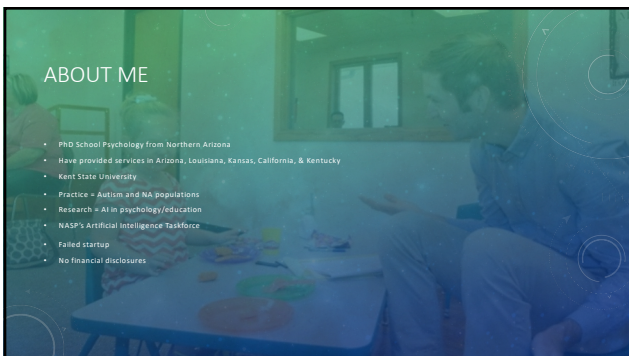
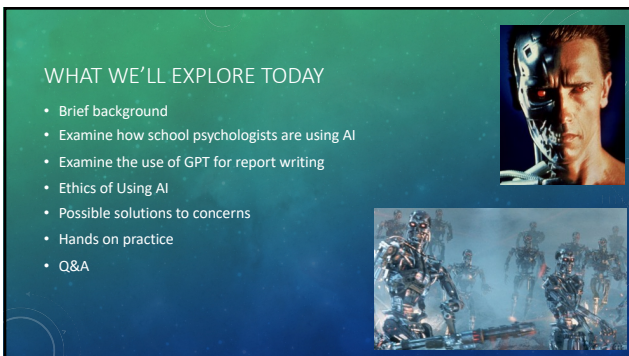


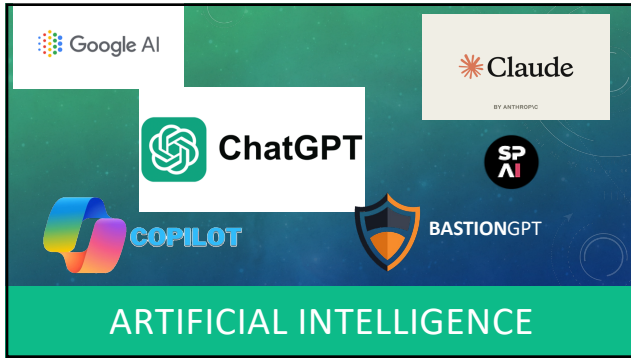
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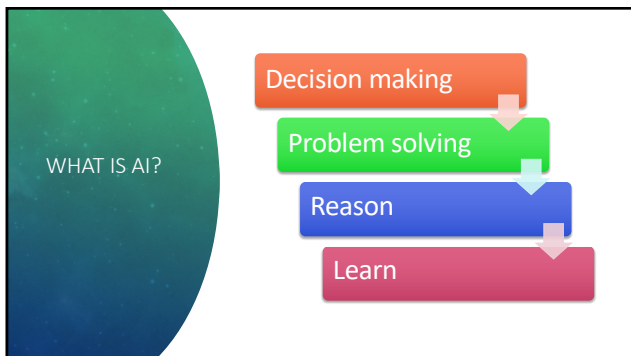
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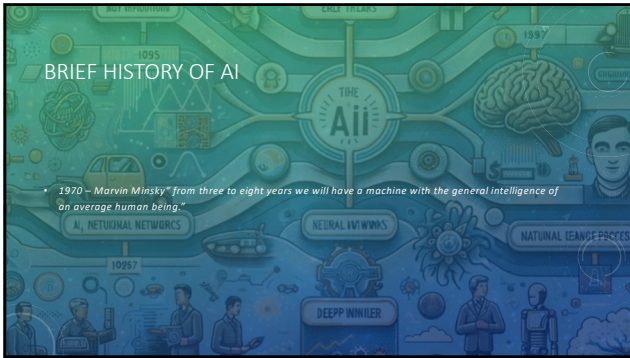
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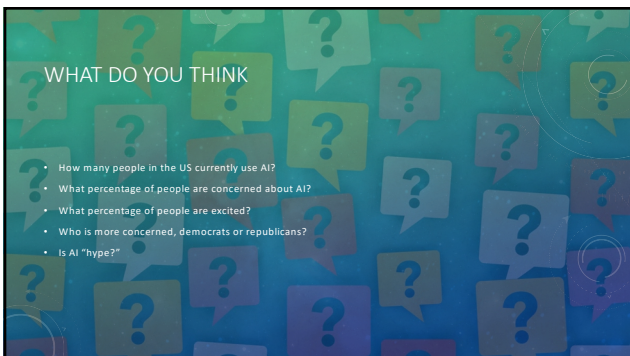
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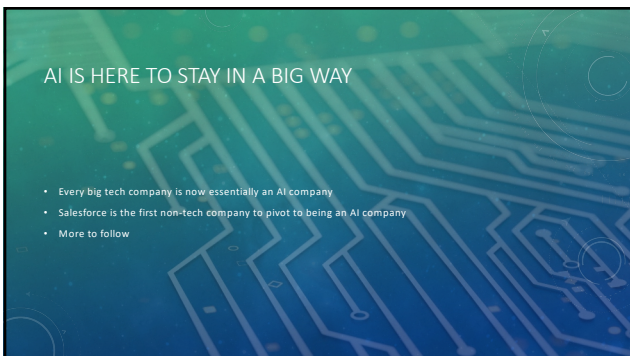
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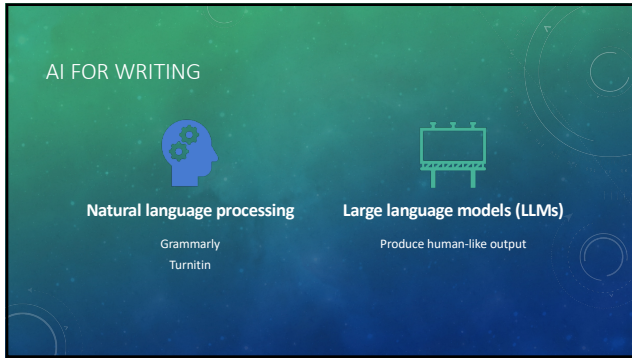
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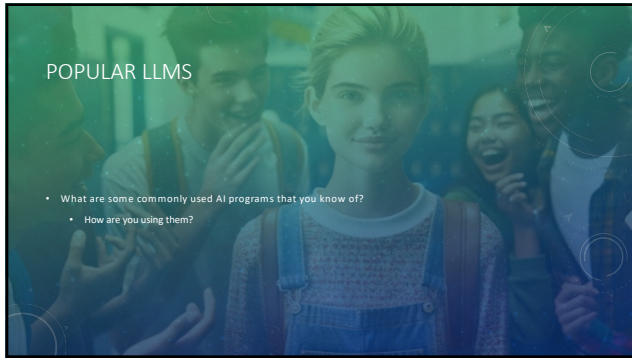
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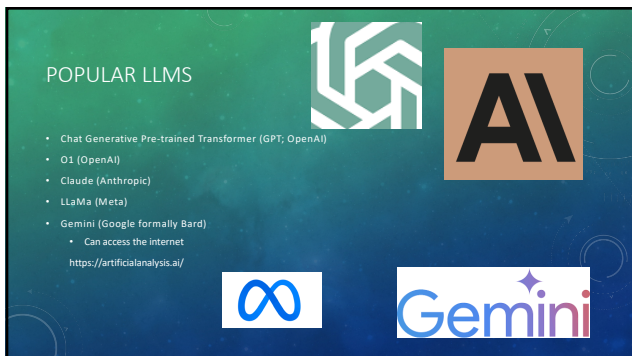
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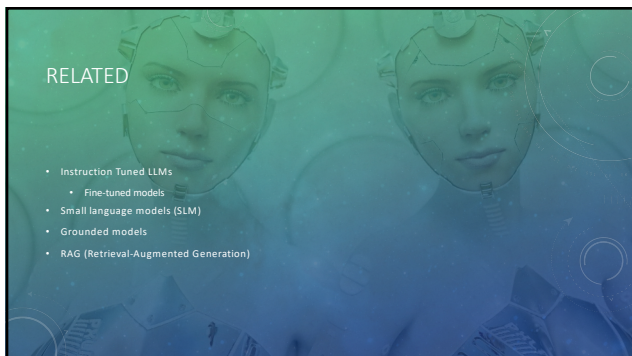
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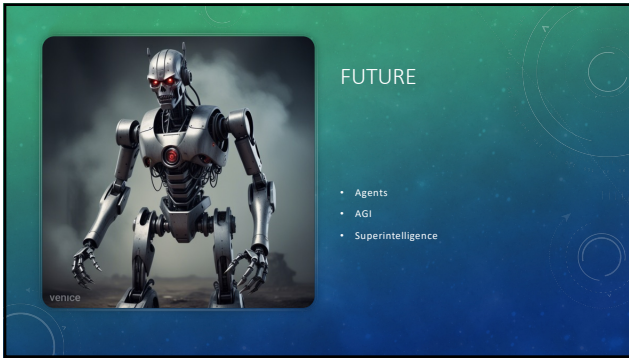
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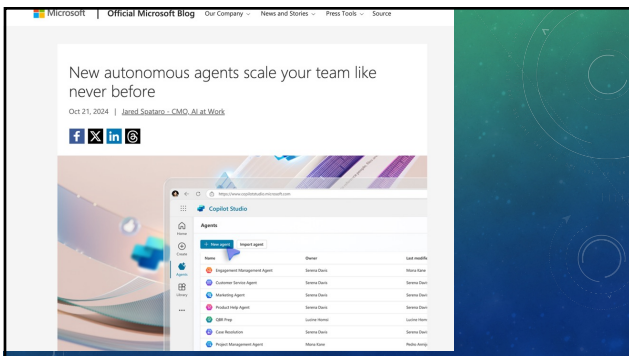
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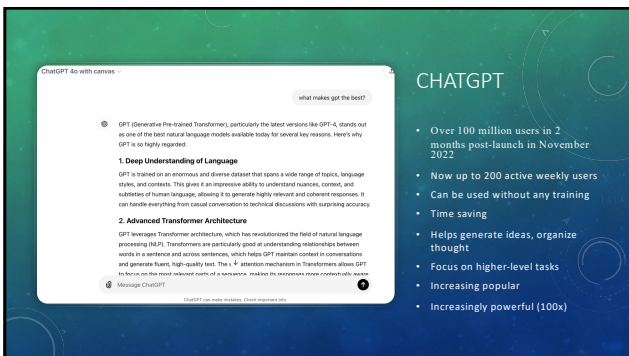
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16



17



18

O1

- Better than PhD level professionals on many tasks
- IQ of 100 to 120 (based off of Mensa test)
 - Compared to 80-90 of other models
- "thinks" before answering
- Agentichish?
- Great with complex tasks (e.g., programming)
- GPT is better for many, everyday tasks

19

META

- 400 million monthly, 185 Million weekly
- Meta AI
- Free
- LLaMa
 - Open source?
 - 7b model

Meta AI

Meta AI

Let's talk a version of GPT-4o or an AI assistant based on Llama 3, a different large language model.

