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Integrating Meaning and Stylistic Coherence: A Factor–Analytic Study of Artistic Expression in Student Visual Works

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This study investigated the structural dimensions and profile patterns of artistic expression in student visual works using expert ratings on seven evaluative indicators. Exploratory factor analysis revealed two latent constructs – Authorial Meaning Integration (symbolic saturation, narrative integration, emotional expressiveness, authorial presence, aesthetic intentionality) and Harmony of Stylistic Form (stylistic coherence, aesthetic orientation) – explaining 72.7% of total variance. The results indicate that youth artistic creativity is organized around interrelated but distinguishable meaning-oriented and stylistic-formal dimensions, rather than a single undifferentiated construct. The prominence of meaning integration highlights the central role of symbolic, narrative, and emotional processes in youth artistic expression, while stylistic harmony reflects the developing organization of formal and perceptual aspects of visual work. Together, the findings provide an empirically grounded and developmentally sensitive framework for understanding youth artistic creativity, emphasizing the dynamic interplay between meaning-making and stylistic organization in visual expression.

Keywords: youth artistic creativity; student visual works; authorial meaning integration; harmony of stylistic form; factor analysis; expert evaluation; aesthetic intentionality

Introduction

Artistic creativity stands at the intersection of cognitive interpretation, emotional expression, and aesthetic sensibility, especially in youth visual artistic works – a domain often overlooked in creativity research (Acar et al., 2024; González-Zamar & Abad-Segura, 2021). Common diagnostic instruments frequently emphasize divergent thinking or standardized psychometric constructs, failing to capture the rich, multimodal interplay of symbolic, formal, narrative, and emotional aspects that define artistic expression in youth (Long et al., 2022).

Recent advances in aesthetic psychology and neuroaesthetics (Freedberg & Gallese, 2007; Scarinzi, 2015), alongside empirical work on expert–novice differences in evaluating beauty and creativity (Mutter & Hübner, 2024), have reconceptualized the creative act as an embodied, meaning-making process framed by the creativity/aesthetics cycle – a dynamic loop of production and perception (Brown, 2024). Building on therapeutic and neuroscience-informed frameworks that highlight the interplay of sensorimotor, emotional, and symbolic processing (Strang, 2024; Vaisvaser et al., 2024), this study introduces a novel mapping of artistic expression through seven visually grounded indicators – stylistic coherence, symbolic richness, narrative integration, emotional expressiveness, authorial presence, aesthetic orientation, and aesthetic intentionality – that are proposed to capture multiple aspects of artistic functioning, the latent organization of which remains an empirical question.

This framework is specifically designed for youth artistic production, as developmental research consistently demonstrates that creativity in children and adolescents differs qualitatively from adult creativity. Unlike adult artistic practice, youth visual expression is more strongly intertwined with identity formation, emotional regulation, and emerging symbolic competence (Winner, 1996; Pariser, 2004). Neurodevelopmental studies further indicate that adolescence is characterized by heightened affective sensitivity and ongoing maturation of executive control, which directly shape creative decision-making and expressive strategies (Luna et al., 2010). These developmental characteristics justify the need for assessment models that foreground meaning-making, emotional integration, and stylistic emergence rather than technical mastery alone.

The selection of seven indicators follows an axiomatic and minimalistic modeling logic rather than an exhaustive descriptive strategy. In line with approaches to theory construction that emphasize parsimony and explanatory sufficiency, the model was designed to include the smallest possible set of conceptually independent indicators capable of capturing the essential dimensions of youth artistic expression (Suppes, 1960; Gigerenzer, 2008). Each indicator is proposed to represent a non-reducible aspect of visual meaning-making that is intended to capture a distinct aspect of visual meaning-making, although empirical relations among indicators remain to be determined. This axiomatic stance allows the framework to remain interpretable, analytically tractable, and suitable for empirical testing, while avoiding unnecessary theoretical redundancy.

To empirically examine the internal structure of the proposed interpretive framework, exploratory factor analysis was applied to explore potential latent dimensions underlying expert evaluations of student visual works. This analytic strategy

enables assessment of how theoretically defined indicators of meaning-making and stylistic organization empirically cohere, without imposing a priori structural constraints. By focusing on latent structure rather than surface-level aggregation, the present approach bridges nuanced aesthetic theory with psychometrically grounded analysis, providing a methodologically transparent and developmentally sensitive framework for assessing youth artistic creativity in educational and psychological contexts.

