoffner & Buchanan, 2005; Maccoby & Wilson, 1957), race (e.g. Bullock et al., 2021; Dore, 2022; Fairlie et al., 2014), or age (Chen et al., 2017; Feilitzen & Linné, 1975; Kim et al., 2016).

However, the empirical record is mixed, and the strength of demographic-similarity effects may have been overstated (for a meta-analysis, see Chen et al., 2024). For instance, although Dore (2022) reported an effect of race-similarity on narrative recall, she found no corresponding effect for gender-similarity. Cohen et al. (2018) observed no influence of age- or gender-similarity on perceived similarity, identification, or persuasion. In addition, Jose and Brewer (1984) found no

main effect of age-similarity on narrative interest (see also Hoffman & Oreopoulos, 2007, for similar conclusions in an ecological context). Taken together, these inconsistencies suggest that demographic-similarity may not reliably determine interest. How, then, can we explain when demographic-similarity matters and when it does not?

One possibility is that demographic-similarity may not be the core driver of narrative interest at all. We propose instead that engagement depends primarily on the alignment between the protagonist's current motivation and the observer's own motivational priorities (henceforth, 'motivational alignment'; see both Dore, 2022; Maccoby & Wilson, 1957).

This account stems from the hypothesis that a person consuming a story is, fundamentally, in the position of an observer watching (or imagining) another agent pursue a goal. Human cognition contains powerful mechanisms for observational learning—mechanisms that extract causal structure from goal-directed action, track how obstacles are navigated, and map outcomes onto internal models for future use (Meltzoff et al., 2012; Szczepanik et al., 2020). Taking the character's point of view feels natural, then, because it would facilitate learning (Oliver & Raney, 2011; Cohen, 2001). Crucially, such simulation becomes most useful when the protagonist strives toward a goal that the observer also values, because only then does the causal information embedded in the narrative generalize to problems the observer may face. Motivational alignment should therefore play a central role.

This alternative hypothesis would explain the apparent effects of demographic-similarity. Such effects would arise as a by-product of motivational alignment rather than from demographic-similarity per se. Individuals who share demographic attributes—age, gender, socioeconomic background—tend to occupy similar ecological and social environments and, as a result, to prioritise similar goals (Marengo et al., 2021; Montag et al., 2020; Del Giudice, 2024). When observers express greater interest in protagonists who resemble them, this pattern may therefore reflect the underlying associations between demographic-similarity and shared motivational priorities (Seitz et al., 2020), be they hardwired or acquired. In other words, demographic-similarity would predict interest only insofar as it functions as a cue from which shared motivation can be inferred. Hence, our two hypotheses:

Hypothesis 1 ('motivational-alignment' hypothesis): Motivational alignment increases narrative interest above and beyond demographic-similarity

Hypothesis 2 ('demographic cue' hypothesis): demographic-similarity should predict narrative interest only in the absence of clear motivational cues

These hypotheses yield a set of preregistered predictions. If motivational alignment is the primary driver of narrative interest (H1), then: Prediction 1 (P1): Motivational alignment increases narrative interest; Prediction 2 (P2): Motivational alignment increases narrative interest above and beyond demographic-similarity; Prediction 3 (P3): Motivational alignment predicts narrative interest better than demographic-similarity when comparing competing models. If demographic-similarity functions mainly as a cue to motivational relevance (H2), then:

Prediction 4 (P4): Overall demographic-similarity has a positive effect on narrative interest when the protagonist's goal is unspecified; Prediction 5 (P5): The effect of demographic-similarity on narrative interest is strongest when goals are unspecified and weakest when goals are specified.

To test this account, we adopted a paradigm that captures an ecologically familiar decision point: the moment when people choose whether to engage with a story based only on a brief description—much like scanning back-cover summaries in a bookstore or selecting a film from a short synopsis. Participants read only a short movie pitch, stripped of genre conventions, stylistic features, emotional tone, or plot development. Restricting exposure to this controlled format ensures that interest judgments depend solely on the information we experimentally manipulate—namely, the protagonist's demographic attributes and motivation—rather than on uncontrolled features of full narratives. This minimal-pitch paradigm allows a direct comparison between the predictive power of demographic-similarity and motivational alignment.

## Research Transparency Statement

### General disclosures

Conflicts of interest: The authors declare no conflicts of interest.

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### Study Disclosures

Preregistration: The hypotheses, predictions, data collection methods, and statistical plans were preregistered (<https://osf.io/eaxrs/files/aq7zn>; <https://osf.io/eaxrs/files/es9qc>) on November 7th 2025 (for the first condition) and December 2nd 2025 (for the second condition), prior to data collection (start date: November 7th 2025 and December 2nd 2025, respectively). There was no deviation from the preregistration, unless specified (see footnote 1).

Materials: All study materials are publicly available (<https://osf.io/eaxrs/>; see Material folder).

Data: All primary data are publicly available (<https://osf.io/eaxrs/>; see Data folder).

Analysis scripts: All analysis scripts are publicly available (<https://osf.io/eaxrs/>; see Analyses folder).

