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ORIGINAL

Psychological Empowerment and Emotional Dynamics in Arts Education Performance: The Mediating Role of Pleasure, Arousal, and Dominance

Empoderamiento psicológico y dinámicas emocionales en el desempeño académico en la educación artística: el papel mediador del placer, la activación y el dominio

Ahmad Fauzan Yusman[1], Ardipal[1], Agusti Efi[2], Fuji Astuti[1], Gusril[3], Alrizka Hairi Dilfa[1], Cecep Permana[4], Vischa Mansyera Pratama[2] ✉, Shaffyna Ananda Akimupasya[2]

[1]Education Science, Graduate School, Universitas Negeri Padang. Padang. Indonesia.
[2]Faculty of Tourism and Hospitality, Universitas Negeri Padang. Padang. Indonesia.
[3]Faculty of Sport Science, Universitas Negeri Padang. Padang. Indonesia.
[4]Faculty of Music and Performing Arts, Universiti Pendidikan Sultan Idris. Tanjong Malim. Malaysia.

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Corresponding author: Vischa Mansyera Pratama ✉

ABSTRACT

Introduction: in the context of arts education's marginalization despite pressure for high achievement, this study pinpoints a precise psychological mechanism. We demonstrate how empowerment fuels academic performance through the mediating effects of three key emotions: pleasure, arousal, and dominance. By unpacking the constructs of empowerment and mapping their relationship to these emotional states, our research provides a clear framework for enhancing pedagogy. The findings directly inform the strategic design of course briefs, critique protocols, and autonomy scaffolds to elevate student performance.
Objective: to explain how facets of empowerment channel through Pleasure-Arousal-Dominance mechanism to shape academic performance in studio and performance intensive programs.
Method: the sample comprised 364 undergraduate arts students in West Sumatra. The study applied validated scales for empowerment (meaning, competence, self-determination, and impact), the three emotion states, and academic performance. The analysis estimated a measurement model and a structural model with partial least squares structural equation modeling. The study assessed reliability, validity, collinearity, and overall model fit. Indirect effects received tests through bootstrap resamples.
Results: the measurement model met reliability and validity criteria. In the structural model, impact aligned with energized engagement; meaning supported sustained activation; and competence with self-determination underpinned a sense of control. Among the emotion states, arousal emerged as the main conduit from empowerment to achievement, with dominance as a complementary path. Pleasure did not account for meaningful variance in performance.
Conclusions: the study meets its objective and defines a psychological route from empowerment to academic performance through pleasure, arousal, and dominance, with activation and perceived control as the decisive links. The account advances theory in arts education and yields actionable levers for course design, critique protocols, autonomy scaffolds, and assessment rubrics that raise attainment.

Keywords: Psychological Empowerment; PAD; Arousal; Dominance; Arts Education; Academic Performance.

RESUMEN

Introducción: en un contexto donde la educación artística permanece marginada pese a la presión por

alto rendimiento, este estudio identifica un mecanismo psicológico preciso. El empoderamiento impulsa el desempeño académico a través de los efectos mediadores de tres emociones clave: placer, activación y dominio. Al desagregar los constructos de empoderamiento y trazar su relación con estos estados emocionales, la investigación ofrece un marco claro para fortalecer la pedagogía. Los hallazgos informan el diseño estratégico de encargos de curso, protocolos de crítica y andamiajes de autonomía para elevar el rendimiento estudiantil.

Objetivo: explicar cómo las facetas del empoderamiento se canalizan a través de placer, activación y dominio para moldear el desempeño académico en programas intensivos de estudio y de interpretación.

Método: la muestra incluyó a 364 estudiantes universitarios de artes en Sumatra Occidental. El estudio aplicó escalas validadas para empoderamiento (sentido, competencia, autodeterminación e impacto), los tres estados emocionales y desempeño académico. El análisis estimó un modelo de medición y un modelo estructural con modelado de ecuaciones estructurales por mínimos cuadrados parciales. La investigación evaluó fiabilidad, validez, colinealidad y ajuste global del modelo. Las pruebas de efectos indirectos utilizaron remuestreo bootstrap.

