

FASHION DESIGN CREATIVITY IN THE DIGITAL ERA: THE INFLUENCE OF AI ON PINTEREST, DESIGN APPS, AND K-POP TRENDS

Sriwahyunningsi Hama^{1a*}, Nurul Hidayati^{2b}, Muhammad Aris Ichwanto^{3c}, Marsono^{4d}, Inas Amatullah^{5e}

¹ Vocational Education , School Postgraduate Program , State University of Malang, Jl. Semarang 5, Malang, East Java, 65145, Indonesia

^{2,3,4,5} State University of Malang, Jl. Semarang 5, Malang, East Java, 65145, Indonesia

^a E-mail : sriwahyunningsi.hamar.2405518@students.um.ac.id

^b Email : nurul.hidayati.ft@um.ac.id

^c Email : muh.aris.ichwanto.ft@um.ac.id

^d Email : marsono.ft@um.ac.id

^e Email : inas.amatullah.2405518@students.um.ac.id

(*) Corresponding Author

sriwahyunningsi.hamar.2405518@students.um.ac.id

ARTICLE HISTORY

Received : 20-05-2026

Revised : 07-06-2026

Accepted : 30-06-2026

KEYWORDS

AI Pinterest;
app design;
K-pop trends;
Creativity;
design fashion;

ABSTRACT

Study This aim For analyze influence Pinterest AI usage , app digital design , and K-pop trends towards creativity design fashion Vocational high school students majoring in Fashion Design. Research use approach quantitative with method survey correlational , involving 232 students from three different vocational schools . Data analyzed use *Structural Equation Modeling* (SEM) via device AMOS software . Research results show that Pinterest's use of AI has influence significant to use application digital design and in direct increase creativity design fashion students . Application digital design is also proven give contribution positive to creativity student in designing fashion . Although K-pop trend is not show influence significant direct to creativity , but own potential influence No direct through improvement Pinterest AI usage and apps design . findings This indicates that integration digital technology and culture popular can be an effective strategy in increase competence creative students in the field design fashion . Research This give implications important for development curriculum and learning strategies that are oriented towards needs digital fashion industry .

This is an open access article under the CC-BY-SA license .



INTRODUCTION

The digital era has bring Fundamental changes in various aspect life , including fashion industry . Transformation This no only impact on the production and distribution process clothing , but also in a significant influence the creative process in design fashion . According to Awaliyah et al. (2025) and Julianto (2023), that access to global information , progress technology design , as well as influence culture popular has create room new for designers For innovate , make creativity as aspect main in face increasingly market dynamics competitive .

One of the most obvious manifestation from the digital era in realm design fashion is the emergence of visual platforms like Pinterest. With support algorithm intelligence artificial intelligence (AI), Pinterest provides very extensive

and personalized visual references based on activity users , such as search , storage pictures and boards inspiration that is followed . This is allows designer For get various new ideas that are relevant and *up-to-date* with global trends (Fatmawati et al., 2023; Lee & Suh, 2024). A study conducted by Pandansari et al. (2024) shows that Pinterest users as a learning medium design fashion in a way significant can increase skills as well as develop students' visual creativity .

Besides being an inspirational platform like Pinterest, apps digital design such as Adobe Illustrator, CorelDRAW, and Ibis Paint X also revolutionize method designer pouring out ideas. Application This allows designer do exploration shape , color , and texture digitally with efficiency high . Ability For see preview design virtually push the emergence of newer ideas free and innovative (Karina, 2025; Purwanto, 2024). In the world of education vocational , especially in schools Intermediate Vocational (SMK) majoring in Fashion Design, use of application as Ibis Paint X proves can increase skills technical and imaginative student in the learning process design (Br Tarigan et al., 2024).

The rise culture popular like Korean Pop (K-pop) trends also have influence big to development design fashion . K-pop idols' fashion styles are expressive and full of color has become many global *trendsetters* adopted by designers in various countries, including Indonesia. Visual elements of K-pop such as piece asymmetrical , combination color striking , as well as accessories eccentric become source inspiration important in creation design modern fashion (Julianto , 2023). Research conducted by Winata et al. (2023) shows that that K-pop trends in general real influence preference teenage *fashion* in Indonesia, which is shifting from style traditional to a more modern and unique style .

