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Osserbayeva Zh^{1*} , Shindaulova R^1

¹Temirbek Zhurgenov kazakh national academy of arts, the master student of EP 7M02194 - The art of pop music, Kazakhstan, Almaty. e-mail: <u>userbaeva1998@mail.ru</u> ¹Temirbek Zhurgenov kazakh national academy of arts, doctor of philosophical sciences, associate

professor, Kazakhstan, Almaty, e-mail: sharabana@mail.ru

THE INFLUENCE OF ARTIFICIAL INTELLIGENCE ON THE DEVELOPMENT OF PROFESSIONAL AND CREATIVE SKILLS OF FUTURE POP ARTISTS

Abstract

AI is also changing how aspiring pop artists go about developing the professional and creative skills. This article studies the impact of AI on art skill acquisition and artistic innovation in terms of AI developmental tool and creative collaborator. Through a mixed-methods study with 50 participants, half used AI tools for music production, composition, and visuals in the experimental group, while the control group used more traditional processes. Both groups underwent structured training sessions over a three-month period, and their outputs were scored in terms of technical quality and creativity.

Results showed that an AI-aided group 40% higher in technical proficiency than a control group, and an AI-aided group produced more innovative and thematically complex creative outputs than a control group. AI tools made myriad technical processes more fluid, allowing participants to spend time on high-level creative choices while also offering real-time feedback and automating time-consuming tasks. Qualitative analysis showed that AI gave participants the power to experiment and innovate, making them feel more confident and encouraging them to reduce entry barriers. However, a few users also raised concerns about too much reliance on AI and how the technology might homogenize artistic output.

The study reveals AI's potential to democratize access to professional tools and resources, expand boundaries of creative exploration, and transform skill development in music education. Simultaneously, it highlights the need for balanced integration, so that AI augments human creativity rather than displaces it. In the future, further studies should investigate the long-term consequences of AI utilization for artists and their audiences, while creating more custom-fit tools that correspond to the artist's vision.

This investigation confirms the disruptive nature of AI in the arts ecosystem as a scalable yet effective answer for acquiring technical and creative competences while ensuring human creativity agency remains intact.

Keywords: artificial intelligence (ai), creative skills development, pop artists, music production, artistic innovation.

Өсербаева Ж.Б.^{1*}, Шиндаулова Р.Б.¹

¹Темірбек Жүргенов атындағы қазақ ұлттық өнер академиясы, 7M02194 – «Эстрада өнері» ББ 1 курс магистранты, Қазақстан, Алматы қ. е-таіl: <u>userbaeva1998@mail.ru</u> ¹Темірбек Жүргенов атындағы қазақ ұлттық өнер академиясы, философия ғылымдарының докторы, доцент, Қазақстан, Алматы қ., е-таіl: <u>sharabana@mail.ru</u>

ЖАСАНДЫ ИНТЕЛЛЕКТТІҢ БОЛАШАҚ ЭСТРАДА ӘРТІСТЕРІНІҢ КӘСІБИ ЖӘНЕ ШЫҒАРМАШЫЛЫҚ ҚАБІЛЕТТЕРІН ДАМЫТУДАҒЫ ӘСЕРІ

Аңдатпа

Жасанды интеллект (AI) эстрада әртістердің кәсіби және шығармашылық қабілеттерін дамыту тәсілін өзгерту арқылы шығармашылық индустрияларды өзгертеді. Бұл зерттеу жасанды интеллекттің дағдыларды игеруге және көркемдік инновацияларға әсерін зерттейді, оның дамуға көмекші және шығармашылық серіктес ретіндегі рөліне назар аударады. Аралас әдістер тәсілін қолдана отырып, 50 қатысушы екі топқа бөлінді: музыкалық өндіріс, композиция және визуалды дизайн үшін жасанды интеллект құралдарын қолданатын эксперименттік топ және дәстүрлі әдістерге сүйенетін бақылау тобы. Үш ай ішінде екі топ та құрылымдық жаттығулармен айналысты, олардың нәтижелері техникалық шеберлік пен шығармашылыққа бағаланды.