The use of expert visual judgment as the primary assessment method is grounded in a well-established tradition within creativity research. Consensual assessment approaches have repeatedly demonstrated that expert ratings of creative products provide reliable and valid indicators of creativity, particularly in artistic domains where standardized psychometric measures are insufficient (Amabile, 1982; Silvia et al., 2008). Recent work further supports the use of expert evaluation for complex visual outputs, emphasizing its sensitivity to stylistic, symbolic, and affective qualities that are not captured by self-report instruments (Long et al., 2022). Within this context, expert-based visual assessment constitutes a methodologically appropriate strategy for evaluating youth artistic creativity.

Together, these considerations frame the present study's aim to operationalize a multidimensional framework that moves beyond surface aesthetics or isolated technical markers, capturing the inner architecture of meaning-making in youth artistic expression while remaining empirically testable and theoretically coherent.

Interpretive Dimensions of the Framework: A Conceptual Narrative

The proposed diagnostic model is grounded in the assumption that youth artistic production expresses not only emotional spontaneity, but a structured interplay of symbolic reasoning, narrative organization, affective expression, stylistic regulation,

and emerging authorial agency. Rather than treating artistic creativity as a unitary trait, the model conceptualizes visual expression as a configuration of seven conceptually independent but psychologically interrelated indicators, each capturing a distinct aspect of meaning-making in visual form.

The first indicator, *Stylistic Coherence*, reflects the degree to which visual elements are integrated into a consistent formal system. Drawing on Gestalt principles of perceptual organization (Arnheim, 1974) and art-historical conceptions of style as a unifying logic of visual language (Gombrich, 1960), this indicator captures the capacity to regulate relations among line, shape, rhythm, and spatial distribution. Rather than assessing technical skill, it evaluates whether the image is governed by an internally stable constructive principle. Higher values indicate the emergence of stylistic regulation – the ability to coordinate multiple graphic decisions into a unified visual structure that guides perception independently of narrative or symbolic interpretation.

The second indicator, *Symbolic Saturation and Figurative Depth*, reflects the extent to which a drawing operates as a symbolic system in which visual elements carry metaphorical or polysemantic meaning. Informed by Jungian notions of symbolic imagery (Jung, 1964), semiotic perspectives on visual signs (Eco, 1976), and the theory of conceptual blending (Fauconnier & Turner, 2002), this indicator captures the capacity to generate meaning through relations among forms rather than through literal representation alone. Higher values indicate a developed figurative intuition and an ability to construct internally coherent symbolic configurations.

Closely related is *Narrative Integration and Relational Dynamics,* which assesses whether visual elements are organized into a meaningful sequence or relational structure suggesting process, interaction, or transformation. Drawing on narrative psychology (Bruner, 1990) and visual storytelling principles (McCloud, 1993), this

indicator reflects the ability to structure visual content temporally or thematically, enabling the artwork to function as a carrier of inner experience or imagined scenarios rather than as an isolated image.

Emotional Expressiveness and Coherence captures the degree to which affective states are conveyed and integrated within the visual composition. In line with affective neuroscience (Damasio, 1999) and psychological theories of emotion (Frijda, 2007), emotional expressiveness is understood not as decorative intensity but as emotionally organized gesture – manifested through line quality, rhythm, color dynamics, and spatial emphasis. Importantly, coherence refers to the internal consistency of affective tone rather than emotional extremity.

Together with *Authorial Presence*, these indicators reflect the subject's emerging capacity to position themselves as an agent within the creative act. Authorial presence denotes the extent to which the work departs from formulaic or imitative solutions and signals ownership of visual decisions, symbolic intent, and expressive stance. Grounded in symbolic interactionism (Mead, 1934) and dialogical self theory (Hermans & Kempen, 1993), this indicator captures the transition from reproduction toward authorship – where visual form becomes a medium of self-articulation.

In addition to meaning-related aspects, the framework includes indicators describing formal-perceptual organization of the artwork. These aspects concern how consistently visual decisions are coordinated into a unified perceptual structure. *Aesthetic orientation* captures an implicit sensitivity to balance, rhythm, and compositional harmony, even in the absence of formal artistic training. These indicators draw on principles from Gestalt psychology (Arnheim, 1974), developmental aesthetics (Pariser & Zimmerman, 2010), and perceptual fluency theory (Reber et al., 2004).

Finally, *Aesthetic Intentionality* addresses the degree to which visual decisions appear purposeful and oriented toward shaping viewer experience. Informed by contemporary accounts of aesthetic attention and intentional action (Nanay, 2023; Shusterman, 2000), this indicator captures the transition from spontaneous mark-making to deliberate aesthetic organization, linking conceptual intention with formal execution.

While each indicator is theoretically distinct and operationalized as a unidimensional rating, their empirical relations are not presupposed. The present study therefore examines whether these indicators organize into broader latent dimensions of artistic functioning.

Taken together, the seven indicators provide a parsimonious yet conceptually rich mapping of youth artistic expression, allowing for the assessment of creative work as an organized system of meaning-making rather than a collection of isolated skills.