Vocational high school students majoring in Fashion Design in education vocational , is candidate power Work active that will face challenge fashion industry in the digital era. Therefore that 's important for student For control technology design , understanding the inspirational platform like Pinterest, as well as capable adapt trend culture popular to in work design they . Combination between mastery technology and sensitivity to trend culture can become an important role model For increase creativity design relevant and competitive fashion .

Based on background behind said , research This aim For study the influence of AI Pinterest, the application digital design , and K-pop trends towards creativity design fashion Vocational high school students majoring in Fashion Design. Through study this , it is hoped can obtained valuable insights for educator , developer curriculum and students in utilise technology as well as culture popular as a strategy for increase Power competition in the fashion industry continues develop .

METHOD

Research methods

Study This use method quantitative with approach survey correlational research correlational is research that aims For study to what extent does the variation in something factor related with variations within One or a number of other factors based on the coefficient correlation (Rukminingsih et al., 2022). Approach This used For measure connection between variables free that is The Use of AI Pinterest (X1), Digital Design Applications (X2), and K-pop Trends (X3), towards variables bound that is Fashion Design Creativity (Y).

Population and Sample

Population in study This is Vocational high school students majoring in Fashion Design. Samples were taken in a way random with purposive sampling technique . Sample in the research This is SMKN 3 Probolinggo , SMK Cendika Kepanjen Nation , and Campalagian State Vocational School . Criteria respondents in study This namely students who have experience using Pinterest, the application digital design , and/ or follow K-pop trends . Total respondents in the study This is 232 respondents .

Instrument Study

Instrument main used in questionnaire based scale linkert with 4 levels choice answer , start from very to very agree to strongly agree . In this study researchers No provide choice answer Neutral (N) with reason For avoid subject choose insufficient answers Certain or doubt, which can cause the data obtained become not enough informative (Azwar, 2015 quoted by Adnan, 2022).

Table 1, Grid Questionnaire Pinterest AI Understanding

Variables	Indicator	Question Items	Source
Insights (X1)	Ability Use Pinterest AI Algorithm	1, 2, 3	Fatmawati et al. (2023)

Election The Right Inspiration	4, 5, 6	Fatmawati et al. (2023)
Creativity in Adapting Inspiration	7, 8, 9	Fatmawati et al. (2023)

Table 2, Grid Questionnaire Mastery Design Application

Variables	Indicator	Question Items	Source
Mastery Design Application (X2)	Skills in Use feature Design Application	1, 2, 3	Xu (2022)
	Ability Visualizing Ideas	4, 5, 6	Satrinia et al. (2023)
	Efficiency and Technique	7, 8, 9	Satrinia et al. (2023)

Table 3, Grid K-pop Fashion Trends Questionnaire

Variables	Indicator	Question Items	Source
K-pop Fashion Trends (X3)	Understanding About K-pop Fashion Trends	1, 2, 3	Lestari (2014)
	Creativity in Adapting K-pop Trends	4, 5, 6	Sakina et al. (2022)
	Compliance with the Latest Trends	7, 8, 9	Princess and Ratih (2020)

Table 4, Grid Questionnaire Fashion Design Creativity

Variables	Indicator	Question Items	Source
Fashion Design Creativity (Y)	Design Originality	1, 2, 3	Satrinia et al. (2023)
	Aesthetics and Color Harmony	4, 5, 6	Satrinia et al. (2023)
	Functions and Uses	7, 8, 9	Novita et al. (2024)
	Cultivation Techniques	10, 11, 12	Listiani et al. (2024)

Data Analysis Techniques

Data collected Then analyzed use *Structural Equation Modeling* (SEM) with help device soft statistics like AMOS. SEM is used For test connection causal between The variables involved are Pinterest AI, Digital Design Applications , K-pop Trends, and Fashion Creativity .

RESULTS AND DISCUSSION

Study This aim For analyze influence a number of factor to creativity design Fashion (KDB) of SMK students majoring in Fashion Design. The factors studied were in study This includes K-pop Fashion Trends (TFK), utilization of Pinterest AI application (PAP), and utilization application design clothing (PAD). Based on analysis conducted use method *Structural Equation Modeling* (SEM), found that third variables This own influence significant towards students'

KDB , with order influence as following : K-pop *Fashion Trends* (TFK) provides the biggest influence , followed by the AI application Pinterest (PAP), and the application design fashion (PAD).

