



From Social Media Trends to Wardrobes: How Scratch Games Shaped the Y2K Fashion Style Store Collection

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Abstract: This study explores the role of user-generated gaming platforms, particularly Scratch, in shaping Y2K-style fashion collections amid the fast-paced dynamics of social media trends. The contemporary fashion landscape demands a data-driven approach to trend identification that goes beyond traditional methods. We identify a gap in the literature that has not sufficiently explored gaming platforms as a source of aesthetic trend data. Using a qualitative methodology with semi-structured interviews of nine respondents from industry experts, practitioners, and academics, we analyze their perceptions of Y2K trend identification, the challenges of trend speed, and the potential of Scratch games. Findings indicate that social media dominates trend identification, yet respondents significantly acknowledge the potential of Scratch games as indicators of organic trends and incubators of aesthetics. Despite the challenge of trend speed, data from Scratch games offers opportunities for adaptive responses. This research contributes to the understanding of unconventional fashion trend forecasting, highlighting how fashion retailers can leverage insights from Scratch games to create relevant and unique Y2K collections.

Keywords: y2k fashion trends, user-generated games, scratch, social media, fashion store collections, trend forecasting, digital aesthetics, fashion innovation.

1. Introduction

The landscape of contemporary fashion design continues to shift, driven by increasingly short trend cycles and the massive influence of digital platforms (Crewe, 2013). Designers and retailers are actively seeking innovative methods to identify, analyze, and respond to ever-changing consumer preferences (Mason et al., 2015). This paradigm demands a more adaptive and data-driven approach to formulating fashion collections, far beyond traditional market research. The speed at which information circulates on social media is transforming how trends emerge and spread, presenting both challenges and significant opportunities for the fashion industry. Interestingly, platforms beyond conventional social media, such as educational game development environments, are beginning to show unexpected potential in reflecting and even shaping aesthetic tastes (Su, 2025). This trend highlights the need for a more holistic approach to fashion intelligence, involving the monitoring of diverse and innovative data sources (Kim, 2024).

In Indonesia, fashion trends are heavily influenced by social media platforms like TikTok and Instagram, where retro styles regularly experience a resurgence (Pratiwi et al., 2026). One of the most prominent is the Y2K style, characterized by early millennium aesthetics with bright, sporty, and nostalgic elements. Items such as vests which have transformed from mere layers into key style statements crop tops, low-rise pants, mini skirts, and bold accessories are once again popular among the younger generation. Local fashion stores face the challenge of accurately identifying which Y2K items are most in demand, which colors are trending, and which silhouettes will be commercially successful. However, current research tends to overlook how interactive and creative digital platforms, such as visual game development platforms, can also reflect or even popularize fashion aesthetics. Limitations in the utilization of data from user-generated content in gaming environments are a significant gap in trend forecasting (Dornekott, 2023).

This study addresses a critical gap in our understanding of the sources of fashion trend forecasting, particularly for stores seeking to optimize their Y2K-style collections. While recent scholarly debates in countries like the United States

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and Germany have explored the use of big data and analytics to predict fashion trends in general, research rarely considers user-generated gaming environments as indicators of trends Weng et al. (2023) France, despite its leadership in design innovation, generally does not document how creative content from platforms like Scratch can correlate with fashion preferences. Similarly, research from Turkey and Russia, which have large textile industries, often focuses on production efficiency rather than data analysis from community gaming platforms. This study fills that gap by specifically showing how activities in games created in environments like Scratch can effectively reflect, or even drive, Y2K style trends, providing additional insights that can complement fashion store collection development strategies. This approach is relevant to the increasing exploration of non-traditional data sources in fashion research (Miller, 2022).