Resultados: el modelo de medición cumplió criterios de fiabilidad y validez. En el modelo estructural, impacto se asoció con compromiso energizado; sentido sostuvo la activación; y competencia con autodeterminación apuntalaron la percepción de control. Entre los estados emocionales, activación emergió como la vía principal entre empoderamiento y logro, con dominio como ruta complementaria. Placer no explicó varianza significativa del desempeño.

Conclusiones: el estudio cumple su objetivo y define una ruta psicológica desde el empoderamiento hacia el desempeño académico a través de placer, activación y dominio, con la activación y el control percibido como vínculos decisivos. El planteamiento impulsa la teoría en educación artística y ofrece palancas aplicables para el diseño de cursos, los protocolos de crítica, los andamiajes de autonomía y las rúbricas de evaluación que elevan el rendimiento.

Palabras clave: Empoderamiento Psicológico; Placer; Activación; Dominio; Educación Artística; Desempeño Académico.

INTRODUCTION

Art disciplines are frequently perceived as having lower social value compared with engineering, economics, or the natural sciences.[1,2,3] Kraehe et al.[4] mapped inequalities in arts across urban contexts in the United States, spanning state and federal policy, resource allocation, access, participation, recognition, and learning outcomes. Under neoliberal educational agendas, art education experiences policy and curricular pressure that narrows its scope to utilitarian objectives.[5] This perception remains salient in many parts of Indonesia, including West Sumatra, where cultural expectations tend to favor fields that promise economic stability and conventional prestige. Students who choose the arts therefore encounter social pressure, doubts about career prospects, and uncertainty about the academic value of their programs.[6] These pressures reduce intrinsic motivation, emotional engagement, and ultimately academic performance.

In higher education, academic success rarely depends on cognitive ability alone.[7] Psychological resources that sustain attention, persistence, and participation quality contribute to achievement.[6,7] Arts programs require public presentation, critique, and negotiation of technical and interpretive standards.[8] Some institutions and training programs confer high status on the arts and adopt expressive modalities as complementary provision. Other systems report limited time, funding, or recognition for the arts.[9,10] Across these settings, meaning, perceived competence, autonomy in decision making, and felt impact (empowerment conceptual constructs) on outcomes function as proximal conditions for sustained engagement and performance.[11,12,13]

Psychological empowerment offers a useful lens for understanding these resources. Spreitzer's formulation describes empowerment as a motivational state characterized by meaning, competence, self-determination, and impact.[14] Meaning refers to the perceived value and personal significance of one's tasks.[15] Competence reflects confidence in the ability to perform those tasks effectively.[14,16,17] Self-determination denotes the experience of choice and agency in planning and executing work. Impact captures the sense that one's actions make a difference to results or to the surrounding environment.[14,16,18] For arts students, these dimensions can function as psychological fuel that supports creative risk taking, resilience through critique, and commitment to demanding practice.

However, empowerment does not inherently produce higher performance.[16,17] Emotional experience often serves as the conduit through which motivational states shape behavior. The Pleasure, Arousal, and Dominance model proposed by Mehrabian and Russell provides a compact framework for describing emotional states that matter for learning.[19] Pleasure represents the degree of enjoyment or satisfaction

that accompanies activity.[20] Arousal refers to the degree of physiological or psychological activation, which may vary from a state of calm to a state of intense energy. Dominance represents the sense of control over a situation, as opposed to feeling constrained or overwhelmed by it.[21] These affective dimensions influence attention, persistence, and the willingness to engage with challenging tasks.

