

Aesthetics, Rhyme and Memory

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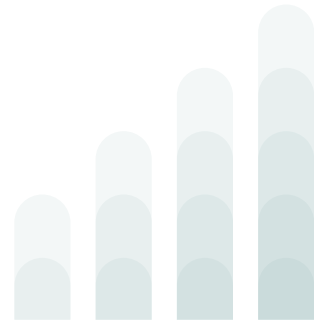




RQ



How does aesthetic appeal influence the perception and processing of rhyme?





Sub-RQs



1. Which rhyme schemes are more aesthetically pleasing?
2. How does the aesthetic appeal of rhyme influence its memorability?



OVERVIEW

1 Linguistic Background

2 Predictions

3 Methodology

4 Results

5 Limitations & Future Implications

AESTHETICS LINGUISTICS

Rastall (2008)



Linguistic Background

Rhyme and aesthetics

- Repetition (Rastall, 2008)
- Cognitive fluency theory (Hunt & Stielstra, 2018)
- Rhyme vs. non rhyme (Obermeier et al., 2013; 2016)

Rhyme and memory

- Organization of lexico-semantic information (Allopenna et al., 1998)
- Emotions (Sternberg, 2003)
- Oral transmission (Negrete, 2021)



Predictions



1. There will be a difference in aesthetic appeal between different rhyme schemes (coupled, alternate, no rhyme).
2. Rhyme will be memorized more easily than non-rhyme because of its higher aesthetic appeal.



Experiment

- Online, larger testing session (4 experiments/parts)
 - Opensesame (Mathôt et al., 2012)
 - Conducted on a laptop
- Tasks
 - Rating Task on a Likert Scale from 1 to 6
 - Memory Task as item recognition
- Stimuli: artificial language
 - UniPseudo (New et al., 2024)
 - Recorded -> VoiceGenerator (Voice Generator, n.d. ; Wickham et al., 2019)

Rating Task

Stimuli

	Coupled Rhyme (AABB)	Alternate Rhyme (ABAB)	No rhyme
Version 1	Abit conu dula <u>lebabs</u> Dohon exap floyok <u>hobabs</u> lbed maly okin <i>pimed</i> Apod yeme tety <i>kamed</i>	Abit conu dula <u>lebabs</u> lbed maly okin <i>pimed</i> Dohon exap floyok <u>hobabs</u> Apod yeme tety <i>kamed</i>	Dohon exap floyok banton Abit conu dula asseld Apod yeme tety slopel lbed maly okin winets
Version 2	Acte coga fene <u>nelens</u> Dama gata tano <u>falens</u> Yavo sile pema <i>inting</i> Poge sape akim <i>upting</i>	Acte coga fene <u>nelens</u> Yavo sile pema <i>inting</i> Dama gata tano <u>falens</u> Poge sape akim <i>upting</i>	Dama gata tano lassul Acte coga fene gloune Poge sape akim tunmes Yavo sile pema slonad
Version 3	Alan bepe geve <u>clazet</u> Cono ampe idil <u>dizet</u> Bily dade juty <i>timax</i> Lega kili mafa <i>somax</i>	Alan bepe geve <u>clazet</u> Bily dade juty <i>timax</i> Cono ampe idil <u>dizet</u> Lega kili mafa <i>somax</i>	Cono ampe idil metgo Alan bepe geve litish Lega kili mafa sizzah Bily dade juty locans
Version 4	Mido acun pupo <u>bastas</u> Opan бага fapi <u>sostas</u> Bune deme exap <i>tabib</i> Anis guta hona <i>embib</i>	Mido acun pupo <u>bastas</u> Bune deme exap <i>tabib</i> Opan бага fapi <u>sostas</u> Anis guta hona <i>embib</i>	Opan бага fapi hommos Mido acun pupo uplitz Anis guta hona dullow Bune deme exap patest
Version 5	Huma idos yofa <u>chemon</u> Lalo netu kiske <u>fimon</u> Owap fovy tano <i>doken</i> Vime ugad polan <i>quaken</i>	Huma idos yofa <u>chemon</u> Owap fovy tano <i>doken</i> Lalo netu kiske <u>fimon</u> Vime ugad polan <i>quaken</i>	Lalo netu kiske wafet Huma idos yofa gamled Vime ugad polan mastes Owap fovy tano deptic

Table 1: The stimuli in written form. The two pairs of rhymes in each version are underlined and italicized, respectively.