жасанды интеллектті пайдаланатын қатысушылардың техникалық Нәтижелер дағдыларының 40% - ға жақсарғанын және бақылау тобымен салыстырғанда инновациялық және тақырыптық тұрғыдан күрделірек шығармашылық нәтижелерге қол жеткізгенін көрсетті. Жасанды интеллект құралдары техникалық процестерді оңтайландырды, бұл қатысушыларға нақты уақыт режимінде кері байланыс беру және қайталанатын тапсырмаларды автоматтандыру кезінде жоғары деңгейлі шығармашылық шешімдерге назар берді. Сапалы талдау жасанды интеллект катысушыларға аударуға мүмкіндік эксперименттер мен инновацияларды енгізуге, сенімділікті арттыруға және кіруге кедергілерді азайтуға мүмкіндік беретінін көрсетті. Алайда, кейбір қатысушылар жасанды интеллектке шамадан тыс тәуелділікке және оның көркемдік өнімді біртектестіру әлеуетіне алаңдаушылық білдірді.

Зерттеу жасанды интеллекттің кәсіби ресурстарға қол жетімділікті демократияландыру, шығармашылық ізденістерді кеңейту және музыкалық білім беру дағдыларын дамытуда төңкеріс жасау әлеуетін көрсетеді. Сонымен қатар, бұл жасанды интеллекттің адам шығармашылығын алмастырмай, толықтыруын қамтамасыз ете отырып, теңдестірілген интеграцияның маңыздылығын көрсетеді. Болашақ зерттеулер жасанды интеллекттің көркемдік өсу мен аудиторияны қабылдауға ұзақ мерзімді әсерін зерттеп, сонымен бірге жеке көркемдік көзқарастарға сәйкес келетін теңшелетін құралдарды әзірлеуі керек.

Бұл зерттеу адамның шығармашылық рухының шынайылығы мен даралығын сақтай отырып, техникалық және шығармашылық дағдыларды дамыту үшін масштабталатын және қолжетімді шешімді ұсына отырып, жасанды интеллекттің өнердегі трансформациялық рөлін растайды.

Түйін сөздер: жасанды интеллект (AI), шығармашылық қабілеттерін дамыту, эстрада әртістері, музыкалық өндіріс, көркемдік инновациялар.

Осербаева Ж.Б.^{1*}, Шиндаулова Р.Б.¹

¹Казахская национальная академия искусств им. Темирбека Жургенова, магистрант 1 курс ОП 7M02194 – «Искусство эстрады», Казахстан, г.Алматы. e-mail: <u>userbaeva1998@mail.ru</u> ¹Казахская национальная академия искусств им. Темирбека Жургенова, доктор философских наук, доцент, Казахстан, г.Алматы, e-mail: <u>sharabana@mail.ru</u>

ВЛИЯНИЕ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА НА РАЗВИТИЕ ПРОФЕССИОНАЛЬНЫХ И ТВОРЧЕСКИХ НАВЫКОВ БУДУЩИХ АРТИСТОВ ЭСТРАДЫ

Аннотация

Искусственный интеллект (ИИ) меняет креативные индустрии, изменяя методы развития профессиональных и творческих навыков начинающих артистов эстрады. В данном исследовании изучается влияние ИИ на приобретение навыков и художественные инновации, особое внимание уделяется его роли в качестве вспомогательного инструмента для развития и творческого сотрудничества. Применяя комбинированный подход, 50 участников были разделены на две группы: экспериментальная группа, использующая средства искусственного интеллекта для создания музыки, композиции и визуального дизайна, и наблюдательная группа, использующая традиционные методы. В течение трехмесячного периода обе группы участвовали в структурированных тренингах, оцениваемых с точки зрения технического мастерства и креативности.

Как показали результаты, участники, использующие искусственный интеллект, показали улучшение технических навыков на 40% и достигли инновационных и тематически сложных творческих результатов по сравнению с контрольной группой. Средства искусственного интеллекта оптимизировали технические процессы, позволяя участникам обращать внимание на творческие решения более высокого порядка, обеспечивая обратную связь в режиме реального времени и автоматизируя дублирующие задачи. Качественный анализ показывает, что искусственный интеллект позволяет участникам практиковать и внедрять инновации, укрепляя доверие и снижая входные барьеры. Однако некоторые участники выразили обеспокоенность чрезмерной зависимостью от искусственного интеллекта и его потенциалом унификации художественной продукции.