Research Hypotheses

This study is grounded in a preliminary conceptual model of youth artistic creativity derived from visual analysis of a corpus of student artworks (N = 147). Through inductive coding and interpretative synthesis, seven visual indicators were identified as recurring dimensions of artistic expression:

- Stylistic Coherence
- Symbolic Saturation and Figurative Depth
- Narrative Integration
- Emotional Expressiveness and Coherence
- Authorial Presence
- Aesthetic Orientation
- Aesthetic Intentionality

Together, these indicators provide an operational framework for describing different aspects of visual meaning-making, including symbolic construction, emotional tonality, narrative organization, stylistic regulation, and the emergence of an authorial voice.

Although each dimension is theoretically informed, the proposed structure remains provisional and requires empirical examination. The present study therefore investigates whether these indicators form interpretable latent dimensions and how they relate to one another at the structural level.

To examine the latent organization underlying these seven indicators, the following hypotheses were formulated.

Hypotheses

Hypothesis 1.

Youth artistic creativity, as assessed through expert evaluation of visual works, is expected to demonstrate a multidimensional rather than unidimensional structure. Accordingly, the seven indicators are expected to show differentiated patterns of association rather than forming a single general factor.

This hypothesis addresses whether artistic creativity in youth can be meaningfully represented as a single evaluative dimension or requires a multidimensional representation, as suggested by contemporary creativity research (Runco, 2004; Kozbelt et al., 2010).

Hypothesis 2.

The indicators are expected to organize into broader latent dimensions reflecting different orientations of artistic functioning. In particular, indicators related to meaning construction (symbolic, narrative, emotional, and authorial aspects) are expected to show stronger mutual associations than with indicators related to formal organization

(stylistic coherence and aesthetic structuring), which are expected to group to a greater extent. This hypothesis proposes a qualitative organization of the multidimensional construct and is consistent with dual-component models of aesthetic evaluation that distinguish between meaning-related and formal-perceptual aspects of creative works (Leder et al., 2004).

Hypothesis 3.

The extracted latent dimensions are expected to vary across artworks, producing differentiated configurations of creative expression rather than uniform levels across indicators. Specifically, individual works are anticipated to demonstrate uneven combinations of meaning-related and form-related characteristics, indicating heterogeneous patterns of artistic functioning.

This expectation is consistent with prior research suggesting that creative expression develops through non-uniform profiles across dimensions, particularly during stages characterized by ongoing identity formation and expressive experimentation (Barron & Harrington, 1981; Runco & Jaeger, 2012).

Materials and Methods

Participants

A total of 170 students enrolled in various academic programs at the universities of Kyiv were invited to participate in the study. Of these, 147 students (86.5%) completed the assigned creative task and submitted their works for analysis. Participants' ages ranged from 17 to 24 years (M = 19.51, SD = 1.91); the sample comprised 78% female and 22% male students. The participants represented diverse fields of study, including Physical Education (n = 27), Philosophy (n = 5), Finance and Credit (n = 13), English Language and Literature (n = 8), Physical Therapy (n = 1), Preschool Education (n =

47), Primary Education (n = 1), Fine Arts and Restoration (n = 21), Information and Analytical Systems (n = 13), Mathematical Modeling (n = 9), and Psychology (n = 25). The study protocol and materials were approved by the institutional ethics committee (blinded for review).

Procedure

Participants completed the assignment titled “For the Development of Creative Thinking” as part of a semester-long psychology course. The task required students to create graphic compositions based on predefined configurations of dots. Specifically, participants were instructed to place either three or five dots on a sheet of paper according to 6 given patterns, as well as to devise and execute one original variant of their own choosing. Using these dots as anchor points, students constructed figures or visual images, thereby engaging in creative visual synthesis. All participants completed the task individually. No time limits were imposed, and no stylistic or thematic guidelines were provided beyond the dot-based constraints.

The predefined dot configurations were identical for all participants and were designed to provide minimal structural constraints while allowing for maximal interpretive freedom. Illustrative examples of these configurations are provided in Appendix A to enhance procedural transparency and replicability. All participants provided informed consent for the anonymous use and analysis of their submitted works in accordance with ethical standards.

Coding Scheme and Inter-Rater Reliability

Each of the 147 creative works was independently evaluated by two raters – (a) a certified visual arts educator with professional experience in teaching and assessing student artworks, and (b) a psychologist specializing in creativity research and

psychological assessment – using seven theoretically grounded indicators of artistic expression: Stylistic Coherence (SC), Symbolic Saturation and Figurative Depth (SS), Narrative Integration (NI), Emotional Expressiveness and Coherence (EE), Authorial Presence (AP), Aesthetic Orientation (AO), and Aesthetic Intentionality (AI).