	Coupled Rhyme (AABB)
Version 1	Abit conu dula le <u>babs</u> Dohon exap floyok ho <u>babs</u> lbed maly okin pimed Apod yeme tety kamed



	Coupled Rhyme (AABB)
Version 1	Abit conu dula <u>lebabs</u> Dohon exap floyok <u>hobabs</u> lbed maly okin pimed Apod yeme tety kamed





	Coupled Rhyme (AABB)	Alternate Rhyme (ABAB)
Version 1	<p>Abit conu dula <u>lebabs</u> Dohon exap floyok <u>hobabs</u> lbed maly okin pimed Apod yeme tety kamed</p>	<p>Abit conu dula <u>lebabs</u> lbed maly okin pimed Dohon exap floyok <u>hobabs</u> Apod yeme tety kamed</p>



	Coupled Rhyme (AABB)	Alternate Rhyme (ABAB)
Version 1	<p>Abit conu dula <u>lebabs</u> Dohon exap floyok <u>hobabs</u> lbed maly okin pimed Apod yeme tety kamed</p>	<p>Abit conu dula <u>lebabs</u> lbed maly okin pimed Dohon exap floyok <u>hobabs</u> Apod yeme tety kamed</p>



	Coupled Rhyme (AABB)	Alternate Rhyme (ABAB)	No rhyme
Version 1	<p>Abit conu dula <u>lebabs</u> Dohon exap floyok <u>hobabs</u> lbed maly okin pimed Apod yeme tety kamed</p>	<p>Abit conu dula <u>lebabs</u> lbed maly okin pimed Dohon exap floyok <u>hobabs</u> Apod yeme tety kamed</p>	<p>Dohon exap floyok banton Abit conu dula asseld Apod yeme tety slopel lbed maly okin winets</p>



	Coupled Rhyme (AABB)	Alternate Rhyme (ABAB)	No rhyme
Version 1	Abit conu dula <u>lebabs</u> Dohon exap floyok <u>hobabs</u> Ibed maly okin <u>pimed</u> Apod yeme tety <u>kamed</u>	Abit conu dula <u>lebabs</u> Ibed maly okin <u>pimed</u> Dohon exap floyok <u>hobabs</u> Apod yeme tety <u>kamed</u>	Dohon exap floyok banton <u>Abit conu dula</u> <u>asseld</u> <u>Apod yeme tety</u> <u>slopel</u> Ibed maly okin winets

