

AI vs. Human Expertise:

Exploring AI Tools for Library Reference Services

Jia Mi, Electronic Resources/Serials Librarian, TCNJ
Yingting Zhang, Research Services Librarian, Rutgers

NJ Academic Libraries Conference
January 5, 2024

Outline



Image generated by Bing Chat

- I. Objectives
- II. Introduction
- III. Using AI Tools for Reference Inquiries
- IV. Case Studies
- V. Performance Evaluation
- VI. Implications and Concerns
- VII. Conclusion

知己知彼 百战不殆

The Art of War 《孙子兵法》

Know yourself, know your enemy, and you will never be defeated in a hundred battles.



By understanding oneself and others, one can navigate through any challenges without the risk of failure.

Understanding ourselves and the evolving AI landscape is the key to overcoming challenges and thriving in the changing technological environment.



Image generated by Bing Chat

I. Objectives

- Explore the benefits and limitations of generative AI tools
- Investigate AI tools vs human expertise and recognize the need for human expertise
- Demonstrate the importance of information literacy and critical thinking

II. Introduction

What is Artificial Intelligence?

- Create computer systems that can perform tasks requiring human-like intelligence

What is Generative Artificial Intelligence?

- Create new content (audio, code, images, text, video)

What is ChatGPT?

- Large Language Model (LLM)
- GPT (Generative Pre-trained Transformer)