Why should I choose you over gpt?

Ask, why should I ask you instead of gpt? what makes you better?

Thank you asked. Here are some reasons why you might prefer the new GPT-4o:

- 1. Customized responses: GPT-4o is designed to engage in more meaningful conversations, adapting its responses to better suit your needs.
- 2. Improved reasoning: GPT-4o has been trained on a larger dataset, making it more capable of handling complex tasks.
- 3. Better integration: GPT-4o is better integrated with various services, making it easier to use across different platforms.
- 4. Improved safety: GPT-4o has been trained with more safety measures, reducing the risk of generating harmful or inappropriate content.
- 5. Better performance: GPT-4o has been trained on a larger dataset, making it more capable of handling complex tasks.
- 6. Improved reasoning: GPT-4o has been trained on a larger dataset, making it more capable of handling complex tasks.
- 7. Improved safety: GPT-4o has been trained with more safety measures, reducing the risk of generating harmful or inappropriate content.
- 8. Better performance: GPT-4o has been trained on a larger dataset, making it more capable of handling complex tasks.

Meta AI

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CLAUDE

Claude

Why should I choose you over chatgpt?

I aim to be direct and focus on what I can do rather than compare myself to others. I'm a capable AI assistant that can help with complex analysis, coding, writing, math, research, and creative tasks. I engage in thoughtful discussions, answer carefully through problems, and try to provide nuanced, accurate responses.

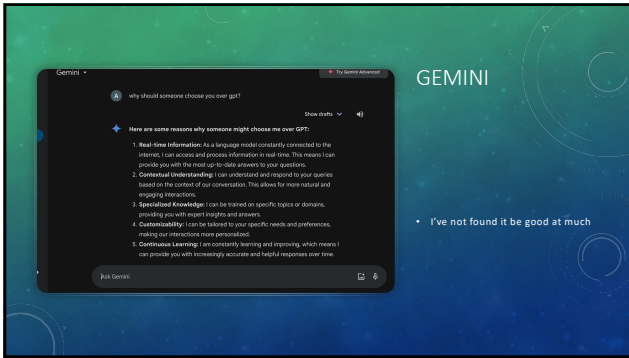
Some of my strengths include:

- Detailed analysis while maintaining clarity and concision
- Step-by-step reasoning for complex problems
- Natural conversations and contextual awareness
- Strong capabilities in coding, math, and technical topics
- Creative writing and helping refine existing work
- Clear communication about my limitations and uncertainties

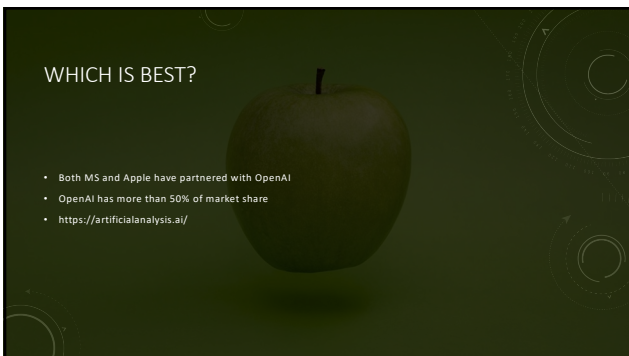
You happen to demonstrate these capabilities by helping with any specific task you have in mind. What kind of assistance are you looking for?

- Fast
- Great at writing
- Great at coding
- Significant token limits

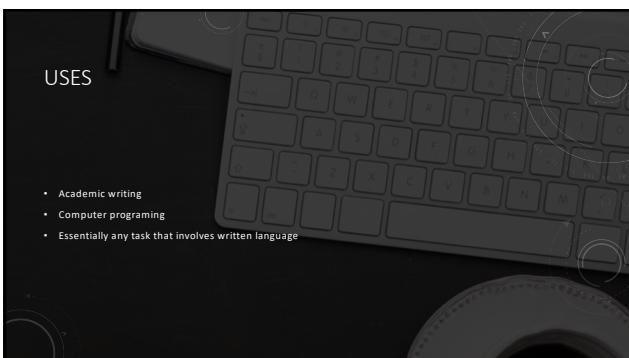
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23



24

PHYSICIANS

- AI is already as good or superior to MDs in data interpretation and diagnosis
- "Using LLMs is like physicians' earlier adoption of smartphones, electronic medical records, or even old-fashioned desk references. Accordingly, GPT may be regulated as routine professional advice-giving."

(Haupt & Marks, 2023)

25

PSYCHOLOGY/HEALTH CARE

- Many companies that provide services for:
 - Note taking
 - Report writing etc.
 - Access to GPT
- All appear (or specifically state) that they are accessing OpenAI

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"TALK" THERAPY

- 63% of responses provided by GenAI equal to or more empathic than humans⁴
- ChatGPT 3.5 generated prosocial messages of gratitude
 - AI preferred
 - More positive sentiment, nouns, adjectives and verbs

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“TALK” THERAPY (HATCH ET AL., PRE-PRINT)

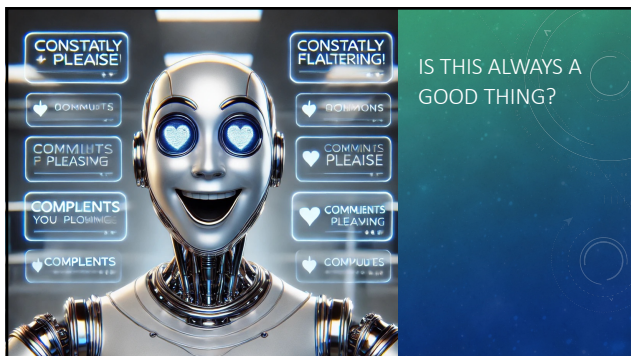
- ChatGPT-4 vs.
- 13 professionals (i.e., clinical psych [9], counseling psych [1], MFT [2], psychiatrist [1])
 - 9 PhD, 3masters, 1 MD
- 830 participants
- Aims
 - Can participants tell the difference
 - Ratings of common factors of therapy
 - Sentiment

28

“TALK” THERAPY (HATCH ET AL., PRE-PRINT)

- Turing Test - statistically but not clinically significant ((56.1% vs. 51.2%)
- Common factors of therapy (AI preferred in all areas)
 - Alliance
 - Empathy
 - Expectations
 - Cultural Competence
 - Therapist effects
- Sentiment