## Method

We recruited 953 participants from the US through the Prolific platform (474 in the Specified Motivation condition, for the first study, and 479 in the Unspecified Motivation condition, for the second study). After applying pre-registered exclusion criteria (i.e., participants who (1) did not answer all items, (2) did not answer “man” or “women” on the gender item, (3) did not answer

“black”, “white”, or “mixed” (4) failed the attention check (IRI)<sup>1</sup>, 934 participants remained (465 in the Specified Motivation condition and 469 in the Unspecified Motivation condition;  $M_{\text{age}} = 42.58$  years,  $SD = 12.54$  years; 465 women and 469 men; 457 black, 471 white, 6 mixed; sensitivity analyses conducted under various exclusion criteria are reported in the Supplementary Materials).

We measured between-subject differences in interest in watching a movie after reading a short movie pitch. Each participant read one of several pitch variants in which the protagonist’s demographic characteristics (age 18–60, male or female, White or Black), motivation, and obstacle were independently randomized and evenly represented (see **Figure 1**; see Supplementary Materials for full wording). Protagonists’ names were selected to avoid strong associations with specific ethnicities, and the actions depicted in the pitch were chosen to be neutral with respect to gender (see Supplementary Materials). The mean Flesh Reading Ease score indicated that the pitches ranged from fairly easy to easy to read (see Supplementary Materials).

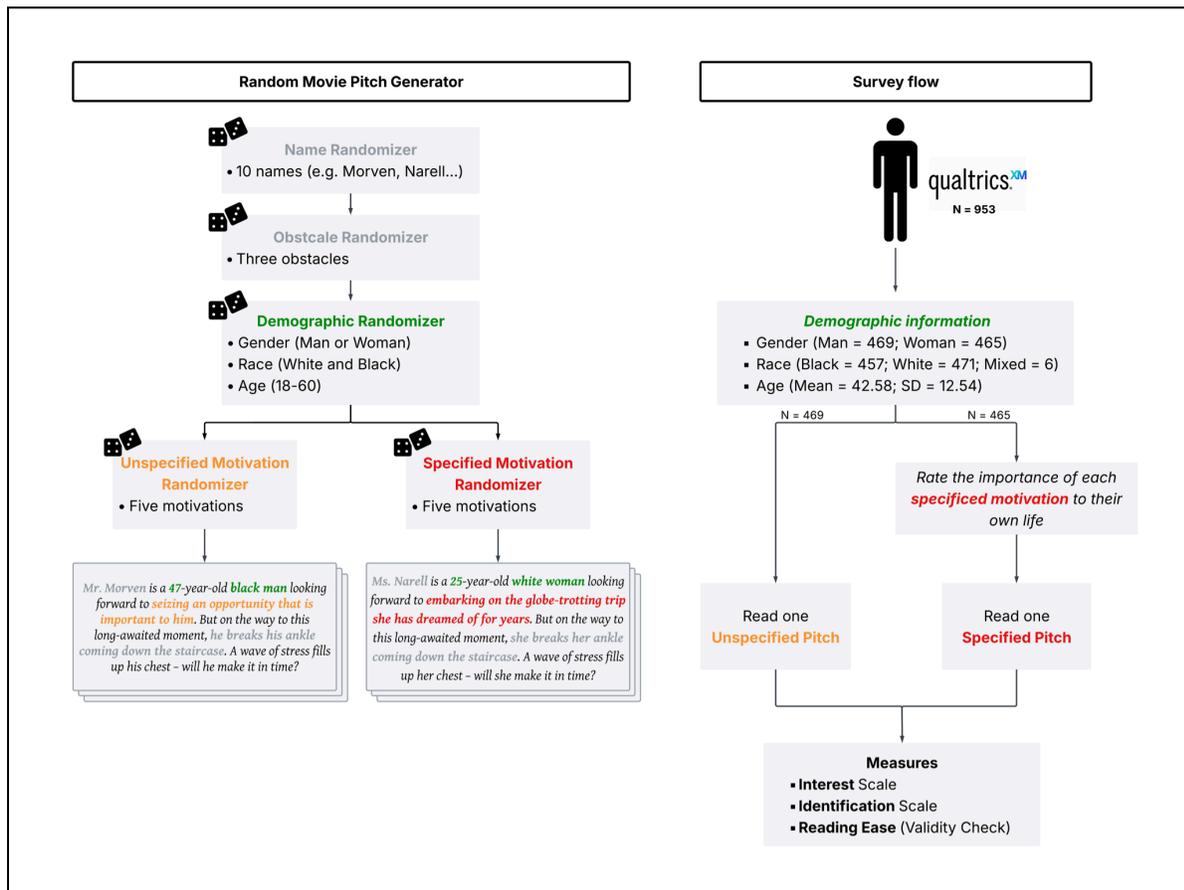
For half of the participants (Unspecified Motivation condition), the protagonist’s motivation was deliberately left unspecified and described only in broad, generic terms (e.g., “doing something important to him/her,” “solving a problem that concerns him/her”). For the other half (Specified Motivation condition), the protagonist’s motivation was explicitly specified. We focused on five motivations characterized in previous psychological research as fundamental human motives (Dubourg et al., 2024), broadly universal yet differing in strength and prioritization across individuals (Marengo et al., 2021; Montag et al., 2020), namely parental care (Anderson et al., 2007; Hoelzer, 1989), friendship (Aktipis et al., 2018; Barclay et al., 2021), romantic love (Fletcher et al., 2015; Kenrick, 2006), curiosity (Berlyne, 1966; Gottlieb et al., 2013), and skill acquisition (Bjorklund, 2022).