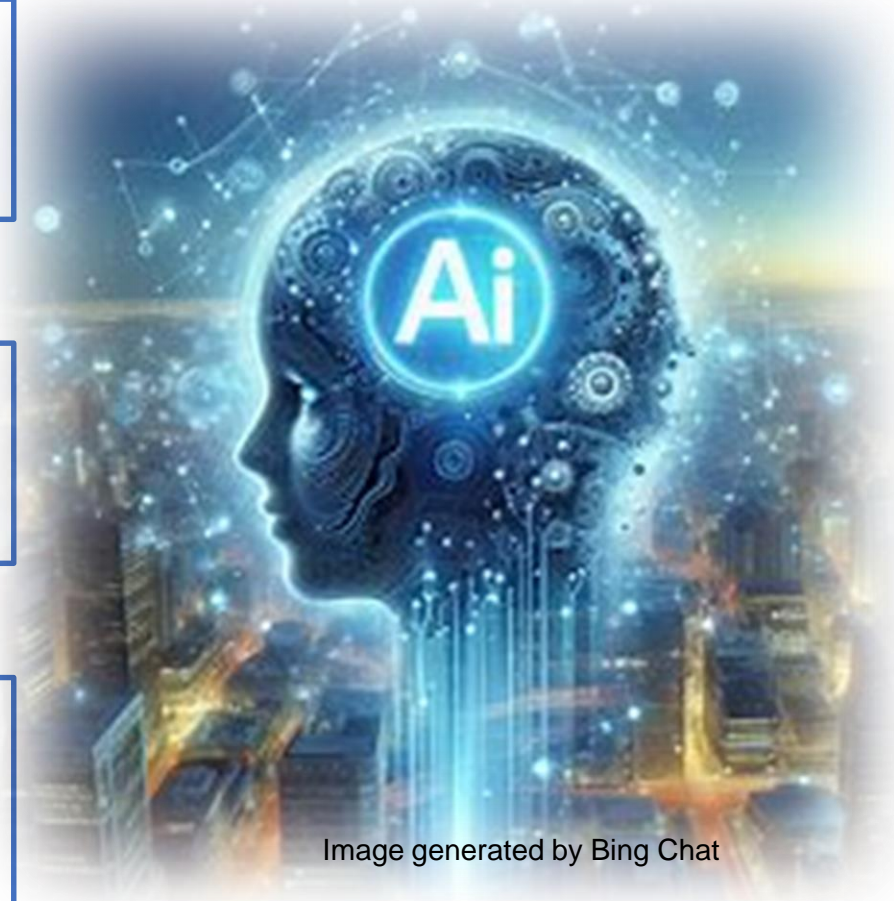


Image generated by Bing Chat

ChatGPT

Microsoft Bing

BARD

Claude

II. Introduction

TECH

OpenAI announces GPT-4, claims it can beat 90% of humans on the SAT

PUBLISHED TUE, MAR 14 2023 1:42 PM EDT | UPDATED TUE, MAR 14 2023 2:32 PM EDT



Kif Lesonsky
@KIFLES

MOTHERBOARD
TECH BY VICE

The New GPT-4 AI Gets Top Marks in Law, Medical Exams, OpenAI Claims

The success
trained on the



By Samantha

March 14, 2023, 2:51



Catalog ▾

Teaching Center ▾

Search out



WEB ARTICLE

ChatGPT Is a Tipping Point for AI

By: [Ethan Mollick](#)

The ability for anyone to produce pretty good text and code on command will transform work.