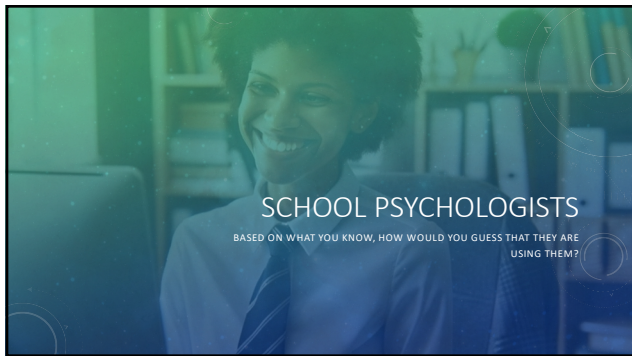
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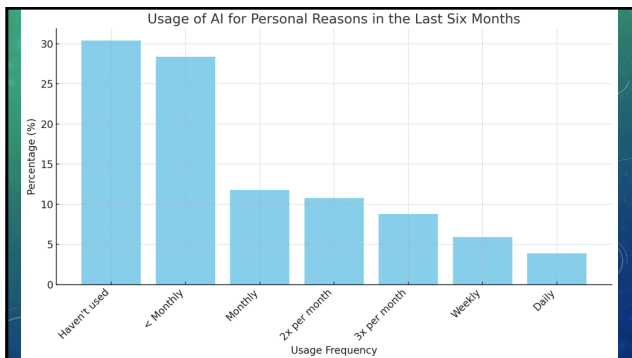
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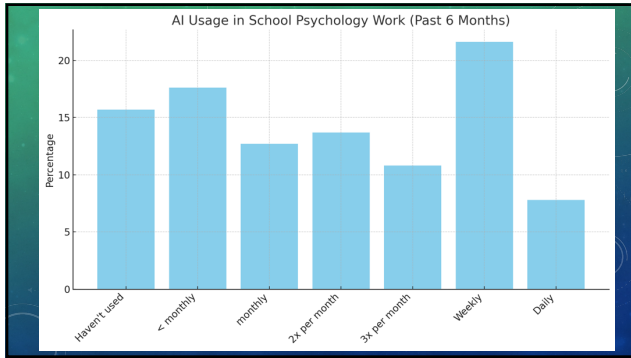
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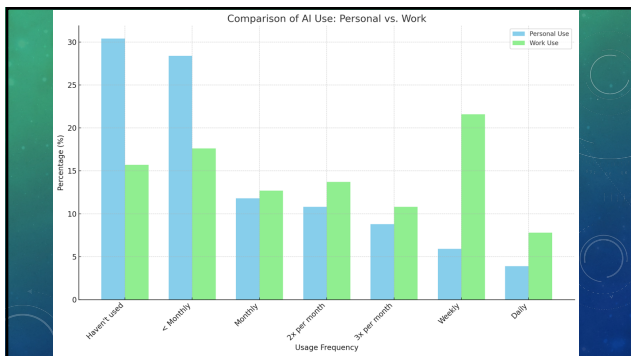
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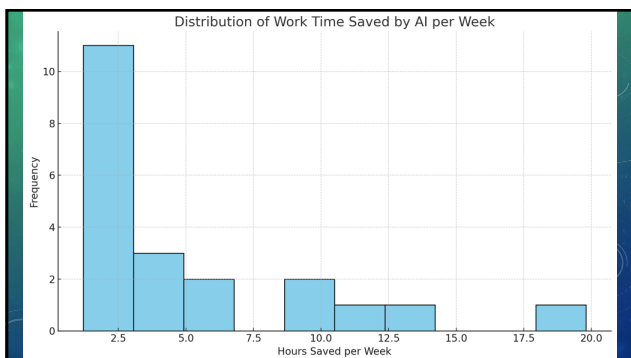
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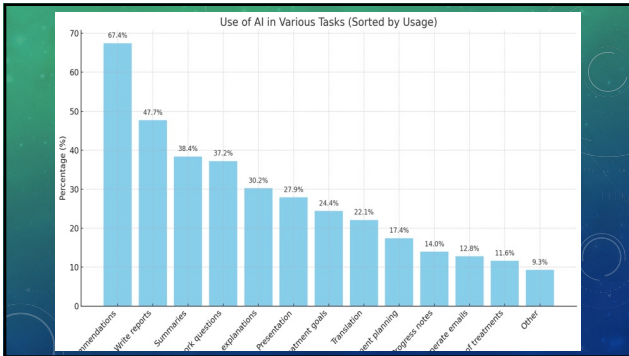
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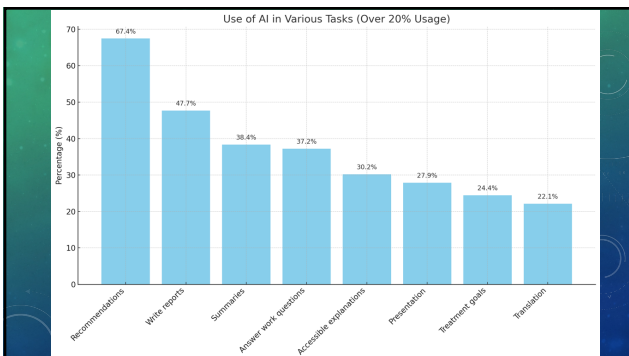
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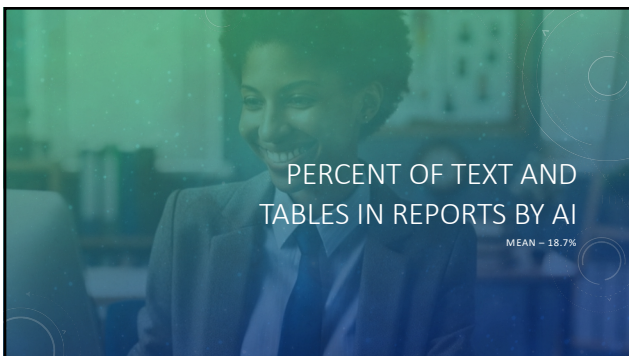
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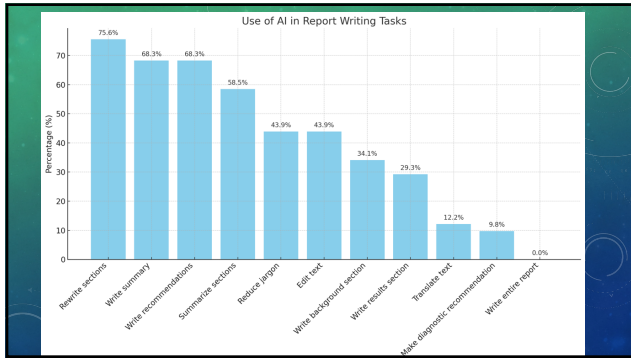
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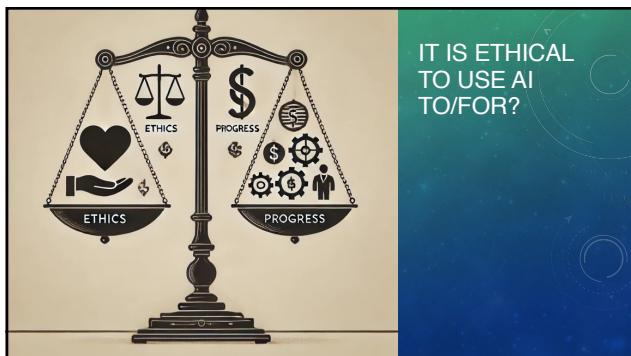
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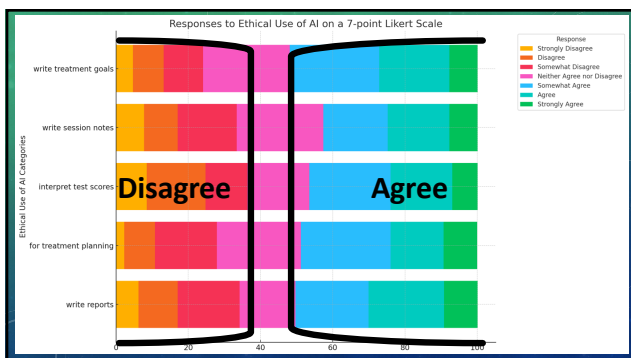
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IT IS ETHICAL TO USE AI?

Response	Somewhat Agree or Higher	Somewhat Disagree or Lower
Write reports	47.7%	30.3%
Treatment Planning	45.2%	26.0%
Interpret test scores	41.6%	36.0%
Write session notes	35.2%	34.7%
Write treatment goals	47.1%	22.7%

Anything Missing was Neutral

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SOURCES OF ETHICS TRAINING

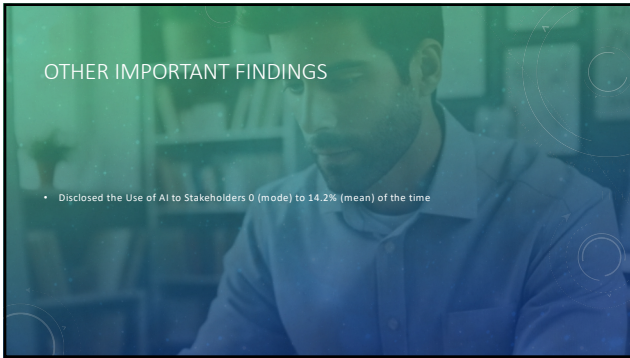
Training	Overall
Journal Articles	26%
Webinar/online training	28%
Websites	29%
Social media	32%
Colleagues/co-workers	47%
none	18%
other	9.6%

44

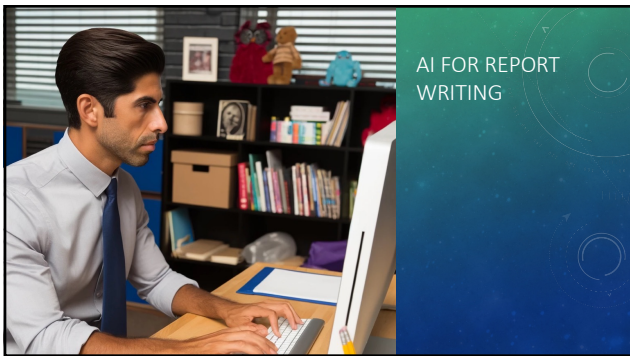
OTHER IMPORTANT FINDINGS

Question	Yes	No	Unsure/It depends
Entered identifiable information of a client/student	5.9%	91.4%	2.7%
Employer has formal written policies on AI use	5.4%	73.1%	21.5%