The arts context heightens the relevance of this emotional pathway.[22] When students find deep meaning in their projects, hold confidence in their abilities, and experience autonomy and influence, they tend to experience greater enjoyment and focused engagement in creative tasks.[23] A robust sense of dominance can help them navigate high-stakes critique sessions, stage performances, and juried evaluations that are typical in arts programs.[24,25] In contrast, limited empowerment may coincide with lower levels of pleasure and arousal, along with a weakened sense of control, which can undermine commitment and hinder learning outcomes.[26]

Despite these theoretical connections, empirical work that integrates empowerment and the PAD framework within arts education remains limited.[27,28,29] Most empowerment research has been conducted in organizational settings or in traditional academic domains.[30] Studies employing the PAD framework in educational contexts remain limited, and most emphasize valence and arousal while providing insufficient consideration to dominance. This omission is notable in the arts, where the felt capacity to take control of the creative process, to own aesthetic decisions, and to respond to public critique is central to students' development and identity.[31]

The setting of West Sumatra adds contextual importance. The prestige gap between the arts and other fields can induce a need for psychological resources that buffer external skepticism.[32,33] Arts students must maintain motivation and learning within contexts where the value of their discipline is often understated.[34] In such a context, empowerment may not only support performance but also protect students' commitment to their chosen field.[35] Understanding how empowerment translates into emotional states that advance academic achievement therefore holds both theoretical and practical significance.[36]

Prestige hierarchies that favor technical and economic disciplines create social skepticism toward the arts, constrain institutional support, and weaken academic confidence among students. A coherent account that links motivational resources to affective experience remains scarce in arts education. Integrating psychological empowerment with the Pleasure, Arousal, and Dominance model can explain how inner resources counter external devaluation and sustain effort in low-status settings, yet prior work has centered on organizations and non-arts domains, leaving the arts in Indonesia, including West Sumatra, underexamined.

This study sets a objective to examine the association between psychological empowerment and academic performance among arts undergraduates in West Sumatra, with pleasure, arousal, and dominance as emotional pathways. The inquiry asks whether meaning, competence, self-determination, and impact relate to these affective states and whether those states connect empowerment to performance. Findings aim to inform course design, studio pedagogy, and advising that strengthen empowerment and adaptive emotion in programs that face low prestige. Figure 1 presents the conceptual framework of the study.

