

ARTICLE

Scrolling through culture: Social media, visual communication, and the creative identity of art students in India

Supplementary Files

1. Full questionnaire items

Table S1 presents the complete questionnaire administered to participants. Items in Sections C and D were scored on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). Section E consisted of two open-ended questions analyzed qualitatively.

Table S1. Complete questionnaire items, response scales, and sources

No.	Item	Scale/response type	Source/adapted from
Section A: Demographic information			
A1	What is your gender?	Categorical (Male/female/non-binary/prefer not to say)	Researcher-developed
A2	What is your age?	Open-ended (years)	Researcher-developed
A3	What type of institution do you attend?	Categorical (government/private/university)	Researcher-developed
A4	Which region of India are you studying in?	Categorical (North/South/East/West)	Researcher-developed
A5	What is your program level?	Categorical (undergraduate/postgraduate)	Researcher-developed
A6	What is your primary discipline?	Categorical (fine arts/visual communication/graphic design/applied arts/other)	Researcher-developed
Section B: Social media platform use			
B1	How many hours per day on average do you use social media for art-related purposes?	Continuous (hrs)	Researcher-developed
B2	Which social media platforms do you use primarily for art practice? (Select all that apply)	Multi-select checklist	Researcher-developed
B3	For each platform selected, rate how often you use it for artistic inspiration, creation, or sharing	Five-point frequency scale	Adapted from Tarifa-Rodriguez <i>et al.</i> ¹
B4	What is the primary purpose of your social media art activity? (inspiration/learning/sharing/professional networking/all)	Categorical	Researcher-developed
Section C: Perceived influence on cultural identity and creative expression (selected items; 1 = strongly disagree, 5 = strongly agree)			
C1	Social media has expanded my exposure to diverse artistic traditions	Five-point Likert scale	Researcher-developed
C2	I have incorporated traditional Indian art motifs into my digital work after seeing them on social media	Five-point Likert scale	Researcher-developed
C3	Western aesthetic trends on social media dominate my creative choices	Five-point Likert scale	Researcher-developed
C4	Social media platforms have helped me monetize or promote my art professionally	Five-point Likert scale	Researcher-developed
C5	My cultural identity as an Indian artist feels more visible through social media	Five-point Likert scale	Researcher-developed

(Cont'd...)

Table S1. (Continued)

No.	Item	Scale/response type	Source/adapted from
C6	I feel pressure to conform to globally trending aesthetics to gain more followers	Five-point Likert scale	Researcher-developed
C7	Social media has improved my technical skills in digital art tools (e.g., Procreate, Adobe)	Five-point Likert scale	Researcher-developed
C8	I actively seek out content related to traditional Indian art forms on social media	Five-point Likert scale	Researcher-developed
C9	Social media peer communities have helped me refine my artistic style	Five-point Likert scale	Researcher-developed
C10	I use different accounts or audiences for culturally specific versus algorithm-friendly art content	Five-point Likert scale	Researcher-developed
Section D: Creative self-efficacy			
D1	I am good at coming up with new ideas for my art	Five-point Likert scale	Adapted from Beghetto ²
D2	I am confident in my ability to create original artworks	Five-point Likert scale	Adapted from Beghetto ²
D3	I believe my artistic work is creative and distinctive	Five-point Likert scale	Adapted from Beghetto ²
D4	I can find creative solutions when I face challenges in my art practice	Five-point Likert scale	Adapted from Beghetto ²
D5	My cultural background gives me unique creative resources	Five-point Likert scale	Adapted from Beghetto ²
D6	I feel capable of experimenting with new media and digital tools in my art	Five-point Likert scale	Adapted from Beghetto ²
D7	I would describe myself as a creative artist	Five-point Likert scale	Adapted from Beghetto ²
D8	Even in difficult circumstances, I trust my creative abilities	Five-point Likert scale	Adapted from Beghetto ²
Section E: Open-ended questions			
E1	In your view, how has social media influenced your identity as an Indian artist? (open text)	Open-ended	Researcher-developed
E2	Do you feel that traditional Indian art forms receive adequate visibility on social media platforms? Please elaborate (open text)	Open-ended	Researcher-developed