Rating Task Interface

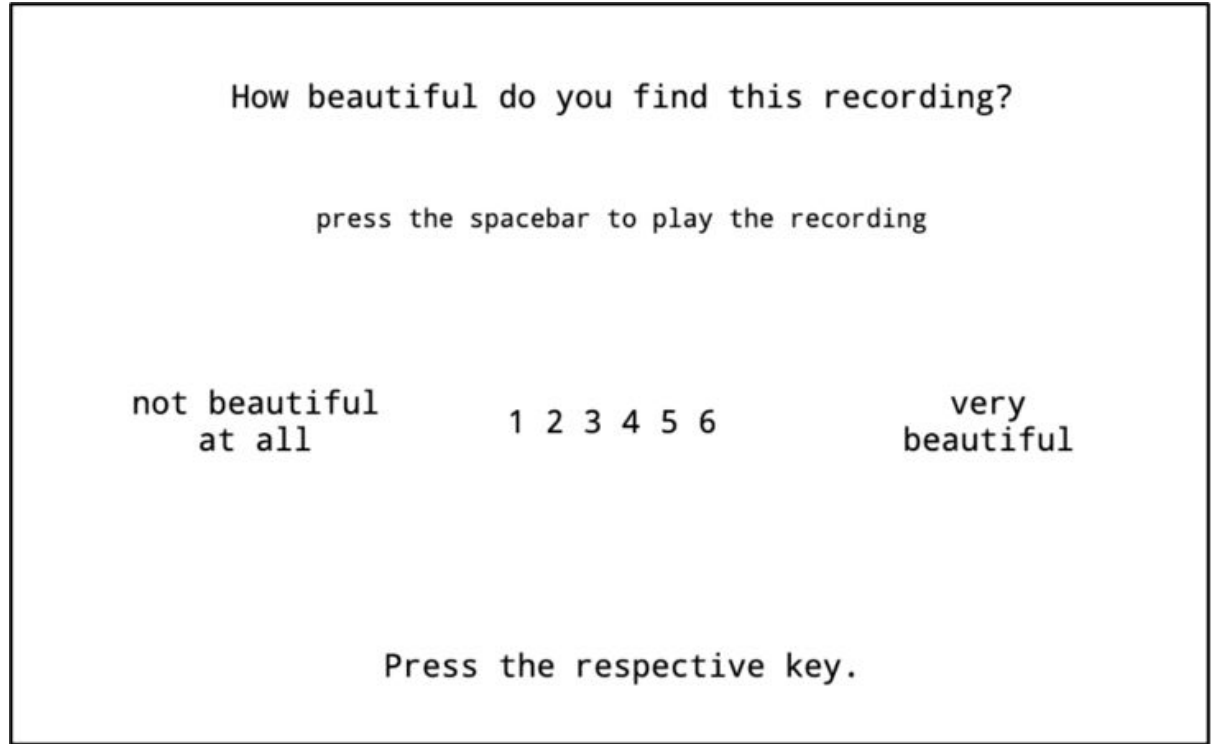


Figure 1. The interface of the experiment, showing the rating task based on a Likert scale from 1 (not beautiful at all) to 6 (very beautiful).

Memory Task

Stimuli

Old Rhyme	Old No Rhyme	New Rhyme	New No Rhyme
<p>Abit conu dula <u>lebabs</u> Dohon exap floyok <u>hobabs</u> Ibed maly okin <u>pimed</u> Apod yeme tety <u>kamed</u></p>	<p>Dohon exap floyok banton Abit conu dula asseld Apod yeme tety slopel Ibed maly okin winets</p>	<p>Caby idde dops <u>uphing</u> Acim mook atul <u>tihing</u> Coap sant cuey <u>blance</u> Opan knue laoy <u>klance</u></p>	<p>Acim mook atul asseld Caby idde dops hosque Opan knue laoy chemon Coap sant cuey quaken</p>
<p>Acte coga fene <u>nelens</u> Dama gata tano <u>falens</u> Yavo sile pema <u>inting</u> Poge sape akim <u>upting</u></p>	<p>Dama gata tano lassul Acte coga fene gloune Poge sape akim tunmes Yavo sile pema slonad</p>	<p>Lald knaw sphels <u>candes</u> Nace muts jeaw <u>mandes</u> Ibed opat pong <u>psylum</u> Pist tean diss <u>ksalum</u></p>	<p>Nace muts jeaw clusen Lald knaw sphels salono Pist tean diss upting Ibed opat pong tunges</p>
<p>Alan bepe geve <u>clazet</u> Cono ampe idil <u>dizet</u> Bily dade juty <u>timax</u> Lega kili mafa <u>somax</u></p>	<p>Cono ampe idil metgo Alan bepe geve litish Lega kile mafe sizzah Bily dade juty locans</p>	<p>Bude geve abss <u>suples</u> Flib dops folf <u>maples</u> Youg sosh bily <u>slimps</u> Biti difs idde <u>mlimps</u></p>	<p>Flib dops roup snobis Bude geve abss admils Biti difs idde bugges Youg sosh bily sunity</p>
<p>Mido acun pupo <u>bastas</u> Opan baga fapi <u>sostas</u> Bune deme exap <u>tabib</u> Anis guta hona <u>embib</u></p>	<p>Opan baga fapi hommos Mido acun pupo uplitz Anis guta hona dullow Bune deme exap patest</p>	<p>Eani ovan tein <u>fakeet</u> Zech pamp nond <u>bukeet</u> Nify iffet deng <u>solums</u> Exab inom eass <u>hulums</u></p>	<p>Zech pamp nond lactim Eani ovan tein bastle Exab inom eass walted Nify iffet deng tawyed</p>