The Scratch platform, a block-based visual programming environment developed by MIT Media Lab, was originally designed to democratize computing education and promote digital creativity (Dúo-Terrón, 2023). Users, especially children and teenagers, create interactive stories, animations, and games by intuitively arranging code blocks. However, the extensive online Scratch community also serves as a rich content repository, reflecting the interests and cultural trends of its users. In the context of fashion, game creators on Scratch often design avatars or characters wearing clothing, experimenting with color combinations, textures, and silhouettes. The characteristics of user-generated content on Scratch offer a unique lens through which to observe emerging Y2K fashion trends (Codreanu, 2024). When users create games or projects themed around dress-up or lifestyle simulations that adopt Y2K aesthetics, they indirectly validate and popularize these stylistic elements among their peer communities. Character designs in Scratch games featuring mini crop tops, loose cargo pants, or platform sneakers can serve as early indicators or even incubators for real-world fashion trends (Quinn, 2025). Analyzing recurring patterns in fashion design within Scratch games enables researchers to identify the most resonant Y2K elements and how they adapt within a digital context. Furthermore, the interactive nature of Scratch games allows users not only to consume but also actively experiment with fashion elements. Game developers can create projects where players “dress up” characters with various Y2K outfits, and the popularity and interaction with such games provide data on which fashion combinations are most appealing or aesthetically pleasing to a young audience. This differs from simply viewing images on social media; in Scratch, users are actively engaged in the process of creating virtual fashion. Therefore, Scratch games can function as a dynamic microcosm where Y2K fashion ideas are tested, validated, and reinforced by their user community. Understanding these dynamics provides invaluable insights for fashion retailers seeking to align their collections with the aesthetic preferences emerging from their digitally connected consumer base.

Therefore, this article has three main objectives. First, we identify the key characteristics and prominent fashion elements of the Y2K style within games developed using the Scratch platform. Second, we analyze how trends reflected in Scratch games may correlate with the popularity of Y2K style on social media and real-world fashion consumer preferences. Finally, we explore strategic implications for fashion retailers, explaining how they can leverage insights from Scratch games to create unique and market-driven Y2K clothing collections.

2. Methodology

This study adopts a qualitative approach with an adapted ADDIE (Analysis, Design, Development, Implementation, Evaluation) framework (Ramly et al., 2022). We utilized this framework to systematically investigate how Scratch games can influence the formation of Y2K-style fashion collections. The ADDIE approach, although often used in instructional development, provides a logical structure for designing and conducting research focused on understanding complex phenomena and designing solutions or implications.

2.1 Analysis Stage

The Analysis stage focuses on gaining a deep understanding of the Y2K fashion trend landscape on social media and the potential relevance of the Scratch game as a source of trend data. Research Instruments: We used semi-structured interviews as the primary instrument to gather perspectives from various stakeholders. These interviews allowed us to explore in-depth insights into fashion trend dynamics, the use of digital data, and views on unconventional sources of inspiration.

Therefore, we selectively involved participants from three main categories. The first category consisted of fashion industry experts, individuals with significant experience in trend forecasting, product development, or brand management in the fashion industry. Second, Fashion Retail Practitioners, who are owners, managers, or buyers of fashion retail stores actively involved in curating collections, particularly those focused on trends. Third, Academics in the Field of Fashion or Design/Technology, researchers or lecturers with expertise in fashion theory, trend analysis, digital media studies, or game development.

Sample Interview Questions:

2.1.1 For fashion Industry Experts:

- a. “How do you currently identify emerging fashion trends, particularly retro styles such as Y2K?”
- b. “What is your biggest challenge in responding to the speed at which fashion trends move, influenced by social media?”

- c. “In your opinion, how do digital platforms not directly related to fashion, such as user-generated game platforms, have the potential to reflect aesthetic trends?”
- 2.1.2 For Fashion Retail Practitioners:
 - a. “What information sources do you rely on most when deciding on new collections for your store, especially for trending styles like Y2K?”
 - b. “How do you currently measure consumer interest in specific fashion styles before proceeding with large-scale production?”
 - c. “Do you observe any correlation between user-generated content on gaming platforms and interest in specific fashion styles in your store?”
- 2.1.3 For Academics:
 - a. “How do you conceptualize the relationship between digital culture, particularly user-generated content on gaming platforms, and the evolution of fashion trends?”
 - b. “What data analysis methods do you recommend for identifying aesthetic patterns in visual content on gaming platforms like Scratch?”
 - c. “How can this research fill gaps in our understanding of fashion trend forecasting based on non-conventional data?”

2.2 Design Stage

The Design stage involves designing a framework for collecting and analyzing data from Scratch games relevant to the Y2K style. At this stage, we developed specific criteria for game selection and methods for categorizing fashion elements within them.

