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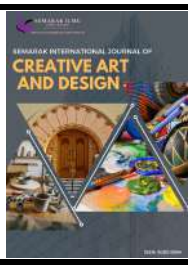

Students' Exposure, Purpose, and Perception of Mood Boards in Creative Design Process

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ABSTRACT

Mood boards are essential visual tools in the creative design process, aiding designers in organizing ideas, exploring concepts, and producing coherent visual outputs. Despite their widespread use in professional practice, students' exposure to mood boards, their purposes of use, and perceptions of their effectiveness in learning contexts remain underexplored. This study aimed to identify the level of students' exposure to mood boards in the creative design process, examine the purposes for which students use mood boards during creative work, and investigate students' perceptions of mood boards as a design tool in producing creative artworks. A quantitative research design was employed, utilizing structured questionnaires to collect data from diploma students enrolled in creative design programmes, including digital art and video production. The findings reveal critical insights into students' practices and perceptions regarding mood boards, highlighting their pivotal role in enhancing visual literacy, creativity, and supporting design consistency. These insights provide valuable guidance for educators to optimize teaching strategies and better support students' creative development in design education.

1. Introduction

The creative design process involves generating ideas, exploring visual elements, and developing meaningful design outcomes. To support this process, designers often rely on visual tools such as mood boards, which are used to organise inspiration, communicate design direction, and establish a coherent visual concept [1,2]. Mood boards typically consist of curated images, colours, textures, and typography, and can be developed in both physical and digital formats. With the advancement of technology, digital mood boards have become increasingly common due to their flexibility and accessibility [3].

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In design education, mood boards are widely introduced to help students translate abstract ideas into visual representations, enhance creativity, and improve visual literacy [4]. Through the process of selecting and organising visual references, students are expected to develop stronger conceptual thinking and design decision-making skills. However, despite their widespread use, students may differ in their level of exposure to mood boards, the purposes for which they use them, and how effectively they apply them within the design process.

In some cases, mood boards are treated as a procedural requirement rather than as a meaningful tool for idea exploration and concept development [5]. This raises concerns about whether students fully understand and utilise mood boards to support creativity and design outcomes. Therefore, it is important to examine how students engage with mood boards, the purposes of their usage, and how they perceive their effectiveness in enhancing creativity and supporting the overall design process within creative design programmes.

1.1 Concept and Role of Mood Boards

Mood boards are widely recognised as visual tools used to communicate ideas, themes, and aesthetic directions in design [1,2]. They typically consist of curated elements such as images, colours, textures, and typography that collectively represent a design concept. Traditionally developed in physical formats, mood boards have evolved into digital forms with the advancement of technology.

Garner and McDonagh-Philp [1] describe mood boards as a medium for externalising abstract ideas into visual representations, enabling designers to visualise and refine concepts. Similarly, McDonagh and Denton [2] highlight their role in facilitating communication among designers and stakeholders. However, while these studies provide strong insights into professional practice, they offer limited discussion on how mood boards are understood and utilised within student learning environments.

Mood boards play a critical role in the early stages of the design process, particularly in idea generation and concept development [6]. They enable designers to explore multiple visual directions and organise inspiration systematically before finalising a design solution.

Furthermore, mood boards function as communication tools that help align expectations between designers and clients, thereby reducing ambiguity and improving workflow efficiency [2]. However, Oxman [4] argues that the effectiveness of visual tools depends largely on how they are integrated into the design thinking process. This suggests that simply using mood boards does not guarantee meaningful outcomes unless they are applied strategically.

1.2 Mood Boards in Design Education

In educational contexts, mood boards are increasingly used as pedagogical tools to support students' learning in creative disciplines. They assist students in translating abstract ideas into visual forms, which is a fundamental competency in design education [4].

Additionally, mood boards encourage active learning by requiring students to explore references, analyse visual elements, and synthesise information into coherent concepts. This aligns with Schön's [7] theory of reflective practice, where learners continuously refine their ideas through iterative processes.

Nevertheless, existing literature suggests that the use of mood boards in education may vary in depth and effectiveness. In some cases, students approach mood boards as a procedural task rather than a meaningful component of the design process, indicating a gap between pedagogical intention and actual practice.

1.3 Students' Perception of Mood Boards

Creativity is a fundamental component of design education, involving the ability to generate original and effective ideas [8]. Visual literacy, defined as the ability to interpret and create visual messages, is equally essential for students in creative disciplines [9].