When participants were exposed to a pitch with a specified motivation, they rated the personal importance of each of the five motivations *in their own lives* (see **Figure 1**). These ratings were collected on a 5-point Likert scale, with items presented in random order. Participants rated the personal importance of various motivations; ‘motivational importance’ represents the specific rating given to the motivation featured in the pitch they viewed. To control for potential order effects, the motivation-importance questionnaire was administered either before or after the movie pitch, counterbalanced across participants (see Supplementary Materials). After reading a variant of the pitch, participants indicated their interest in watching the described movie using a single-item questionnaire on a 5-point likert scale ranging from 1 (not at all interested) to 5

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<sup>1</sup> Participants were excluded if they did not report their gender as “man” or “woman,” or their race as “Black,” “White,” or “Mixed.” This exclusion was required because this study relies on computing a measurable distance between participant demographics and protagonist characteristics; responses such as “prefer not to say” or open-ended self-descriptions could not be incorporated into this distance-based analysis. The preregistration specified an exclusion criterion based on reading time, whereby participants spending less than 9 seconds on the movie-pitch screen would be excluded. This criterion could not be implemented because the movie pitch was presented on the same page as additional questionnaire items, making it impossible to isolate reading time for the pitch itself. As a result, this preregistered exclusion criterion was not applied. No other preregistered exclusions were affected.

(extremely interested). The item was: “Based on this pitch, how interested would you be in watching this movie?”.



**Figure 1. Experimental design and survey flow.** Randomly generated movie pitches varied protagonist demographics and motivational content, with participants reading one pitch and rating interest, anticipated identification (validity check), and reading ease.

For each participant–pitch pair, we computed demographic-similarity along three dimensions. Gender-similarity was coded as 1 when the participant and protagonist shared the same gender and 0 otherwise; race-similarity was coded in the same way. Age-similarity was operationalized as the absolute difference between the participant’s age and the protagonist’s age (see Supplementary Analyses for other computations of age-similarity). In analyses targeting Hypotheses 1, these variables were entered independently to estimate the unique contribution of each demographic dimension to narrative interest. Following the preregistration, we normalized each similarity variable.

To test Hypothesis 2—which concerns the interaction between the overall demographic-similarity index and goal specification—we preregistered the use of a single composite index. Following the preregistration, we averaged race-, gender-, and age-similarity variables into a normalized demographic-similarity index, and used this combined measure in the interaction models. This pre-registered approach reflects the fact that testing all three

demographic-similarity × goal-type interactions separately would require a substantially larger sample size than planned, whereas a composite index allows for a well-powered test of the preregistered hypothesis.

## Results

To test Hypothesis 1, we analyzed the subset of participants who read a pitch with a specified motivation (N=465). Within this sample, we estimated three preregistered models predicting narrative interest: a model including only motivational alignment (Model 1), a model including motivational alignment and demographic-similarity variables (Model 2), and a model including only demographic-similarity variables (Model 3). This approach allowed us to assess the unique contribution of motivational alignment (P1), its robustness when demographic-similarity is controlled (P2), and its relative parsimony compared to demographic-only models (P3).

Model 1 tested whether participants were more interested in a story when it featured a motivation they personally considered more important in their own life, following equation [1].

$$[1] \text{Interest}_i = \beta_0 + \beta_1 \text{MotivationalAlignment}_i + \varepsilon_i$$

The real-life importance participants assigned to the motivation depicted in the pitch significantly predicted narrative interest ( $\beta = 0.11$ ,  $SE = 0.05$ ,  $t(463) = 2.38$ ,  $p = 0.018$ ), validating P1.

Then, we included demographic-similarity as control variables (Model 2), following equation [2].

$$[2] \text{Interest}_i = \beta_0 + \beta_1 \text{MotivationalAlignment}_i + \beta_2 \text{GenderSimilarity}_i + \beta_3 \text{RaceSimilarity}_i + \beta_4 \text{AgeSimilarity}_i + \varepsilon_i$$

Motivation rating remained a significant predictor of interest ( $\beta = 0.11$ ,  $SE = 0.05$ ,  $t(460) = 2.41$ ,  $p = 0.016$ ). In contrast, gender-similarity ( $\beta = 0.07$ ,  $t = 1.5$ ,  $p = 0.13$ ), race-similarity ( $\beta = 0.08$ ,  $t = 1.68$ ,  $p = 0.09$ ), and age-similarity ( $\beta = -0.01$ ,  $t = -0.22$ ,  $p = 0.82$ ) were not significant predictors. Thus, motivational alignment explains unique variance in interest beyond demographic-similarity, validating P2.