Table 5, SEM Path Analysis Results

Path of Influence	Estimate Standard (β)	Significance (p)	Information
TFK $\rightarrow$ KDB	0.620	0,000	Significant
PAP $\rightarrow$ KDB	0.346	0,000	Significant
PAD $\rightarrow$ KDB	0.145	0.033	Significant

Analysis results show that K-pop Fashion Trends (TFK) has the biggest influence to creativity design fashion students , with estimate influence of $\beta = 0.620$ and significance $p = 0.000$. Furthermore , the utilization of Pinterest AI app (PAP) is proven own significant influence to creativity design student clothing (KDB) with estimate influence $\beta = 0.346$ and significance $p = 0.000$. Application design fashion (PAD) is also proven own influence significant to creativity design fashion student with estimate influence $\beta = 0.145$ and significance $p = 0.033$.

The impact of Pinterest AI on Fashion Design Creativity

Utilization Pinterest AI app (PAP) is proven own significant influence to creativity design student clothing (KDB) with estimate influence $\beta = 0.346$ and significance $p = 0.000$. Application like Pinterest, which serves various visual references and inspiration design , allows student For find new ideas that can enrich the creative process they . Through Pinterest, students can access thousands images , *mood boards* , and collages functional clothing as reference in the design process they .

One of factor main influencing factors creativity design fashion is ability For see and absorb various type visual reference . Pinterest works as a platform that enables student For expand horizon design they , inspire they For think outside the box limitation traditional in make design fashion . This is in line with study Saputri et al. (2025), that Pinterest social media usage is influential to the manufacturing process picture collage fashion women in learning practice design fashion at State Vocational School 4 Yogyakarta.

research (2023) shows that utilization Pinterest app by students class XI of SMK Negeri 4 Yogyakarta is influential significant to creativity design fashion , with contribution by 14.7%, although level utilization and creativity student classified as enough , the use of Pinterest is proven increase creativity design fashion party woman students . Research results Mutiarani and Triyanto (2022), show that use influential social media app Pinterest to creativity designing fashion party woman Syubbanul Vocational School students Wathon .

The Influence of Design Applications on Fashion Design Creativity

Application design fashion (PAD) is also proven own influence significant to creativity design fashion student with estimate influence $\beta = 0.145$ and significance $p = 0.033$. Mastery application design digital fashion , such as Ibis PaintAdobe Illustrator or CorelDRAW, provide student freedom For express their ideas in form more design structured and professional . With skills technical skills obtained through use application design , students can more freely in processing creative ideas become results more works mature and detailed .

In addition , the application digital design also offers convenience for student in correcting and perfecting design they with fast . This is different with manual approach that requires student For make sketch physical that requires time longer and more manual skills high . Use application design give profit in the form of convenience access , flexibility , and capability For produce design with precision high , which allows student For explore various variation design with more effective .

Study This support findings from Widiyaswari (2025) which shows that use Ibis Paint X application by students Class XI of State Vocational School 1 Sewon influential significant to creativity design fashion , with 61.1% of students use it and 72.8% have creativity tinggserta a application This give contribution by 31.2% in increase creativity student in design fashion . In line with that , research conducted by Vebryanti and Sulistiami . (2025), shows that use influential Sketchbook app positive and significant to improvement interest as well as motivation Study students . According to Asmayanti et al. (2020), utilization application digital design support experiment more creative wide without limitations of physical materials . This is would be very helpful in the learning process design , especially in institutions education

vocational such as vocational schools majoring in Fashion Design. This digital application also encourages student For develop skills technical skills needed in modern industry .

The Influence of K-pop Trends on Fashion Design Creativity

Analysis results show that K-pop *Fashion Trends (TFK)* has the biggest influence to creativity design fashion students , with estimate influence of $\beta = 0.620$ and significance $p = 0.000$. This influence show that factor external , namely growing global fashion trends through K-pop phenomenon , has significant impact to method student designing fashion . The K-pop trend, popularized by Korean pop culture , has penetrate to various aspect life , including in the world of *fashion* . This is seen It is clear that vocational school students are very influenced by the style emerging fashion from the world of entertainment , such as clothes worn by K-pop idols. K-pop doesn't only influence to visually aesthetic , but also functional as source inspiration creative through popularity , stage visuals , and idol image . (Alghamdi & Tawfiq, 2021) in his research mention that Song Mino 's song "Aurora" was used as inspiration design fashion and proven capable increase fluency of ideas, flexibility , and originality in work . Fashion experts judge that inspired design from K-pop elements tend to own high visual power and relevance strong culture .