Mood boards contribute to creativity by providing a platform for exploration and experimentation, while also enhancing visual literacy through exposure to diverse visual elements. As students engage with visual references, they develop a deeper understanding of design principles and aesthetics.

Recent research further expands this perspective by highlighting the cognitive function of mood boards. Jiang *et al.,* [10] found that mood boards act as cognitive stimuli, where an optimal level of constraint can enhance creative performance. Specifically, moderate constraints were shown to produce more effective outcomes compared to conditions with too many or too few limitations.

This finding suggests that the effectiveness of mood boards is influenced not only by their use but also by how they are structured within the learning environment. Therefore, further research is needed to understand how mood boards can be effectively applied to support creativity and visual literacy among students.

1.4 Creativity and Visual Literacy in Design Education

Creativity is a fundamental component of design education, involving the ability to generate original and effective ideas [11]. Visual literacy, defined as the ability to interpret and create visual messages, is equally important for design students [12].

Mood boards contribute to creativity by providing a platform for experimentation and idea exploration. They also enhance visual literacy by exposing students to diverse visual elements and encouraging critical analysis. As students engage with visual references, they develop a deeper understanding of design principles and aesthetics.

Recent studies further highlight the cognitive role of mood boards in the creative process. Mood boards can act as cognitive stimuli, where an optimal level of visual constraint enhances creative performance. Specifically, moderate levels of constraint have been found to produce more effective creative outcomes compared to overly restrictive or overly flexible conditions [10].

This suggests that the effectiveness of mood boards is not solely dependent on their use, but also on how they are structured and guided within the learning process. Therefore, the role of mood boards in fostering creativity and visual literacy requires further investigation, particularly in educational contexts.

1.5 Research Gap

Despite the extensive use of mood boards in both professional practice and education, existing literature remains limited in several key areas. Earlier studies have primarily focused on the role of mood boards in communication and idea development within professional settings [2].

More recent research has begun to explore their impact on creativity and collaborative processes, highlighting the importance of cognitive stimulation and structured constraints [10], as well as the role of digital platforms in facilitating collaborative learning [13].

However, there is still a lack of research examining students' perceptions of mood boards, particularly in terms of their effectiveness in supporting creativity and the design process. Furthermore, studies focusing on diploma-level students and specific educational contexts remain scarce. In addition, much of the existing research adopts qualitative or experimental approaches, with limited emphasis on quantitative analysis of students' experiences and perceptions.

Therefore, this study aims to address these gaps by investigating how diploma students utilise mood boards and examining their perceived effectiveness in enhancing creativity and supporting design outcomes.

2. Methodology

2.1 Research Design and Theoretical Framework

This study adopts quantitative research design using a survey method. A structured questionnaire was used to collect data from respondents to measure students' exposure to mood boards, their purposes of use, and their perceptions of mood boards in creative design activities. The quantitative approach is appropriate as it allows for statistical analysis of patterns and relationships among variables. This study is guided by the Technology Acceptance Model (TAM) developed by Fred Davis [14]. TAM explains user acceptance of technology based on two main constructs: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU).

In this study, mood boards are considered design tools. Students' exposure is expected to influence their ease of use and perceived usefulness, which subsequently affects how they use mood boards and their overall perception of its effectiveness in the creative design process.

2.2 Population, Sampling and Data Collection

The population of this study consists of diploma students from Politeknik Tuanku Syed Sirajuddin (PTSS), specifically from the Diploma in Digital Creative Technology Arts (DCS) and Diploma in Digital Creative Technology Video Production (DCV) programmes. The population size is 579 students from Semester 1 to Semester 5 as shown in Figure 1.

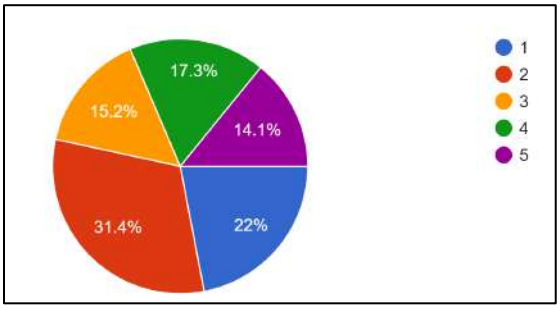

Fig. 1. Respondent percentage from Semester 1 to Semester 5

A purposive sampling technique was used, as the respondents were selected based on their relevance to the study, particularly students who are exposed to design-related learning. Based on Krejcie and Morgan's table [15], the recommended sample size for a population of 579 is approximately 234 respondents. Out of 191 responses collected, 19 respondents indicated that they were not familiar with using mood boards. These respondents were excluded from further analysis, resulting in a final sample of 172 participants. Data were collected using a Google Form questionnaire distributed via Telegram and WhatsApp over a period of five days. Participation was voluntary.