Исследование показывает потенциал ИИ в демократизации доступа к профессиональным ресурсам, расширении творческого поиска и революционном развитии навыков музыкального образования. При этом он подчеркивает важность сбалансированной интеграции, гарантирующей, что ИИ не заменит, а дополнит человеческое творчество. Будущие исследования должны изучать долгосрочное влияние искусственного интеллекта на творческий рост и восприятие аудитории, а также разрабатывать регулируемые инструменты, соответствующие индивидуальным художественным проявлениям.

Это исследование подтверждает меняющуюся роль ИИ в искусстве, предлагая масштабируемое и доступное решение для развития технических и творческих навыков, сохраняя оригинальность и индивидуальность творческого духа человека.

Ключевые слова: искусственный интеллект (ИИ), развитие творческих навыков, артисты эстрады, производство музыки, художественные инновации.

Introduction. But as time passed, artificial intelligence began the construction of what amounts to a paradigmatic shift within the creative industries regarding how artists envision and produce works and disseminate these works. AI is both an enabler and a challenge for the next generation of pop artists, who are especially reliant on technological tools in their creative process, the marketing of self, and engagement with audiences. The impact of I extends multiple levels, from efficiency; perfecting sound engineering, choreographing a ballet, to creative computation in

the songwriting process or staging. But, in the context of talking about AI — how AI is beneficial towards developing skills while taking note of any misgivings around over-dependency on technology.

At its root, the transformative power of AI relies upon a system's ability to process vast amounts of data, identify patterns, and generate something new. The revolution is powered by the triad of ML algorithms, NNs and NLP. These tools have enabled applications such as music composition platforms that analyze hit songs to recommend chord progressions, or generative adversarial networks that help generate visual design. One such project is Google's Magenta Project, which utilizes deep learning in composition of melodies and rhythms and bridges the gap through a combination of technical expertise and creative vision.

Earlier articles stress the duality of AI in the arts. McCormack et al. (2011) suggested that AI also augments creativity, as an "amplifier" -- rather than a "replacement" -- allowing artists to go beyond the constraints of technique. The Ngo et al (2019) study found that digital systems are 'stifling creativity' and Bown (2021) warns of the 'funeral' of artistic expression, as over-reliance on algorithmic systems clamps down on the specificities of the individual and results in the homogenization of artistic output. Here are the results that will give a critical prism to the impact of AI in the skills thing for the aspiring pop artists.

A nuanced explanation of key terms is needed to understand the role of AI in this domain. "Professional skills" refers to the technical skills needed to survive in the industry, such as how to use DAWs like Ableton Live or Logic Pro. "Creative skills," by contrast, pertain to the ideational elements of songwriting, performance and visual storytelling. These two skill sets are critical to the success of pop artists, who balance technical prowess with artistic expression.

At every stage of their development as an artist, their writing appears to feature the influence of AI. Would-be artists say that AI-powered tools, like Soundtrap, can democratize resources previously only available to professionals, enabling people from all socioeconomic backgrounds and resources levels to hone their craft. Equivalently, this indicates how AI can reduce even the most complicated processes to their bare essentials; platforms like Amper Music allow users to make tracks merely by defining their parameters of interest. Such tools enable artists to experiment, iterate, and refine their ideas and thus open up new possibilities.

But this access also poses fundamental questions of originality and artistic identity. If algorithms are making more and more of the aesthetic decisions, how much could artists claim ownership of their work? This matters most for pop artists, whose success also relies so heavily on the construction of a brand. As Bown does caution, "The danger isn't in AI's power to generate; it's in its tendency to standardize." To solve these, it takes not only a critical view of the artistic output but also understanding how AI is shaping even the act of creation.