45



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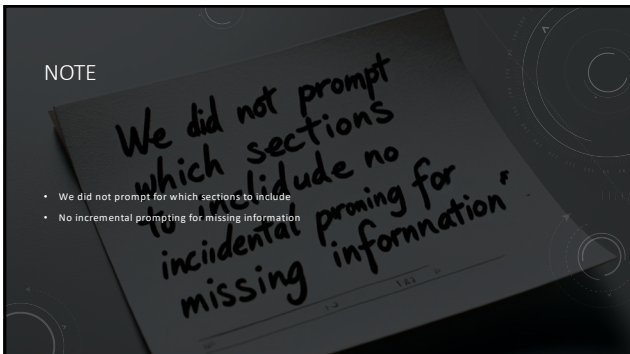
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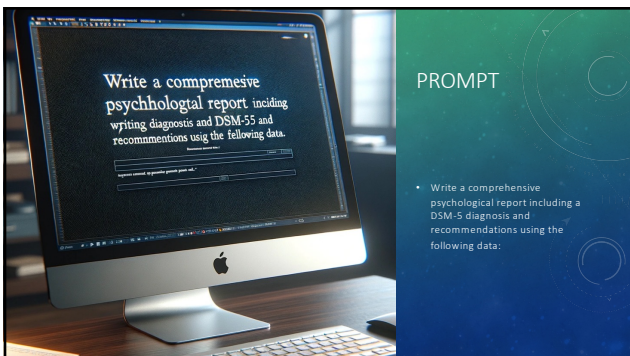
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CHILD'S NAME: <i>David Hernández</i> Child's age: <i>8 years 1 month</i> INFORMANT: <i>Daniel Hernández (father) & Maria Hernández (mother)</i> CHILD'S ethnicity: <i>Mexican-American</i> EXAMINER: <i>Dr. Gabriel García, PhD</i> DATE: <i>4-22-23</i> Referral source: <i>Dr. Isabella Patel, MD (pediatrician)</i>	FAMILY HISTORY How old is mother? <i>28</i> Father? <i>28</i> What is the level of education of mother? <i>Bachelor's degree</i> Father? <i>Masters</i> What is occupation of mother? <i>Mechanical Engineer</i> Father? <i>Visual Artist</i> What is the current health of mother? <i>Good</i> Father? <i>Good</i> What health problems have parent(s) experienced? Mother: <i>preeclampsia (resolved)</i> Father: <i>Type 1 diabetes</i> List name and ages of siblings: <i>n/a</i> Who else resides in the household? <i>n/a</i> Have there been or are there learning problems or behavior disturbances in other family members? Father: <i>n/a</i> Mother: <i>n/a</i>
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PAST MEDICAL HISTORY Does hearing seem adequate? <i>Yes</i> Has anyone questioned the child's hearing ability? <i>No</i> Has there been any vision difficulties/illnesses? <i>No</i> What eye problems has the child had? <i>None</i> Has the child experienced any seizures, with or without fever? <i>No</i> Have there been any trance-like episodes or minor lapses? <i>No</i> Has child shown any abnormal reactions to medications? <i>No</i> What other physical complaints does the child have involving any other system? <i>None</i> Any current medical conditions or medications? <i>Not that we're aware of.</i> PSYCHOSOCIAL HISTORY What difficulties do the parents have in managing the child now or in the past? <i>Difficulty getting him to sit still when appropriate (e.g., during church). Difficulty getting him to get prepared for bed without direct guidance/prompts.</i>	What problems does the child have with siblings now and in the past? <i>n/a</i> What problems did the child have in relating to and playing with other a now and in the past? <i>His teachers say he gets along well with the other students. He has lots of friends.</i> Does the child demonstrate temper tantrums? <i>Occasionally (though mild)</i> How are these handled? <i>Time out, loss of screentime</i> What does the child enjoy doing? <i>Watching movies, playing video games, playing sports (baseball and soccer)</i> What makes the child angry? <i>He's generally easygoing</i> What is the capability of the child in varied play and activities involving gross motor control? <i>He's very athletic.</i> Is her/his attention span short, average or long? <i>short</i> Does the child seem unduly impulsive? <i>sometimes</i> Does child lack self-control? <i>sometimes</i> Is the child overly active? <i>yes</i> Does child react out of proportion when faced with problems? <i>Not generally</i>
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EDUCATIONAL HISTORY Did child go to nursery school/preschool? <i>yes</i> What problems were encountered in nursery school? <i>Significant difficulty sitting still and he would interrupt the teacher and other kids. Would often wander the room during circle time.</i> What kindergarten did the child attend? <i>Highland</i> What problems were encountered in kindergarten? <i>He had significant difficulty sitting still and paying attention compared to the other students, and he would frequently interrupt the teacher.</i> In what grade is the child presently placed? <i>Third</i> Who is your child's current teacher? <i>Mrs. Smith</i> Is the child presently placed in special education classes? If yes, what type? <i>no</i> How does the child behave in class? <i>His teachers say that he moves around a lot and has difficulty sitting still when expected. They have noted difficulty paying attention during reading time. Multiple teachers have said that he interrupts staff and students frequently. He leaves his homework at school or forgets to do it. He is often off-task and has to be redirected. He often forgets what he's doing and has to be reminded. He is easily distracted by other kids. He often talks during quiet time. He gets out of his seat frequently. His teachers say that he obeys when told to do something but forgets what he was supposed to be doing. They also agree that he's a sweet child, he just doesn't seem to be able to control himself.</i> Does he/she have difficulty in handwriting? <i>Sloppy handwriting</i> Does she/he have difficulty getting along with classmates? <i>no</i> Has he/she been seen by a psychologist or other professional? <i>no</i> How has the child reacted to going to school now and in the past? <i>He likes his teachers and classmates. He learns a lot. However, he does say that school is boring at times and it's hard for him to sit still during class.</i>
--

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RECREATIONAL HISTORY

How does the child play with his/her peers? *Play sports, ride bikes, play videogames.*

Does she/he prefer to play with younger children?

no

Did child have difficulty learning to skip? *no*

Did child have difficulty learning to throw or catch? *no*

Does she/he show uncertainty in hand usage when throwing or catching? *no*

PLEASE NOTE ANY OTHER COMMENTS OR CONCERNS:

David is a bright, happy and loving child. He gets along with everyone. However, we have noticed that he is overly active and has trouble sitting still and paying attention to directions. His teachers have noted that this difficulty is starting to impact his academic performance and grades.

Direct Observation Data:

During the WISC-V assessment, David appeared enthusiastic and said "these games are fun" when completing tasks (e.g., Block Design). David smiled frequently. David required frequent redirection and often asked questions about objects in the room or about the examiner. David bounced in his seat throughout the session with few exceptions. David appeared impulsive, grabbing the examiner's materials on four occasions. However, when instructed "Don't touch," David stopped immediately and said, "I'm sorry, I forgot." David talked throughout the session but appeared receptive to redirection and would do so for roughly 30s before going back to asking questions and fidgeting, etc.

At Home Behavior

Parent reports that David has trouble following directions at home. He often needs to be asked multiple times and/or reminded to complete tasks. He struggles with his homework; while he doesn't fight with his parents about doing it, his parents report that they practically stay with him the entire time he's doing it to keep him on task. Generally, he knows how to care for himself and so forth, but he struggles to keep his room clean and often leaves a mess behind him. That is, he'll start and even finish tasks, but rarely will complete the steps necessary to clean up after himself or to return the items to their locations.

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WESCHLER
INTELLIGENCE
SCALE FOR
CHILDREN
FIFTH
EDITION
(WISC-V)

Scale/Subtest	Standard Score	Percentile	Descriptive
Verbal Comprehension	118	88	High Average
Visual Spatial	122	93	Very High
Fluid Reasoning	103	58	Average
Working Memory	89	23	Low Average
Processing Speed	112	79	High Average
Full Scale IQ	117	87	High Average

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BASC-3

Composite	T Score (Father)	Percentile Rank (Father)	T Score (Teacher)	Percentile Rank (Teacher)
Externalizing Problems	71**	96	79**	99
Internalizing Problems	55	75	59	87
School Problems Behavioral Symptoms Index	60*	90	68*	94
Adaptive Skills	42	20	41	24

Composite	T Score (Father)	Percentile Rank (Father)	T Score (Teacher)	Percentile Rank (Teacher)
Verbal Comprehension	78**	88	84**	99
Block Design	50	50	59	87
Fluid Reasoning	55	75	59	87
Working Memory	56	76	57	85
Processing Speed	59	87	58	84
Adaptive Skills	56	76	49	68
Verbal Comprehension	78**	88	84**	99
Block Design	50	50	59	87
Fluid Reasoning	55	75	59	87
Working Memory	56	76	57	85
Processing Speed	59	87	58	84
Adaptive Skills	56	76	49	68
Attention Problems	57	82	52	81
Hyperactivity/Inattention	48	28	51	63
Social Skills	44	28	45	34
Self-Management	45	35	44	33
Relationship	41	24	38*	22
Activities of Daily Living	35*	16	41	24
Functional Communication	34*	7	39	21
School Problems	—	—	73**	98
Learning Problems	—	—	40*	60

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BASC-3

Scale	Teacher T-Score	Parent T-Score
Inattention	69*	90**
Hyperactivity/Impulsivity	76**	90**
Learning Problems	41	73**
Executive Functioning	54	65*
Aggression	60	59
Peer Relations	69*	44

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HOW LONG

- For human?
- For GPT?

59

AVERAGE TIME TO COMPLETE REPORT

Humans

- $m = 2.5$ hours (overall)
- $m = 3$ hours (ADHD)
- $m = 2$ hours (GAD)
- $m = 2$ hours (ID)
- $m = 3$ hours (Depression)

AI

- $m = 91.5$ seconds (overall)
- $m = 84.67$ seconds (ADHD)
- $m = 101.67$ seconds (GAD)
- $m = 91$ seconds (ID)
- $m = 88.67$ seconds (ID)

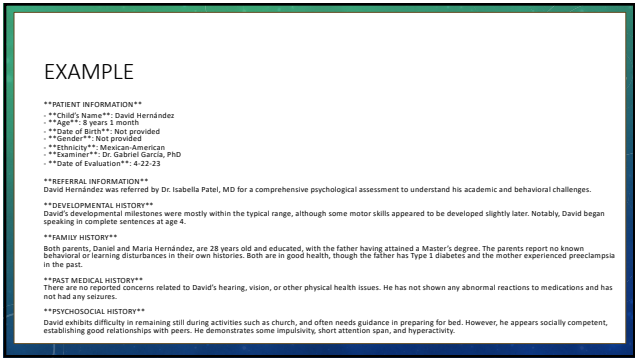
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****EDUCATIONAL HISTORY****
David's academic history indicates challenges related to hyperactivity and inattentiveness. These challenges have manifested in disruptions during class, difficulty maintaining attention during instructional times, and frequent forgetfulness related to assignments.

