

VISUAL FRAMING IN LIVESTREAMING: THE EFFECT OF BACKGROUND AND PRODUCT TYPE ON CONSUMER WILLINGNESS TO BUY

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INTRODUCTION

In livestream shopping, streamers engage potential customers by promoting products and creating a more enjoyable experience (Wang et al. 2022; Tong et al. 2022). Without tactile or sensory cues, they rely on visuals—such as layout, design, atmospherics, and social presence—to drive consumer response (Manganari et al. 2009). Research highlights factors affecting livestream success, including streamer’s attributes, product demos, lucky draws, audience size, language style, and product characteristics (Song et al. 2022; Hu and Ming 2020; Zhang et al. 2022; Luo et al. 2021). However, few studies address how these factors work together. Following recent calls for research on multimodality (Grewal et al. 2022), this study explores the interaction between product displays and background style to reveal differential consumer responses in livestream shopping.

CONCEPTUAL DEVELOPMENT

Consumer preference for visual stimuli depends on presentation, that is how information is “framed” affects consumer perception. In livestream selling, the background acts as a frame, shaping perceptions of the setting, product, and seller. Background design conveys messages about product attributes, performance, and lifestyle. The primary role of a livestream session is to provide cues about product and service quality to drive purchases, as quality evaluations strongly influence decision-making (Dodds et al. 1991).

We expect that a professional background paired with a high-end product increases perceived competence, leading to a rise in willingness to buy (WtB). Research links professional settings to perceived competence—a construct encompassing expertise, reliability, and skill—which fosters trust in sales relationships (Srinivasan et al., 2020). Likewise, we anticipate that a familiar background paired with a low-end product enhances perceived intimacy, creating comfort and ease in the shopping environment. Intimacy encourages consumers to expend less cognitive effort and feel more certain about the purchase. When consumers sense a connection with the streamer, they are more inclined to buy. We test our predictions in two experimental studies.

METHODOLOGY

Study 1: Main effect of a professional background

Eighty-three respondents ($M_{\text{age}} = 38.00$, $SD_{\text{age}} = 12.95$, 53% women), were randomly assigned to one of two background conditions (professional vs. neutral). We created a realistic livestream selling session with a seller who was promoting a high-end wristwatch that could be purchased right after the end of the livestream selling session. The video lasted about 48 seconds to avoid boredom effects in respondents. This time was enough to convey

the main feelings of a livestream selling session and to make sure that respondents were exposed long enough to the professional (vs. neutral) background. The script in both videos was the same and the seller was wearing the same clothes and used the same pitch to avoid confounding effects. Stimuli are available on request.

After watching the livestream session, respondents rated their willingness to buy ($r = .94, p < .001$), completed manipulation checks which were successful ($r = .55, p < .001$), and provided their demographics.

An independent sample t-test confirmed that the professional background generated higher WTB compared to the neutral one ($M_{\text{professional}} = 2.90, M_{\text{neutral}} = 2.10, t_{(81)} = 2.40, p = .02$). In the next Study, we replicate the findings for professional backgrounds, provide new evidence for familiar backgrounds and test the mechanisms that drive the effect of background and product type on WTB.

Study 2: Moderating effect of product type

Two hundred seventeen participants ($M_{\text{age}} = 46.16, SD_{\text{age}} = 13.44, 50\%$ women) were randomly assigned to a 2 (product: high-end vs. low-end) \times 2 (background: professional vs. familiar) between-subjects design. Participants rated whether the product was perceived as high- or low-end (manipulation checks were successful), along with perceived competence and intimacy (all $r > .90, p < .001$).

A two-way ANOVA showed a significant product \times background type interaction ($F_{(1, 217)} = 129.20, p < .001$). WTB was higher for high-end products with a professional background ($M_{\text{professional}} = 6.54, M_{\text{familiar}} = 2.39, F_{(1, 213)} = 136.39, p < .001$). For low-end products, WTB was higher with a familiar background ($M_{\text{professional}} = 2.39, M_{\text{familiar}} = 5.68, F_{(1, 213)} = 19.47, p < .001$).

Using PROCESS model 14 (Hayes, 2018), a professional (vs. familiar) background increased perceived competence ($b = 3.81, SE = .25, t = 15.27, p < .001$), which raised WTB ($b = .30, SE = .07, t = 4.62, p < .001$). This indirect effect through competence was stronger for high-end products ($b = 3.53, SE = .30, 95\% \text{ CI } [2.97, 4.15]$) than for low-end products ($b = 1.14, SE = .25, 95\% \text{ CI } [.69, 1.68]$).

A professional (vs. familiar) background decreased perceived intimacy ($b = -3.94, SE = .22, t = 17.06, p < .001$), which increased WTB ($b = .67, SE = .08, t = 8.90, p < .001$). The indirect effect through intimacy was non-significant for high-end products ($b = .06, SE = .33, 95\% \text{ CI } [-.33, .54]$) and negative for low-end products ($b = -2.64, SE = .30, 95\% \text{ CI } [-3.27, -2.06]$). Both mediation paths showed significant moderated mediation.

GENERAL DISCUSSION

This work provides evidence on the role that the background plays on the effectiveness of livestream selling. Professional backgrounds increase WTB for high-end products and familiar background for low end-products. This result can be explained by heightened perceived competence and intimacy that are triggered by the type of background.

References available upon request