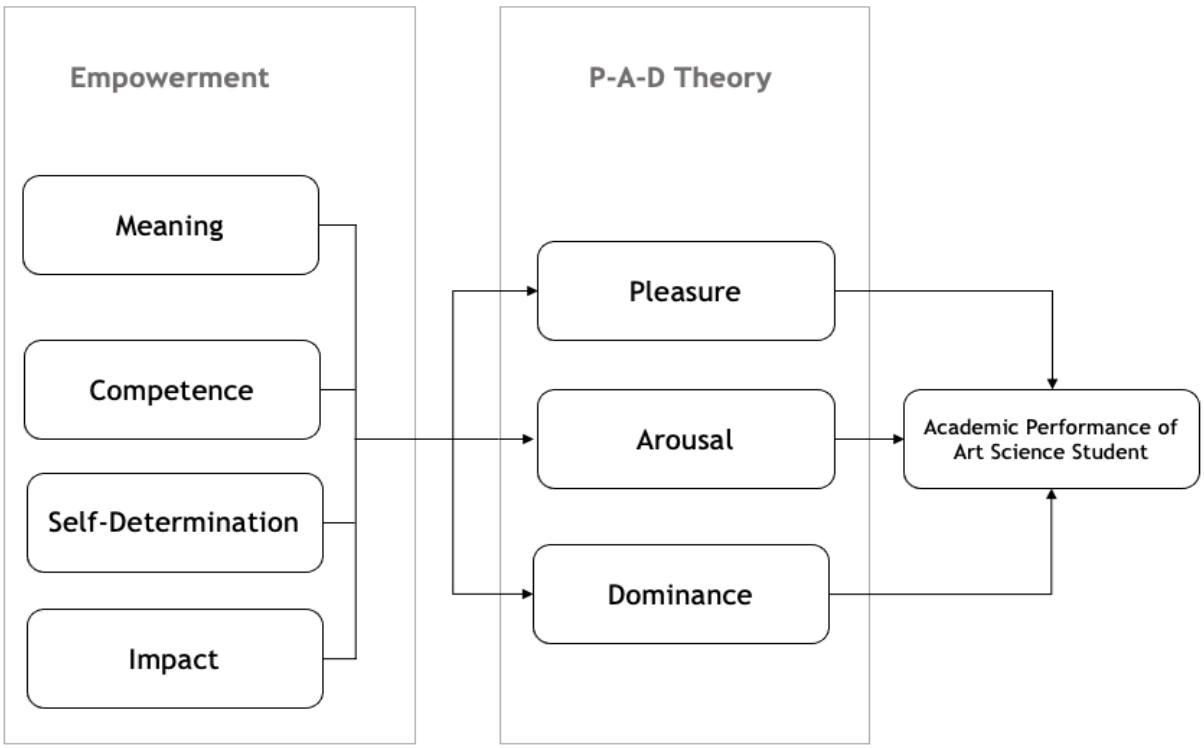

Figure 1. Research Framework

METHOD

Type of Study

This research used an observational, analytical, cross-sectional design to examine associations among psychological empowerment, affect within the Pleasure–Arousal–Dominance (PAD) model, and academic performance. The design suited the objective of testing relations among latent constructs at one time point without causal claims. Partial Least Squares Structural Equation Modeling (PLS-SEM) served the analytic objective given the presence of multiple mediators, several latent predictors, and a predictive orientation. [37,38] All analyses used SmartPLS version 4.

Universe and Sample

The universe comprised undergraduates in arts programs at universities in West Sumatra. The sample comprised 364 students from visual arts, performing arts, music, and design. A purposive sample in coordination with program heads targeted active cohorts during the data collection period. Inclusion required enrollment in an arts major with completion of at least two semesters or one academic year, which indicates adequate exposure to the curriculum, faculty, and the academic environment. Exclusion removed questionnaires with incomplete responses. The sample size satisfied the common PLS-SEM rule of at least ten cases per maximum number of structural paths directed at any endogenous construct.

Variables and Measures

Variables. The independent construct was psychological empowerment. The mediators were pleasure, arousal, and dominance from the PAD framework. The dependent construct was academic performance in the university arts context. Gender, age, and disciplinary specialization served as recorded covariates.

Measures. All constructs used validated instruments adapted to the Indonesian language and cultural context. Psychological empowerment was assessed on a five-point Likert scale from strongly disagree to strongly agree. [17] The scale comprised twelve items organized into four dimensions—meaning, competence, self-determination, and impact—with three items per dimension and a reflective specification. The PAD framework used ten adapted items, with pleasure measured by three items, arousal by four items, and dominance by three items. [39] Academic performance used five self-reported indicators tailored to arts-education settings. [40] Higher scores indicated higher levels on each construct. The adaptation process included expert review by arts-education faculty and cognitive checks with a small group of students, followed by minor wording revisions.

Data Collection and Processing

Data collection took place during scheduled class or studio sessions after permission from program heads. Trained research assistants introduced the study, explained respondent rights, and distributed paper or online questionnaires. Average completion time was fifteen minutes. No identifying information appeared on the instruments.

Data processing preceded modeling. The team screened responses for completeness and outliers and applied listwise deletion for missing data. PLS-SEM proceeded in two stages. [37] The measurement model assessment examined indicator loadings, internal consistency, and validity. Retained indicators loaded at 0,70 or higher. Reliability used Cronbach's alpha and composite reliability with thresholds of 0,70. Convergent validity used the average variance extracted with a threshold of 0,50. Discriminant validity followed the Fornell–Larcker criterion. The structural model assessment estimated standardized path coefficients with a bootstrap procedure of 5 000 resamples. Model adequacy considered coefficients of determination (R^2) for endogenous variables, effect sizes (f^2), and predictive relevance (Q^2). Mediation tests evaluated indirect effects from psychological empowerment to academic performance through PAD components.