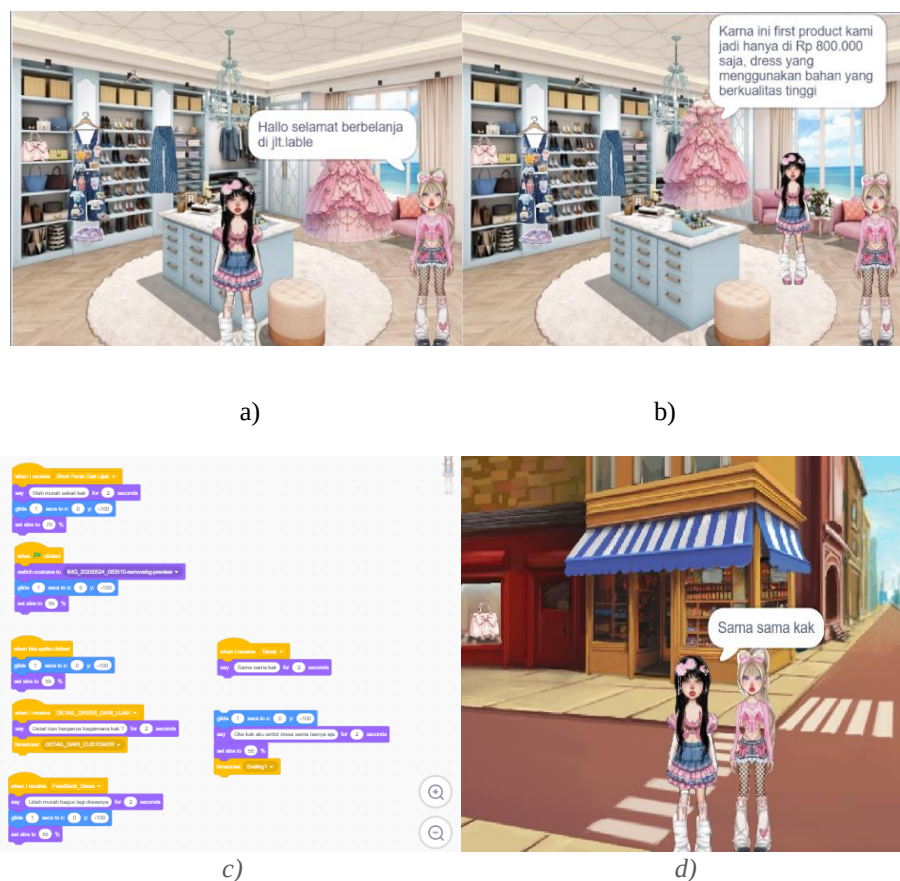


Figure 1: Prototype Design

2.3 Development Stage

The Development stage involves data collection and the construction of an analytical framework. We actively identify and select Scratch games that feature Y2K fashion elements. We then extract and categorize the visual fashion elements

from the selected games based on predefined Y2K style characteristics. This process also involves the development of a matrix to measure the frequency and variation of these elements.