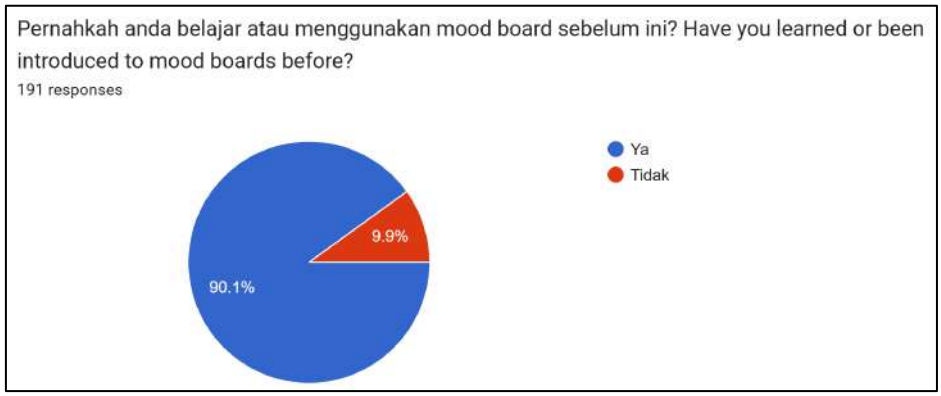

Fig. 2. Percentage of respondents who had experience in using the mood boards

2.3 Research Instrument, Reliability, and Data Analysis

The research instrument consisted of a structured questionnaire with four sections: demographic information (Section A), exposure to mood boards (Section B – 6 items), purpose of using mood boards (Section C – 7 items), students' perception of mood boards (Section D – 9 items) and open-ended question (Section E – 2 items). All items in Section B until D were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire was developed in a mixed language format to ensure clarity.

A pilot test involving 21 students was conducted to assess the reliability of the instrument using Cronbach's Alpha. The results indicate excellent internal consistency, with values of 0.910 for exposure, 0.983 for purpose, and 0.967 for perception as shown in Table 1. These values exceed the acceptable threshold of 0.70, confirming that the instrument is reliable.

Table 1
Reliability statistics for pilot test

Construct	*N of Items*	*Cronbach's Alpha*	*Reliability Level*
Student Exposure to Mood Board	6	.910	Excellent
The Purpose of Usage	7	.983	Excellent
Students' Perception	9	.967	Excellent

Data was analysed using SPSS software. Descriptive statistics such as frequency, percentage, and mean were used to analyse the data. Mean scores were interpreted using levels of low, moderate, and high to provide a clearer understanding of the findings.

3. Results

3.1 Reliability Analysis

A reliability test was conducted on the research instrument to ensure that the items measuring each construct were internally consistent and reliable for further analysis. The Cronbach's Alpha coefficient was employed as the primary measure of reliability, with a score of 0.70 or higher generally considered acceptable in social science research.

Table 2
Internal consistency and reliability statistics (Cronbach's Alpha) for measured variables

Construct	*N of Items*	*Cronbach's Alpha*	*Reliability Level*
Student Exposure to Mood Board	6	.898	High / Good
The Purpose of Usage	7	.961	Excellent
Students' Perception	9	.968	Excellent

As shown in Table 2, the first construct "*Student Exposure to Mood Board*," consisted of 6 items. The analysis yielded a Cronbach's Alpha of .898, while the Cronbach's Alpha based on standardized items was .899. This coefficient indicates a high level of internal consistency, suggesting that the items reliably measure the extent of students' exposure to mood boards within the study.

For the second construct, "*The Purpose of Usage*," a total of 7 items were analyzed. This construct achieved a Cronbach's Alpha of .961, with a standardized item alpha of .962. A score exceeding 0.90 is categorized as excellent reliability, demonstrating that the scale items are highly cohesive in capturing the various purposes for which students utilize mood boards.

The final construct, "*Students' Perception*," involved the highest number of items at 9 items. The reliability statistics showed a Cronbach's Alpha of .968, which was identical to the coefficient based on standardized items (.968). This result reflects excellent internal consistency, indicating that the measurement scale for students' perceptions is highly robust and dependable for the final data analysis.

