Social Proof by Age: When Old-Authored Reviews Help or Hurt Hotel Purchase Intention

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Abstract

We test how apparent review provenance and reader age jointly shape hotel purchase intention. In a between-subjects online experiment (N = 186) participants (balanced <50 vs. 50+) viewed a standardized hotel with one of four cues: no review, a generic positive review, a young-authored review, or an old-authored review. A model with age, review condition, and interactions reveals a clear moderation. Youthful consumers show no differences between no/any/young-authored reviews, but old-authored reviews reduce intention. Older consumers (50+) start lowest without reviews; any review increases intention, and old-authored reviews produce the highest intentions overall. Results integrate social proof with social identity, highlighting age-based in-/out-group cues as relevant. Managerially, platforms should age-tune review displays: surface peer (50+) reviews for older visitors and avoid leading with old-authored snippets for youth.

Keywords: online reviews; social proof; age-based in-/out-group; hotel booking

Suggested Tracks: Digital Marketing or Sectorial Marketing – Services (Services, Tourism, Culture, Healthcare, Media, Education, Non profit…)

Introduction

Digital reviews concentrate social proof—the tendency to align one's behavior with others, especially under uncertainty (Cialdini & Goldstein, 2004). Classic conformity work shows that observed consensus can sway even simple judgments (Asch, 1956), and group identity amplifies such influence when sources are perceived as "us" rather than "them" (Tajfel & Turner, 2004). In travel, review signals are now among the most consequential cues driving booking choices (Lien et al., 2023; Ullah et al., 2019). At the same time, populations are aging, making age-tailored persuasion increasingly important.

Yet, evidence is mixed on whether younger or older consumers are more susceptible to social influence, and whether age matching between reviewers and readers matters. Some work predicts stronger effects within in-groups and weaker or even adverse reactions to out-groups; others report attenuated conformity with age. This ambiguity leaves marketers without clear guidance on how to stage reviews for age-diverse audiences.

We address this gap with an online experiment that presented a standardized hotel to participants randomly assigned to one of four review conditions: no review, a generic positive review, a review saliently authored by younger consumers, or one by older consumers. With this study, we show, first, that youthful consumers are broadly indifferent to reviews—there is no meaningful difference between seeing no review, any review, or a review by young peers—except when reviews can be attributed to older reviewers, which then reduces their purchase intention. Second, we show that older consumers (50+) start from a lower purchase intention when no review is present relative to the young, but any review mitigates this gap, including reviews from young people; reviews by older consumers lift purchase intention the most, to the highest observed group level. Together, these results reconcile prior inconsistencies by demonstrating that who speaks in the review (age in- vs. out-group) interacts strongly with who is listening (consumer age).

Managerially, the findings imply that platforms and hotels should age-tune their review displays: surface age-matched endorsements to older visitors to unlock intention gains, avoid exposing younger visitors to older-authored reviews that can depress intention, and recognize that for the young, merely adding generic positivity is unlikely to help. Practically, this can be implemented with optional filters (e.g., "reviews from travelers like me") or with subtle age cues in snippet carousels.

Conceptually, our work clarifies when social proof helps or harms across the life span by centering age-based in-/out-group cues within the review literature. It adds to research that links social identity to conformity in marketplace contexts and complements tourism evidence on the potency of review signals for booking decisions.

Theory and Hypotheses

In tourism, online reviews are among the most diagnostic signals of quality and risk, routinely shaping hotel choice (Lien et al., 2023; Ullah et al., 2019). Online reviews operationalize social proof: when options feel uncertain, people look to others' choices as a shortcut (Cialdini & Goldstein, 2004). Conformity research shows that such normative cues can sway judgments even when the "right" answer is obvious (Asch, 1956). However, who provides the cue matters. Social identity theory predicts stronger persuasion from in-group sources and weaker, or even adverse, reactions to out-groups (Tajfel & Turner, 2004). A well-established similarity–attraction mechanism likewise links source–receiver similarity to higher liking, trust, and influence (Byrne, 1997).

Age can moderate these pathways through both identity and motivation. Socioemotional selectivity theory argues that older adults prioritize emotionally meaningful, self-relevant

information and trusted in-groups (Su et al., 2024). In the hotel booking context, older consumers may perceive higher downside risk and therefore start from a lower intention baseline absent reassuring social proof; any review should mitigate this uncertainty, and age-matched (older-authored) reviews should resonate most via in-group signaling. By contrast, youthful consumers typically face lower perceived risk and exhibit greater confidence in independent choice, reducing their reliance on generic review cues. When review authors are saliently older, the out-group signal may reduce relevance or trigger subtle reactance, lowering purchase intention relative to other conditions (Byrne, 1997; Tajfel & Turner, 2004).

We test the following directional hypotheses:

- **Hypothesis H1** (Baseline age gap). In the absence of reviews, older consumers (50+) report lower purchase intention than youthful consumers.
- **Hypothesis H2** (Mitigation by any review when older). For older consumers, any review (generic or with age cues) increases purchase intention relative to no review.
- **Hypothesis H3** (old-authored reviews for in- and outgroups). For older consumers, old-authored reviews further increase purchase intention beyond generic or young-authored reviews (ingroup), but For youthful consumers, old-authored reviews reduce purchase intention relative to the other conditions (outgroup).