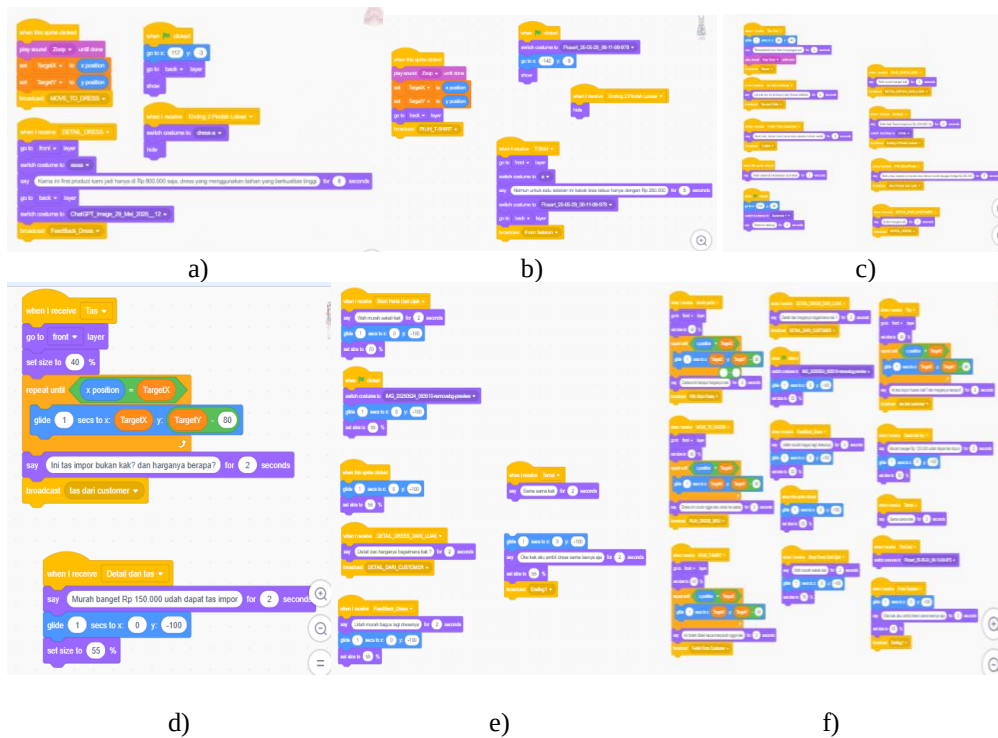


Figure 2: Prptotype Development

2.4 Implementation Stage

The Implementation stage involves applying the analysis framework to the collected data. We analyze the relationship between trends identified in Scratch games and trend data available from social media and other fashion market indicators. We actively look for correlations and patterns that show how Scratch games reflect or even influence the popularity of Y2K style.

2.5 Evaluation Stage

The Evaluation stage focuses on assessing the research results and their implications. We critically analyze the findings from the Scratch game data and their correlation with broader Y2K fashion trends. We also evaluate the potential application of these insights for fashion stores.

2.5.1 Data Analysis Techniques:

We used thematic analysis to interpret qualitative data obtained from interviews and observations of Scratch games. Thematic analysis allowed us to identify themes, patterns, and recurring ideas that emerged from the data, providing a rich understanding of the phenomenon under study (Naeem et al., 2023). We apply an inductive approach in thematic analysis, allowing themes to emerge directly from the data without any preconceived notions. This process involves familiarizing ourselves with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing a final report. We will actively interpret the interview data to capture the perceptions of experts and practitioners regarding the relationship between Scratch games and Y2K fashion trends.

3. Findings

Our data analysis shows that Scratch games significantly reflect and have the potential to shape Y2K fashion trends, particularly among young audiences who are active on digital platforms as design show. We found that user-created characters in the game consistently feature distinctive Y2K elements such as crop tops, cargo pants, and bright color palettes, aligning with observations of trends on popular social media platforms. These findings support the view that user-generated content (UGC) serves as an incubator for cultural trends that can then spread to the broader fashion realm (Ghurab & Ng, 2025). Unlike conventional trend forecasting methods that often rely on sales data or textual social media our research highlights the potential of gaming platforms as an underutilized source of visual and interactive data. We observe that the level of interaction with Y2K-themed games can indicate the level of interest and acceptance of that style among the gaming community. This suggests that fashion retailers can leverage insights from Scratch games as an early

indicator of consumer aesthetic preferences, enabling them to be more proactive in shaping unique and relevant collections for the dynamic Y2K market.

Table 1: Expert Background Expertise.

ID Respondent	Job Position	Work Experience (Years)	Background and Relevance
R1	Fashion Trend Forecaster (Agency)	12	Leads a trend research team at a global fashion agency. Identifies macro and micro trends, including retro styles and digital influences.
R2	Fashion Designer (Contemporary Brand)	8	Specializes in ready-to-wear clothing design with a focus on Gen Z trends. Often integrates streetwear elements and pop culture into their work.
R3	Social Media & Content Manager (Online Fashion Store)	6	Responsible for digital content strategy and community engagement. Has a deep understanding of social media algorithms and viral trends.
R4	Academic (Fashion & Textile Design Lecturer)	15	Teaches courses on fashion history, trend theory, and textile innovation. Conducts research on the impact of digital technology on fashion and consumer behavior.
R5	Youth Culture Analyst (Digital Focus)	7	Analyzes cultural trends, behaviors, and preferences of the younger generation on digital platforms, including gaming and social media. Provides insights into subculture phenomena.
R6	Academic (Computer Science/Game Development Professor)	9	Specializes in interactive game development and studies user behavior in digital environments. Monitors trends in user-generated content.
R7	Indie Boutique Owner/Concept	10	Curates unique collections for boutiques targeting niche markets. Has direct insight from customer interactions and avant-garde style preferences.
R8	Content Creator / Fashion Influencer (Y2K Niche)	4	Has a large social media account focused on Y2K style. Interacts directly with audiences who love this style and creates Y2K outfit content.
R9	Indie Game Developer / Education)	5	Creates games focused on creativity and self-expression, including dress-up or style simulation games. Has technical understanding of Scratch.