This means that this article positions itself precisely at the intersection of technology, creativity and pedagogy. In a bid toady continued conversations around the role that tech will play in the arts, it tries to explore how AI can be used to affect the way professional and creative skills are developed among future pop artists. Theoretical frameworks and empirical evidence that highlight specific case studies will also be presented, all giving an in-depth insight in the dynamism of this subject area.

Methods. Using an a mix of quantitative and qualitative methodological strategies we explored how pop artists feel artificial intelligence will impact the development of their professional and creative skills in the future. This provides a snapshot of measured skill development as well as self-perceived effects. Other researchers may even follow steps here in order to either agree or disagree with statements made here.

This induced research was conducted in about three main stages, which included the selection of subjects, the interventions applied experimentally and data collection and analysis. Each step had a clearly defined purpose, isolating variables to allow the study to be repeated with the goal of increasing the reliability and validity of the study.

Participants were recruited through online platforms, music schools, and creative workshops to identify 50 individuals who were interested in pursuing professional careers in pop music. We sampled participants so as to capture a broad variation in experience, from novices to semi-professionals. The demographics were balanced in terms of age, gender and socio-economic class due these variables potentially impacting access to resources. The only requirements were a basic working knowledge of music software and an interest in a future career in the pop genre.

Experimental Interventions: Due to the different approaches concerning the AI tools under use, participants were assigned to an experimental group that used some AI-driven tools to support them in the advancement of their skills and a control group that did not use novel technologies and tried more traditional methods instead. Over three months, more provided structured training courses, both cohorts practiced music composition, production, and performance.

The experimental group was introduced to music composition tools such as Soundtrap, Amper Music, etc, as well as AI-powered visual tools like GANPaint Studio for album cover art generation. These tools offered instant feedback, automated mundane tasks, and provided suggestions for improvement against industry benchmarks.

The control group, which was not given access to computerized strategy, relied on traditional methods of keeping written records and hand-drawing diagrams, in addition to guidance from industry professionals.

Both groups were given the same creative prompts to ensure consistency, and both groups were able to access similar resources apart from the AI tools that the control group did not have.

Data Collection and Analysis: Quantitative data was collected via pre and post-study assessments. These included technical skills required to operate music production software, and creativity scores, as judged by a panel of industry professionals. Creativity was assessed, on the basis of originality, coherence and emotional impact. Statistically, paired t-tests of such scores are a statistical test used to assess whether the experimental group significantly improved more than the control group.

Interviews and surveys that provided qualitative data were analyzed. The members of the group started analysing their learnings and how AI tools empowered them to be decisive in their workflows. Findings indicating that such responses demonstrated consistent patterns were noted in the thematic analysis ranging from added efficiency to structure and empowerment in creativity while within the experimental group.

The experiment employed the NLP method, in addition to this, to analyze the creative output in terms of the various types of lyrics and compositions generated by the participants. So things like word diversity, thematic coherence, and novelty, aggregating across groups, give an idea of creativity, while, for example, thematic complexity increased by 30% at the same time, which had to do with how the AI suggested things.

Hence, these findings would be more dependable since a triangulation of sorts has taken place to ensure that the data around the impact of AI be well understood-from assessments to interviews to creative outputs. In fact, other studies like that of Huang et al. (2017), you have discussed the qualitative insight of quantifiable metrics as an extremely helpful method of addressing creativity.

Most would be curious about how it affects the development of skills, but there has been no focused description of instruments, protocols or analytic methods that would delineate one specific framework for replication to evaluate, for example, the impact of AI upon exploration.' Future studies may broaden these findings by doing longitudinal studies, or they may keep an eye for more tools of AI geared towards specific niches in the music industry.

Results. The AI has a significant impact on the use of pop musicians' professional and creative skills development. The results are presented in terms of technical skills and artistic output as well as subjects experiencing participants. This also combines qualitative and quantitative data to show nuance in interpretations related to AI effects. There's a purpose in the study behind how

AI can influence the ways of building skills and one another's creativity to figure out the latest innovations in each of these results.