Table 2: The stimuli in written form for the memory recognition task.

Memory Task Interface



Figure 2. The interface of the item recognition task.



Participants

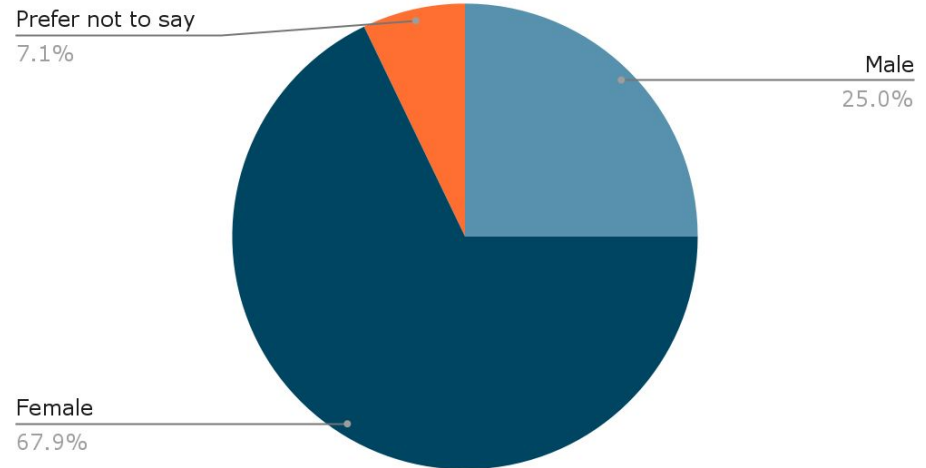
Total: 28 participants

Mean age: 23.63 years
(SD=11.24), with ages ranging
from 14 to 52 years

L1: 38; German (28.95%), French
(15.79%) and English (10.53%)

L2: 66; English (31.82%), German
(25.76%) French (12.12%)