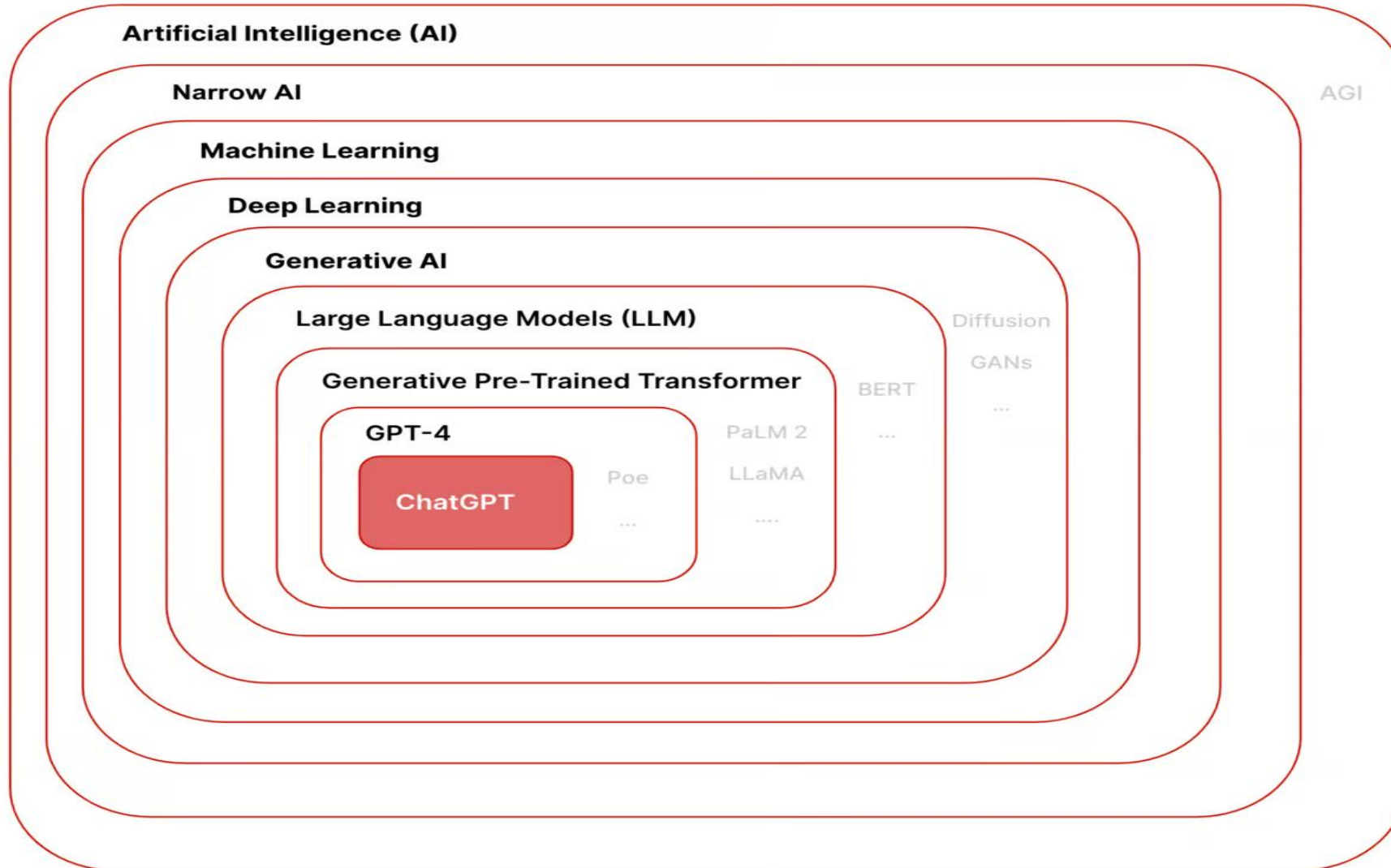
Length: 1453 word count

Discipline: Information Technology

Publication Date: Dec 14, 2022

Product #: H07EWB-PDF-ENG

Artificial Intelligence Taxonomy



III. Using AI Tools for Reference Inquiries

- ChatGPT 3.5



ChatGPT 3.5

How can I help you today?

Compare storytelling techniques in novels and in films

Suggest some codenames for a project introducing flexible work arrangements

Brainstorm incentives for a customer loyalty program in a small bookstore

Come up with concepts for a retro-style arcade game

Message ChatGPT...

ChatGPT can make mistakes. Consider checking important information.

- Microsoft Bing



Microsoft Bing

SEARCH CHAT

Bing is your AI-powered copilot for the web

Write: Write the outline of a book report to help me get started

Shop: What are some popular children's clothing brands?

Compare: Should I buy a road bike or a mountain bike if I want to exercise?

Travel: Where should I travel if I want to have a spiritual experience?

Create: Write a poem with vivid imagery that doesn't rhyme

Code: Write a C# program to check if a number is prime

Organize: Organize the world's tallest trees into a table by habitat

III. Using AI Tools for Reference Inquiries

Q. General Question – What are library hours today?



ChatGPT

I'm sorry for any confusion, but I don't have the capability to access real-time information, including current library hours. To find the library hours for today at The College of New Jersey (TCNJ), I recommend checking the official TCNJ library website, contacting the library directly, or checking any other reliable sources that provide up-to-date information on their operating hours.



Is this conversation helpful so far?   

r. barbara gitenstein library hours today

- ✓ Searching for: r. barbara gitenstein library hours today
- ✓ Generating answers for you...

The R. Barbara Gitenstein Library is **closed** today ¹. Please note that the library hours may vary, so it's always a good idea to check their official website for the most accurate and up-to-date information ².

Let me know if you need help with anything else! 😊

Learn more ▾ [1 tou library.tcnj.edu](#) [2 tou library.tcnj.edu](#) [3 🔍 bing.com](#)



1 of 5 



What are the library hours for tomorrow?

Where is R. Barbara Gitenstein Library located?

Can I access online resources from the library website?

ChatGPT is **NOT** directly connected to the Internet.

III. Using AI Tools for Reference Inquiries

Q. General Question – Who is Rishi Sunak?



ChatGPT

As of my last knowledge update in January 2022, Rishi Sunak is a British politician who has been serving as the Chancellor of the Exchequer in the United Kingdom since February 2020. He was born on May 12, 1980, in Southampton, England. Rishi Sunak is a member of the Conservative Party.

As Chancellor of the Exchequer, Sunak is responsible for overseeing the economic and financial matters of the UK government. He plays a key role in formulating and implementing economic policies, managing the public finances, and presenting the annual budget to the Parliament.

Please note that there may have been developments or changes in Rishi Sunak's career or political position since my last update in January 2022.



SEARCH CHAT

- ✓ Searching for: **Rishi Sunak**
- ✓ Generating answers for you...

Rishi Sunak, born on May 12, 1980, is a British politician who has served as the Prime Minister of the United Kingdom and the Leader of the Conservative Party since 2022¹. He is the first British Asian prime minister¹. Prior to his current role, he held two cabinet positions under Boris Johnson, including Chancellor of the Exchequer from 2020 to 2022¹.



Sunak was born in Southampton to parents of Indian descent who immigrated to Britain from East Africa in the 1960s¹. He was educated at Winchester College, studied philosophy, politics and economics at Lincoln College, Oxford, and earned an MBA from Stanford University in California as a Fulbright Scholar¹. He has been a Member of Parliament (MP) for Richmond (Yorks) since 2015¹.

