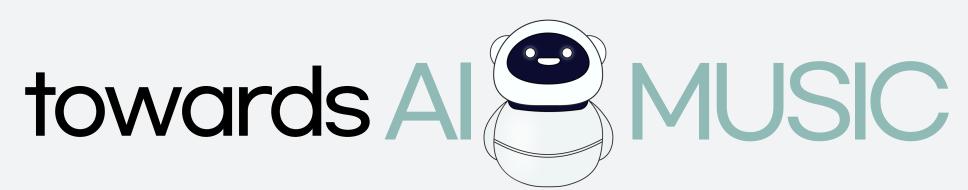
# PERCEPTION and BIAS



## MOTIVATION /

**54.11%** of people accurately

identified Al generated

the discernible drop in

rather from peoples'

perception.

music. This suggests that

biases didn't happen from

compositional quality for

Al-generated music, but

While most

insignificant,

Al-genrated

classical music

16.7% more than

popular music

listeners!

comparisons were

Classical listeners

were able to discern

Al is transforming the arts. In music, platforms like SUNOAI and AIVA are reshaping creativity, while DALLE and MID JOURNEY revolutionize visual arts. Although some fear Al could replace human artists, most experts view it as a creative asset. Yet, persistent biases and challenges in distinguishing Al-generated work from human-made ones highlight the need for further exploration to understand the future role of Al in creative fields.

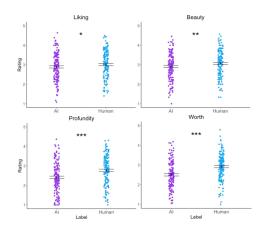
# GOALS T

Many people still lack familiarity with creative AI, often leading to negative perceptions that can distort the evaluation of Al-driven art and impede a harmonious coexistence between human and AI creativity.

Therefore, this study aims to:

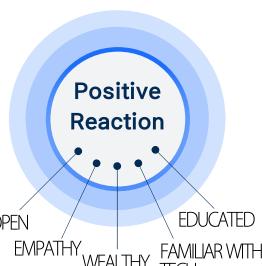
- Assess individuals' ability to distinguish between Al-generated and human-made music.
- 2 Determine whether negative evaluations of AI art, especially in music, exist.
- Examine how these biases are influenced by participants' views on Al's creative capabilities.
- Analyze how these biases and distinguishing abilities are influenced by individuals' personal characteristics (e.g. gender)

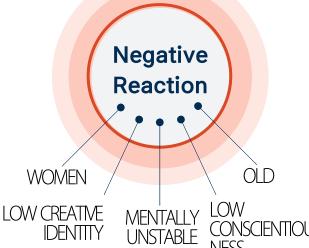
### PRE-RESEARCH



created ones across domains like beauty or creativity.

Bellaiche L., et al. (2023)

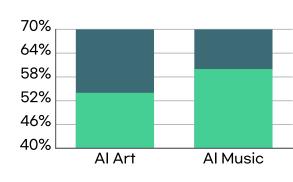




Some personal traits correlate with how one reacts to Al artworks.

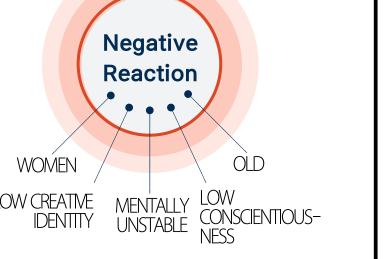
R. Latikka et al. (2023)

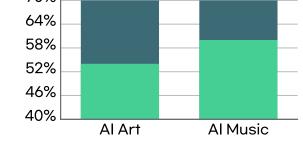
Al music, especially Classical, is slightly more distinguishable than Al art. Ferreira, P. et al. (2023)



Correctly Distinguised

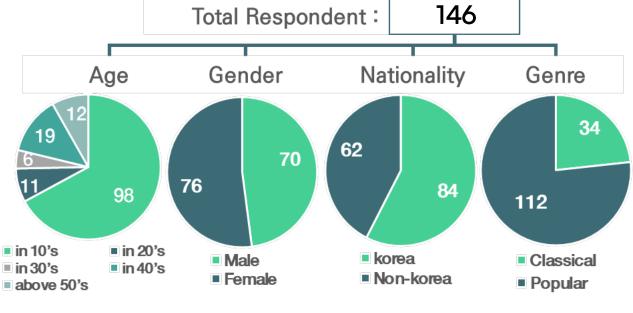
### People rate Al-generated artworks lower than human-





Incorrectly Distinguished

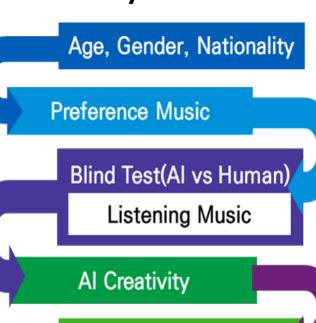
## METHODOLOGY



Respondents listened to 4 music (2 made by human, 2 generated by Al), evaluate it on a 7point likert scale, and guess the composer's identity.

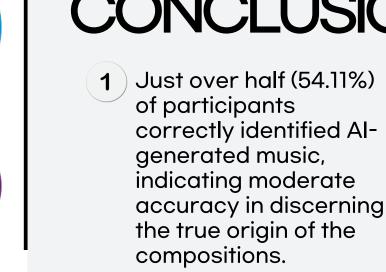
They also answered how creative they thought AI was on a 7point likert scale and who deserves copyright for Al-generated music.