We next estimated a model that included only gender-, race-, and age-similarity (Model 3), following equation [3].

$$[3] \text{Interest}_i = \beta_0 + \beta_1 \text{GenderSimilarity}_i + \beta_2 \text{RaceSimilarity}_i + \beta_3 \text{AgeSimilarity}_i + \varepsilon_i$$

We compared AIC values across the three models—Model 1 vs. Model 3 and Model 2 vs. Model 1. Model differences were evaluated using a bootstrapped AIC comparison procedure (see Supplementary Materials). For the comparison between Model 1 and Model 3, the mean bootstrapped  $\Delta AIC$  was positive (2.83), yet the 95% bootstrap confidence interval [−11.78, 16.9] included 0, indicating that the two models could not be reliably distinguished in terms of overall fit. Therefore, we found no evidence supporting P3. For the comparison between Model 2 and

Model 1, the mean bootstrapped  $\Delta AIC$  was negative ( $-2.11$ ), yet the 95% bootstrap confidence interval  $[-13.55, 4.98]$  again included 0, indicating that adding demographic variables to motivational alignment does not reliably improve model fit. Thus, it is not possible to determine whether Model 1 or Model 2 is more parsimonious. These results suggest that motivational alignment shows a consistent association with narrative interest, whereas adding demographic variables yields little to no improvement in model fit.

**Table 1.** Results of pre-registered regressions for all models with standardized variables (standard error in parenthesis; \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ ). Motivational importance was defined as the participant's pre-existing real-life valuation of the specific goal featured in their assigned pitch (see Method). Similarity variables were operationalised as the distance between participants' and protagonists' gender, race, and age, and were then averaged into an overall demographic-similarity index (all variables were normalized). Goal-type was coded as 0 (Unspecified Motivation condition) or 1 (Specified Motivation condition).

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
<b>Condition</b>	Specified Motivation	Specified Motivation	Specified Motivation	Unspecified Motivation	Both conditions
Motivation Importance	.110* (.046)	.111* (.046)			
Gender-Similarity		.069 (.046)	.071 (.046)		
Race-Similarity		.077 (.046)	.075 (.046)		
Age-Similarity		-.010 (.046)	-.007 (.046)		
Demographic-Similarity				.034 (.045)	.034 (.047)
Demographic-Similarity x Goal-Type					.048 (.065)
Observations	465	465	465	469	934
R-squared	.012	.023	.011	.001	.004

To test Hypothesis 2, we first estimated a model restricted to participants who read a pitch with an unspecified goal ( $N = 469$ ), following equation [4].

$$[4] \text{Interest}_i = \beta_0 + \beta_1 \text{DemographicSimilarity}_i + \varepsilon_i$$

In this group, the composite demographic-similarity index did not predict interest ( $\beta = 0.03$ ,  $SE = 0.04$ ,  $t = .76$ ,  $p = 0.45$ ; Model 4), indicating that demographic-similarity did not become more influential when no motivational information was provided. Second, as preregistered, we fitted an interaction model on the full sample to test whether the effect of the overall demographic-similarity index differed between the specified- and unspecified-motivation conditions, following equation [5].

$$[5] \text{Interest}_i = \beta_0 + \beta_1 \text{DemographicSimilarity}_i + \beta_2 \text{GoalType}_i + \beta_3 \text{DemographicSimilarity}_i \times \text{GoalType}_i + \varepsilon_i$$

The demographic-similarity  $\times$  goal-type interaction was nonsignificant ( $\beta = 0.05$ ,  $SE = 0.07$ ,  $t = 0.73$ ,  $p = 0.47$ ; Model 5), showing no evidence that demographics played a stronger role when motivations were absent. Together, these results provide no support for Prediction 4 and 5.

One possible explanation for the null effect of demographic-similarity on interest in the unspecified motivation condition is that participants may not have attended to the similarity manipulation. To assess this possibility, we examined responses to an additional exploratory measure included in the survey (pre-registered as exploratory): anticipated identification with the protagonist (“*If you were to watch the movie described in this pitch, to what extent would you identify with the main character?*”). Gender-similarity and race-similarity both had a significant and strong positive effect on anticipated identification (see Supplementary Materials), indicating that these demographic cues were successfully encoded by participants, and thereby ruling out the possibility that the null effect of demographic-similarity on interest simply reflects inattention to the characters’ demographic attributes or to their similarity with the observer.

## Discussion

Across two preregistered experiments, we investigated whether people become interested in stories because protagonists resemble them demographically or because they pursue goals that observers personally value. Three consistent results were observed. First, motivational alignment—the correspondence between a protagonist’s ongoing goal and the observer’s own motivational priorities—reliably predicted interest. Second, this effect remained significant when demographic-similarity was included in the model, whereas demographic-similarity alone showed no predictive value. Third, demographic cues did not become more influential when motivational information was absent. Taken together, these findings suggest that motivational alignment, rather than demographic-similarity, guides the earliest stages of narrative engagement.