Study Design

We ran a between-subjects online experiment with four review conditions: no review (control), generic positive review (no age cue), review by younger travelers (<25), and review by older travelers (50+). Recruitment occurred via WhatsApp/Instagram and through a senior residence contact to balance age groups. After pre-specified exclusions (incomplete responses; speeders < 33% of median time; never booked a hotel online), the final sample was N = 186 (96 women, 90 men), evenly split into younger <50 vs. older 50+ (n = 93 each). Randomization produced near-equal group sizes: 45/46/49/46 across the four conditions. Figure 1 depicts the split age distribution of the sample:

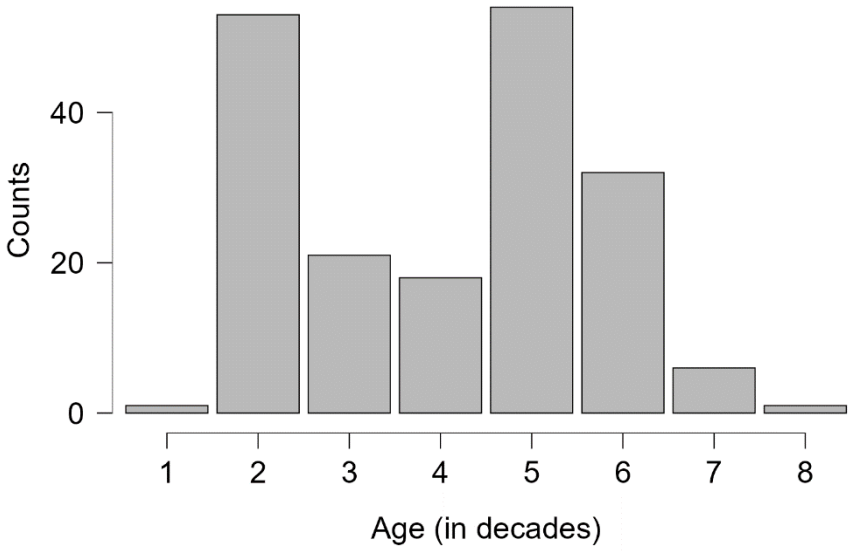

Figure 1: Sample Age Distribution

Participants imagined planning a weekend trip and saw a standardized listing for a fictional hotel ("Bella Vista") with a photo of a double room. Figure 2 shows the stimuli. The review manipulation appeared as a booking-site style snippet overlaid on the same room image. All texts were in German:

- Generic review: "Das Hotel war sehr sauber und gepflegt."
- Young reviewers (<25): "Die Nähe zum Clubviertel war ideal …"; badge "Jüngere Reisende betonen besonders die zentrale Lage."
- Old reviewers (50+): "Die Dusche war ebenerdig und angenehm geräumig …"; badge "Ältere Reisende betonen besonders die bequeme Nutzung."
- The control showed only the room image without any review

Figure 2: Stimuli

The dependent variable was hotel purchase intention: "Wie wahrscheinlich ist es, dass Sie dieses Doppelzimmer zu einem Preis von 107 € buchen würden?" on a 5-point likelihood scale (1 = sehr unwahrscheinlich … 5 = sehr wahrscheinlich). We also collected an open-ended maximum WTP (unused here). A manipulation-check asked whether the page conveyed that many guests had rated the hotel positively; responses clearly separated "any review" vs. "no review" (Welch-t = −8.356, $p < .001$).

Results

Our single OLS model on purchase intention (DV) with Age50+, review dummies (Review for all three review conditions, Review_byYoung for young-authored condition, Review_byOld for old-authored; baseline = no review), and their interactions was significant: $F = 4.296$, $p < .001$, $R^2 = .145$. Main-effect Social Proof was not significant, but Age50+ and the Age50+ × Social Proof interaction were significant, indicating that review effects depend on reader age.

In line with a baseline age gap, we find that older participants showed a significantly lower purchase intention (b = - 1.285, $p < .001$); but this is mitigated in presence of any review (b = + 1.067, $p < .05$), in line with hypothesis H2. We expected a different response of both age groups to reviews from older reviwers (H3): this condition was the only that reduced purchase intention among young participants (b = - .714, $p < .05$), but further increased purchase intention among older participants (b = + 1.286, $p < .01$), making it the best condition for this group. Table 1 depicts estimates of the model, Figure 3 illustrates the stimulus group differences in purchase intention.