The raters were selected to represent complementary domains of expertise relevant to the construct under investigation: visual-formal analysis and psychological interpretation of expressive meaning. The visual arts educator contributed domain-specific knowledge of composition, stylistic organization, and visual language, whereas the psychologist contributed expertise in interpretation of symbolic, affective, and intentional aspects of expression. The evaluation therefore relied on interdisciplinary expert judgment rather than a single-domain aesthetic preference.

Indicators were rated on a five-point Likert scale ranging from 0 (absent) to 4 (fully developed), where higher scores reflect greater integration or development of the respective dimension. Expert rating form and visual anchor scale for the seven indicators of artistic expression are provided in Supplementary Material S1. To enhance transparency of the rating procedure, illustrative series of artworks with corresponding expert evaluations are presented in Supplementary Material S2.

Prior to the main coding phase, the raters participated in a calibration session using a pilot subset of 30 randomly selected works. During this phase, the operational definitions of each indicator were jointly reviewed, discussed, and refined to ensure conceptual clarity and shared interpretive standards across disciplinary backgrounds. The purpose of this stage was not statistical training but the establishment of a common interpretive framework. Ratings from this calibration phase were not included in the final dataset.

To assess the reliability of the rating procedure, inter-rater agreement was evaluated on a pilot subset of 30 works using the two-way random effects model of the intraclass correlation coefficient (ICC[2,1]), appropriate for measuring absolute agreement between interchangeable raters (Koo & Li, 2016). ICC values ranged from 0.78 to 0.90, indicating good to excellent reliability according to established criteria (Cicchetti, 1994). Highest agreement was observed for SS (ICC = 0.90), AO (ICC = 0.84), AI (ICC = 0.84), and SC (ICC = 0.83), reflecting clear operationalization and consistent interpretation across disciplines. Moderate-to-high agreement was found for AP (ICC = 0.81), EE (ICC = 0.80), and NI (ICC = 0.78).

Following calibration, both raters independently evaluated all 147 artworks. After independent scoring, every discrepancy between raters – regardless of magnitude – was reviewed in a joint adjudication session. The artwork was re-examined and discussed until a single consensus score was reached for each indicator.
Thus, the final dataset consisted of consensus-based expert judgments rather than averaged ratings.

The ICC values therefore reflect initial rating reliability, while the analyzed data represent agreed-upon expert evaluations produced through a reconciliation procedure. No cases required exclusion due to unresolved disagreement.

These finalized consensus scores constituted the input variables for the exploratory factor analysis. This procedure ensured both reliability (through independent rating and agreement assessment) and interpretive validity (through expert consensus).

Statistical Analysis

Data were analyzed using SPSS Statistics (version 27). Descriptive statistics were calculated to examine the distributional properties of the expert ratings. To explore the

underlying multidimensional structure of youth artistic creativity, an Exploratory Factor Analysis (EFA) was employed. Statistical significance for all applicable tests was established at an alpha level of .05.

Results

Descriptive Statistics

The distributional properties of the seven evaluative variables were first examined. As shown in Table 1, the variables demonstrated acceptable levels of skewness and kurtosis, mostly within ±1.0, indicating approximate normality suitable for parametric analyses. The highest mean was observed for *SC* (M = 2.98, SD = 0.70), while *NI* had the lowest (M = 1.61, SD = 0.94). These results suggest a broad range of evaluative emphasis across dimensions.

Table 1. Means, Standard Deviations, Skewness, and Kurtosis of the Variables

Variable	**M**	**SD**	*Skewness*	*Kurtosis*
1 Stylistic Coherence	2.98	0.70	-0.94	3.20
2 Symbolic Saturation	1.81	1.20	0.18	-0.76
3 Narrative Integration	1.61	0.94	0.42	-0.01
4 Emotional Expressiveness	1.81	0.97	0.48	-0.45
5 Authorial Presence	2.47	0.91	0.15	-0.76
6 Aesthetic Orientation	2.58	0.54	-0.45	-0.82
7 Aesthetic Intentionality	2.27	0.83	0.25	-0.09

Factor Analysis

Prior to factor extraction, the suitability of the data for EFA was assessed. The

participant-to-variable ratio exceeded 21:1 (seven variables), surpassing the recommended minimum of 10:1 for stable factor extraction (Costello & Osborne, 2005). Sampling adequacy was confirmed by the Kaiser-Meyer-Olkin measure (KMO = .868), indicating high inter-item correlations, and Bartlett's test of sphericity was significant ($\chi^2(21) = 746.179$, $p < .001$).