This motivational account of engagement and interest aligns with a broader body of findings. Early in social learning research, Maccoby & Wilson (1957) interpreted their results as suggesting that, rather than perceived similarity, interest in an on-screen character was mainly influenced by what they termed the ‘need relevance’ of the character’s current goal to the observer. More recently, Dore (2022) hypothesized a similar construct (‘self-relevance’) to

explain the absence of a gender-similarity effect (but simultaneous presence of a so-called race-similarity effect) on free recall of educational and plot-related information presented in a narrative. This shift toward the observer's goals mirrors the logic of motivational alignment, offering a functional explanation as to why demographic-similarity alone often fails to predict engagement and interest.

These findings bear directly on a foundational assumption in narrative theory: the mechanism that makes character identification, and therefore narrative immersion, possible (Green & Brock, 2002; Jauss et al., 1974). Classical accounts treat identification as an identity-based process: readers are assumed to “enter” a story by aligning themselves with protagonists, with demographic-similarity thought to facilitate this fusion (Hoffner & Buchanan, 2005; Kaufman & Libby, 2012; Oatley, 1999). Our results suggest that this interpretation targets the wrong explanatory variable. What enables immersion is not shared identity but shared motivation (Green & Brock, 2002). When a protagonist pursues a goal that the observer personally values, the character's choices become instrumentally relevant, and perspective-taking follows as a functional response to that relevance. Under this view, narrative identification is better understood as a motivationally driven form of vicarious problem-solving rather than as an identity-based merging of selves.

This shift—from identity-based alignment to motivation-based relevance—also suggests a different way of thinking about the cognitive mechanisms that make engagement with stories possible. Narratives do not captivate audiences simply because they entertain or elicit emotion. Rather, they engage us because they reproduce the informational conditions under which humans naturally learn from observing others: a goal-directed agent encountering obstacles, making decisions under uncertainty, and experiencing consequences (Meltzoff et al., 2012; Szczepanik et al., 2020). From this perspective, a story is better understood as a perceived environment for vicarious problem-solving. Its appeal lies not in the opportunity to merge identities with similar protagonists, but in the perceived opportunity to extract causal insight from another agent's pursuit of goals that matter to the observer. Emotional resonance, in turn, would function less as an aesthetic experience and more as a cognitive device that supports vicarious causal learning, helping observers internalize—much as in real life—how valued goals are pursued and which strategies succeed or fail (Olsson et al., 2020; Olsson & Phelps, 2007).

This insight also has direct implications beyond narrative theory, particularly for the design of personalized communication in public policy (e.g., in health, see Avenel et al., forthcoming; Teeny et al., 2021). If engagement depends primarily on motivational relevance rather than demographic-similarity, effective personalization should not be understood as matching messages to people's demographic profiles, but as aligning content with the goals, values, and concerns that structure their motivation (Joyal-Desmarais et al., 2022). Demographic variables are often used because they are easy to observe, yet they are at best indirect indicators of what individuals actually care about. By contrast, motivational orientations—measurable through personality traits, values, or even cultural preferences—offer a more principled basis for tailoring communication (e.g., Hirsh et al., 2012; Matz et al., 2017). Future research in edutainment (Ferrara et al., 2012; Singhal, 2004) could extend this framework by testing whether

motivation-based personalization or motivationally aligned role models improve not only engagement, but also persuasion and downstream behavioral outcomes.

Although the present studies focus on narrative interest, the proposed mechanism is not inherently narrative-specific. A growing body of work conceptualizes demographic-similarity biases as core selective mechanisms in cultural evolution (Henrich, 2016). Our findings, as well as Maccoby & Wilson's (1957) and Dore's (2022), support an alternative account. We instead propose that the primary engine driving narrative change (and, presumably, other forms of cultural productions) may be the extent to which they are perceived to facilitate the fulfilment of evolved motivations via goal-directed behavior (see the notion of 'subjective selection'; Singh, 2022, 2025; see also Bouizegarene et al., 2024; Di Paolo et al., 2025). Similar considerations have been developed extensively beyond the cultural evolutionary literature (Clark, 2011, 2019; Gray & Fu, 2001; Lupyan & Clark, 2015; Ritchie et al., 2025).

Future research should examine whether the present findings generalize to other cultural productions and, for stories, to related outcomes such as character identification and narrative absorption. Our paradigm intentionally focused on minimal pitches because the central question concerns the moment at which people decide whether a story is worth their attention. Extending this work to longer narratives is clearly desirable, but it presents methodological challenges. When participants are required to read or watch a full story they would not have chosen in everyday life, variance in interest becomes entangled with numerous uncontrolled factors—writing quality, pacing, emotional tone, theme, genre expectations—that can overshadow or distort the influence of demographic or motivational cues. In contrast, brief pitches allow researchers to isolate the information that observers actually use when making initial engagement decisions. Future work may explore hybrid designs that preserve ecological validity while systematically introducing richer narrative elements.