Gender of participants





RESULTS



Results: Rating Task

Confidence Intervals

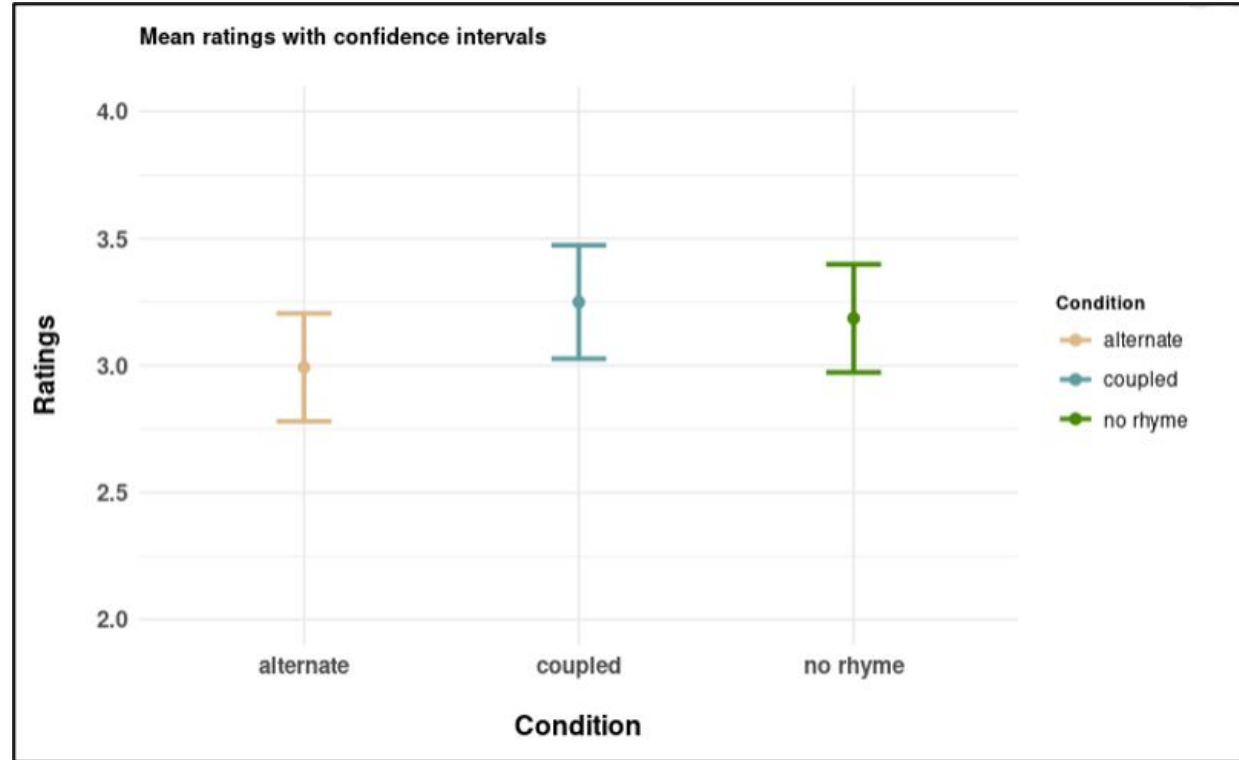


Figure 3. The mean ratings of beauty for alternate rhyme, coupled rhyme and no rhyme (error bars indicate 95% confidence intervals).