3.1 Shift in Trend Identification: The Dominance of Social Media and the Prospects of Gaming as Indicators

Our respondents consistently highlighted the dominant role of social media, particularly TikTok and Instagram, as the primary source for identifying emerging Y2K fashion trends (Q1). They explained how these platforms facilitate the rapid spread of trends through visual content and user interaction, and serve as the main source of information for deciding on new collections (Q4). For example, a Social Media & Content Manager stated, “We directly monitor what's trending on TikTok, looking at challenges and hashtags relevant to Y2K (Brown et al., 2024). This is our primary source for deciding what to sell.” This statement underscores the paradigm shift in trend forecasting toward the use of real-time data from social media platforms, a phenomenon widely discussed in contemporary digital marketing studies.

Furthermore, our interviews revealed recognition of the potential of user-generated game platforms (such as Scratch) as an underutilized source of aesthetic trend information (Q3). While some practitioners have not yet directly integrated them, their perspectives on these games are beginning to open up, with some respondents noting correlations, albeit indirect (Q6). An academic (Fashion Design Lecturer) stated, “User-generated game environments like Scratch reflect the collective creativity and visual preferences of their users. If there is an accumulation of Y2K-themed game projects, this indicates significant aesthetic resonance among that user demographic. This could serve as a leading indicator.” This assessment aligns with research identifying user-generated content (UGC) as an incubator for subcultural trends that can then spread to the broader fashion realm.

3.2 The Challenge of Speed Trends and Opportunities for Adaptive Responses Through Non-Conventional Data

Respondents generally agree that the speed at which fashion trends move, influenced by social media, is the biggest challenge for the industry (Q2). Short trend cycles demand quick responses from designers and retailers, and make it difficult to gauge consumer interest before large-scale production (Q5). A Fashion Designer stated, “Trends emerge and disappear so quickly on social media. This complicates production planning and increases the risk of inventory buildup.” This statement underscores the impact of fast-paced trend dynamics on supply chain efficiency and business profitability, a central issue in fashion management studies. In this context, leveraging non-traditional data sources like the Scratch game offers opportunities to enhance responsiveness and fill forecasting gaps (Q9). Respondents acknowledged that this platform can provide early insights to help reduce risks (Q6).

A Youth Culture Analyst commented, “Perhaps such games could help us ‘peek’ into Gen Z's preferences earlier, before they emerge en masse on Instagram. That would be invaluable for collection planning.” This perspective aligns with discussions in the literature supporting the exploration of alternative data sources for more proactive and adaptive trend forecasting, rather than merely reacting to established trends.

3.3 Conceptualization of Digital-Fashion Relationships and Potential Analysis Methods

Respondents also conceptualized the relationship between digital culture, especially UGC on gaming platforms, and the evolution of fashion trends (Q7). They saw gaming platforms as spaces where aesthetic preferences are collectively experimented with and validated. An academic (Computer Science/Game Development Lecturer) explained, “Digital culture is an arena for experimentation. UGC, including in games, reflects aesthetic preferences that are being ‘tested’ by the community.” This perspective reinforces the role of immersive and interactive digital environments as incubators for subcultural trends.

Regarding analytical methods, respondents recommended a combination of approaches to identify aesthetic patterns in visual content on gaming platforms (Q8). They suggested the need for analysis that combines visual methods with contextual understanding. “Automated visual content analysis can be helpful, but for nuance and contextual interpretation, thematic analysis from manual observation and interviews with game creators will be richer,” suggested an academic (Fashion Design Lecturer). This supports the use of mixed methodologies in digital culture studies, combining large-scale data analysis with in-depth qualitative insights for comprehensive understanding.

3.4 Strategic Implications for Fashion Stores in Creating Y2K Collections

Our findings indicate significant strategic implications for fashion retailers looking to leverage Scratch games to shape Y2K-style collections. Insights from this platform can facilitate the identification of desirable design elements and more relevant collection planning (Q4, Q5). An indie game developer suggests, “If a Scratch game about Y2K dress-up becomes very popular, with many specific outfit combinations created by players, it's a strong signal about what the young audience prefers. Fashion stores can analyze these patterns for design inspiration or even marketing campaigns.” This highlights the potential of user-generated games as interactive mood boards or collective fashion concept testing platforms, an area that remains under-researched compared to traditional market research focused on surveys or focus

groups. By integrating Scratch game content monitoring, fashion stores can gain a deeper understanding of the evolving Y2K aesthetic preferences among young consumer segments. This approach enables the development of more unique, relevant, and responsive collections to the fast-paced dynamics of digital trends, providing a competitive edge in the ever-changing fashion market.