## References

- Aktipis, A., Cronk, L., Alcock, J., Ayers, J. D., Baciu, C., Balliet, D., Boddy, A. M., Curry, O. S., Krems, J. A., Muñoz, A., Sullivan, D., Sznycer, D., Wilkinson, G. S., & Winfrey, P. (2018). Understanding cooperation through fitness interdependence. *Nature Human Behaviour*, 2(7), 429–431. <https://doi.org/10.1038/s41562-018-0378-4>
- Anderson, K. G., Kaplan, H., & Lancaster, J. B. (2007). Confidence of paternity, divorce, and investment in children by Albuquerque men. *Evolution and Human Behavior*, 28(1), 1–10. <https://doi.org/10.1016/j.evolhumbehav.2006.06.004>
- Avenel, J., Chevallier, C., & Dubourg, E. (n.d.). *Beyond One-Size-Fits-All: Personalising Health Communication to Drive Real Behaviour Change*.
- Bandura, A., Ross, D., & Ross, S. A. (1961). Transmission of aggression through imitation of aggressive models. *The Journal of Abnormal and Social Psychology*, 63(3), 575–582. <https://doi.org/10.1037/h0045925>
- Bandura, A., Ross, D., & Ross, S. A. (1963). Imitation of film-mediated aggressive models. *The Journal of Abnormal and Social Psychology*, 66(1), 3–11. <https://doi.org/10.1037/h0048687>

- Barclay, P., Bliege Bird, R., Roberts, G., & Számadó, S. (2021). Cooperating to show that you care: Costly helping as an honest signal of fitness interdependence. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 376(1838), 20200292. <https://doi.org/10.1098/rstb.2020.0292>
- Berlyne, D. E. (1966). Curiosity and Exploration: Animals spend much of their time seeking stimuli whose significance raises problems for psychology. *Science*, 153(3731), 25–33. <https://doi.org/10.1126/science.153.3731.25>
- Bjorklund, D. F. (2022). Children's Evolved Learning Abilities and Their Implications for Education. *Educational Psychology Review*, 34(4), 2243–2273. <https://doi.org/10.1007/s10648-022-09688-z>
- Bouizegarene, N., Ramstead, M. J. D., Constant, A., Friston, K. J., & Kirmayer, L. J. (2024). Narrative as active inference: An integrative account of cognitive and social functions in adaptation. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1345480>
- Bullock, O. M., Shulman, H. C., & Huskey, R. (2021). Narratives are Persuasive Because They are Easier to Understand: Examining Processing Fluency as a Mechanism of Narrative Persuasion. *Frontiers in Communication*, 6, 719615. <https://doi.org/10.3389/fcomm.2021.719615>
- Chen, M., Bell, R. A., & Taylor, L. D. (2017). Persuasive Effects of Point of View, Protagonist Competence, and Similarity in a Health Narrative About Type 2 Diabetes. *Journal of Health Communication*, 22(8), 702–712. <https://doi.org/10.1080/10810730.2017.1341568>
- Chen, M., Dong, Y., & Wang, J. (2024). A Meta-Analysis Examining the Role of Character-Recipient Similarity in Narrative Persuasion. *Communication Research*, 51(1), 56–82. <https://doi.org/10.1177/00936502231204834>
- Clark, A. (2011). *Supersizing the mind: Embodiment, action, and cognitive extension*. Oxford university press.
- Clark, A. (2019). *Surfing uncertainty: Prediction, action, and the embodied mind*. Oxford University Press.
- Cohen, J. (2001). Defining Identification: A Theoretical Look at the Identification of Audiences With Media Characters. *Mass Communication and Society*, 4(3), 245–264. [https://doi.org/10.1207/S15327825MCS0403\\_01](https://doi.org/10.1207/S15327825MCS0403_01)
- Cohen, J., Weimann-Saks, D., & Mazor-Tregerman, M. (2018). Does Character Similarity Increase Identification and Persuasion? *Media Psychology*, 21(3), 506–528. <https://doi.org/10.1080/15213269.2017.1302344>
- Del Giudice, M. (2024). The Motivational Architecture of Emotions. In L. Al-Shawaf & T. K. Shackelford (Eds.), *The Oxford Handbook of Evolution and the Emotions* (1st ed., pp. 99–132). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780197544754.013.5>
- Di Paolo, L. D., White, B., Guénin--Carlut, A., Constant, A., & Clark, A. (2025). Material culture both reflects and causes human cognitive evolution. *The Behavioral and Brain Sciences*, 48, e7. <https://doi.org/10.1017/S0140525X2400092X>
- Dore, R. A. (2022). The effect of character similarity on children's learning from fictional stories: The roles of race and gender. *Journal of Experimental Child Psychology*, 214, 105310. <https://doi.org/10.1016/j.jecp.2021.105310>