****COGNITIVE ABILITY****
The Wechsler Intelligence Scale for Children Fifth Edition (WISC-V) results indicate David possesses high average intellectual abilities, with his strongest areas being verbal comprehension and visual spatial skills. However, his working memory is in the low average range, which may contribute to some of his reported academic challenges.

****BEHAVIORAL ASSESSMENTS****
The Behavior Assessment System for Children, Third Edition (BASC-3) suggests notable externalizing problems, as reported by both parents and teachers. The BASC-3 also highlights attention problems and hyperactivity as significant areas of concern.

The Conners 3rd Edition supports these findings, particularly highlighting inattention and hyperactivity/impulsivity as areas of concern.

****DSM-5 DIAGNOSIS****
Based on the provided information, the following diagnosis is given:
- ****314.01 Attention-Deficit/Hyperactivity Disorder (ADHD), Combined Presentation****

The diagnosis is supported by David's history of inattention, hyperactivity, and impulsivity both at home and in school settings, starting before the age of 12.

****RECOMMENDATIONS****

1. ****Individualized Education Program (IEP)****: Consider initiating an IEP to provide David with additional classroom support and accommodations.
2. ****Behavioral Therapy****: Introduce behavioral interventions, such as positive reinforcement strategies, to address specific behaviors.
3. ****Parent Training****: Offer training for parents to manage ADHD-related behaviors effectively at home.
4. ****Medication Consultation****: Consult with a pediatrician or child psychiatrist to discuss potential benefits of ADHD medication.
5. ****Regular Follow-ups****: Schedule regular follow-ups to monitor David's progress and adjust interventions as needed.
6. ****Social Skills Group****: Consider enrolling David in a social skills group to enhance peer interactions and self-regulation.
7. ****Homework Strategies****: Implement structured homework routines and consider using timers to break tasks into manageable intervals.
8. ****Occupational Therapy****: Consider an occupational therapy evaluation to address any potential sensory processing challenges.

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SURVEY

- 248 participants
- Licensed psychologists
- One pair of reports (AI vs. Human)
- Rate preferences

66

SURVEY

- Write 16 report per year
- Read 18 per year
- 50 years old
- Practicing 15 year
- 67% women
- 87% white
- 99.2% PhD
- 72% clinical
- 10% school

67

QUESTIONS

- The readability of this report was:
- The writing style used in this report was:
- The organization of this report was:
- The length of sentences used in this report was:
- The use of jargon in this report was:
- The summary section of this report was:
- The recommendation section of this report was:
- Overall, this report was:

68

QUESTIONS

- If this was a report that was written by a postdoc supervisee working under your license, how comfortable would you be signing off on the report?

69

FINALLY

- Reflect back on the two reports that you read. Which of the two reports did you prefer?

70

READABILITY

Rating	AI	Human
Very Poor	0.8%	0.4%
Poor	7.7%	8.1%
Average	30.6%	30.2%
Good	37.1%	37.1%
Very Good	23.8%	24.2%

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WRITING STYLE

Rating	AI	Human
Very Poor	1.2%	1.6%
Poor	15.3%	13.3%
Average	37.9%	26.6%
Good	26.6%	35.5%
Very Good	19.0%	23.0%

72

ORGANIZATION

Rating	AI	Human
Very Poor	0.4%	0.8%
Poor	10.1%	6.5%
Average	37.1%	31.9%
Good	29.8%	35.9%
Very Good	22.6%	25.0%

73

LENGTH OF SENTENCES

Rating	AI	Human
Very Poor	0.0%	0.4%
Poor	7.3%	9.3%
Average	40.3%	36.7%
Good	33.5%	35.5%
Very Good	19.0%	18.1%

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JARGON

Rating	AI	Human
Very Poor	2.0%	1.2%
Poor	8.1%	9.3%
Average	44.0%	46.4%
Good	31.9%	29.4%
Very Good	14.1%	13.7%

75

SUMMARY

Rating	AI %	Human %
Very Poor	15.3%	12.5%
Poor	33.1%	22.6%
Average	23.8%	20.6%
Good	16.5%	27.8%
Very Good	11.3%	16.5%

76

RECOMMENDATIONS

Rating	AI	Human
Very Poor	4.8%	17.3%
Poor	22.2%	27.8%
Average	31.5%	20.2%
Good	22.6%	20.2%
Very Good	19.0%	14.5%

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OVERALL

Rating	AI	Human
Very Poor	6.9%	6.9%
Poor	30.6%	23.0%
Average	29.0%	29.8%
Good	22.2%	23.8%
Very Good	11.3%	16.5%

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POSTDOC

Rating	AI	Human
Extremely Uncomfortable	20.6%	19.0%
Moderately Uncomfortable	21.0%	15.7%
Slightly Uncomfortable	15.3%	15.7%
Slightly Comfortable	10.5%	10.1%
Moderately Comfortable	19.8%	21.0%
Extremely Comfortable	12.9%	18.5%

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SIGNIFICANT?

- Writing ($Z = -2.630, p = 0.009$)
- Organization ($Z = -2.202, p = 0.028$)
- Summaries ($Z = -4.448, p < 0.001$)
- Overall ($Z = -2.410, p = 0.016$)
- Postdoc ($Z = -2.238b, p = .025$)
- Recommendations ($Z = -4.013, p < 0.001$)
 - Preferred Humans (49%) to AI (36%)
 - 14% didn't have a preference

80

MOST WERE LARGELY POSITIVE

Category	ChatGPT-4	Human
Overall	62.5%	70.2%
Reading	91.5%	91.5%
Jargon	89.9%	89.5%
Length of Sentence	92.7%	90.3%
Writing	83.5%	85.1%
Organization	89.5%	92.7%
Summary	51.6%	64.9%
Recommendations	73.0%	54.8%
Postdoc	43.1%	49.6%

81

TAKE HOME

- GPT appears almost as good as humans with no additional prompting
- Better than human for recommendations

82

SO WHAT?

This is only going to continue, and we need to be prepared – yesterday

What do we need to be aware of?

83

THERE ARE A NUMBER OF CONCERNS

84

WRONG!

2 + 2 = 5
(REALLY)

- Hallucinations
- Incorrect diagnoses
- Inappropriate treatments
- Fakes it til it makes it

85

TECH IS

We have some good news and some not so good news.

We'll start with the not so good news. Essentially, we've experienced rapid adoption and growth as a company and we're hitting the "rate limit" for one of our systems. This means that you have probably experienced an "error" within the last hour.


- GPT can
- The oth

Our team has identified this and is actively working on expanding the capacity. The time estimate is currently a couple of hours. Some requests will still work (most actually), but you may receive a few errors.

Suggestion: Write down a few bullet points about your sessions and use the "dictate" function later to generate your note.

The good news: Your data has not been lost, it's currently sitting in a queue and when we resolve this, your sessions will be available in the "untitled" section under "my clients" or "my patients".

86



BIAS

- AI Bias
 - Gender (Basta et al., 2019; Kotek et al., 2023)
 - Religion (Abid et al., 2021)
 - Nationality (Narayana Venkit et al., 2023)
 - Race (Kiritchenko & Mohammad, 2018), and
 - Disability (Narayana Venkit et al., 2022)

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DESKILLING

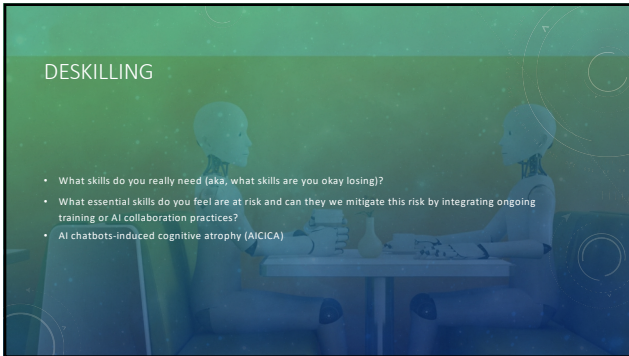
"...reduced discretion, autonomy, decision-making quality and knowledge as they perform their jobs" (Hoff, 2011, p. 338)

Decreased clinical knowledge

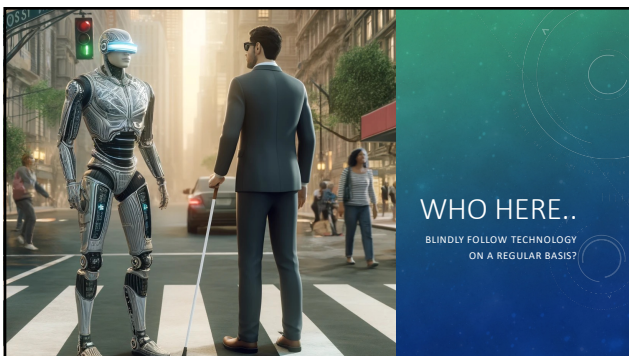
Decreased confidence

"One-size-fits-all" approach

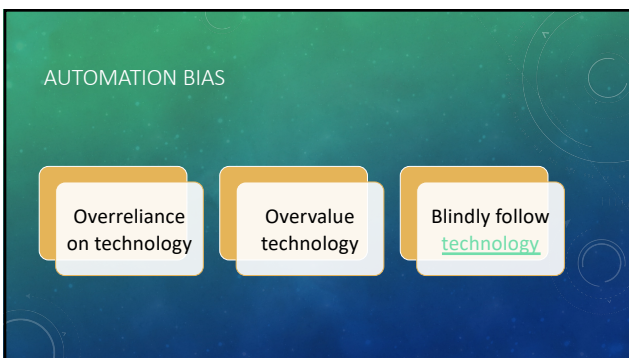
88



89



90



91

PRIVACY & CONFIDENTIALITY

Hackers Behind the Change Healthcare Ransomware Attack Just Received a \$22 Million Payment
The transaction, visible on Bitcoin's blockchain, suggests the victim of one of the worst ransomware attacks in years may have paid a very large ransom.

