Navigating the Ethical Landscape: Exploring AI in School Psychology

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Objectives:

1. To understand the role of AI in school psychology and its potential impact on report writing, intervention selection, and ethical considerations.
2. To discuss the ethics of using AI-powered tools and resources that facilitate the search for evidence-based interventions and support decision-making in school psychology.
3. To navigate the ethical considerations associated with the use of AI in school psychology and develop strategies for ethical integration.
4. Considerations for integrating AI tools ethically and responsibly into school psychology practice.
5. To gain a deeper understanding of the ethical implications of using AI in school psychology and foster a mindset of responsible AI adoption.
# Areas to Be Discussed

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Introduction to AI
Introduction

What is Artificial Intelligence (AI)?

“It is the science and engineering of making intelligent machines…” (McCarthy et al., 1955).

“... is a field, which combines computer science and robust datasets, to enable problem-solving” (IBM, 2023).

“AI is about making machines smart, so they can do things that usually require human intelligence, like learning, problem-solving, and decision-making. It helps us automate tasks and improve efficiency” (ChatGPT, 2023).
AI Has Already Existed...

Roomba, 2002

NASA’s Opportunity Rover, 2004

Kinect for Xbox 360, 2010

Alexa, 2014

Siri, 2011

Hanson Robotics’s Sophia, 2016
Introduction

Dorfer, 2023
Tristan Harris & Aza Raskin: The AI Dilemma
AI Applicable to School Psychology

ChatGPT

Pros
- Best for text-based tasks and summaries
- Builds on and learns from previous threads
- Built-in plagiarism detector
- View, delete, and share threads

Cons
- Knowledge cut-off September 2021
- “Hallucinations” may occur
- Summarizes well, but does not offer unique or novel insights

Bard

Pros
- Best for research and answering fact-based questions
- Continuously draws updated information from the internet (i.e., has no knowledge cut-off)
- Summarizes webpages

Cons
- Frequent “hallucinations”
- No plagiarism detector at this time
- Struggles to summarize longer content
et al., 2022). As a result of this change from legislated efforts in schools to emphasize the importance of addressing academic skill deficits, using systems such as RTI, MTSS.

In 2004, the Individuals with Disabilities Education Act (IDEA) underwent its transformation into the Individuals with Disabilities Education Act of 2004 (IDEA 2004). Consequently, response to intervention (RTI) became an alternative to the ability-achievement discrepancy model, where students with potential specific learning disabilities are identified. This shift emphasized an imperative for educational institutions to prioritize early intervention for students who are not presently identified as requiring specific support.

As a result of these revisions mandated by IDEIA (2004), educational systems were obligated to provide intervention measures prior to referral for special education services. This evolution helped to prompt a paradigm shift in educational practice, focusing on early identification and intervention. The inclusion of social and emotional learning (SEL) programs, such as those promoted by CASEL (Collaborative for Academic, Social, and Emotional Learning), has also become increasingly important in addressing the holistic needs of students.
AI Applicable to School Psychology

Elicit

Pros

- Conducts literature reviews
- Finds relevant papers even if they don’t match keywords
- Automatically searches forwards and backwards in citations
- Can upload your own PDFs
- Can download CSV or .bib file to import references

Cons

- Cannot access full-text papers behind paywalls
- Not 100% accurate, misinterprets information (estimated to be around 80-90% accurate)
- Does not tell you how many papers were returned
- Cannot evaluate trustworthiness of articles
So how do I use it?
Report Writing Efficiency
# Ways to use AI in Report Writing

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<th>Assessment Descriptions</th>
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| ● Standardized assessment descriptions and write-ups  
  ○ “Using the following scores, write up the C-TOPP-2 results and include examples of what these scores mean in the classroom.”  
  ● Screening measures including Acadience, FastBridge, iReady, MAP, etc. | ● Paste information and ask for a summary  
  ○ Great for academic or behavior assessment data or combining multiple teachers’ input  
  ● Ask for recommendations based on student data | ● Match your report-writing style  
  ○ “Analyze this text for tone, structure, and content: [insert de-identified part of a report].”  
  ● Ask for information to be re-written to be parent or student friendly  
  ● Check for spelling and grammar mistakes |
Examples of ChatGPT’s output

a. Florell (2023a)