- Dubourg, E., Thouzeau, V., Beuchot, T., Bonard, C., Boyer, P., Clasen, M., Boon-Falleur, M., Fiorio, G., Fitouchi, L., Fisher, M. L., Gantman, A., Grant, A., Hye-Knudsen, M., Katiyar, T., Kjeldgaard-Christiansen, J., Mercier, H., Morin, O., Salmon, C., Scott-Phillips, T., ... Baumard, N. (2024). *Explaining the Diversity and Variability of Fictions: An Evolutionary Framework*. [https://osf.io/me6bz\\_v1](https://osf.io/me6bz_v1)
- Fairlie, R. W., Hoffmann, F., & Oreopoulos, P. (2014). A Community College Instructor Like Me: Race and Ethnicity Interactions in the Classroom. *American Economic Review*, *104*(8), 2567–2591. <https://doi.org/10.1257/aer.104.8.2567>
- Feilitzen, C. V., & Linné, O. (1975). Identifying with Television Characters. *Journal of Communication*, *25*(4), 51–55. <https://doi.org/10.1111/j.1460-2466.1975.tb00638.x>
- Ferrara, E. L., Chong, A., & Duryea, S. (2012). Soap Operas and Fertility: Evidence from Brazil. *American Economic Journal: Applied Economics*, *4*(4), 1–31. <https://doi.org/10.1257/app.4.4.1>
- Fletcher, G. J. O., Simpson, J. A., Campbell, L., & Overall, N. C. (2015). Pair-Bonding, Romantic Love, and Evolution: The Curious Case of *Homo sapiens*. *Perspectives on Psychological Science*, *10*(1), 20–36. <https://doi.org/10.1177/1745691614561683>
- Gottlieb, J., Oudeyer, P.-Y., Lopes, M., & Baranes, A. (2013). Information-seeking, curiosity, and attention: Computational and neural mechanisms. *Trends in Cognitive Sciences*, *17*(11), 585–593. <https://doi.org/10.1016/j.tics.2013.09.001>
- Gray, W. D., & Fu, W.-T. (2001). Ignoring perfect knowledge in-the-world for imperfect knowledge in-the-head. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 112–119. <https://doi.org/10.1145/365024.365061>
- Green, M. C., & Brock, T. C. (2002). In the mind's eye: Transportation-imagery model of narrative persuasion. In *Narrative impact: Social and cognitive foundations* (pp. 315–341). Lawrence Erlbaum Associates Publishers.
- Grusec, J. E., & Brinker, D. B. (1972). Reinforcement for imitation as a social learning determinant with implications for sex-role development. *Journal of Personality and Social Psychology*, *21*(2), 149–158. <https://doi.org/10.1037/h0032213>
- Henrich, J. P. (2016). *The secret of our success: How culture is driving human evolution, domesticating our species, and making us smarter*. Princeton university press.
- Hirsh, J. B., Kang, S. K., & Bodenhausen, G. V. (2012). Personalized Persuasion: Tailoring Persuasive Appeals to Recipients' Personality Traits. *Psychological Science*, *23*(6), 578–581. <https://doi.org/10.1177/0956797611436349>
- Hoelzer, G. A. (1989). The good parent process of sexual selection. *Animal Behaviour*, *38*(6), 1067–1078. [https://doi.org/10.1016/S0003-3472\(89\)80146-0](https://doi.org/10.1016/S0003-3472(89)80146-0)
- Hoffman, F., & Oreopoulos, P. (2007). *A Professor Like Me: The Influence of Instructor Gender on College Achievement* (SSRN Scholarly Paper No. 994230). Social Science Research Network. <https://papers.ssrn.com/abstract=994230>
- Hoffner, C. (1996). Children's wishful identification and parasocial interaction with favorite television characters. *Journal of Broadcasting & Electronic Media*, *40*(3), 389–402. <https://doi.org/10.1080/08838159609364360>
- Hoffner, C., & Buchanan, M. (2005). Young Adults' Wishful Identification With Television Characters: The Role of Perceived Similarity and Character Attributes. *Media Psychology*, *7*(4), 325–351. [https://doi.org/10.1207/S1532785XMEP0704\\_2](https://doi.org/10.1207/S1532785XMEP0704_2)