Ethical Standards

Before data collection, participants were informed about the objectives of the study and their rights as respondents. Participation was voluntary, and responses were kept anonymous. Ethical principles of informed consent and confidentiality were followed throughout the research process.

RESULTS

Sample characteristics and preliminary checks

The survey returned 367 questionnaires; three failed completeness checks, which yielded a final analytic sample of 364 students. Preliminary checks showed item-level missingness below 2 percent after listwise deletion of the three incomplete cases. Table 1 reports gender, year of study, and program. Year 1 refers to students who had completed at least two semesters.

Table 1. Sample characteristics (N = 364)			
Characteristic	**Category**	**n**	**%**
Gender	Female	204	56,0
	Male	160	44,0
Year of study	Year 1*	36	9,9
	Year 2	118	32,4
	Year 3	132	36,3
	Year 4	78	21,4
Program	Visual arts	104	28,6
	Performing arts	94	25,8
	Music	78	21,4
	Design	88	24,2
Note: *Year 1 indicates completion of at least two semesters.			

Measurement model

Indicator loadings exceeded 0,70 for all retained items. Internal consistency reliability was satisfactory, with Cronbach's alpha and composite reliability above 0,70 for every construct. Convergent validity was supported by AVE values above 0,50. Discriminant validity was established using the Fornell Larcker criterion, where the square roots of AVE on the diagonal exceeded interconstruct correlations. Table 2 summarizes reliability and convergent validity, and table 3 presents the Fornell Larcker matrix.

Table 2. Measurement Model Summary				
Construct	**Indicator Loading Range**	**Cronbach's Alpha**	**Composite Reliability (CR)**	**AVE**
Meaning	0,73 – 0,86	0,81	0,88	0,65
Competence	0,75 – 0,89	0,84	0,90	0,68
Self-determination	0,78 – 0,87	0,83	0,89	0,66
Impact	0,76 – 0,88	0,85	0,90	0,67
Pleasure	0,70 – 0,84	0,80	0,87	0,61
Arousal	0,74 – 0,88	0,86	0,91	0,67
Dominance	0,72 – 0,85	0,82	0,88	0,64
Academic Performance	0,77 – 0,89	0,84	0,90	0,69
Note: All indicators > 0,70; AVE > 0,50; reliability acceptable.				

Table 3. Fornell-Larcker discriminant validity								
Construct	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1. Meaning	0,81							
2. Competence	0,46	0,82						
3. Self-determination	0,44	0,48	0,81					
4. Impact	0,51	0,43	0,41	0,82				
5. Pleasure	0,42	0,38	0,36	0,47	0,78			
6. Arousal	0,56	0,45	0,43	0,60	0,41	0,82		
7. Dominance	0,40	0,52	0,50	0,45	0,37	0,48	0,80	
8. Academic Perf.	0,39	0,44	0,40	0,47	0,30	0,55	0,42	0,83
Note: Diagonal elements (√AVE) shown in bold exceed inter-construct correlations.								

Structural model

Collinearity diagnostics indicated VIF values below 3,3 for all predictors. Model fit indices were acceptable for PLS SEM, with SRMR equal to 0,061. Predictive relevance was supported by Q^2 statistics greater than zero for all endogenous constructs. Explained variance was moderate. R^2 for Pleasure was 0,46, for Arousal 0,52, for Dominance 0,49, and for Academic performance 0,31.

Path estimates were obtained with bootstrapping using 5 000 resamples. As specified a priori, Impact showed the strongest effects on Arousal and Pleasure compared with other empowerment dimensions. Meaning was most salient for Arousal with a moderate positive effect. Competence and self-determination were both

strongly associated with Dominance. Regarding outcomes, Arousal had the strongest positive relationship with Academic performance. Dominance was significant but smaller. Pleasure was not a significant predictor of Academic performance. Table 4 reports the standardized path coefficients, bootstrapped t values, p values, and effect sizes.