Results: Rating Task

Boxplots

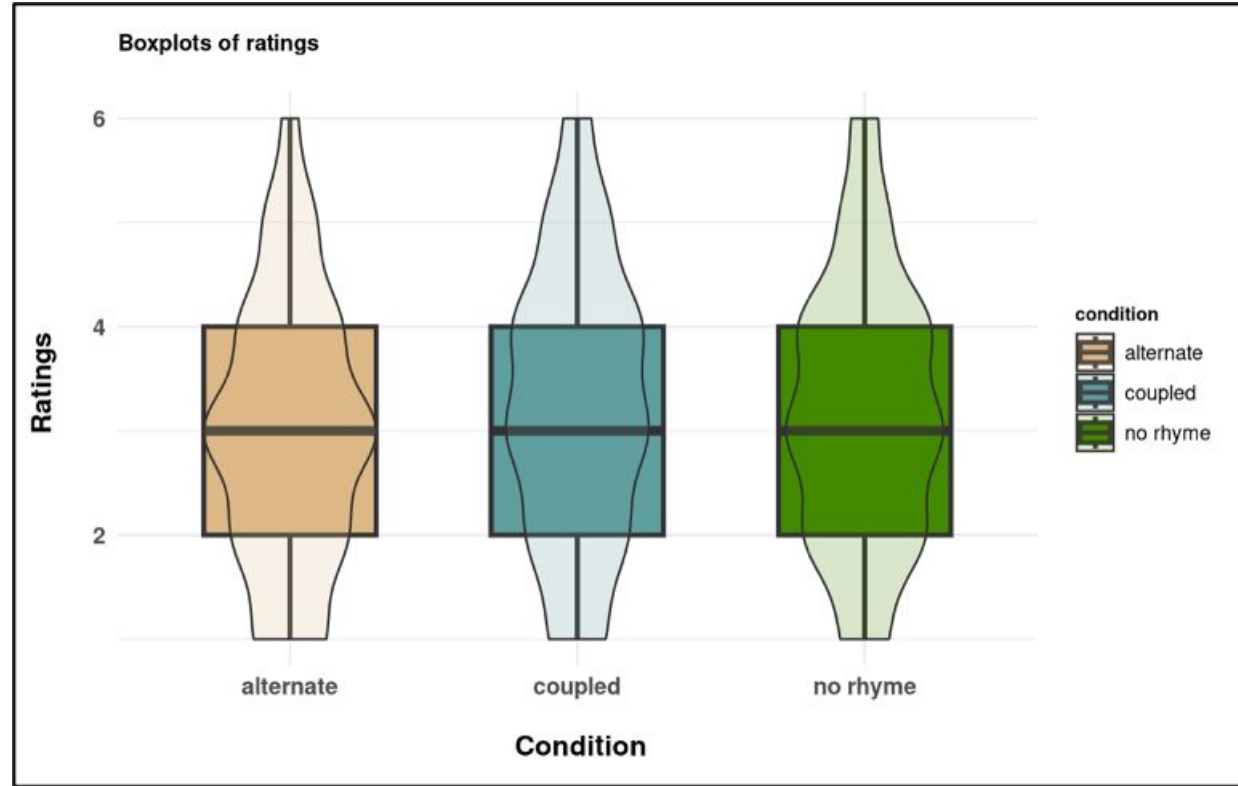


Figure 4. Boxplots displaying the distribution of the results for alternate rhyme, coupled rhyme and no rhyme.