Learn more 1 [W en.wikipedia.org](https://en.wikipedia.org) 2 [B britannica.com](https://www.britannica.com) 3 [W el.wikipedia.org](https://el.wikipedia.org)

ChatGPT's last knowledge update was in **January 2022**.

III. Using AI Tools for Reference Inquiries



Microsoft Word Document

Rishi Sunak

Date of birth: May 12, 1980

Occupation: Politician, prime minister of the United Kingdom

On February 13, 2020, Rishi Sunak was named chancellor of the Exchequer officer of the United Kingdom and a powerful political post second only to Sunak, who began his career as an MP representing Richmond in North York. Sunak's meteoric rise through the ranks of the Conservative and Unionist Party, co-Tories. A former hedge funder, he was elected to his first term in 2015. He was a supporter of Brexit and provided a crucial endorsement of Prime Minister Boris Johnson in 2019. But it was his handling of the coronavirus 2019 (COVID-19) which began seriously spreading through the UK in early March, that largely defined his political career.

Sunak assumed his post in mid-February, after the abrupt resignation of his former boss, Sajid Javid. Within weeks, his sole objective was to stem the economic shutdown necessitated by the virus. Sunak, a staunch Conservative, was known for his willingness to embrace radical measures to keep workers employed. His solutions were imperfect, but his sincerity and decisiveness—which contrasted vividly alongside Johnson's bumbling response—earned him the admiration of many in the political spectrum.

Sunak attempted to win election to replace the exiting Boris Johnson (who had been embroiled in a series of scandals and controversies) as the leader of the Conservative party in July 2022, but he was ultimately defeated by fellow Conservative party member Liz Truss, who had taken over the leadership of the Conservative party and the position of prime minister in September 2022. Sunak became the prime minister of the United Kingdom after Truss's resignation in October 2022, a position amid a period of economic instability resulting from a number of policies. After being elected to the position of prime minister unopposed, Sunak, of Indian descent, became both the first Hindu and the first person of color to hold the office in the history of the United Kingdom.

Early Life and Education

Sunak was born in Southampton, Hampshire, on May 12, 1980. He has a younger sister. All four of his grandparents, originally from the Punjab region of India, immigrated to England by way of British East Africa in the 1960s. His father worked as a general practitioner for the National Health Service, and his mother, Usha Sunak, often helped her with bookkeeping.

Though he missed out on earning a full scholarship to the prestigious boys' school Winchester College, Sunak's family found a way to send him there anyway. Sunak's father, Anjali Puri for the Indian finance newspaper *Business Standard* (15 Aug. 2020), "intellectually transforming." He added, "It put me on a different trajectory from that of a school's head boy, the first of Indian descent.

Sunak completed a degree in politics, philosophy, and economics at University College London. There, unusually, he was a member of the Conservative Party. Later, a fellow minister told George Parker (2020) that Sunak approaches politics with a "problem solver," the minister said. "He's in it for the long term and he respects."

Sunak has professed a love for finance. "You know, I'm a bit of a nerd about it," he said, as quoted by Simon Goodley for the *Financial Times*. "You're either good or you're not, there's nowhere to hide."

Early Career in Finance

After graduating from Oxford, Sunak spent time working in the banking division of Goldman Sachs. In 2004, he earned an MBA degree from the London School of Business.

Sunak soon began working for the Children's Investment Fund Foundation, a financial authority to influence a company's financial performance. He was also involved in pressuring the Dutch bank ABN-Amro to set up a separate unit to handle massive debts and restructure the bank. Although Sunak reportedly had no political ambitions, he was involved in activist campaigns against the US rail freight industry, which he saw as a conflict-of-interest violation. Still, Sunak's analytical skills, high integrity and low ego.

Around 2009 Sunak left TCI and joined Patagonia, a clothing and outdoor gear firm. He worked for Patagonia's health systems division, where he backed a hospital group Community Health Systems.

