

The Interactive Effects of Consumer Personality and Colour Psychology on Digital Advertising Engagement

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Abstract: *The Impact of Colour Psychology on Advertising and Branding* This study proposes and tests a model of Colour-Message Congruity moderated by Consumer Personality to address a major gap in marketing literature related to the complex effects of colour. Prior research shows that colour significantly influences consumer judgment (up to 90% of initial evaluation), but often oversimplifies its impact and overlooks psychological factors affecting responses to advertising appeals. This study incorporates a literature review of 43 publications and primary data collection from 125 online consumers. The conceptual framework is based on the Two-Dimensional Theory of Colour Affect (Activation vs. Evaluation) and the Self-Monitoring personality construct. The main hypothesis (H3) states that Evaluating Colours combined with Quality-Oriented Appeals increase click-through intent (CTI) among Low Self-Monitoring Consumers, while Activating Colours combined with Image-Oriented Appeals (H2) are more effective for High Self-Monitoring Consumers. The methodology provides a strategic roadmap for empirically validating this congruence model. Validating these hypotheses could significantly enhance strategic accuracy in digital advertising by shifting marketers from anecdotal colour choices to psychologically grounded decisions.

I. OVERVIEW

Colour is one of the most effective nonverbal communication tools for marketers. Due to its strong visual presence, it is often the first element consumers notice in an advertisement or product. Research shows that consumers form judgments within 90 seconds of initial exposure, with 62–90% of these judgments based solely on colour. Colour influences up to 85% of final purchase decisions, making it essential for brand identity, perception, and consumer buying behaviour. As a result, colour strategy is a foundational element of brand aesthetics and often involves major design investments.

Despite its importance, colour psychology in marketing is still guided largely by anecdotal

evidence and cultural associations. Although marketers commonly understand cues such as red being exciting and blue being reliable, empirical research has not fully examined how specific colour attributes (brightness, saturation) align with motivational differences across consumers.

This study fills this gap by integrating theories from visual psychology and consumer behaviour to develop and test a moderated congruence model. Focusing on digital advertising, it examines how specific colour properties influence consumer behaviour, moderated by personality traits.

II. PROBLEM DESCRIPTION

The study addresses the strategic imprecision in using colour as a persuasive cue. Two major issues exist: Oversimplification of Colour Measurement: Many studies treat colour effects in a one-dimensional way (e.g., only “liking”), ignoring the dual nature of colour responses—Evaluation (calmness/liking) and Activation (excitement/arousal). Without distinguishing these, marketers cannot design precise colour palettes that evoke intended psychological states.

Lack of Personality Moderation: Psychological differences among consumers are often excluded from colour-related advertising models. Although consumers respond strongly to image-based (soft-sell) or quality-based (hard-sell) appeals, research has not examined how Self-Monitoring (tendency to adjust behaviour based on social cues) interacts with specific colour appeals.

Research Goals (RO)

Assess the effects of highly evaluating (high-value, short wavelength) and highly activating (high-chroma, long wavelength) colour palettes on self-reported arousal and liking.

Categorize respondents by Self-Monitoring level and examine their preference for image-oriented vs. quality-oriented appeals.

Evaluate the interaction between colour dimension (Activation/Evaluation) and message appeal (Image/Quality) on CTI for High and Low Self-Monitors.

Determine whether colour-personality congruence increases perceived product value and purchase intent.

III. REVIEW OF LITERATURE AND CONCEPTUAL UNDERPINNINGS

This section reviews 43 academic articles on colour in branding, psychological characteristics of colour, and consumer motivation.

Colour in Brand Identity and Perception

Colour is central to brand governance and identity, shaping recognition and differentiation.

Brand Recognition: Colour enhances recognition by up to 80%. The Coca-Cola (Red) vs. Pepsi (Blue) rivalry demonstrates strategic colour positioning.

Brand Personality Mapping: Research maps colour attributes to Aaker's Brand Personality dimensions:

Competence/Trust → Blue

Excitement → Red, high saturation

Sophistication → Purple, Black, high value

Congruity Principle: A brand logo's perceived appropriateness depends on aligning colour meaning with product function (e.g., blue for banking).

Two-Dimensional Psychological Effects of Colour Evaluation vs. Activation: Crowley (1993) identified two dimensions—Evaluation increases toward cooler colours, and Activation follows a U-shape across the spectrum.

Colour Attributes: Saturation and value influence emotional response. High chroma produces excitement; high value produces calmness.

Behavioural Effects: Activating colours (Red/Yellow) encourage impulse decisions, while evaluating colours (Blue/Green) support thoughtful decisions.