Table 1: Model Summary

	Coefficient	Standard Error	Hypothesis	t	p
(Intercept)	**3.739**	0.234		15.991	< .001
Age 50+ (1)	**-1.285**	0.334	H1	-3.841	< .001
Review (1)	-0.130	0.331		-0.394	0.694
Review_byYoung (1)	-0.109	0.316		-0.344	0.731
Review_byOld (1)	**-0.714**	0.348	H3	-2.054	0.041
Age 50+ (1) × Review (1)	**1.067**	0.470	H2	2.269	0.024
Age 50+ (1) × Review_byYoung (1)	-0.092	0.463		-0.199	0.842
Age 50+ (1) × Review_byOld (1)	**1.286**	0.471	H3	2.728	0.007

Notes. Significant estimates (p < 0.05) marked in bold.

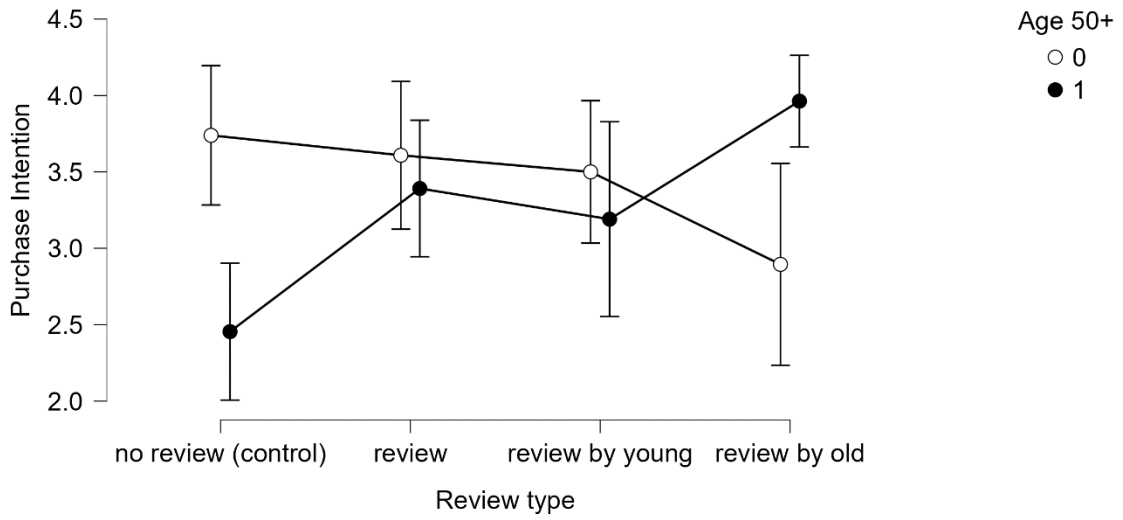

Figure 3: Experimental Group Mean

Discussion

This study shows that the persuasive value of reviews depends jointly on who reads and who (apparently) wrote them. For youthful consumers, generic positivity or age-matched (young-authored) reviews neither help nor hurt; only old-authored reviews depress intention. For older consumers (50+), no-review is a liability, any review mitigates it, and old-authored reviews yield the highest intentions.

These patterns reconcile mixed findings about review influence by foregrounding social identity and cue processing. First, the in-group advantage for older consumers aligns with social identity theory and similarity–attraction: sources that look like "me" are perceived as more relevant and trustworthy, boosting impact (Byrne, 1997; Tajfel & Turner, 2004). Second, the baseline deficit for older consumers under no-review is consistent with a greater need for reassurance under uncertainty and with socioemotional selectivity's emphasis on meaningful, trustworthy cues (Su et al., 2024). Thus, even minimal social proof (any review) lifts older readers (Cialdini & Goldstein, 2004). Third, youthful consumers' indifference to none/generic/young reviews suggests that, for them, review presence is a weak peripheral cue; only an out-group signal (old-authored) is diagnostic enough—negatively—to move intention. In short, age-based in/out-group cues explain when the same review architecture helps, does nothing, or harms.

Limitations & future work. First, the manipulation used salient age tags on otherwise comparable positive snippets; real platforms present varied valence, length, and credibility signals. Second, our single-product context (mid-scale city-hotel, fixed price point) constrains generalization to luxury, budget, or high-risk categories. Third, the binary age split (<50 vs. 50+) simplifies a continuum; finer-grained cohorts (e.g., 18–29, 30–49, 50–64, 65+) could refine the curves. Fourth, we studied purchase intention, not actual booking behavior; field evidence would test behavioral persistence. Finally, we did not vary valence or volume; these may interact with age cues (e.g., in-group negative reviews could deter even more strongly).

Field experiments on booking sites could randomize review provenance cues by visitor age (opt-in personalization) and track real bookings. Multi-factor designs can cross age cues with valence/volume to map full response surfaces. Richer mediators (perceived similarity, trust, risk) would unpack mechanisms beyond our parsimonious model. Cross-cultural replications could test whether age-norms moderate in-/out-group reactions

Conclusion. older consumers need reviews and benefit most from age-matched endorsements; youthful consumers are mostly unmoved, except they react negatively to old-authored reviews. This age-by-source interplay translates into clear product guidance: show some review to older visitors (ideally from their peers), and don't lead with old-authored reviews for the young. By centering who speaks as much as what is said, platforms can convert social proof into a targeted, age-sensitive lever of persuasion.

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