Overall, the reliability coefficients for all three constructs range from .898 to .968, significantly exceeding the recommended threshold of 0.70. Consequently, the research instrument is deemed highly reliable, and the data collected is suitable for further inferential statistical testing.

3.2 Students' Exposure to Mood Boards

This section presents the descriptive analysis of students' exposure to mood boards. Based on the responses from 172 participants, the findings as shown in Table 3 indicate that students generally have a high level of exposure and experience in using mood boards within their design learning context. Overall, the mean scores for all items range from 3.87 to 4.55, suggesting that students are well-acquainted with mood boards, although the level of exposure varies across different aspects.

The highest mean score was recorded for "*Used Digital Tools to Create Mood Boards*" (M = 4.55, SD = 0.812). This indicates that students are highly familiar with and actively use digital platforms for creating mood boards, reflecting the increasing integration of digital tools in design education. The relatively low standard deviation also suggests consistent responses among participants.

Table 3
Respondent's mean and standard deviation for mood board exposure

Descriptive Statistics for Mood Board Exposure

	N	Minimum	Maximum	Mean	Std. Deviation
Exposure to Mood Board	172	1	5	4.40	.835
Mood Board Usage in Assigment	172	1	5	3.99	.979
Understand Mood Board Function	172	1	5	4.17	.933
Experienced in using Mood Board for Design Project	172	1	5	4.25	.950
Familiar with Physical and Digital Mood Boards	172	1	5	3.87	1.068
Used Digital Tools to Create Mood Boards	172	1	5	4.55	.812
Valid N (listwise)	172				

Students also reported high levels of general exposure and experience. The items "*Exposure to Mood Board*" (M = 4.40, SD = 0.835) and "*Experienced in using Mood Board for Design Project*" (M = 4.25, SD = 0.950) indicate that most students have been introduced to mood boards and have applied them in their design projects. In terms of understanding, the item "*Understand Mood Board Function*" (M = 4.17, SD = 0.933) demonstrates that students possess a solid comprehension of how mood boards function within the design process. This aligns with their positive perception reported earlier.

However, slightly lower mean values were observed for "*Mood Board Usage in Assignment*" (M = 3.99, SD = 0.979) and "*Familiar with Physical and Digital Mood Boards*" (M = 3.87, SD = 1.068). These findings suggest that while students are generally exposed to mood boards, their usage in formal assignments may not be fully consistent, and their familiarity with both physical and digital formats varies more widely among respondents. The higher standard deviation for the latter item indicates greater variability in students' experiences.

In summary, the results show that students have substantial exposure to mood boards, particularly in digital formats and practical design applications. However, there is room for improvement in ensuring consistent integration of mood boards across assignments and enhancing students' familiarity with different types of mood boards.

3.3 Purpose of using Mood Boards

This section examines the purposes for which students use mood boards in their design activities. The descriptive analysis reveals that students utilize mood boards for multiple design-related functions, all of which received high levels of agreement as recorded in Table 4. The mean scores for all items range from 4.10 to 4.26, indicating that students strongly acknowledge the importance of mood boards across various stages of the design process.

Table 4
Respondent's mean and standard deviation for purpose of using mood board

Descriptive Statistics for Purpose of Using Mood Boards

	N	Minimum	Maximum	Mean	Std. Deviation
Generate Design Ideas	172	1	5	4.14	.874
Collect Visual References	172	1	5	4.26	.888
Develop Design Concepts	172	1	5	4.24	.830
Organise Design Direction	172	1	5	4.16	.920
Communicate Ideas with Others	172	1	5	4.20	.924
Guideline before Starting Final Design	172	1	5	4.10	.943
Explore Different Styles and Themes	172	1	5	4.17	.924
Valid N (listwise)	172				

The highest mean score was recorded for *"Collect Visual References"* (M = 4.26, SD = 0.888), suggesting that the primary purpose of mood boards is to gather and organize visual materials. This reflects the fundamental role of mood boards as a repository of inspiration and reference in design work.

Similarly, *"Develop Design Concepts"* (M = 4.24, SD = 0.830) and *"Communicate ideas with Others"* (M = 4.20, SD = 0.924) highlight the role of mood boards in both conceptual development and communication. These findings indicate that mood boards function not only as individual creative tools but also as collaborative instruments for sharing ideas with peers and instructors.