2. Descriptive statistics for all scale variables

Table S2. Descriptive statistics of key scale variables ($n = 312$)

Variable	Mean	Standard deviation	Minimum	Maximum
Creative self-efficacy (eight items)	3.74	0.61	1.50	5.00
Instagram use frequency (hrs/day)	2.43	1.12	0.00	6.50
Exposure to indigenous art content (C8)	3.58	0.88	1.00	5.00
Western aesthetic pressure (C3 + C6; composite)	3.24	0.94	1.00	5.00
Digital tool proficiency (C7)	3.62	0.84	1.00	5.00
Peer feedback received online (C9)	3.44	0.91	1.00	5.00
Cultural identity visibility (C5)	3.66	0.87	1.00	5.00

Notes: All Likert items scored 1–5. Instagram use frequency is continuous (hours/day).

3. Pearson correlation matrix

All bivariate correlations among the regression variables were computed prior to the multiple regression analysis. [Table S3](#) presents the zero-order correlation matrix. No multicollinearity concerns were identified; all variance inflation factor values

were below 2.4.

Table S3. Pearson correlation matrix for regression variables

Variable	Creative self-efficacy	Instagram use frequency	Indigenous art exposure	Western aesthetic pressure	Digital tool proficiency	Peer feedback received online
Creative self-efficacy	–	–	–	–	–	–
Instagram use frequency	0.38**	–	–	–	–	–
Indigenous art exposure	0.52**	0.29**	–	–	–	–
Western aesthetic pressure	–0.24**	0.019**	–0.12*	–	–	–
Digital tool proficiency	0.46**	0.31**	0.38**	–0.09	–	–
Peer feedback received online	0.41**	0.34**	0.27**	0.13*	0.35**	–

Notes: * $p < 0.05$ and ** $p < 0.01$ indicate statistical significance (two-tailed tests; $n = 312$).

4. Qualitative thematic analysis summary

Open-ended responses were analyzed using thematic analysis³. Two researchers coded the data independently; inter-rater reliability was $\kappa = 0.81$. The three themes below represent the primary patterns identified across the 312 open-ended responses (combined across E1 and E2). Theme frequency indicates the number of participants whose responses contributed at least one code belonging to each theme.

Table S4. Qualitative thematic analysis: Theme definitions, frequencies, and illustrative examples

Theme	Definition	Frequency of codes ($n = 312$)	Illustrative paraphrase (translated/anonymized)
Cultural pride and digital visibility	Social media enables Indian art forms (especially folk and tribal arts) to reach global audiences previously inaccessible through formal channels	183 (58.7%)	A student described how posting Madhubani-inspired digital art reached followers in Europe who had never encountered the tradition, generating more engagement than local exhibitions
Aesthetic tension and the algorithm	The experienced conflict between platform-rewarded minimalist aesthetics and culturally specific, ornate, symbolically complex Indian visual traditions	211 (67.6%)	A respondent described maintaining separate accounts—one for algorithm-friendly content in global styles and another exclusively for cultural art, shared with a smaller but more culturally resonant community
Social media as informal art education resource	Platforms (especially YouTube and Instagram) functioning as accessible pedagogical resources, compensating for gaps in formal institutional provision	196 (62.8%)	A student from a smaller city noted learning digital illustration entirely through YouTube tutorials and Instagram process videos because their college lacked digital art labs

References

1. Tarifa-Rodriguez A, Virues-Ortega J, Perez-Bustamante Pereira A, Calero-Elvira A, Cowie S. Quantitative Indices of Student Social Media Engagement in Tertiary Education: A Systematic Review and a Taxonomy. *J Behav Educ.* 2023;33(4):769-797.
doi: 10.1007/s10864-023-09516-6
2. Beghetto R. Creative Self-Efficacy: Correlates in Middle and Secondary Students. *Creativity Res J.* 2006;18(4):447-457.
doi: 10.1207/s15326934crj1804_4
3. Braun V, Clarke V. *Thematic analysis: A practical guide*. SAGE Publications; 2021.