Phenomenon This can interpreted that K-pop trends give inspiration to student For try various element design previous fashion No they consider . They feel pushed For experiment with various style , color , and cut trendy fashion trend among K-pop fans . Based on findings research conducted by Muhaditia et al. (2022) that trend Korean *fashion* influence significant to creativity design fashion Indonesian teenagers , because style fashion the reflecting one's identity and providing opportunity For exploration color bright as well as interesting model variations . Masada (2022) in study explain that K-pop influences perception Indonesian society towards music , *fashion* , and culture popular others , and push creativity and innovation generation young in combine culture local with K-pop inspiration .

CONCLUSION

Based on results study can concluded that Pinterest AI usage , app design , and K-pop trends in general significant influential to creativity design fashion students . Pinterest AI is proven capable increase creativity through provision rich and relevant visual references , so that push student more active explore ideas and utilize application digital design in the design process fashion . In addition , the ability technical student in use application design also provides contribution positive to improvement creativity , because mastery digital tools make things easier visualization and development of design ideas . On the other hand , the K-pop trend shows the strongest influence to creativity design fashion , which indicates that phenomenon culture popular play a role big as source inspiration aesthetics and style for students . In overall , AI- based visual media integration , mastery application design and utilization trend culture popular can be an effective strategy in increase creativity design fashion in context learning .

REFERENCES

- Adnan, E. M. (2022). *Pengaruh Empathy, Role Model, dan Variabel Demografi Terhadap Altruism Santri Remaja yang Dimediasi Oleh Gratitude*. Universitas Islam Negeri Syarif Hidayatullah Jakarta.
- Alghamdi, R., & Tawfiq, W. (2021). The K-pop icon: Song Mino as an Audio Inspiration in Fashion Design. *International Design Journal*, 11(6), 287–298. <https://doi.org/10.21608/idx.2021.205105>
- Apsa Pandu Winata, Ady Bagoes Jagat Satria Vandea, & Andhita Risiko Faristiana. (2023). Pengaruh Kebudayaan K-Pop Terhadap Mode Pakaian Remaja Di Ponorogo. *Harmoni: Jurnal Ilmu Komunikasi Dan Sosial*, 1(1), 59–72. <https://doi.org/10.59581/harmoni-widyakarya.v1i1.486>
- Asmayanti, A., Mukhirah, M., & Fadhillah, F. (2020). Aplikasi desain digital dalam dunia fashion. *Jurnal Ilmiah Mahasiswa Pendidikan Kesejahteraan Keluarga*, 5(1), 61–72. <https://doi.org/http://www.jim.unsyiah.ac.id/pkk/issue/view/581>
- Awaliyah, W. A., Dadang, D., & Jumiaty, E. (2025). Pemetaan Pengetahuan dan Tren Penelitian Pendidikan Inklusif di Era Digital: Analisis Bibliometrik 2014-2024. *Jurnal Kewirausahaan Bukit Pengharapan*, 4(2), 73–83. <https://doi.org/10.61696/juwira.v4i2.653>
- Br Tarigan, O. T., Sari, P. W., & Ampera, D. (2024). Utilization of the Ibis Paint X Application in Fashion Design Learning for Class XI of Imelda Tourism Vocational School, Medan. *Edu Cendikia: Jurnal Ilmiah Kependidikan*, 4(03), 1033–1041. <https://doi.org/10.47709/educendikia.v4i03.4927>