Other key purposes include *"Explore Different Styles and Themes"* (M = 4.17, SD = 0.924) and *"Organise Design Direction"* (M = 4.16, SD = 0.920), which demonstrate that mood boards help students structure their design thinking and explore diverse creative possibilities.

Additionally, *"Generate Design Ideas"* (M = 4.14, SD = 0.874) and *"Guideline before Starting Final Design"* (M = 4.10, SD = 0.943) indicate that mood boards are commonly used in the early stages of the design process, serving as a foundation for idea generation and planning.

The relatively low standard deviation values across all items (ranging from 0.830 to 0.943) suggest that students' responses are consistent, further reinforcing the reliability of these findings.

In conclusion, the results demonstrate that mood boards serve a **comprehensive and multifunctional role** in students' design practices. They are widely used for collecting references, developing concepts, organizing ideas, and facilitating communication. These findings underscore the importance of mood boards as an essential tool throughout the entire design process, from initial ideation to final execution.

3.4 Students' Perception of Mood Boards

The findings indicate that students have a highly positive perception of mood boards. Table 5 recorded mean scores above 4.00 for all items based on a five-point Likert scale, suggesting that respondents generally agree that mood boards play an important role in supporting their design learning and practice.

The highest mean score was recorded for the item "*Useful in Design Process*" (M = 4.23, SD = 0.868), indicating that students strongly perceive mood boards as an essential tool in guiding their overall design workflow. This suggests that mood boards are not merely supplementary materials but are actively integrated into students' design processes.

In terms of creativity and idea development, students also expressed strong agreement that mood boards enhance their creative capabilities. The item "Help Improve Creativity" (M = 4.17, SD = 0.924) and "*Develop Design Ideas Easier*" (M = 4.15, SD = 0.876) demonstrate that mood boards serve as effective tools for idea generation and conceptual exploration. Similarly, "*Improve Visual Quality of Art Works*" (M = 4.16, SD = 0.890) indicates that students believe mood boards contribute to producing more visually appealing outcomes.

Consistency in design is another important aspect highlighted in the findings. The item "*Help Produced Consistent Designs*" (M = 4.17, SD = 0.872) suggests that mood boards assist students in maintaining coherence in their visual direction, which is crucial in professional design practice.

From the usability perspective, students generally find mood boards easy to use and understand. The item "*Mood Boards is Easy to be Used and Understand*" (M = 4.13, SD = 0.889) reflects a high level of accessibility, indicating that mood boards are user-friendly tools that can be readily adopted by students. Furthermore, the item "*More Confident while using Mood Boards*" (M = 4.06, SD = 0.953) suggests that the use of mood boards also contributes to increased confidence during the design process, although this aspect shows slightly more variation among respondents.

Table 5
Respondent's perception of mood board

Descriptive Statistics for Perception of Mood Boards

	N	Minimum	Maximum	Mean	Std. Deviation
Help Improve Creativity	172	1	5	4.17	.924
Develop Design Ideas Easier	172	1	5	4.15	.876
Improve Visual Quality of Art Works	172	1	5	4.16	.890
Help Produced Consistent Designs	172	1	5	4.17	.872
Useful in Design Process	172	1	5	4.23	.868
More Confident while using Mood Boards	172	1	5	4.06	.953
Creating Mood Boards is a Meaningful Process in Designing	172	1	5	4.08	.930
Mood Boards is Easy to be Used and Understand	172	1	5	4.13	.889
Continue using Mood Boards in the Future	172	1	5	4.08	.982
Valid N (listwise)	172				

In addition, students perceive mood boards as meaningful in their design activities. The item "*Creating Mood Boards is a Meaningful Process in Designing*" (M = 4.08, SD = 0.930) reinforces the idea that mood boards are not only functional but also add value to the learning experience. Likewise,

"*Continue using Mood Boards in the Future*" (M = 4.08, SD = 0.982) indicates students' willingness to sustain the use of mood boards beyond their current studies.

In terms of response consistency, the standard deviation values for all items range between 0.868 and 0.982, indicating a relatively low dispersion and suggesting that students' responses are generally consistent.

In summary, the findings clearly demonstrate that students perceive mood boards as an effective, practical, and valuable tool in the design process. Mood boards support creativity, enhance visual quality, improve idea development, and contribute to design consistency. Additionally, their ease of use and perceived usefulness encourage continued adoption among students. These results highlight the importance of integrating mood board practices into design education to support students' creative development and learning outcomes.