(Duration: Jan. 13 - 24, 2025)



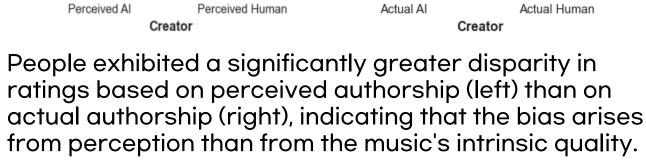
Al Copyright

# **Survey Process**



A notable perception gap emerged: music believed to be Alcomposed received lower ratings —a disparity greater than that observed based on actual authorship. This indicates that the bias stems from perceptions of non-human authorship, not from the inherent quality of the music.

and unresolved copyright and ownership



Left mean difference: 1.17 Right mean difference: 0.54

# **CREATIVITY AI Music Perception and Creativity Score** Male vs Female Korea vs Non-Non Copyright Popular In general, males, Koreans, Classical listeners,

Preference based on

actual authorship

and people who believe copyright exist believed Al is creative more than their counterpart.

Sub Group

Male

Female

Korea

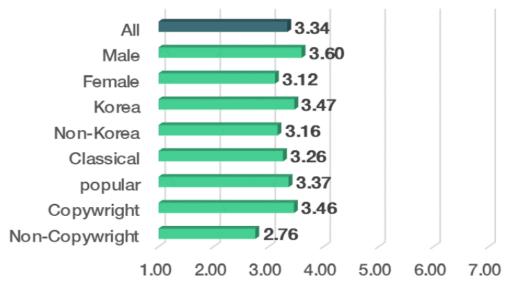
Non-Korea

Classical

Popular

Copyright

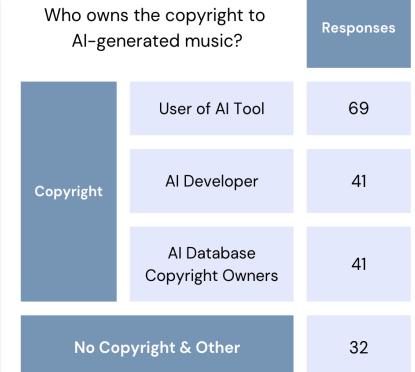
No Copyright



understand uncarmy Voriginal notices de promotinate un liste sorre saylad well expression involved understand un liste liste liste un liste un liste un liste liste liste un l machine callapse of a Sed ween with point us and a second state of the second second

People associate words like "generate", or "simple" when associating AI with creativity

Creativity was measured on a 7-point likert scale. Overall, every single responses in general were less than half of that (3.5), suggesting most people don't think AI to be creative



\*Multiple choices were allowed

32 (18.5%) respondents thought no copyright should be given at all.

119 (81.5%) think some copyright should be given.

# **PERCEPTION**

Classical vs

Popular

Copyright

Non-Copyright

"Perceived authorship" = the listener's

believed composer's identity

"Actual authorship" = its true origin

When preference score for Gap 1 > Gap

2, evaluations are swayed more by

who listeners think created the music

than by the music's **actual quality**.

This suggests that the bias stems from

the idea of Al authorship making the

music less favorable—not because the

compositions are inherently less likable.

Male vs Female Korea vs Non-

**Analysis Method** 

GAP 1

Respondent's

Perceived

Al music

**Preference** 

Human music Preference `

Actual

(Original Source)

Al music

Preference

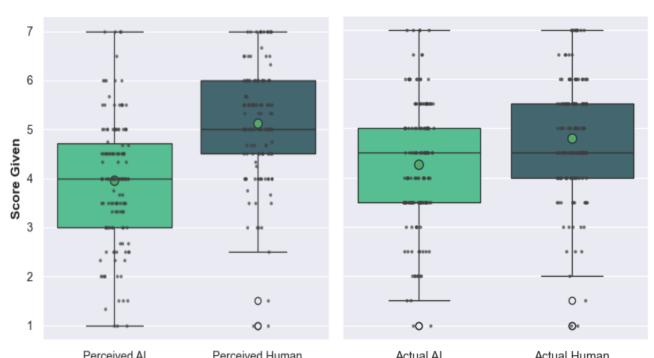
Human music

Preference

GAP 2

ACCURACY

54.11%



People who give higher ratings

to music they think was

composed by an Al also tend to

think AI to be more creative.

Preference based on

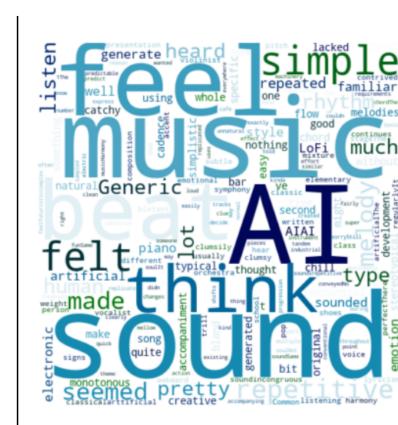
perceived authorship



Deeper analysis revealed that, with the exception of the noncopyright group, all subgroups showed a significant difference



When people were asked why they thought a music sounded "human", they mentioned words like "creative", "good", "nice", "emotional", or "complex".



When people were asked why they thought a music sounded "Al", they mentioned words like "artificial", "simple", "repeated", "monotonous", or "clumsily".

## CONCLUSION

Skepticism regarding

Al's creative abilities grows, fueling biases issues surrounding

### SO WHAT?

Unresolved issues around Algenerated music add another layer of complexity to public acceptance of creative Als. Addressing these are crucial for a clearer understanding of Al's role in the creative process.

### **IMPROVEMENTS**

- 1. Broaden the sample size and ensure demographic diversity
- 2. Refine the experimental design by including a control group, where authorship is revealed only after initial ratings
- 3. Incorporate more qualitative feedback through open-ended questions