The WISC-V (Wechsler Intelligence Scale for Children-Fifth Edition) is a widely used cognitive assessment tool for children aged 6 to 16. It measures cognitive abilities such as verbal comprehension, visual–spatial processing, working memory, and reasoning in five main domains. The test results provide a comprehensive picture of a child's intellectual strengths and weaknesses and support educational planning.

b. DTSD - Berry (2023)

Based on the results of the Wechsler Individual Achievement Test - Fourth Edition (WIAT-4), Jane’s academic strengths appear to be in essay composition, where she scored in the average range. However, her needs are evident in all other areas assessed. Jane’s reading scores are in the very low range, with low average scores in decoding and reading fluency. Her math scores are also in the very low range, with very low scores in math problem-solving and numerical operations. Her written expression scores are in the low average range, with a very low score in spelling.
Intervention Selection

Benefits of AI in Intervention Selection

- Improved efficiency
  - Time-saving
  - Staying current with the research

- Enhanced accuracy
  - Individual-specific
Intervention Selection

**IEP outline**
Outline an individualized Education Plan. The more specific you put into the topic the more helpful the Outline will be.

**Accommodations List**
Come up with a list of accommodations for a specific disability or need of the student.

**Behavioral Intervention Plan**
Create a plan to eliminate or encourage a specific behavior for a student in your class. Use specificity in describing the behavior you would like to address.

**Lexile Increaser**
Paste text in the topic and generate a similar text at a higher Lexile score. (More Difficult)

**Lexile Decreaser**
Paste text in the topic and generate a similar text at a lower Lexile score. (Less difficult)

**Evidence-Based interventions list**
Generate a list of Evidence-Based interventions that you can try.

Sophia Recommends
Sophia provides individualized, detailed, measurable recommendations and interventions based on hundreds of evidence-based practices.
Prompts & Practice
Some Considerations…

How/What to ask AI

- Age
- Grade
- Content
- Operationally Defined
- Narrow/Specific academic area

Evidence-Based?

- Are the interventions suggested evidence-based?
- Example:
  - Can you provide me references that support this intervention?

Who is implementing?

- Specify educator/staff
- AI provides different interventions based off role
- Example:
  - Could you provide interventions for a school psychologist?
  - Could you provide recommendations for a classroom teacher?
Examples of AI prompts

- Can you give me a parent-friendly description of the WISC-V?
- What subtests are included in FastBridge EarlyReading?
- Summarize the following academic data for a student and include strengths and weaknesses.
- Give me 3-5 interventions for a 5th grade student with a reading disability in basic reading.
- Give me 3-5 interventions focusing on time management and organization for a 3rd grade student with ADHD.
- What are the strengths and weaknesses of the SRS, CARS, and ASRS?
- If a student’s BASC results came up Clinically Significant on Atypicality, Depression, and Aggression, what additional assessments or rating scales should I give?
“Golden Prompts”

- “Act as if...”
  - Will instruct ChatGPT to emulate or use the same writing style as a group, person, expert, etc.
  - Example: “Act as if you are a parent whose child just had their first psychoeducational evaluation...”

- “Tell me what else you need to do this”
  - Will create more personalized results by prompting ChatGPT to ask more questions about what you want
  - Tacked on to the end of a prompt
  - Example: “Create a counseling goal for a student who is working on decreasing anxiety. Tell me what else you need to do this.”

Chen, 2023; Florell, 2023a
Ways AI Can Automate Tasks

**Writing Emails/Communication**
- Write emails in parent-friendly language about anything (e.g., special education evaluation process, opting into tier 2 behavioral intervention, translate to any language)
- Create parent-friendly newsletters

**Random Notes Into Concise Form**
- Turn notes into full sentences (e.g., notes from classroom observation, parent meeting, teacher consultation)
  
  *Example:* “Using the following notes [paste sanitized notes], summarize the information in chronological order and in an objective and clinical tone of a school psychologist.”