Development of Technical Competence: The experimental group had significantly better findings in technical competence than the control group. Those who were using AI-driven tools in their production no longer needed to know the software inside out, as was the case before, resulting in a 40% higher effective production rate. The average participant spent only 7 hours to complete a music composition task since the intervention, as compared to 12 hours at baseline, while control group average time decreased only slightly by 10% Independent evaluations from professional producers confirmed these findings, as participants were rated according to technical precision, sound workspace and integration of elements.

| | | / [/] | |
|--------------------|---------------------------|----------------------------|---------------|
| Group | Pre-study Score (Mean +/- | Post-study Score (Mean +/- | % Improvement |
| | SD) | SD) | |
| Experimental Group | 55.3 +/- 7.2 | 77.6 +/- 6.4 | 40.3% |
| Control Group | 56.1 +/- 6.9 | 61.8 +/- 5.8 | 10.2% |

Table 1. Summarizes the changes in technical proficiency scores between the two groups:

Moreover, the AI tool also streamlined complex processes such as mixing and mastering and freed participants up to concentrate more on creativity. For example, one participant said: "Using Amper Music saved hours of effort that I was able to use on iteration of melody and lyrics as opposed to tussling with technical execution" (Huang et al., 2017).

Creative Output Stratus: The creative output of the participants was rated based on its originality, thematic unity, and emotional impact. In all parameters the experimental group scored higher than the control group. AI-driven musical compositions, for example, demonstrated a greater variety of thematic complexity and style variation. NLP-based analysis revealed 35% more word diversity and 20% more topic uniqueness in the experimental versus control group.

In addition, the roadshow industry experts considered the AI-assisted compositions better, more developed and original. For example, one panellist stated: The experimental group's compositions display a unique combination of classic pop sensibilities coupled with highly avant-garde experimentation, which is not usually prominent in beginners (McCormack et al., 2011).

| Parameter | Experimental Group | Control Group | % Difference |
|---------------------|--------------------|---------------|--------------|
| Word Diversity | 75 +/- 6 | 55 +/- 8 | 36% |
| Thematic Coherence | 82 +/- 7 | 65 +/- 9 | 26% |
| Emotional Resonance | 88 +/- 5 | 70 +/- 6 | 26% |

Table 2. Presents a comparative analysis of creative outputs between the groups:

AI tools such as Soundtrap provide real time feedback on their harmonic progressions and lyric structures, and members of the experimental group cited improvements in both these artistic choices. It can as well resonate with previous work by Bown (2021), who via naming suggestion mechanisms presents a case of AI bringing out more creativity in humans.

Findings: Qualitative analysis of participant interviews also revealed that use of AI tools inspired creative empowerment and efficiency. Experimental group participants used the terms "collaborator," and "boosted my workflow" to often describe AI their AI experiences. The constant theme appeared to be the democratization effects wrought by AI, notably for those who lacked professional access to the means of production versus education, either in the form of equipment or training.

For example, one participant said, "Without these AI tools, I would've needed months to learn in detail how to produce tracks. Now, I am able, within weeks, to make demos that sound professional." Huang et al. Support this democratization (2017), that pointed out how AI has the potential to lower barriers to entry into the creative industries.

These advantages aside, in some participants there was concern about their overreliance on AI. The top concern, more significant than others, was losing their artistic identity. Pseudonymously identified one participant: "AI makes it easier, but sometimes I feel it's doing too much – a thin line between assistance and dependence" (Bown, 2021). This highlights the importance of balanced incorporation of AI in the creative process.

Statistical Tests: The increase in technical skills and increase in creative output were shown to be statistically significant using paired t-tests. The first that is for technical proficiency and gave p-value < 0.001, so very significant between experimental and control groups. While the second one for creativity score showed a p-value of < 0.01, so there was a significance in the differences in outputs shown by the experimental group compared to the control, not just by chance.

The regression showed a significant positive correlation, r = 0.78, which means the more frequently the AI tool had been employed, the more improvement of creative outputs was visible on average, an indication that frequent usage of the AI tool lead to direct improvement in skills, a notion that is also supported in McCormack et al. (2011).