Moderating Role of Self-Monitoring

High Self-Monitors (HSM): Prioritize social image; respond strongly to image-oriented appeals.

Low Self-Monitors (LSM): Value authenticity; respond better to quality-oriented claims.

This study hypothesizes that colour appeals should match Self-Monitoring tendencies—Activating + Image for HSM and Evaluating + Quality for LSM.

IV. RESEARCH STRUCTURE AND HYPOTHESES

Research Inquiries

Do activating colour schemes produce higher arousal than evaluating schemes?

Does Self-Monitoring influence CTI when appeals match colour psychology?

Does colour-personality congruence predict purchase intent and perceived value?

Conceptual Model

The model examines how Self-Monitoring moderates the interaction of Colour Dimension and Message Appeal on engagement.

Alternative Research Hypotheses

H1: Activating palettes produce higher arousal than evaluating palettes.

H2: High Self-Monitors show higher CTI for Activating Colours paired with Image Appeals.

H3: Low Self-Monitors show higher CTI for Evaluating Colours paired with Quality Appeals.

H4: Congruent combinations lead to increased perceived value and purchase intent.

Techniques

Data Sources

Primary: Structured questionnaire; 125 responses.

Secondary: Review of 43 scholarly articles.

Population and Sampling

Target Population: Adult internet users exposed to digital advertising.

Sample Size: 125.

Sampling Method: Convenience sampling.

Measured Instruments and Structures

A 5-point Likert scale was used across 18 items spanning four questionnaire sections.

Section	Construct Measured	Key Measurement Purpose
Section B	Self-Monitoring Propensity (Moderating Variable)	To categorize respondents into High/Low Self-Monitors by gauging their prioritization of social image versus intrinsic product quality.
Section C	Colour Psychological Response (Mediating Variable)	To measure the perceived Activation (excitement, energy from high-chroma colours) and Evaluation (trust, calmness from high-value colours) effects.
Section D	Behavioural Outcomes/Congruity (Dependent Variables)	To measure the effectiveness of the <i>congruent</i> colour/appeal scenarios on Click-Through Intent (CTI), Perceived Product Value, and Purchase Intent.

Data Analysis Plan

Scale reliability and manipulation checks.

Regression for H1.

Moderated mediation analysis (Colour Dimension × Message Appeal × Self-Monitoring) for H2 and H3.

SEM for H4.

V. ANTICIPATED RESULTS AND DISCUSSION

Expected findings describe how hypotheses are likely to perform based on theory.

Hypothesis	Predicted Outcome	Expected Contribution
H1 Supported	Digital ads featuring Activating Colours (e.g., high-chroma Red/Yellow) will register significantly higher scores on arousal/excitement measures.	Confirms the two-dimensional psychological effect of colour (Activation) in the modern digital advertising context, validating the use of specific colour attributes (chroma) for arousal purposes. [1, 1]
H2 Supported	High Self-Monitoring consumers will show the highest CTI when exposed to Activating Colour with Image Appeal (e.g., Red/Exciting colour + "Buy this and stand out socially" message).	Provides empirical evidence that colour persuasion is moderated by personality. HSMs seek external validation, making them highly susceptible to image congruence reinforced by high-arousal colours.
H3 Supported	Low Self-Monitoring consumers will show the highest CTI when exposed to Evaluating Colour with Quality Appeal (e.g., Blue/Trustworthy colour + "Superior performance specifications" message).	Demonstrates that LSMs require colour-message congruity based on intrinsic values. The calming/competent nature of blue facilitates processing of objective quality claims, maximizing trust and intent.
H4 Supported	The congruent conditions (H2 and H3 matches) will significantly increase both Perceived Product Value and subsequent Purchase Intent.	Establishes the link between psychological mechanisms and direct behavioral outcomes, quantifying the strategic importance of congruence in sales forecasting.

5.2 Theoretical Implications Discussion

Expands the two-dimensional model of colour using digital media.

Shows interaction of message type and personality in persuasion.

Reinforces importance of colour-message congruence.

VI. CONCLUSION AND MANAGERIAL IMPLICATIONS

Conclusion

Colour psychology strongly shapes early consumer judgments. This study identifies how Activation/Evaluation dimensions interact with Self-Monitoring to influence CTI and purchase intent.

Implications for Management

Optimized Targeting: Segment by Self-Monitoring for personalized colour strategies.

Brand Redesign: Select colours aligned with product and consumer self-image.

Reduce Misperception: Avoid mismatching colour cues with appeal type.

Limitations and Future Studies

Limited generalizability due to convenience sampling.

Attitude-behaviour gap due to self-reported data.

Future work should use behavioural data, cross-cultural replication, and multisensory cues.

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