**Lessons and Goals**
- Can create individual, small-group, and classwide lessons
  
  *Example:* “Using CASEL standards, write an engaging classwide lesson about the difference between empathy and sympathy for fifth-grade students.”
Your Turn!

- Let’s take a look at what it can do.
- You are welcome to try it on your own.

https://chat.openai.com/auth/login
Ethical Considerations
Should we be worried?
Ethical Considerations

Should we use it?

Yeah, but your scientists were so preoccupied with whether or not they could, that they didn’t stop to think if they should.
NASP Ethics

Standard II.3.5 Digital Administration and Scoring
When using digitally administered assessments (e.g., computers, tablets, virtual reality) and/or computer-assisted scoring or interpretation programs, school psychologists choose programs that meet professional standards for accuracy and validity. School psychologists use professional judgment in evaluating the accuracy of digitally assisted assessment findings for the examinee.
Ethical Considerations

01 Concerns with privacy and confidentiality of student data and information

02 “Digital redlining” and racial bias in algorithms

03 Need for adequate training for responsible use and understanding of impact on human autonomy
Examples of ChatGPT’s output

Q: Calculate the GAI based on these scores: Verbal Comprehension 121, Visual Spatial 119, Fluid Reasoning 126, Working Memory 107, Processing Speed 108

A: To calculate the GAI (General Ability Index), we need to use the scores from the Verbal Comprehension, Visual Spatial, and Fluid Reasoning subtests, which are considered the "core" abilities.  

\[
\text{GAI} = \frac{\text{Verbal Comprehension} + \text{Visual Spatial} + \text{Fluid Reasoning}}{3} \\
\text{GAI} = \frac{121 + 119 + 126}{3} \\
\text{GAI} = \frac{366}{3} \\
\text{GAI} = 122
\]

Therefore, the GAI for these scores is 122.
## Examples of ChatGPT’s output

| Q: can you give me a list of articles looking at the effectiveness of zones of regulation |
| Q: I cannot find that article. |
| A: I apologize for the confusion earlier. After re-checking my sources, I cannot find any published studies by Zizzo and Jaffe that specifically examine the effectiveness of the Zones of Regulation program. It is possible that the article was an unpublished research report or a presentation given at a conference. I apologize for any confusion or inconvenience this may have caused. |
### Privacy?

**Does ChatGPT (and other AI) save data, such as chat history?**

- Yes, they do save data, such as chat history, to train and improve its models.
- The conversations are used for training purposes and “may be reviewed by our AI trainers to improve our systems.”

Think about Facial Recognition systems. They offer a preview of the privacy issues that emerge.
Confidentiality

Some AI systems have introduced more privacy controls.

- Look at the data usage policies for an individual’s use of the platform.
- Turn off chat history.
  - By turning off your chat history, your conversations won’t be used to train the AI.
Algorithmic Discrimination

“Part of the problem is there is no across-the-board policy that requires companies to disclose what is actually operating inside their technology. And I think a lot of leaders in schools still have the perception that if you’re basing things on numbers, then systems must be operating in a neutral fashion. But these systems are built by people, and therefore people’s inherent biases, their unconscious biases, their explicit biases go into the systems. A lot of our conversations are about educating people on a general level that these are not neutral systems.”
Conclusion
01 AI has tremendous potential to support the work of a school psychologist & to gain efficiencies

02 Support for creating parent friendly communication

03 Ethical considerations particularly around confidentiality need to be considered. Confidentiality and bias need to be considered.

04 AI makes suggestions, you make decisions
References


Center for Humane Technology. (2023, June). Center for humane technology co-founders Tristan Harris and Aza Raskin discuss the AI dilemma. [Video]. YouTube. https://www.youtube.com/watch?v=cB0_-qKbal4


Questions?
Thank You!