Two factors were retained based on Kaiser's criterion (eigenvalues > 1.0) and the scree plot, supported by conceptual interpretability. A Varimax rotation was applied, and factor loadings of 0.40 or higher were considered salient. As shown in Table 2, the two-factor solution explained 72.7% of the total variance. Given the exploratory aims of the study and the rubric-development context, factor interpretation prioritized conceptual coherence over strict factorial purity.

The first factor, labeled Authorial Meaning Integration, comprised SS, NI, EE, AP, and AI. The second factor, Harmony of Stylistic Form, included SC and AO (Table 3). Notably, AO and AI exhibited meaningful cross-loadings on both factors, indicating their integrative role at the intersection of formal organization and meaning-oriented processes.

Table 2. Explained Variance of Extracted Factors

Stage	Factor 1	% Variance	Factor 2	% Variance	Cumulative %
Initial	4.462	63.7%	1.195	17.1%	80.8%
Extraction	4.212	60.2%	0.878	12.5%	72.7%
Rotation	3.155	45.1%	1.935	27.6%	72.7%

Table 3 presents the rotated factor loadings for each variable, with loadings of .40 and above highlighted to indicate salient associations with the respective factors.

Table 3. Rotated Factor Loadings (Varimax with Kaiser normalization)

Variable	Authorial Meaning Integration	Harmony of Stylistic Form
Emotional Expressiveness	**.891**	.169
Symbolic Saturation	**.856**	.209
Narrative Integration	**.749**	.216
Authorial Presence	**.734**	.468
Aesthetic Intentionality	**.675**	.537
Stylistic Coherence	.159	**.831**
Aesthetic Orientation	.675	**.708**

The first factor, labeled *Authorial Meaning Integration*, was primarily defined by SS, NI, EE, AP, and AI. This factor reflects the integration of symbolic, emotional, and narrative processes into a coherent structure of authorial meaning, indicating the extent to which visual works function as intentional expressive systems rather than collections of isolated formal elements.

The second factor, *Harmony of Stylistic Form*, was most strongly associated with SC and reflects the internal consistency and formal organization of visual language across compositional elements.

Two indicators – AO and AI – demonstrated substantial cross-loadings on both factors. AO loaded comparably on Authorial Meaning Integration (.675) and Harmony of Stylistic Form (.708), while AI also showed meaningful loadings on both dimensions (.675 and .537, respectively). These results suggest that both indicators relate simultaneously to meaning-oriented and formal aspects of artistic expression.

Taken together, the factor analytic results indicate a dual-factor structure of youth artistic creativity consisting of a meaning-centered dimension and a stylistic-formal dimension, alongside integrative indicators linking these domains.

Qualitative interpretation of extracted factors

Factor 1: Authorial Meaning Integration

Visual works with high loadings on Factor 1 – *Authorial Meaning Integration* – are organized around intentionally constructed meaning rather than purely formal relations between elements. Individual graphic components are subordinated to a unifying semantic structure integrating symbolic references, narrative implication, and the author's interpretive position. The image functions as a coherent expressive statement rather than a collection of visual elements (see Figure 1).

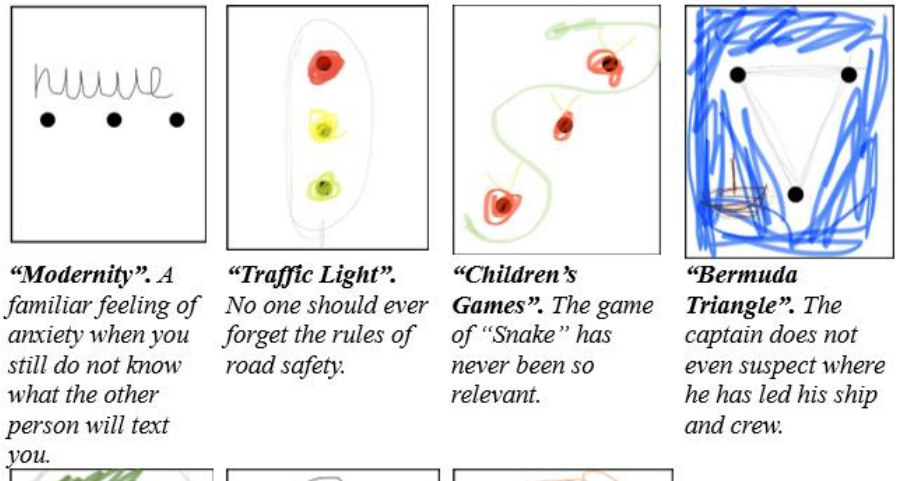
Two qualitative realizations of this factor can be distinguished.

In the first case (Figure 1a), meaning is conveyed through internally integrated imagery. Visual elements interact to form a symbolically and emotionally coherent scene, and interpretation emerges directly from pictorial relations without verbal clarification.