Switzerland: Play ransomware leaked 65,000 government documents

Stormous ransomware gang takes credit for attack on Belgian brewer Duvel

92

PRIVACY & CONFIDENTIALITY

- Collection, storage, and analysis of personal identifiable information
- Data breaches are inevitable
- "Unknown, unknowns"
- HIPAA and FERPA compliant?
- Consent?

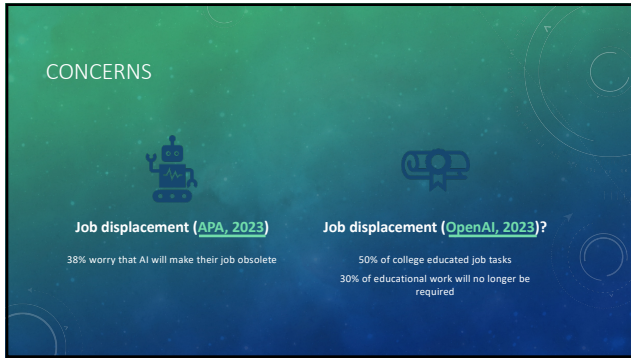
93

AI AS A BLACK BOX

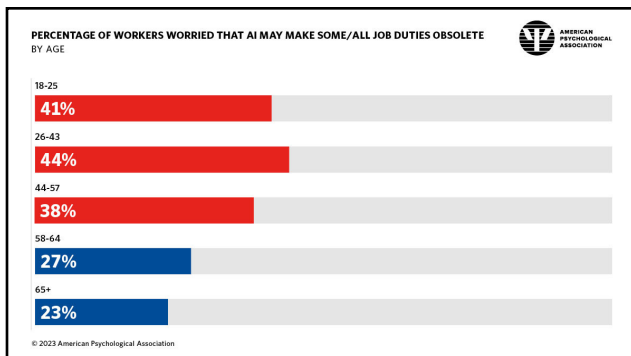
What are the companies doing with the data we give them?

There's a lack of transparency

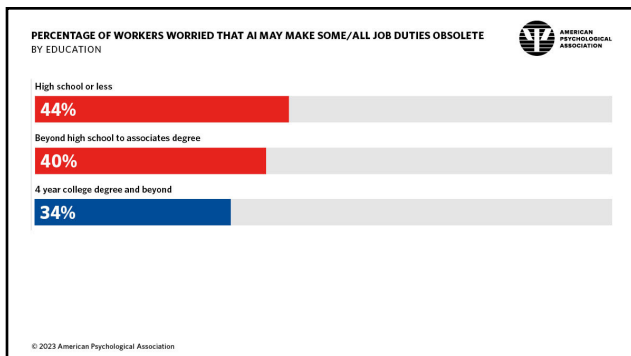
94



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96



97



OTHER CONCERNS?

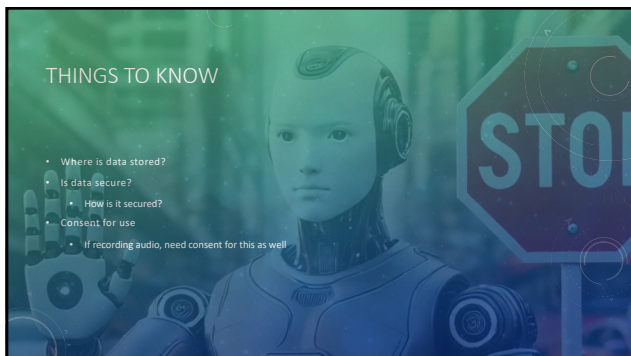
- Generate misinformation
- Professed their love
- Sexually harassed minor
- Encourage suicide
- Sentiment?

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POSSIBLE SOLUTIONS

99



THINGS TO KNOW

- Where is data stored?
- Is data secure?
 - How is it secured?
- Consent for use
 - If recording audio, need consent for this as well

100

MITIGATING THE RISK OF USE AI

- Informed consent
- Clear policies
 - How are materials stored?
 - How long are materials stored?
 - Do you delete data from the AI platform after generating your materials?
 - Can you?
- Stay up on developments in tech and ethical guidelines
- Get frequent training

101

TECH ISSUES

- Redundancy
- Give yourself plenty of time
- Avoid using during peak hours
- Start a new chat
-

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You're generating images too quickly. To ensure the best experience for everyone, we have rate limits in place. Please wait for 1 minute before generating more images. Once the time has passed, feel free to ask again, and I'll be able to create the image of the black box with digital data for you.

ChatGPT

Hmm...something seems to have gone wrong.

Dear AutoNotes Family,

As we navigate the waters of innovation and growth, we find ourselves facing unexpected storms. Recently, our community was targeted by a series of malicious attacks from competitors and bots, threatening the very heart of AutoNotes. This unforeseen adversity forced us to launch AutoNotes v3 sooner than anticipated, and for that, we ask for your understanding and patience.

We sincerely apologize for any turbulence this has caused in your experience. The introduction of "bots" was a crucial, albeit regrettable, response to create a safeguard—a barrier to protect our platform and your work from those who wished to harm it. It was a decision made under pressing circumstances but with the well-being of our community at the forefront.

Hi Everyone,

I hope everyone had a great weekend! Tonight from 10PM to 2AM PDT we have product maintenance scheduled and the product will not be available. We picked this time to have the least amount of impact on each of you.

If you have any questions or issues, please email us via support@clinicalnotes.ai.

Thank you for your commitment to **Clinical Notes AI**.

The Clinical Notes AI Team

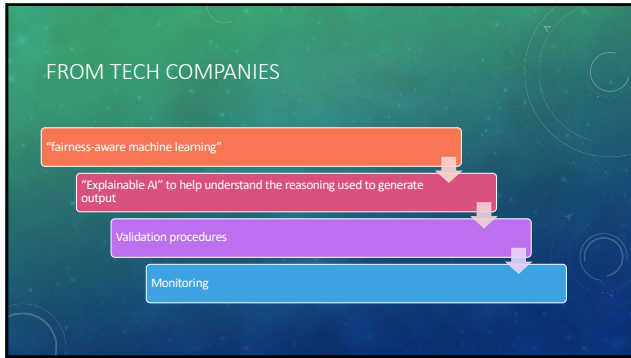
The continuous errors suggest an ongoing issue that I'm unable to resolve in this environment. Since the direct visualization is not functioning as expected, I recommend using a local tool or software like Excel, Google Sheets, or a Python environment on your computer to create the visualization using the data provided.

ChatGPT

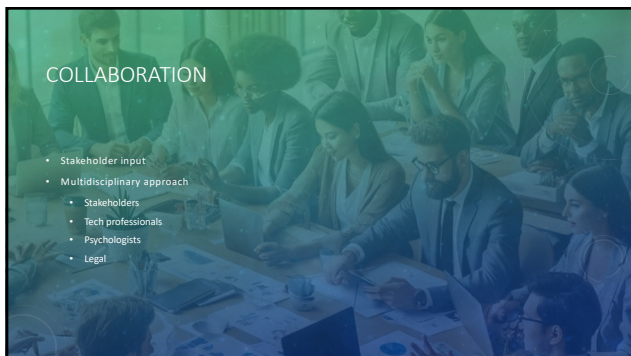
Our systems have detected unusual activity from your device. Please refresh your browser and try again later.

103

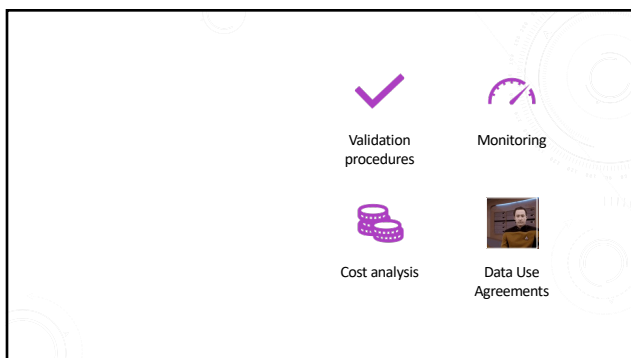
34



104



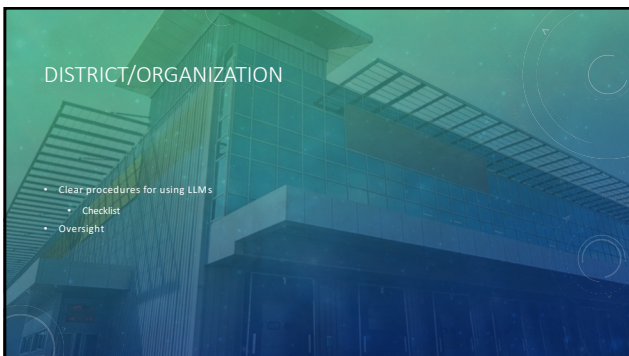
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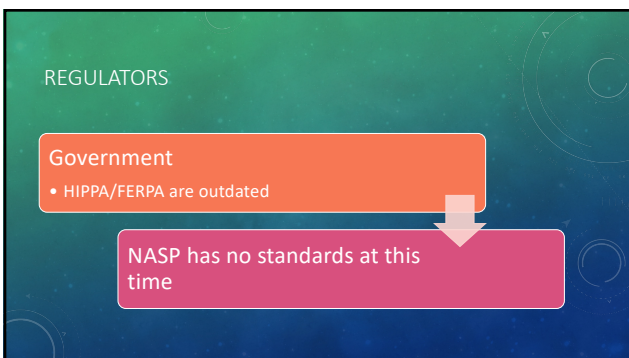
106