- Jauss, H. R., Bennett, B., & Bennett, H. (1974). Levels of Identification of Hero and Audience. *New Literary History*, 5(2), 283. <https://doi.org/10.2307/468397>
- Jose, P. E., & Brewer, W. F. (1984). Development of story liking: Character identification, suspense, and outcome resolution. *Developmental Psychology*, 20(5), 911–924. <https://doi.org/10.1037/0012-1649.20.5.911>
- Joyal-Desmarais, K., Scharmer, A. K., Madzellan, M. K., See, J. V., Rothman, A. J., & Snyder, M. (2022). Appealing to motivation to change attitudes, intentions, and behavior: A systematic review and meta-analysis of 702 experimental tests of the effects of motivational message matching on persuasion. *Psychological Bulletin*, 148(7–8), 465–517. <https://doi.org/10.1037/bul0000377>
- Kaufman, G. F., & Libby, L. K. (2012). Changing beliefs and behavior through experience-taking. *Journal of Personality and Social Psychology*, 103(1), 1–19. <https://doi.org/10.1037/a0027525>
- Kenrick, D. T. (2006). A Dynamical Evolutionary View of Love. In *The new psychology of love* (pp. 15–34). Yale University Press.
- Kim, M., Shi, R., & Cappella, J. N. (2016). Effect of Character–Audience Similarity on the Perceived Effectiveness of Antismoking PSAs via Engagement. *Health Communication*, 31(10), 1193–1204. <https://doi.org/10.1080/10410236.2015.1048421>
- Lupyan, G., & Clark, A. (2015). Words and the World: Predictive Coding and the Language-Perception-Cognition Interface. *Current Directions in Psychological Science*, 24(4), 279–284. <https://doi.org/10.1177/0963721415570732>
- Maccoby, E. E., & Wilson, W. C. (1957). Identification and observational learning from films. *The Journal of Abnormal and Social Psychology*, 55(1), 76–87. <https://doi.org/10.1037/h0043015>
- Marengo, D., Davis, K. L., Gradwohl, G. Ö., & Montag, C. (2021). A meta-analysis on individual differences in primary emotional systems and Big Five personality traits. *Scientific Reports*, 11(1), 7453. <https://doi.org/10.1038/s41598-021-84366-8>
- Matz, S. C., Kosinski, M., Nave, G., & Stillwell, D. J. (2017). Psychological targeting as an effective approach to digital mass persuasion. *Proceedings of the National Academy of Sciences of the United States of America*, 114(48), 12714–12719. <https://doi.org/10.1073/pnas.1710966114>
- Meltzoff, A. N., Waismeyer, A., & Gopnik, A. (2012). Learning about causes from people: Observational causal learning in 24-month-old infants. *Developmental Psychology*, 48(5), 1215–1228. <https://doi.org/10.1037/a0027440>
- Montag, C., Sindermann, C., Lester, D., & Davis, K. L. (2020). Linking individual differences in satisfaction with each of Maslow’s needs to the Big Five personality traits and Panksepp’s primary emotional systems. *Heliyon*, 6(7), e04325. <https://doi.org/10.1016/j.heliyon.2020.e04325>
- Oatley, K. (1999). Meetings of minds: Dialogue, sympathy, and identification, in reading fiction. *Poetics*, 26(5), 439–454. [https://doi.org/10.1016/S0304-422X\(99\)00011-X](https://doi.org/10.1016/S0304-422X(99)00011-X)
- Oliver, M. B., & Raney, A. A. (2011). Entertainment as Pleasurable and Meaningful: Identifying Hedonic and Eudaimonic Motivations for Entertainment Consumption. *Journal of Communication*, 61(5), 984–1004. <https://doi.org/10.1111/j.1460-2466.2011.01585.x>

- Olsson, A., Knapska, E., & Lindström, B. (2020). The neural and computational systems of social learning. *Nature Reviews Neuroscience*, 21(4), 197–212. <https://doi.org/10.1038/s41583-020-0276-4>
- Olsson, A., & Phelps, E. A. (2007). Social learning of fear. *Nature Neuroscience*, 10(9), 1095–1102. <https://doi.org/10.1038/nn1968>
- Ritchie, J. B., Wardle, S. G., Vaziri-Pashkam, M., Kravitz, D. J., & Baker, C. I. (2025). Rethinking category-selectivity in human visual cortex. *Cognitive Neuroscience*, 0(0), 1–28. <https://doi.org/10.1080/17588928.2025.2543890>
- Seitz, M., Lenhart, J., & Rübsem, N. (2020). The effects of gendered information in stories on preschool children's development of gender stereotypes. *British Journal of Developmental Psychology*, 38(3), 363–390. <https://doi.org/10.1111/bjdp.12323>
- Singh, M. (2022). Subjective selection and the evolution of complex culture. *Evolutionary Anthropology: Issues, News, and Reviews*, 31(6), 266–280. <https://doi.org/10.1002/evan.21948>
- Singh, M. (2025). *Subjective selection, super-attractors, and the origins of the cultural manifold*. PsyArXiv. [https://doi.org/10.31234/osf.io/a8n3b\\_v1](https://doi.org/10.31234/osf.io/a8n3b_v1)
- Singhal, A. (Ed.). (2004). *Entertainment-education and social change: History, research, and practice*. Lawrence Erlbaum Associates.
- Szczepanik, M., Kaźmierowska, A. M., Michałowski, J. M., Wypych, M., Olsson, A., & Knapska, E. (2020). Observational learning of fear in real time procedure. *Scientific Reports*, 10(1), 16960. <https://doi.org/10.1038/s41598-020-74113-w>
- Teeny, J. D., Siev, J. J., Briñol, P., & Petty, R. E. (2021). A Review and Conceptual Framework for Understanding Personalized Matching Effects in Persuasion. *Journal of Consumer Psychology*, 31(2), 382–414. <https://doi.org/10.1002/jcpy.1198>