In the second case (Figure 1b), meaning is constructed conceptually. The drawings remain minimal or schematic, but titles and short written comments explicitly articulate the intended idea and transform the image into a reflective statement. The verbal component becomes part of the expressive structure rather than a mere caption.



a

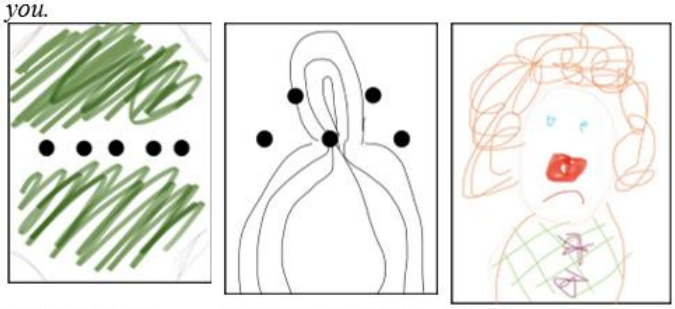


"Modernity". *A familiar feeling of anxiety when you still do not know what the other person will text you.*

"Traffic Light". *No one should ever forget the rules of road safety.*

"Children's Games". *The game of "Snake" has never been so relevant.*

"Bermuda Triangle". *The captain does not even suspect where he has led his ship and crew.*



"Snooker". *It could have been a perfect billiard game if all the balls had not turned out to be black.*

"Bullseye". *Today was a successful day at the shooting range.*

"Nose". Every clown has a sad story.

b

Figure 1. Examples of series of visual works with high loadings on Factor 1 – Authorial Meaning Integration: (a) imagery-based integrated expression; (b) conceptual-verbal integrated expression.

Despite these differences, both variants share the same structural property: the drawings are consistently organized around a single semantic theme. Thus, Factor 1 reflects the degree to which a visual work embodies an integrated authorial message combining symbolic, narrative, and intentional components into a unified communicative structure.

Factor 2: Harmony of Stylistic Form

Visual works with high loadings on Factor 2 – *Harmony of Stylistic Form* – are organized primarily around formal relations between elements rather than semantic or expressive content. Points function as structural nodes and lines as connective vectors forming coherent geometric configurations. The compositions demonstrate consistency of visual language across solutions: the same constructive principle governs all images despite variation in shape. Perception is guided by balance, proportional relations, and structural clarity rather than symbolic interpretation (see Figure 2).

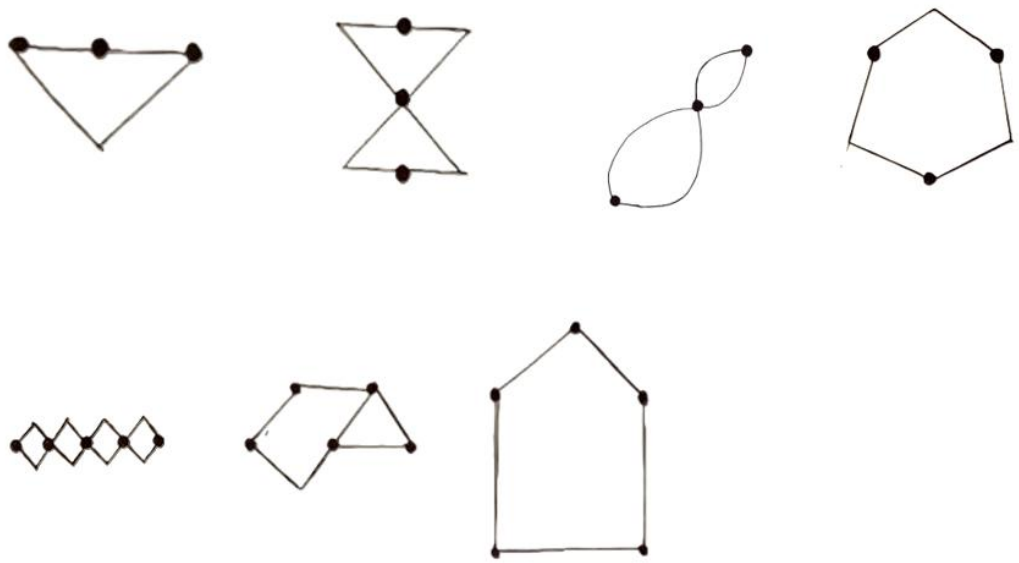


Figure 2. Examples of series of visual works characterized by Harmony of Stylistic Form (Factor 2).

Conceptual Overlap Between Factors 1 and 2

Some visual works cannot be unequivocally attributed to a single latent dimension, as they simultaneously display features of Authorial Meaning Integration and Harmony of Stylistic Form (Figure 3). In these drawings, the composition alternates between representational interpretation and structural construction. Certain images develop recognizable objects (tree, flowers, landscape), while others retain geometric or schematic organization derived directly from point relations.