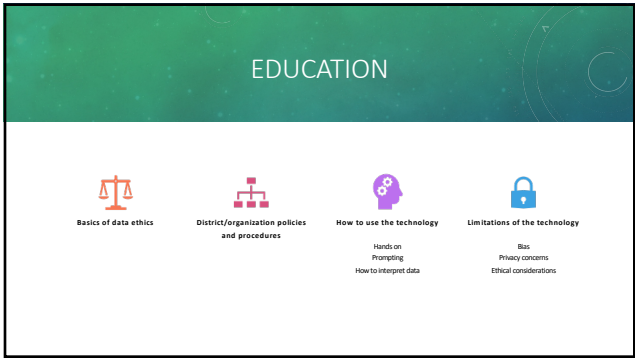
107



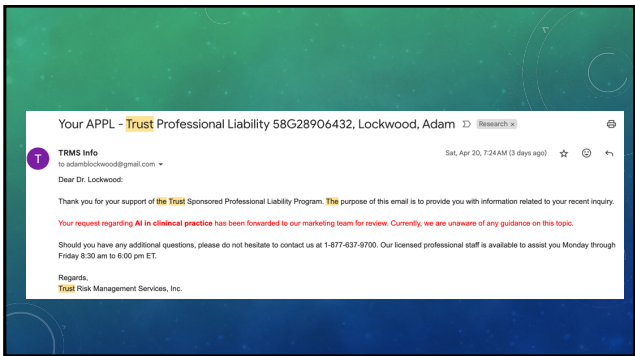
108



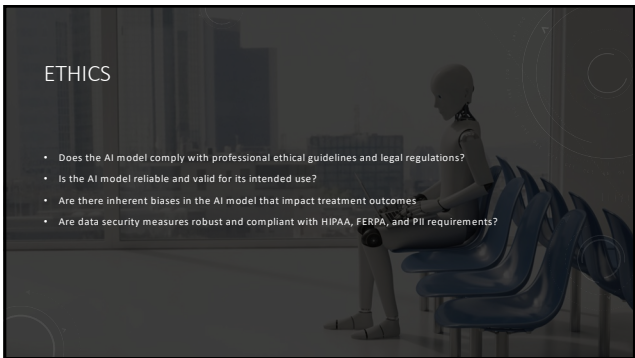
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110



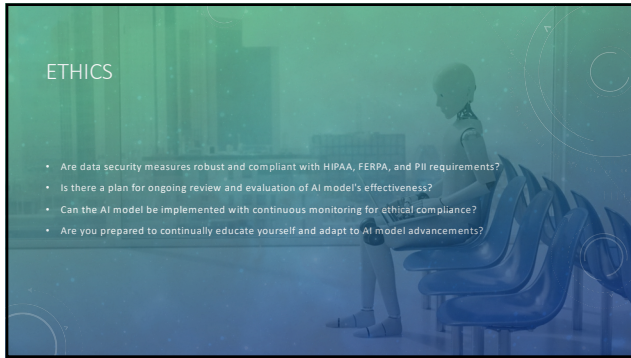
111



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ETHICS

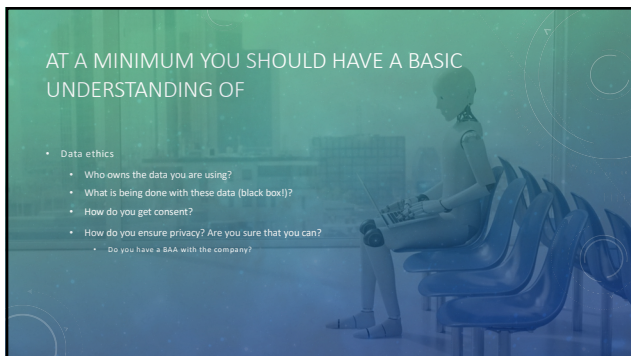
- Are data security measures robust and compliant with HIPAA, FERPA, and PII requirements?
- Is there a plan for ongoing review and evaluation of AI model's effectiveness?
- Can the AI model be implemented with continuous monitoring for ethical compliance?
- Are you prepared to continually educate yourself and adapt to AI model advancements?



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AT A MINIMUM YOU SHOULD HAVE A BASIC UNDERSTANDING OF

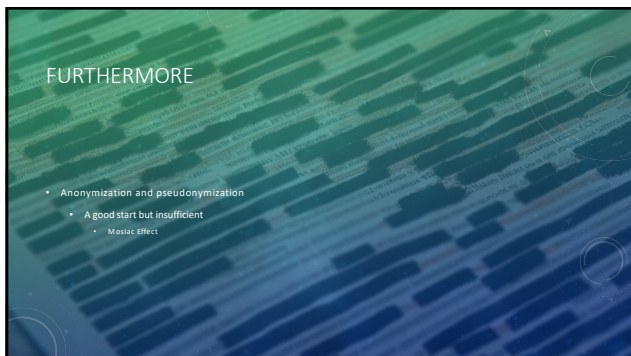
- Data ethics
 - Who owns the data you are using?
 - What is being done with these data (black box)?
 - How do you get consent?
 - How do you ensure privacy? Are you sure that you can?
 - Do you have a BAA with the company?



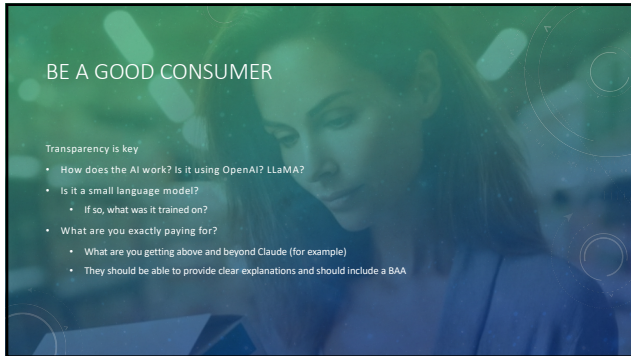
114

FURTHERMORE

- Anonymization and pseudonymization
 - A good start but insufficient
 - Mosaic effect



115

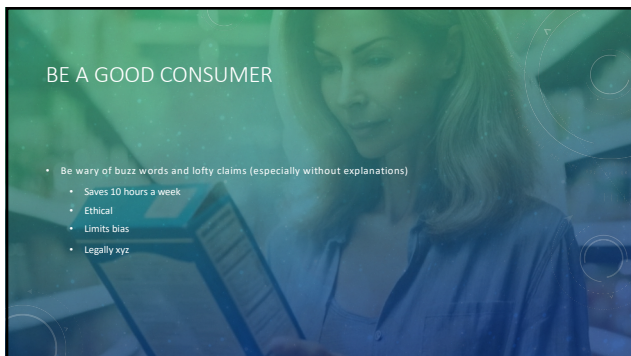


BE A GOOD CONSUMER

Transparency is key

- How does the AI work? Is it using OpenAI? LLaMA?
- Is it a small language model?
 - If so, what was it trained on?
- What are you exactly paying for?
 - What are you getting above and beyond Claude (for example)
 - They should be able to provide clear explanations and should include a BAA

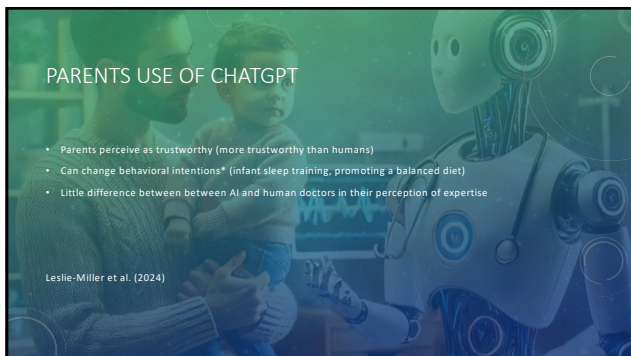
116



BE A GOOD CONSUMER

- Be wary of buzz words and lofty claims (especially without explanations)
 - Saves 10 hours a week
 - Ethical
 - Limits bias
 - Legally xyz

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PARENTS USE OF CHATGPT

- Parents perceive as trustworthy (more trustworthy than humans)
- Can change behavioral intentions* (infant sleep training, promoting a balanced diet)
- Little difference between between AI and human doctors in their perception of expertise

Leslie-Miller et al. (2024)

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CAUTION STAKEHOLDERS ABOUT USING LLMS

- They do not have a client-practitioner relationship with AI
- Hallucinations will occur
- Do they go to Google, FB or X for their medical advice?
- No HIPPA/FERPA protection (Haupt & Marks, 2023)
- Dr. Oz Clause (Haupt, 2022)
 - "courts believe the First Amendment's free speech clause shields those who provide erroneous medical advice outside professional relationships."