- Fatmawati, F. E. ., Russanti, I. ., Arifiana, D. ., & Yuniati, M. (2023). Pengaruh Penggunaan Aplikasi Pinterest terhadap Kreativitas Mendesain Busana Pesta Kelas XI Busana 3 SMK Negeri 8 Surabaya. *Jurnal Review Pendidikan Dan Pengajaran*, 6(4), 2122–2130. <https://doi.org/https://doi.org/10.31004/jrpp.v6i4.21175>
- Julianto. (2023). Analisis Digital Fashion Dalam Perspektif Teknologi, Sistem Informasi, Dan Bisnis. *Adopsi Teknologi Dan Sistem Informasi (ATASI)*, 2(1), 71–78. <https://doi.org/10.30872/atasi.v2i1.726>
- Karina. (2025). *Manfaat era digital dalam dunia fashion di Indonesia* [Telkom University]. <https://doi.org/https://sci.telkomuniversity.ac.id/manfaat-era-digital-dalam-dunia-fashion-di-indonesia/>
- Lee, N., & Suh, S. (2024). How Does Digital Technology Inspire Global Fashion Design Trends? Big Data Analysis on Design Elements. *Applied Sciences*, 14(13), 5693. <https://doi.org/10.3390/app14135693>
- Masada, D. G. (2022). Cultural Fusion: The Impact of K-Pop on the Indonesian Perspectives and Identities. *Sentris*, 5(1), 34–44. <https://doi.org/https://doi.org/10.26593/sentris.v5i1.7633.34-44>
- Muhaditia, P., Narawati, P. C., & Lisnawaty, R. Y. (2022). Pengaruh Korean Waves terhadap fashion remaja Indonesia. *Nusantara: Jurnal Pendidikan, Seni, Sains Dan Sosial Humanioral*, 1(1), 138–153. [https://doi.org/Muhaditia, P., Narawati, P. C., & Lisnawaty, R. Y. \(2022\). Pengaruh Korean Waves terhadap fashion remaja Indonesia. Nusantara: Jurnal Pendidikan, Seni, Sains dan Sosial Humanioral, 1\(1\), 138-153. https://doi.org/10.11111/nusantara.xxxxxxx](https://doi.org/Muhaditia, P., Narawati, P. C., & Lisnawaty, R. Y. (2022). Pengaruh Korean Waves terhadap fashion remaja Indonesia. Nusantara: Jurnal Pendidikan, Seni, Sains dan Sosial Humanioral, 1(1), 138-153. https://doi.org/10.11111/nusantara.xxxxxxx)
- Mutiarani, W. A., & Triyanto, T. (2022). Pengaruh aplikasi media sosial Pinterest terhadap kreativitas mendesain busana pesta wanita siswa SMK Syubbanul Wathon. *Teknik Busana*, 11(3). <https://doi.org/https://doi.org/10.21831/teknikbusana.v11i3.19564>
- Pandansari, P., Purwanti, R., Kustiyono, K., Jalil, A., & Lathifah, L. (2024). Penggunaan Pinterest sebagai Media Desain Busana untuk Meningkatkan Pembelajaran Mahasiswa Desain Fashion. *SINERGI : Jurnal Riset Ilmiah*, 1(7), 506–510. <https://doi.org/10.62335/shpvd358>
- Purwanto, L. M. F. (2024). Transformasi Digital dalam Arsitektur: Perpaduan Inovasi Teknologi dan Kreativitas Desain. *JoDA Journal of Digital Architecture*, 4(1), 1–2. <https://doi.org/10.24167/joda.v4i1.12779>
- Rukminingsih, Adnan, G., & Latief, M. A. (2022). Metode Penelitian Pendidikan: Penelitian Kuantitatif, Penelitian Kualitatif, Penelitian Tindakan Kelas. *Journal of Chemical Information and Modeling*, 53(9).
- Saputri, N., Karyaningsih, E. W., & Inayah, D. T. (2025). Pengaruh Penggunaan Media Sosial Pinterest terhadap Proses Pembuatan Gambar Kolase Busana Wanita. *Prosiding Pendidikan Teknik Boga Busana*, 19(1). <https://doi.org/https://journal.uny.ac.id/index.php/ptbb/article/view/83310>
- Vebryanti, P. A. ., & Sulistiami. (2025). Pengaruh Penggunaan Aplikasi Sketchbook Terhadap Minat dan Motivasi Belajar Desain Busana Wanita pada Siswa SMK Dharma Wanita Gresik. *JIMU: Jurnal Ilmiah Multidisipliner*, 3(04). <https://doi.org/https://ojs.smkmerahputih.com/index.php/jimu/article/view/1171>
- Widiyaswari, S. A. (2025). *Pengaruh Penggunaan Aplikasi Ibis Paint X terhadap Kreativitas Siswa pada Mata Pelajaran Desain Busana Kelas Xi Sekolah Menengah Kejuruan Negeri 1 Sewon Bantul Yogyakarta Tahun Pelajaran 2022/2023*. Universitas Sarjanawiyata Tamansiswa.
- Wulandari, S. W. (2023). *Pengaruh Pemanfaatan Media Aplikasi Pinterest terhadap Kreativitas Mendesain Busana Pesta Wanita Kelas XI Tata Busana Sekolah Menengah Kejuruan Negeri 4 Yogyakarta Tahun Pelajaran 2022/2023*. Universitas Sarjanawiyata Tamansiswa.