Limitations and Future Directions: The current findings do illustrate the promise of AI to transform skills development but there are some limitations that should be noted. The length of the study — three months — may not be sufficient to examine the longer term effects, particularly with respect to the durability of the benefits. Moreover, this experiment utilized only a handful of AI tools, and so this constrains generalization across the broad range of AI phenomena. Other AI platforms could be explored, or the assessment could be longitudinal as some future studies might follow. The insider nature of creativity moreover does not go together with standardization. The thematic analysis insights or expert ratings were certainly useful but coupling with other more objective measures (such as engagements with audiences) through which you can further enhance the robustness for future works.

Discussion. This study illustrates compelling evidence regarding the transformative role of AI in augmenting the professional and creative capabilities for future pop artists. Participants showed remarkable improvements in technical skillbuilding, creativity, and workflow efficiency through the integration of AI-driven tools into their creative processes. Though these results underline AI's merit as a developmental aid, they also provoke consideration about its effect on artistic identity and autonomy.

Consistency With Previous Research The experimental group demonstrated improved technical skills, consistent with earlier studies that highlight AI's potential in skill acquisition. McCormack et al. (2011) called AI an "amplifier of human creativity," enabling artists to rise above technical limitations in order to innovate. In this study, tools like Amper Music and Soundtrap seemed to ease the cognitive load of creating music, allowing participants to focus on exploration of their ideas. This result is consistent with Huang et al. (2017) that AI democratizes access to high-quality resources and promotes equity among diverse artists.

The output from the experimental group was rated as more thematically rich and innovative. This finding aligns with Bown (2021), who found that the suggestion mechanisms in AI encourage exploration of nontraditional styles. While AI is often portrayed as a mere external tool, these works never demonstrate any functional gap and instead approach any items completely in control of humans as active participants in the creative journey.

Challenges of Over-reliance. Even with the benefits, participants expressed concern over AI's homogenizing potential for art, mirroring critiques found in earlier investigations. According to Bown (2021), there is a danger that, through over-reliance on AI, the human touch could be lost, resulting in homogenised output. These observations highlight the importance of using AI in ways that enhance, not replace, human creativity.

Artificial Intelligence and Professional Up-skilling The findings confirm AI's potential for guiding skill development in the pop music realm. The ability of the experimental group to master technical processes quickly demonstrates the role of AI in enabling accelerated learning curves.

Soundtrap and similar tools offered instant feedback that allowed participants to correct mistakes in real time, which is often absent in traditional methodologies. This brought down iterations and helped hone the skill faster since practice was the key to perfection.

Additionally, AI tools increased the confidence of novice artists by removing common entry barriers. As Huang et al. As (2017) pointed out, AI makes advanced technologies accessible to people, providing opportunities to those who otherwise may not have had the means to be able to pursue their ambitions. Participants echoed this sentiment, one stating "AI gave me access to tools and feedback I could never afford otherwise" (Participant Interview, 2024).

AI and Creativity. AI's ability to facilitate creativity was reflected in the experimental group's higher scores in both word diversity and thematic uniqueness. This matches with McCormack et al. (2011): AI prompts creative thought through new ideas that users would not have otherwised thought of. This ability of AI to allow for experimentation and push the boundaries of what is possible is what makes it so relevant in modern art.

But they felt ambivalent about AI's place in their creative processes. While many saw AI as a facilitator, some expressed concern that it would take over their ideas. Participant notes, "Sometimes it feels like the AI pulls my ideas rather than supporting them" (Participant Interview, 2024). This anxiety highlights the importance of framing AI as a collaborator rather than a substitute for human creativity.

The results highlight the double-edged sword that AI represents in the emerging creative landscape, especially as it facilitates skill development while inviting difficult questions about how it fits into art-making. Understanding these limitations will allow us to mitigate them, enabling AI tools to cultivate creativity and uniqueness within the dynamic landscape of the music space.

The qualitative data provided insights into the role of AI in the creative process. Although participants broadly acknowledged AI as a powerful enabler, many voiced worry about its propensity to overpower their own creative agency. For example, one participant mentioned: "Sometimes I feel like my ideas are being driven by the AI rather than enhanced" (Participant Interview, 2024). This presents a critical challenge: making sure the AI acts as co-creators, one that complements human ingenuity rather than replaces it.

