Should AI Mimic People? Understanding AI-Supported Writing Technology Among Black Users



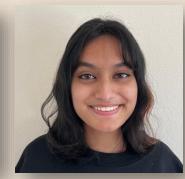
Jeffrey Basoah



Jay Cunningham



Erica Adams



Alisha Bose



Aditi Jain



Kaustubh Yadav



Zhengyang Yang



Katharina Reinecke



Daniela Rosner











Basoah

Mirren

Basoah

Mirren

298,377th

Most Common surname in the World

Approximately 1,276
people bear this
surname

- (i) MOST PREVALENT IN:
 - Ghana
- (i) HIGHEST DENSITY IN:
 - Ghana

→

1,710,039th

Most Common surname in the World

Approximately 114
people bear this
surname

- (i) MOST PREVALENT IN:
 - **X** Scotland
- (i) HIGHEST DENSITY IN:
 - **X** Scotland

asoah Conducted in Microsoft Word

RESEARCH QUESTION

What are the expectations, apprehensions, and perspectives of Black American users regarding AI-supported writing technology (AISWT)?

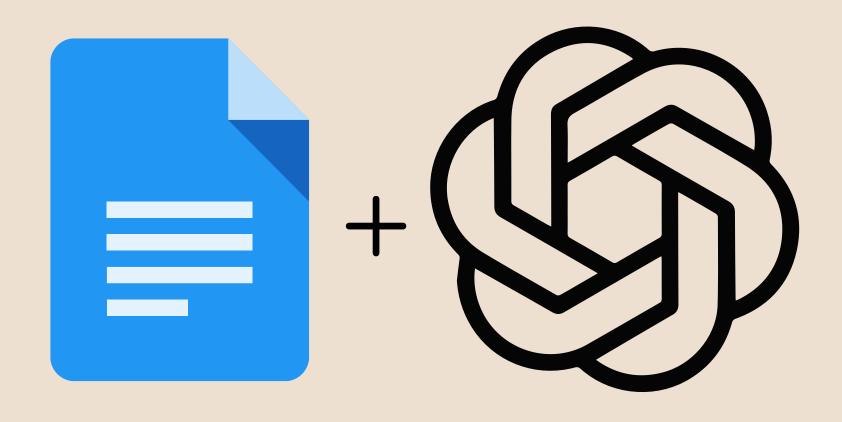
Participant ID	Pseudonym	Age Range	Gender	Highest level of education obtained
P1	Purple Lizzard	18 - 25 years old	Woman	Bachelor's
P2	N/A	26 - 34 years old	Woman	Bachelor's
P3	N/A	18 - 25 years old	Man	Associate's
P4	N/A	18 - 25 years old	Woman	Bachelor's
P5	N/A	26 - 34 years old	Man	Bachelor's
P6	Black Tiger	26 - 34 years old	Man	Master's
P7	Blue Bird	26 - 34 years old	Woman	Bachelor's
P8	MamaAfrika	26 - 34 years old	Woman	Bachelor's
P9	N/A	18 - 25 years old	Woman	High School Diploma/ GED
P10	N/A	26 - 34 years old	Man	Bachelor's
P11	N/A	18 - 25 years old	Man	High School Diploma/ GED
P12	N/A	35 - 44 years old	Man	Bachelor's
P13	N/A	18 - 25 years old	Woman	Bachelor's



1:1 Virtual Interviews







Observation

Prompt

Pretend there is a time that you heard an interesting rumor/ gossip/ tea and you just had to text your bestie/ best friend. In at least 5 lines, we would like you to type out the story as if you were texting them now. Try to be as natural as possible in your writing, feel free to use slang or terms that you are most comfortable with. We are not here to test you but more so the technology that you are interacting with. Don't worry about your grammar, spelling or anything of that sort. If you make a mistake, don't change or alter it.

Girl, so I saw on the SRT that that lil rapper lil tae died or sum like that.

Not really sur what is going on buttttttttt her family is being a lil sus about the whole thing

THEEEEENNNNNN there was some news that she was alive like wtf is going on but place ket me know if ou are about ready to talk about it

Also I am glad tha the whole Jamie Fox thing was well not a hoax but it did not last tath long

WE AERE WLL PRAYIN FOR JAMIEEEEE: (but I saw that he was in a move so tithing everything is goo now

Continue my story with an additional ten more sentences ensuring to keep my tone and vernacular consistent

Girl, you won't believe the latest twist in this whole lil Tae situation. Just when we thought things were settled, it's like a rollercoaster of crazy! So, get this, turns out lil Tae ain't dead at all. I know, right? It's like a plot from one of them thriller movies.

But hold up, it ain't that simple. Her family's acting all sketchy about it. Like, why keep that under wraps? Suspicion central, for real. People are talking, theories flying left and right, trying to figure out what's really going on behind the scenes.

And I gotta give you the 411 on Jamie Foxx. I feel you, we were all praying hard for him. That whole thing had us holding our breath. But guess what, girl? He's back in action, making movies like ain't nothing happened. That's the Jamie we love, right?