3.5 Thematic Analysis for Open Ended Questions

3.5.1 Challenges in mood board creation

The most significant challenge reported by participants was the process of generating a creative concept, with 30.4% (n=52) of respondents indicating that 'art block' or a lack of inspiration hindered their progress as listed in Table 6.

Table 6
Thematic analysis for the challenges faced by students in using mood boards

Theme	*Frequency (n=171)*	*Percentage (%)*
Theme 1: *Conceptualization and Idea Generation*	52	30.4%
Theme 2: *Visual Selection and Aesthetic Consistency*	36	21.1%
Theme 3: *Technical and Operational Constraints*	28	16.4%

Theme 1: Conceptualization and Idea Generation

The most prevalent challenge identified by respondents was the difficulty in initiating the creative process and narrowing down a specific concept. Many students reported "art blocks" or a lack of inspiration at the onset of a project. Conversely, some participants felt overwhelmed by an abundance of ideas, making it difficult to select a single, focused direction. One respondent noted that their primary challenge was "translating abstract ideas into visuals," highlighting the cognitive leap required to move from a mental concept to a tangible visual representation.

Theme 2: Visual Selection and Aesthetic Consistency

A significant number of participants expressed difficulty in finding "suitable" and "high-quality" images that aligned perfectly with their intended themes. Beyond mere selection, maintaining aesthetic consistency—specifically regarding color palettes, textures, and styles—was a major concern. Respondents frequently mentioned that they struggled to ensure all visual elements appeared cohesive rather than "cluttered or confusing." The struggle to balance personal taste with the objective requirements of a design brief was also a noted difficulty.

Theme 3: Technical and Operational Constraints

Technical hurdles such as time management, internet connectivity, and the limitations of physical versus digital formats were frequently cited. Students creating physical mood boards noted constraints in page space and the inability to resize elements easily, whereas digital users occasionally struggled with software proficiency. Additionally, "time constraints" were a recurring theme, with

many students feeling that the research and curation process required more time than was available, leading to rushed or less-than-ideal outcomes.

3.5.2 Thematic analysis of strategies for enhancing mood board effectiveness (Q2)

Table 7 below summarizes the key themes derived from the participants' suggestions for improvement.

Table 7
Participants suggestion to improve mood boards

Theme	*Frequency (n=171)*	*Percentage (%)*
Theme 1: *Enhanced Structural Guidance & Conceptual Clarity*	58	33.9%
Theme 2: *Digital Integration & Technological Enhancements*	24	14.0%
Theme 3: *Pedagogical Integration & Early Practice*	21	12.3%
Theme 4: *Visual Detail & Rationalization (Annotations)*	18	10.5%
Theme 5: *Collaborative Learning & Social Engagement*	12	7.0%
Other: *General benefits or non-specific suggestions*	38	22.2%

Theme 1: Enhanced Structural Guidance & Conceptual Clarity

The most frequent suggestion, identified by **33.9% (n=58)** of respondents, was the need for clearer structural guidance from the outset. Many students felt that mood boards could be improved if lecturers provided more specific themes or brief explanations of the expected visual outcomes. Respondents suggested that "clarifying the concept from the beginning" and providing "clearer guidelines on the theme" would significantly reduce the confusion often felt during the research phase. This suggests that students view the mood board not just as a creative outlet, but as a directed academic task that requires scaffolding.

Theme 2: Digital Integration & Technological Enhancements

Approximately **14.0% (n=24)** of students emphasized the importance of utilizing digital tools more strategically. Suggestions included the use of interactive digital platforms to organize ideas and the integration of AI or professional design software to refine layouts. For these students, the transition to digital formats was seen to overcome the space limitations and physical constraints mentioned in the challenges section, allowing for a more fluid and "expandable" creative process.

Theme 3: Pedagogical Integration & Early Practice

A recurring suggestion **(12.3%, n=21)** was the earlier introduction of mood boards in the curriculum, specifically during Semester 1. Students argued that mood boards should not be treated as a one-off assignment but should be "practiced in every subject" that requires visual research. By integrating mood boards into the early stages of their academic journey, students believe they would develop a more intuitive understanding of how to translate research into design, effectively making it a "habit" rather than a hurdle.