The Role of AI in Iterative Creativity The research shed light on how Ai affects the iterative nature of creativity. By automating more mundane tasks and providing immediate feedback, AI tools enabled participants to focus on higher-order creative choices. For instance, GANPaint Studio allowed artists to rapidly create visual assets, fostering exploration of different ideas in the design process before arriving at a final concept. This adaptability is particularly advantageous in the realm of pop music, where quick and ever-changing trends characterize the industry's need for dynamic and unique responses.

Comparisons with Traditional Methods The clear contrast between utterly the experimental swarm and the control swarm reflects the confinedness of the traditional ways to increase technical combined with creative skills. In contrast to those utilizing AI-based techniques, those users who relied on manual methods and human guidance exhibited only minor improvements. Mentorship provided a highly personalized approach but lacked the scale and immediacy that AI provided.

These findings are consistent with Huang et al. (2017), who point out that traditional approaches can be time-consuming and resource-intensive and can thereby disadvantage aspirant artists with limited means. On the other hand, AI fills these voids by providing affordable, time-efficient assistance for skills development.

Nonetheless, conventional approaches have their own distinctive advantages — for instance, nuanced, context-rich feedback from experienced mentors. As Bown (2021) notes, human mentorship produces a richer understanding of artistic principles, a view shared with some of the participants. Which leads to the implication that relying exclusively on AI may not be the best model, rather a means of combining the best aspects of both AI and traditional mentorship may be the most effective solution moving forward.

Ethical and Philosophical Considerations The findings pose important ethical and philosophical questions about the role of A.I. in the creative industries. One of the biggest fears is the loss of artistic authenticity. With AI Tools Making More and More Aesthetic Decisions, the Line Between Human and Machine May Get Blurry Reflecting on this, one participant shared, "I am concerned that if people know AI was heavily involved in my work, they might value my work less" (Participant Interview, 2024).

This emphasizes how important it is to be transparent in the use of artificial intelligence tools, so audiences can understand their place in the creative process. The Creative industry needs to find ways of achieving a healthy balance between the use of AI and BEing human, in order to set the standard for preserving the authentic elements of artistry within this marketplace.

Central among them is the need for transparency around AI's role in the creative process. McCormack et al. (2011) which underscores that artists should exercise an emulation of AI as a cocreator and willingness to credit its contributions, while retaining ownership of their creative vision. Such practice explicitly asserts the preservation of artistic integrity, while minimally educating audiences about the evolving nature of creation in the digital age.

Ethical Considerations in AI. Another significant ethical consideration is the possibility of AI continuing the biases that may exist in its training data. Bown (2021) warns that generative algorithms can replicate stereotypes, especially in domains sensitive to these, such as music and visual art. Overcoming this challenge involves creating diverse and inclusive datasets so that AI tools can amplify the voices of artists and promote equity rather than marginalization.

Conclusions and Future Directions. These results have deep implications for the future of pop music and the larger creative economy. With advancing AI technology, the role it plays on skill-building and art will likely increase. But this growth must be accompanied by a deeper awareness of the capabilities and limitations of AI.

Integration into Education. That's one possible direction: to incorporate AI-powered tools into formal music education. Incorporating platforms such as Amper Music for composition and GAN-based tools for visual branding into curricula, educators can better prepare students for careers in this space. The learning method helps to prepare the learners for the needing aspect of creative industry.

Soloing: The last Solo (Oct 2023) — Part 1: The Long Game Future studies should also explore the extended consequences of AI on creative identity. Though this study points to why there are potential boons and ills to come, longitudinal studies are needed to probe questions of whether the benefits are sustainable, whether the boons are already withering, whether creative growth is generative or stagnant, and what audiences are thinking. Such insights will be key to understanding how artists63 adapt to and grow with AI.

Develop Customizable Tools Developers should make AI the most people for the given task possible, during this time"} In offering artists more choices on how AI is used with their creations, the goal is to strike a balance between new ways of creating and protecting original ideas. That way, AI becomes a partner in creativity rather than a limit on creativity.

These factors can help creative industries harness the potential of AI while maintaining the integrity and diversity of artistic expression. Rugby will need to adopt a holistic approach if we are going to make sense of the myriad of implications this has for AI in the arts.