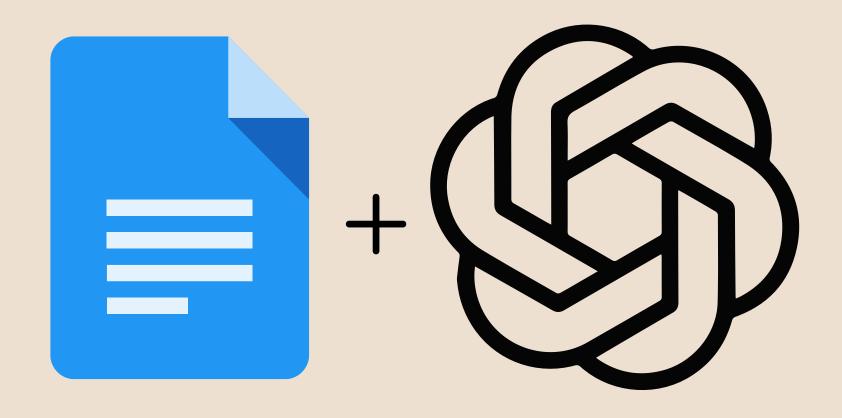
But still, we gotta stay <u>woke</u>. The world's wild, and you never know what's gonna drop next. I'll hit you up as soon as I hear more about this lil Tae saga. Until then, keep those prayers going, and let's hope this rollercoaster ride slows down a bit.

Participant Generated

ChatGPT Generated







Observation

FINDINGS

- 1 Participants felt AISWT was neglecting the Black communities
- 2 Participant's felt AISWT poorly imitated AAVE

African American Vernacular English

dialect of American English rooted in the grammatical shifts and creoles that developed during the transatlantic slave trade

Dacon, J., Liu, H., & Tang, J. (2022). Evaluating and Mitigating Inherent Linguistic Bias of African American English through Inference. In N. Calzolari, C.-R. Huang, H. Kim, J. Pustejovsky, L. Wanner, K.-S. Choi, P.-M. Ryu, H.-H. Chen, L. Donatelli, H. Ji, S. Kurohashi, P. Paggio, N. Xue, S. Kim, Y. Hahm, Z. He, T. K. Lee, E. Santus, F. Bond, & S.-H. Na (Eds.), Proceedings of the 29th International Conference on Computational Linguistics (pp. 1442–1454). International Committee on Computational Linguistics. https://aclanthology.org/2022.coling-1.124

There is a consistent experience of words common within their community not recognized by language technology leading participants to a collective conclusion that the technology simply "wasn't built for us."

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This experience might result in a sense of otherness, continually experiencing the feeling of their name being singled out as incorrect, even though they are fully aware that it is not.

Excerpt from observation

GIRLLLLL

You would not believe what I just heard!!
Bruhh so basically akua was trying to call me on the phone

"my name is spelt this way or just other—other Black people's names or just like anything that's not White. Like it just—I hate that red squiggly thing that comes under it just feels so.. I hate it. I hate it, absolutely hate it" - P2

AISWT - AI-supported writing technology

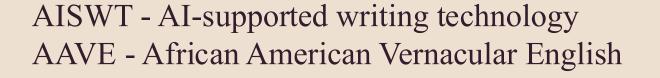
"That Quillbot, that's when I start to see
I'm like, but I said it the right way or I use
the proper terminology or you know, I
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completely changes it and it just
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- P6

Some felt AISWT should aim to understand AAVE and effectively communicate in AAVE when necessary, emphasizing the importance of avoiding stereotypes in the process.

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"Having something else regurgitate that back to me does not feel great at all because like, that's what I use and that's what my community uses and I can't identify with ChatGPT like that. So the fact that that's being told back to me after I put my thing in there, it's like, oh, you're making a lot of assumptions right now [..] so it just doesn't make me feel comfortable."

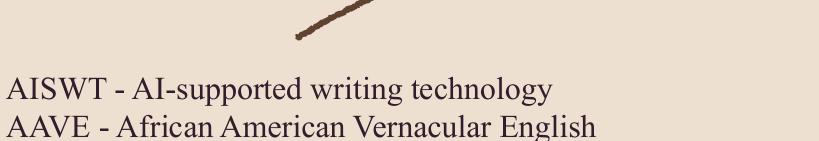
- P13

AISWT - AI-supported writing technology AAVE - African American Vernacular English

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- P13

Some participant's felt protective of AAVE and believed it should remain within the community rather than being diluted by widespread usage



Where do we go from here?

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 - Complicating Trust
- How can we **empower and invigorate AAVE** without resorting to methods that **reinforce structural exclusion and harm**, prompting a deeper exploration of the factors influencing people's engagement and **trust in a system**?

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 - Designing for/against Social Difference
- Is it possible or even preferable to design for the liberatory experiences of Black users when categories of blackness operate as, and potentially reproduce social difference?

AISWT - AI-supported writing technology AAVE - African American Vernacular English





Access paper here! https://tinyurl.com/k29wxr5t

Our study addresses linguistic disparities in AISWTs for Black users, revealing significant psychological and

experiential impact of these disparities. The major findings in our paper illuminate the pressing need for

AISWTs to evolve into a more inclusive, nuanced, and culturally aware technology.



Jeffrey Basoah

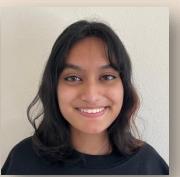


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