4. Conclusion

This study successfully revealed the significant role of user-generated gaming platforms such as Scratch as a source of insight into Y2K fashion trends that have not been optimally utilized. We identified that while social media remains the primary force in trend forecasting, Scratch games organically reflect and have the potential to shape Y2K aesthetic preferences among younger audiences. The rapid pace of social media-influenced fashion trends poses significant challenges for the industry, but data from games offers opportunities for more proactive and adaptive responses. These findings suggest that fashion retailers can strategically leverage content analysis and activity within Scratch games to identify popular Y2K design elements and create more relevant and unique collections. This study enriches the literature on digital trend forecasting and the role of participatory culture in fashion, paving the way for further research on integrating gaming platforms as market intelligence tools.

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Conflict of Interest

The authors declare no conflict of interest.

References

- Brown, M. G., Carah, N., Tan, X. Y., Angus, D., & Burgess, J. (2024). Finding the future in digitally mediated ruin: #nostalgiacores and the algorithmic culture of digital platforms. *Convergence*, 30(5), 1710-1731. <https://doi.org/10.1177/13548565241270669>
- Codreanu, A. (2024). Exploring the Impact of User-Generated Content (UGC) on Consumer Behavior in Digital Platforms: A Survey-Based Analysis.
- Crewe, L. (2013). When virtual and material worlds collide: Democratic fashion in the digital age. *Environment and Planning A*, 45(4), 760-780. <https://doi.org/10.1068/a4546>
- Dornekott, D. (2023). User-generated content in marketing research: methods and applications. <https://doi.org/10.48693/229>
- Dúo-Terrón, P. (2023). Analysis of scratch software in scientific production for 20 years: programming in education to develop computational thinking and steam disciplines. *Education Sciences*, 13(4), 404. <https://doi.org/10.3390/educsci13040404>
- Ghurab, S., & Ng, R. (2025). Fostering Meaningful Interactions Through User-Generated Content: Reshaping How Fashion Brands Interact with Consumers. In *Sustainable Digital Marketing for Fashion and Luxury Brands: Theory and Practice* (pp. 79-100). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-82467-8_4
- Kim, S. J. (2024). Generative artificial intelligence in collaborative ideation: Educational insight from fashion students. *Ieee Access*, 12, 49261-49274. <https://doi.org/10.1109/ACCESS.2024.3382194>,
- Mason, H., Mattin, D., Luthy, M., & Dumitrescu, D. (2015). Trend-driven innovation: Beat accelerating customer expectations. John Wiley & Sons.
- Miller, L. S. (2022). Seeing Beyond the Price. An Empirical Study Evaluating Experiential Marketing Factors in UK Value-based Fashion Retailers (Doctoral dissertation, University of Derby (United Kingdom)). <https://doi.org/10.48773/q7qv1>
- Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International journal of qualitative methods*, 22, 16094069231205789. <https://doi.org/10.1177/16094069231205789>
- Pratiwi, A. A., Harahap, F. R., & Darmawan, B. (2026). Thrifting online sebagai tren fashion anak muda di media sosial TikTok. *Jurnal Penelitian Ilmiah Multidisipliner*, 2(03), 918-928. <https://ojs.ruangpublikasi.com/index.php/jpim/article/view/969>

Ramly, S. N. F., Ahmad, N. J., & Said, H. M. (2022). The development of innovation and chemical entrepreneurship module for pre-university students: An analysis phase of ADDIE model. *Journal of Natural Science and Integration*, 5(1), 96-116. <http://dx.doi.org/10.24014/jnsi.v4i2.11445>

Quinn, B. (2025). *Fashion in the Metaverse: Designs and Technologies Shaping the Future*. Hachette UK.

Su, L. (2025). *Digital Game Design in Remediating the Aesthetic Experience of Museum Artworks* (Doctoral dissertation, UCL (University College London)).

Weng, X., Ng, O. L., Cui, Z., & Leung, S. (2023). Creativity development with problem-based digital making and block-based programming for science, technology, engineering, arts, and mathematics learning in middle school contexts. *Journal of Educational Computing Research*, 61(2), 304-328. <https://doi.org/10.1177/07356331221115661>.