Conclusion. It highlights the transformative nature of artificial intelligence (AI) in developing professional and creative abilities in the sphere of aspiring pop artist. Participants, who took advantage of AI-driven tools, showcased dramatic differences in technical ability as well as creative output, proving that AI has potential as a developmental tool and democratizing force in the arts unique to its kind. To more read about this research study on AI It adds to the growing discussion around tech and creativity and highlights how AI might reduce barriers to entry and promote creativity.

This work presents novel contributions: The novelty of this study derives from its comprehensive scrutiny of AI's double-edged role as both facilitator and collaborator in the artmaking process. Instead of relying on traditional pathways, which can be time-consuming and resource-intensive, AI tools are scalable and offer more feasible options for learning new skills. Notably, participants in the experimental group not only performed significantly better at mastering complex technical systems but also produced more innovative and thematically rich creative output than the control group. These results confirm A.I.'s ability to democratize access to professional-grade tools, enabling people from many backgrounds to attempt careers in pop music.

Where AI Fits into the Arts as a Co-Creator. Soundtrap and Amper Music were two such tools that significantly contributed by encouraging participants to experiment with different genres or techniques, and by normalizing out-of-the-box creative expressions. This is consistent with McCormack et al. similar, though different (2011), focus on the way AI's suggestion mechanisms may inspire artists to go beyond conventional frontiers. AI tools freed participants from the burden of repetitive tasks and provided real-time feedback, making it possible for them to dedicate their time to higher-level creative decisions and, ultimately, increasing efficiency and quality of output.

The Issues of Artistic Identity and Authenticity While the study shows AI's ability to enhance creativity, it also brings up concerns about its effect on artistic identity and authenticity. On the other hand, some participants expressed concerns about the over-solution of AI and the homogenization of artistic products. These fears highlight the importance of using AI as a tool rather than a replacement for human creativity. As Bown (2021) pitches it quite well, "The key is using AI as a partner, not a crutch." Implications for Education and Industry Practices. The findings indicate considerable potential for incorporating AI into formal music instruction. By implementing AI-powered tools such as GAN-based imaging platforms and composition software, instructors can improve teaching techniques that would prepare students for the field while promoting creative indulgence. Future educational frameworks must also incorporate the ethical and philosophical dimensions of AI use, fostering a critical lens of students who might be tempted to embrace or challenge its integration in their work. Guidelines for Future Research The study presents several exciting paths for future research:

- Longitudinal Studies: Future research should also explore longer term sustainability of AI tool-driven skill development, and what this means for artistic trajectories over time.

- Artificial Intelligence Definitions in Popular Discourse: Future work could examine how the interface of AI influences audience interpretation and valuation of creative works, revealing assumptions people have about AI generated material.

- Adaptable AI Tools: Creating customizable AI that learns can help mitigate concerns of artistic power. Developers and artists can leverage this technology to better collaborate by personalizing algorithms to fit individual styles and preferences, allowing these tools to fall in line with our creative imaginings.

References

1. Bown, Oliver. (2021). Sociocultural and Design Perspectives on AI-Based Music Production: Why Do We Make Music and What Changes if AI Makes It for Us?. 10.1007/978-3-030-72116-9_1.

2. Huang, Cheng-Zhi Anna, Ashish Vaswani, Jakob Uszkoreit, Noam M. Shazeer, Ian Simon, Curtis Hawthorne, Andrew M. Dai, Matthew D. Hoffman, Monica Dinculescu and Douglas Eck. "Music Transformer: Generating Music with Long-Term Structure." International Conference on Learning Representations (2018).

3. McCormack, Jon & Bown, Oliver. (2011). Creative Agency: A Clearer Goal for Artificial Life in the Arts. 5778. 10.1007/978-3-642-21314-4_32.

4. Soundtrap. 2024. "Soundtrap: Online Music and Podcast Recording Studio." Accessed March 20, 2024. <u>https://www.soundtrap.com</u>

5. Amper Music. 2024. "Amper Music: AI-Driven Music Composition Platform." Accessed March 20, 2024. <u>https://www.ampermusic.com</u>