Theme 4: Visual Detail & Rationalization (Annotations)

To increase the functionality of mood boards, **10.5% (n=18)** of participants suggested the inclusion of detailed elements such as annotations, color palettes with specific codes, and typography samples. One notable suggestion was to "mandate a rational explanation for every visual element

chosen." This shift from a purely aesthetic collection to an "intentional curation" ensures that students understand the functional purpose of their choices, transforming the mood board into a strategic design document.

Theme 5: Collaborative Learning & Social Engagement

Finally, a smaller group of students **(7.0%, n=12)** proposed making the mood board process more social and interactive. Suggestions included "group collaborations," "peer feedback sessions," and even "creative competitions or exhibitions." These respondents felt that seeing how their peers interpreted a theme would broaden their own creative horizons and turn a solitary research task into a more engaging, community-driven experience.

Overall, the findings indicate that students demonstrate high levels of exposure, diverse purposes of usage, and positive perceptions towards mood boards in the creative design process. While the quantitative results highlight strong acceptance and perceived usefulness, the qualitative findings further reveal several challenges related to idea generation, visual consistency, and technical constraints. These combined results suggest that although mood boards are widely used and valued by students, their effectiveness is influenced by the level of guidance, structure, and integration within the learning environment. Therefore, the next chapter discusses these findings in relation to the study objectives and proposes relevant conclusions and recommendations.

4. Conclusions and recommendations

4.1 Conclusion

Building on the findings presented in Chapter 4, this study examined diploma students' exposure to mood boards, their purposes of use, and their perceptions of effectiveness in the creative design process.

The findings indicate that students demonstrate strong exposure to mood boards, particularly in digital formats, reflecting current trends in design practice. However, despite being introduced as early as Semester 1 through subjects such as Visual Narrative, the findings revealed that 19 out of 191 respondents reported that they were not familiar with using mood boards. This suggests that early exposure does not necessarily guarantee understanding, indicating a gap between instruction and actual student comprehension.

In terms of purpose, the study confirms that students utilise mood boards for multiple meaningful functions, including collecting visual references, developing design concepts, organising design direction, exploring styles, and communicating ideas. This highlights the role of mood boards as both cognitive and communicative tools throughout the design process.

Students also demonstrate a highly positive perception towards mood boards. They are regarded as useful, easy to use, and effective in enhancing creativity, improving visual quality, and supporting design consistency. These findings align with the Technology Acceptance Model (TAM), where perceived usefulness and perceived ease of use contribute to strong acceptance and continued usage intention.

Despite these positive findings, several challenges were identified, particularly in idea generation, maintaining visual consistency, and dealing with technical and time constraints. These findings suggest that while mood boards are widely used and valued, their effectiveness depends on structured guidance and proper integration within the learning environment.

In conclusion, this study confirms that mood boards play a significant role in supporting creativity, conceptual thinking, and communication in design education. However, their full potential can be achieved through more systematic and intentional implementation in teaching practices. In relation

to the research objectives, this study has successfully identified students' level of exposure, examined the purposes of mood board usage, and analysed students' perceptions of their effectiveness. Ultimately, the effective integration of mood boards in design education has the potential to enhance students' creative performance, visual communication skills, and readiness for professional practice.

4.2 Recommendations

Based on the findings of this study, several recommendations are proposed to enhance the effectiveness of mood board usage in design education. Firstly, there is a need for more structured instructional strategies, where educators provide clear themes, systematic guidance, and practical demonstrations when introducing mood boards. This is particularly important as the findings indicate that, despite early exposure, some students still experience difficulties in applying mood boards effectively, suggesting a gap between exposure and functional understanding.

Moreover, greater emphasis should be placed on conceptual development by encouraging students to incorporate annotations and provide justification for their visual selections. Such an approach can transform mood boards from mere collections of visual references into purposeful design tools that reflect intentional thinking and coherent design direction.

In addition, collaborative learning approaches should be strengthened through the integration of peer discussions, group critiques, and collaborative projects. These strategies not only respond to students' suggestions for more interactive learning environments but also support the development of diverse perspectives and creative exchange.

Furthermore, adequate time allocation and access to relevant resources should be ensured to support students throughout the mood board development process. This is essential in addressing the time constraints and technical challenges identified in the findings.

Finally, future research is recommended to adopt qualitative or mixed method approaches to gain deeper insights into students' cognitive and creative processes. Comparative studies across different institutions and investigations into the impact of mood boards on actual design performance, including the integration of emerging technologies such as artificial intelligence, would further enrich the existing body of knowledge.

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