Figure 3. Series of visual works demonstrating conceptual overlap between Authorial Meaning Integration and Harmony of Stylistic Form.

Meaning in such works emerges partly from depicted content and partly from spatial organization. Individual drawings may carry symbolic interpretation, yet the overall series does not function as a unified expressive statement. Instead, semantic elements appear episodically and coexist with formally organized configurations that emphasize balance and connectivity rather than narrative development.

This pattern reflects a intermediate configuration of visual organization: the author transforms geometric stimuli into images but does not consistently subordinate all elements either to a coherent symbolic message or to a stable stylistic system. The

visual language therefore remains heterogeneous, combining representational and structural principles within the same production set.

Thus, these works illustrate a zone of conceptual overlap between the two extracted factors, where intentional meaning construction and formal organization operate in parallel rather than forming a single dominant principle.

Taken together, the extracted factors and their qualitative manifestations indicate that students' visual productions are organized according to distinct principles of creative structuring. Some works prioritize intentional meaning construction, others emphasize formal organization, while a subset combines both orientations without stable dominance. The coexistence of these patterns indicates the presence of distinct modes of organizing visual production within the task. These observations provide the basis for interpreting the findings in relation to theoretical models of creativity and educational context, which are considered in the following discussion section.

Discussion

The present study examined the structure of youth artistic creativity, providing empirical support for all three proposed hypotheses. Expert judgments of youth visual artistic works were not based on a single, undifferentiated creativity construct (H1), but were instead organized around two interrelated latent dimensions: *Authorial Meaning Integration* and *Harmony of Stylistic Form* (H2). Furthermore, qualitative inspection of the artwork series revealed systematic variability across these dimensions, indicating distinct modes of artistic engagement – meaning-dominant, form-dominant, and mixed configurations – within the sample (H3).

Authorial Meaning Integration reflects the extent to which artworks function as carriers of integrated personal meaning rather than as formal constructions. This pattern aligns with prior findings that narrative coherence, symbolic density, and affective

engagement are central to expert appraisals of artistic quality (Cupchik & Winston, 1996; Kaufman & Beghetto, 2009). Furthermore, evaluators perceive creative works as more coherent and valuable when conceptual elaboration and emotional engagement are integrated into a unified expressive whole (Scherbakova & Bahar, 2025; Mutter & Hübner, 2024). This factor is conceptually aligned with the "artistic orientation" identified by Pelowski et al. (2019), where expressive intent, rather than mere technical accuracy, predicts judged artistic quality.

Harmony of Stylistic Form reflects the degree of formal unity, perceptual fluency, and compositional balance within the artwork. Aesthetic orientation and aesthetic intentionality both exhibited notable cross-loadings across the two factors, indicating shared variance between formal harmony and meaning-oriented processes rather than strict separation. This supports dual-component models where creative works are evaluated both on cognitive-interpretative content and formal-perceptual qualities (Leder et al., 2004; Reber et al., 2004). The observed interplay suggests that fluency in processing stylistic elements facilitates deeper interpretative engagement, a dynamic modulated by evaluative goals and expertise (Yoo et al., 2024; Gao & Liu, 2024).

Our framework also bridges the gap between artistic production and figural divergent thinking. While divergent thinking tasks traditionally focus on ideational originality and fluency (Torrance, 1972; Barbot, 2018), our results show that in youth art, such generative potential must be synthesized within a structured aesthetic product. *Authorial Meaning Integration* captures the generative originality often found in divergent thinking measures (Boldt & Strub, 2023), but provides a more strong indicator of creative potential by prioritizing qualitative synthesis over simple statistical infrequency (Forthmann et al., 2020; Kenett, 2018).

Youth Artistic Creativity as a Developmentally Specific Phenomenon

Unlike mature professional creativity, which often relies on stabilized stylistic repertoires and well-internalized aesthetic conventions, youth creativity involves the ongoing integration of symbolic exploration, emotional regulation, and emerging authorial control (Sawyer, 2012; Kaufman & Beghetto, 2009). The prominence of meaning-making in our sample suggests that expressive and narrative coherence may precede stable stylistic consistency during development (Pariser & Zimmerman, 2010). Rather than functioning as clearly separated competencies, aesthetic orientation and intentionality in youth operate between intuitive sensitivity and deliberate control, often emerging through iterative experimentation (Winner, 1996; Sawyer, 2012).