Table 4. Structural paths, bootstrapping results, and effect sizes

Path	β (Standardized)	t-value	p-value	f^2 (Effect size)
Meaning → Pleasure	0,28	3,45	0,001	0,07
Meaning → Arousal	0,31	4,02	0,000	0,09
Meaning → Dominance	0,12	1,56	0,12	0,01
Competence → Pleasure	0,10	1,34	0,18	0,01
Competence → Arousal	0,18	2,52	0,012	0,04
Competence → Dominance	0,36	5,44	0,000	0,13
Self-determination → Dominance	0,33	4,91	0,000	0,11
Impact → Pleasure	0,41	5,67	0,000	0,17
Impact → Arousal	0,44	6,21	0,000	0,19
Impact → Dominance	0,21	2,77	0,006	0,05
Pleasure → Academic Performance	0,07	1,05	0,29	0,01
Arousal → Academic Performance	0,38	5,01	0,000	0,14
Dominance → Academic Performance	0,21	2,84	0,005	0,06

Note: Model fit: SRMR = 0,061, R^2(Arousal) = 0,52, R^2(Dominance) = 0,49, R^2(Pleasure) = 0,46, R^2(Performance) = 0,31.

Mediation

Indirect effects were tested with the same bootstrap procedure. The total indirect effect of Impact on Performance through PAD was the largest among empowerment dimensions, supported primarily by the Impact to Arousal to Performance pathway. Meaning showed a significant indirect effect through Arousal. Competence and self-determination each showed significant indirect effects through Dominance. Pleasure did not transmit effects to Performance due to its nonsignificant direct link. Table 5 summarizes the key indirect effects.

Table 5. Selected indirect effects through PAD

Indirect Path	Indirect Effect	t-value	p-value
Meaning → Arousal → Performance	0,12	3,01	0,003
Competence → Dominance → Performance	0,08	2,36	0,018
Self-determination → Dominance → Performance	0,07	2,11	0,035
Impact → Arousal → Performance	0,17	4,22	0,000
Impact → Pleasure → Performance	0,03	1,02	0,31

Overall, the measurement model met accepted reliability and validity thresholds, including Fornell-Larcker discriminant validity. The structural model yielded moderate explanatory power. As hypothesized, Impact emerged as the most influential empowerment dimension for emotional activation, with particularly strong associations with Arousal and a substantial link to Pleasure. Meaning showed a clear and practical association with Arousal that aligned with the theoretical expectation that perceived significance energizes engagement. Competence and self-determination were most consequential for Dominance, indicating that efficacy beliefs and autonomy are closely tied to a felt sense of control during creative tasks and critique situations.

In predicting Academic performance, Arousal was the strongest emotional determinant, Dominance contributed positively but less strongly, and Pleasure did not reach significance. The resulting mediation pattern indicates that empowerment relates to academic outcomes primarily through energized engagement and, to a lesser degree, through a sense of control. This pattern is consistent with the performance demands of arts programs that require focused energy during studio production, rehearsals, and evaluations, while also rewarding students who sustain agency in high exposure settings such as criticism sessions and juried assessments.

DISCUSSION

The pattern of effects positions affects as the proximal route from empowerment to attainment in arts

education. Evidence indicates an activation–agency architecture rather than a hedonic route to performance. Arousal operates as the engine that translates meaning and perceived impact into production under time and exposure constraints. Dominance operates as the control system that stabilizes decisions and risk during critique. Pleasure supports persistence and climate but does not appear as the decisive route to near-term attainment in studio or stage contexts.