Results: Memory Task

Confidence Intervals

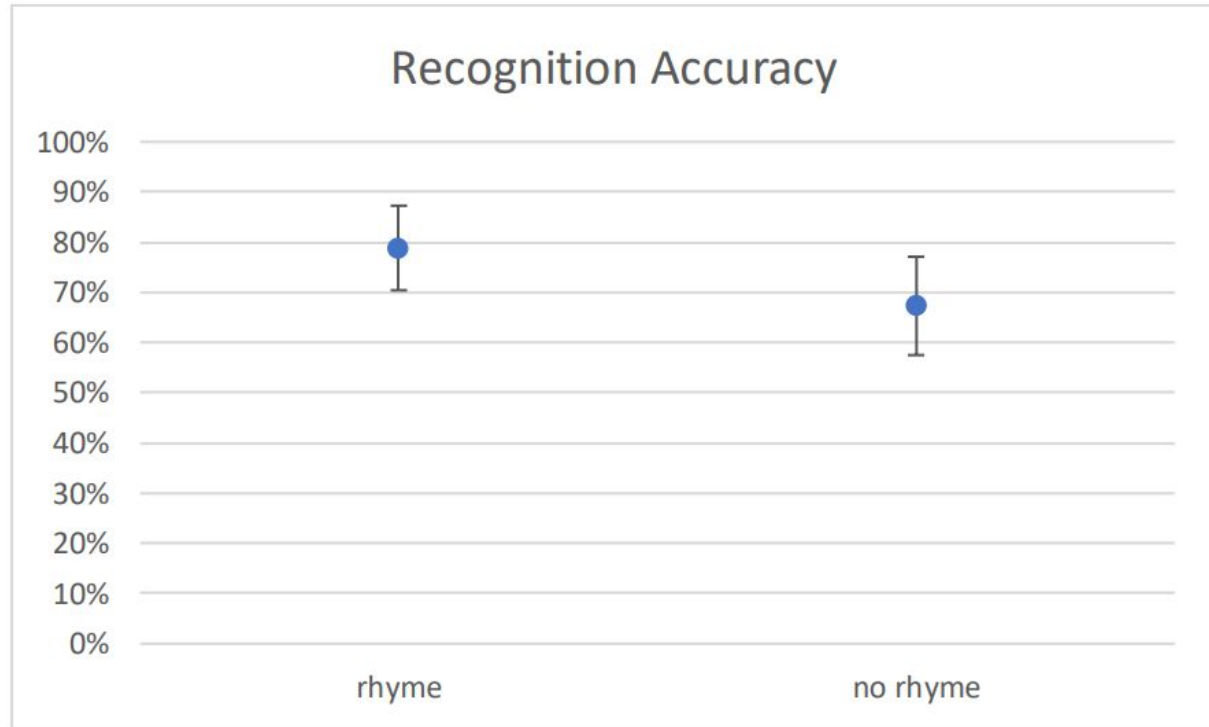


Figure 5. The mean recognition accuracy for rhyme and no rhyme (whiskers indicate 95% confidence intervals). Mean recognition accuracy rhyme = 80%, no rhyme = 67%.

Results: Memory Task

Boxplots

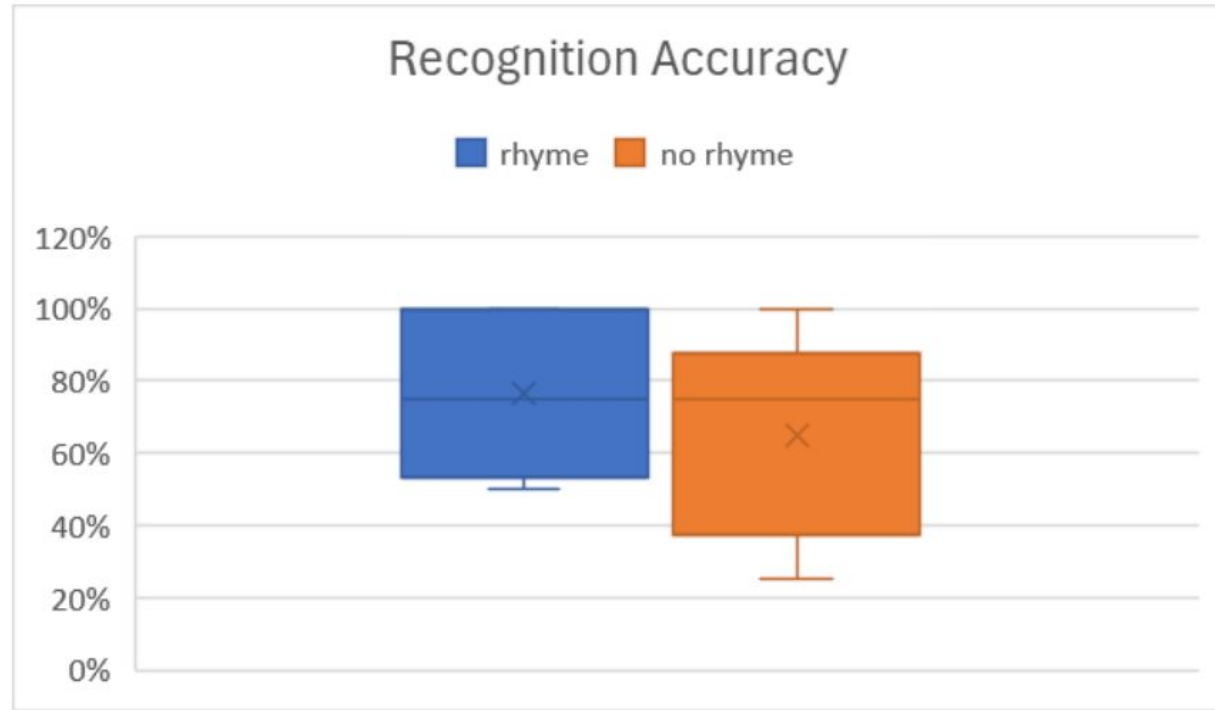


Figure 4. Boxplots displaying the recognition accuracy for rhyme and no rhyme.

Limitations

not enough participants

technical difficulties

too standardized

Future research?

follow-up studies on rhyme, aesthetics and memory

further research on poetry and music



THANK YOU!

Any questions?





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