Whether this two-dimensional structure persists into adulthood remains an open question. However, research by Rostan (1998, 2005, 2010) suggests structural continuity, where early artistic identity formation predicts continued engagement. As expertise accumulates, the weighting of these dimensions likely shifts toward deeper integration, where formal competence increasingly serves expressive ends (Rostan et al., 2002; Pelowski et al., 2019). Future longitudinal studies tracking this trajectory from youth to adulthood would be a valuable direction for research.

More broadly, the results suggest that youth artistic creativity may be interpreted not as a simplified form of adult creativity but as a distinct developmental configuration with its own structural organization, evaluative logic, and expressive priorities. This perspective supports the use of developmentally sensitive diagnostic tools in educational and psychological contexts, particularly when artistic creativity is considered an indicator of cognitive integration, emotional regulation, and identity-related processes.

Novelty and Significance of the Present Study

The present study introduces and empirically validates a multidimensional model of youth artistic creativity grounded in expert evaluations of actual visual works. By employing a framework of seven indicators across symbolic, emotional, narrative, stylistic, and intentional domains, this research extends beyond traditional approaches that rely on global creativity scores or isolated technical features.

A key contribution of this work is the structural specification of how meaning-related and form-related processes jointly organize artistic production. The identification of *Authorial Meaning Integration* and *Harmony of Stylistic Form* as distinct but complementary dimensions provides a more comprehensive understanding of the cognitive and affective architecture of creativity. Because the model is derived from evaluations of actual artworks rather than standardized tests or self-reports, it provides an ecologically grounded representation of youth creativity. This perspective is especially relevant during adolescence and emerging adulthood, when artistic activity is closely intertwined with identity formation and affective regulation.

The identified dimensions establish a structural basis for future research on developmental trajectories of artistic thinking, educational assessment practices, and individual differences in creative engagement, including their relations to personality characteristics such as openness to experience and self-reflective capacity.

Limitations and Future Directions

The present study employed exploratory factor analysis as part of an initial model-building stage aimed at identifying and conceptually interpreting latent dimensions underlying expert evaluations of youth artistic works. Accordingly, confirmatory factor analysis (CFA) was not applied at this stage. Although the extracted two-factor solution showed adequate sampling adequacy (KMO = .868), high communalities (> .70), and a

clear loading structure, the absence of confirmatory testing limits conclusions regarding structural stability and measurement invariance. Future studies should examine the proposed structure using CFA in independent and more heterogeneous samples.

A second limitation concerns the sample composition. Participants were university students in late adolescence and emerging adulthood, predominantly female (78%), and recruited from higher education contexts. While developmentally relevant, this restricts generalizability. Subsequent research should include younger adolescents, non-academic populations, and more balanced gender distributions to examine developmental variability in the identified dimensions.

The reliance on expert ratings also introduces interpretive constraints. Despite good-to-excellent inter-rater reliability, evaluative judgments may partly reflect disciplinary perspectives. Future work would benefit from larger and more diverse panels of raters and from systematic investigation of how expertise type influences evaluation criteria.

Finally, the present study addressed structural organization rather than predictive validity. Future research should incorporate external criteria of artistic quality, creative achievement, or educational outcomes and test the predictive contribution of the identified dimensions using regression-based and longitudinal designs.

Taken together, the framework should currently be considered a theoretically informed diagnostic model that requires further confirmatory testing, cross-sample replication, and predictive validation before being treated as a fully established psychometric instrument.

Conclusions

The present study examined expert evaluations of student visual works and identified an underlying structure of youth artistic creativity. Exploratory factor analysis revealed two

related dimensions organizing judgments of visual expression. The first, Authorial Meaning Integration, included symbolic saturation, narrative integration, emotional expressiveness, authorial presence, and aesthetic intentionality, reflecting the integration of conceptual meaning and expressive intent. The second, Harmony of Stylistic Form, comprised stylistic coherence and aesthetic orientation, capturing formal unity and perceptual organization of the image.

These findings support a dual-component account of youth artistic creativity in which aesthetic evaluation involves both meaning-related and form-related processes. The dimensions were interrelated rather than independent, with aesthetic intentionality operating as a linking element between conceptual expression and stylistic organization.

From a developmental perspective, the structure is consistent with youth creativity as a transitional mode of artistic production combining spontaneous expression with emerging intentional control. This indicates the importance of developmentally sensitive approaches to assessing creativity rather than direct transfer of models derived from adult artistic practice.

Educationally, the results suggest that assessment and instruction should address both symbolic–narrative meaning and stylistic organization. Encouraging the coordination of expressive content with deliberate form-making may support the development of authorial agency in student artwork.

Although the study provides an empirically grounded framework for understanding youth artistic creativity, further research is required to evaluate its generalizability and predictive value. Future work should incorporate confirmatory analyses, external criteria of creative quality, and longitudinal designs to examine developmental trajectories and associations with personality and educational outcomes.

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