The prominence of activation accords with control–value theory, in which task-focused arousal and perceptions of control sit closer to achievement than hedonic tone.[26,41,42,43] The weak role of pleasure converges with studies that locate enjoyment within long-horizon persistence[44,45,46] rather than immediate execution under evaluation. In the empowerment tradition, links from competence and autonomy to agentic outcomes are well established. The present dominance channel fits that tradition while situating its affective expression in juried and public performance common in arts programs. Research in creative domains also shows that cues about impact and audience significance elevate effort and evaluative engagement, which aligns with the prominent contribution of impact within the activation route observed here.[15,47,48,49,50,51] Taken together, the literature supports two propositions that help organize the current pattern: activation and control predict performance more directly than pleasure in high-exposure creative work, and distinct facets of empowerment map onto distinct affective routes.

The practical implications favor program designs that cultivate activation and agency as educational resources. Course briefs that orient projects toward audiences or real uses can heighten perceived impact and invite sustained arousal across a semester. Scheduling of critiques that distributes evaluative intensity through the term can protect productive energy while preserving standards. Rehearsal and studio routines that emphasize visible output within bounded intervals can consolidate readiness for public assessment. Assessment culture that recognizes command under exposure, and feedback that guides decisions students can control, can strengthen dominance during juries, critiques, and showcases. When these features anchor everyday instruction, instructional climates foster energized engagement and composure without relying on hedonic tone as the primary driver of performance.

The study's strengths include theory-consistent measurement and a structural model with moderate explanatory power. Boundaries remain. A single region limits external validity. Self-report limits inference about microprocesses during performance. Cross-sectional data restrict temporal claims. Future research can deploy longitudinal panels to establish temporal precedence, task paradigms that elicit evaluative pressure with behavioral and physiological markers of activation and control, juried scores to triangulate performance, and cross-site replications across arts subfields.[35,36,37] These designs would test whether the two-route mechanism persists across variation in context, adjudication culture, and resources.

A field-level shift in emphasis follows from these considerations. In studio and performance-intensive programs, activation and control sit closest to attainment, while pleasure supports longer-range persistence. Empowerment does not operate as a single path. Meaning and impact supply energy, competence and autonomy supply control, and both routes elevate performance when programs teach for them. This account integrates empowerment and PAD within arts education and identifies levers that administrators and faculty can embed within existing studio and critique practices.

CONCLUSION

This study meets its objective and specifies a clear route from psychological empowerment to academic performance through pleasure, arousal, and dominance. The account shifts emphasis from hedonic tone to activation and perceived control, and shows how distinct facets of empowerment connect with achievement in studio and performance courses. The work advances theory on affect in higher education and consolidates motivation, emotion, and performance within one coherent mechanism.

The study also supplies actionable levers for practice. Course briefs should target impact and mastery, critique protocols should stage agency across the semester, and programs should extend structured autonomy while maintaining rigor. Assessment rubrics should weight sustained effort, calibrated challenge, and command under public scrutiny, and quality assurance can embed these targets in faculty development and program review so that arts education secures durable gains in attainment.

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AUTHORSHIP CONTRIBUTION

Conceptualization: Ahmad Fauzan Yusman; Ardipal.
Data curation: Fuji Astuti; Vischa Mansyera Pratama; Alrizka Hairi Dilfa.
Formal analysis: Alrizka Hairi Dilfa; Ahmad Fauzan Yusman.
Research: Ahmad Fauzan Yusman; Fuji Astuti; Vischa Mansyera Pratama.
Methodology: Ardipal; Ahmad Fauzan Yusman.
Project management: Ahmad Fauzan Yusman; Gusril.
Resources: Agusti Efi; Gusril; Cecep Permana.
Software: Alrizka Hairi Dilfa; Shaffyna Ananda Akimupasya
*Supervisio*n: Ardipal; Cecep Permana.
Validation: Agusti Efi; Gusril.
Display: Fuji Astuti; Vischa Mansyera Pratama; Shaffyna Ananda Akimupasya
Drafting – original draft: Ahmad Fauzan Yusman; Vischa Mansyera Pratama.
Writing – proofreading and editing: Ahmad Fauzan Yusman; Ardipal; Agusti Efi; Fuji Astuti.