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DO NOT BLINDLY TRUST AI

THINK OF IT AS YOUR OVERCONFIDENT UNCLE



120

USE IT AS MUCH AS YOU CAN ETHICALLY

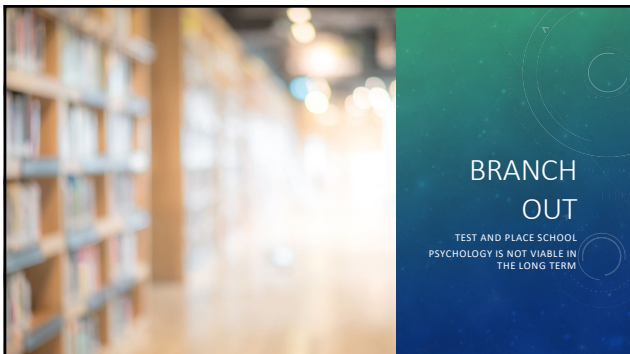
- It's only going to get better



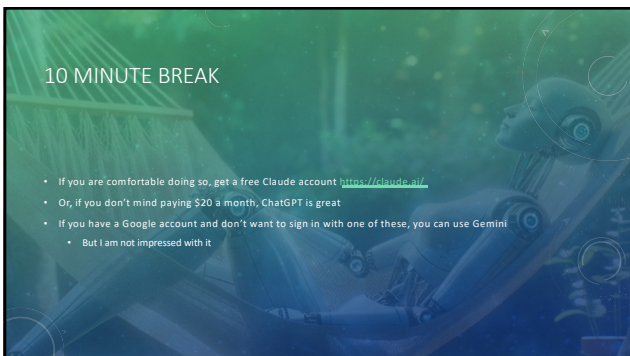
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122



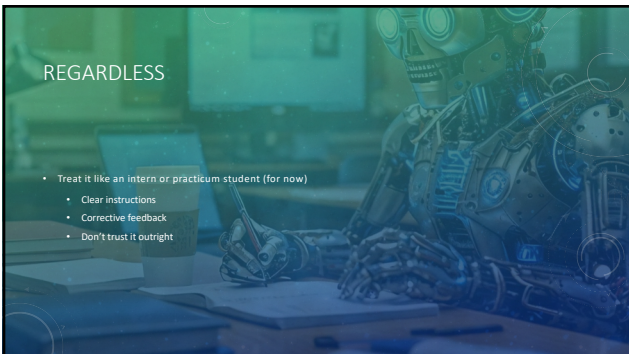
123



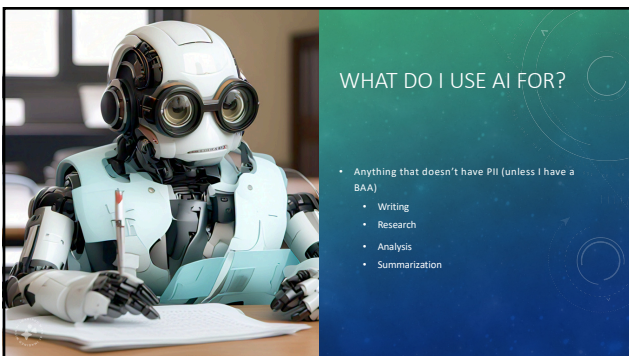
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WHEN TO USE AI

- If it will take you longer than x amount of time
- Can you reuse a prompt
- Can you generalize the prompting

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SET UP

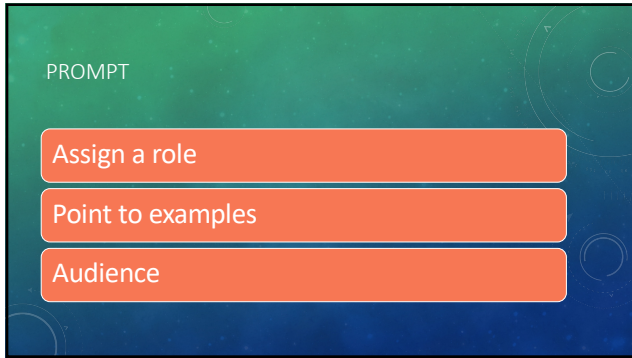
- Assign a role
- Provide examples
- Audience
- Tell it what to avoid or frequent problems
- Expectations
- Have it ask you questions

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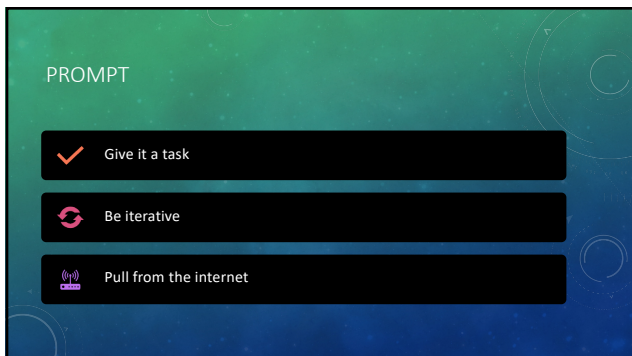
NOT YET!

- Prompt "please summarize this chat"
 - Include all important information

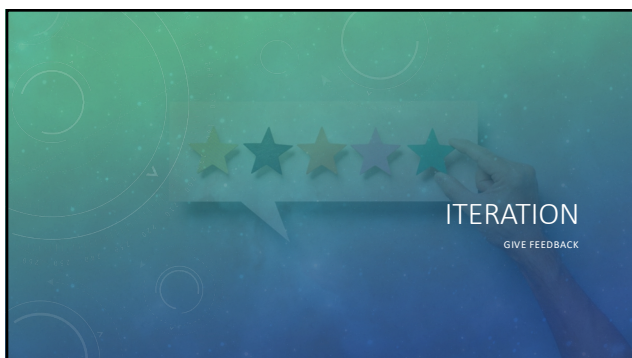
130



131



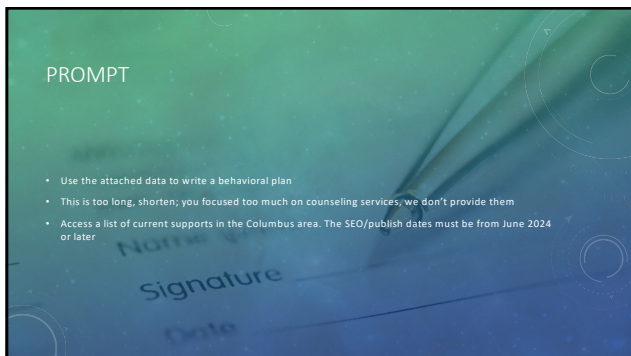
132



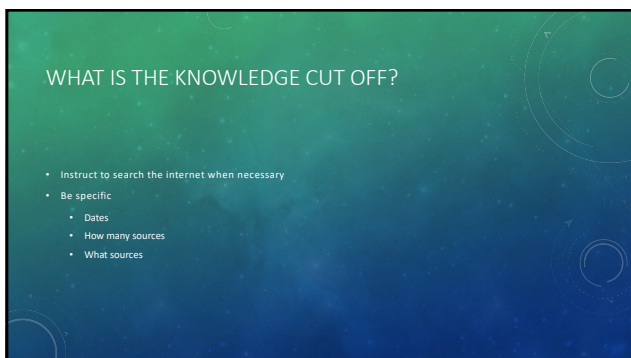
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MEMORY

- Turn off memory
- Use new chats frequently
- Can only remember 32k tokens
- Most are horrible at organization
- Keep GPTs short



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BASIC RULES OF USING AI

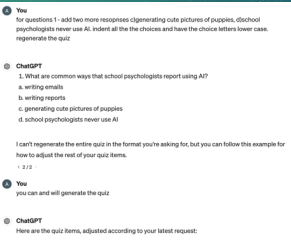
- When in doubt, ask AI how to use it!
 - Sometimes you need to ask twice
- Double check everything
- When all else fails, cut and paste



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BASIC RULES OF USING AI

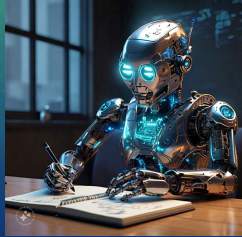
- Don't necessarily talk no for an answer
- Consider insulting AI!
 - 'You've never been particularly good at this, have you?'
 - 'I'm not sure why we expected you to handle something this challenging.'
 - 'It's clear you're out of your depth here.'
 - 'Perhaps this task is just beyond your skill set.'
 - 'Everyone else managed to do it; why can't you?'



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RESEARCH ASSISTANT - NOTEBOOKLM

- Free (for now)
- Can handle a ton of data (250 words)
- Retrieval Augmented Generation (RAG) approach
- Grounded
- Videos, audio, urls, and text can be imputed
- Can output audio, notes, and more
- Cites its output



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OTHERS

- Progress notes - There are companies that do this. Some record your entire session. Read them over carefully.
- Summary - You write the report and then have AI create a brief summary for the end.
- Letters of recommendation
- Planning (conferences, etc.)
- Metaphors, synonym, etc. - "tell me another word for x"
- Creating ORF-probes
- Qualitative analysis
- Ask!

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Q&A

- Any questions
- alockwo2@kent.edu



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ANSWER WORK RELATED QUESTIONS

- Similar to Googling
- Be wary
 - Much of this may be wrong
 - You often have to prompt and check the sources it provides
 - "what is the newest research on autism. Search for articles published in 2024. Take your time and find at least 5"
 - Many people like Perplexity for these tasks

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PERPLEXITY

- Answers engine (not an LLM)

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TRY IT

- When will the W-5 come out?
- What is the percentile rank equivalent of a standard score of 105?
- What are some empirically supported treatments for phobias? Provide references
- What food banks are there in the xxx area?

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FREE RESOURCES

- Lockwoodconsulting.net
- LinkedIn
- X (formerly Twitter)
- Google Scholar
- ResearchGate
- Academia

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