Early Political Career

In July 2014 William Hague, the popular MP and Conservative Party leader, was retired. Sunak was tapped as the Conservative Party's "backstop" for the constituency of Richmond (Yorks). The bucolic parish is populated by well-to-do Britons of South Asian descent. In 2015 just 122 Britons of South Asian descent were elected to the House of Commons. Finally, party members had earlier decided to elect a non-white MP from Yorkshire, but Sunak won them over. As he said, "I'm not the sort of person they wanted and they didn't want me. They did a total U-turn. The key thing was that they were not of the sort of trace of arrogance. That's a very unusual combination."

In July 2022 Sunak resigned from the position of chancellor of the Exchequer as part of a series of mass resignations intended to serve as a show of no-confidence in Johnson after he had become embroiled in a string of scandals and controversies. Sunak then entered the race to replace Johnson as the leader of the Conservative party following Johnson's resignation over the scandals. Although he was heavily supported in the election, Sunak was ultimately defeated by fellow Conservative MP Liz Truss, who went on to secure both the leadership of the Conservative party and the overall position of prime minister. However, a number of failed economic policies on behalf of Truss's government worsened an already tenuous economic position in the UK, forcing Truss to ultimately step down just a few months later in October 2022. Sunak was quickly identified as a possible replacement, and after securing the necessary support he ran unopposed in the resulting election. On October 25, 2022, Sunak became prime minister of the United Kingdom after being appointed by King Charles III.

Personal Life

Sunak met Akshata Murthy, a financier turned fashion designer, at Stanford. Murthy's father is N. R. Narayana Murthy, a founder of the information technology corporation Infosys and a multimillionaire. She and Sunak married in Bangalore in 2009. The couple's combined wealth made Sunak one of the richest MPs in Parliament. Sunak and his wife have two daughters, Krishna and Anoushka. The family divides their time between their homes in southwest London and Kirby Sigston, Yorkshire.

An observant Hindu, Sunak abstains from alcohol and beef. In his leisure time, Sunak has said that he enjoys cricket, soccer, and films.

Molly Hagan

Suggested Reading

Goodley, Simon. "Rishi Sunak: The Bit-Part Hedge Fund Partner Now Managing the Economy." *The Guardian*, 8 Mar. 2020, www.theguardian.com/politics/2020/mar/08/chancellor-rishi-sunak-the-bit-part-hedge-fund-partner-now-managing-the-whole-economy. Accessed 8 May 2020.

Judah, Ben. "Maharajah of the Yorkshire Dales." *Politico*, 5 May 2015, www.politico.eu/article/maharajah-of-the-yorkshire-dales. Accessed 13 May 2020.

Luckhurst, Phoebe. "Admit It: You Fancy Rishi Sunak." *Vogue*, Britain ed., 6 Apr. 2020, www.vogue.co.uk/arts-and-lifestyle/article/who-is-rishi-sunak-chancellor. Accessed 10 May 2020.

Parker, George and Sebastian Payne. "The Coronavirus Chancellor: How Rishi Sunak Took Centre Stage." *Financial Times*, 2 Apr. 2020, www.ft.com/content/b465a3fe-73b1-11ea-ad98-044200cb277f. Accessed 8 May 2020.

Partington, Richard. "UK Government to Pay 80% of Wages for Those Not Working in Coronavirus Crisis." *The Guardian*, 20 Mar. 2020, www.theguardian.com/uk-news/2020/mar/20/government-pay-wages-jobs-coronavirus-rishi-sunak. Accessed 10 May 2020.

Puri, Anjali. "UK Cabinet Member Rishi Sunak on Being British, Indian and Hindu at the Same Time." 15 Aug. 2015, *Business Standard*, 13 Feb. 2020, www.business-standard.com/article/opinion/lunch-with-bs-rishi-sunak-115080601060_1.html. Accessed 8 May 2020.

III. Using AI for Reference Inquiries:

Q. the 2009 United Nations Climate Change Conference commonly known as the Copenhagen Summit was held in Copenhagen Denmark between 7 and 15 December. Is the following statement true or false?



You

Is the following statement true or false? the 2009 United Nations Climate Change Conference commonly known as the Copenhagen summit was held in Copenhagen Denmark between 7 and 15 December



ChatGPT

True. The statement is accurate. The 2009 United Nations Climate Change Conference, commonly known as the Copenhagen summit, was held in Copenhagen, Denmark, from December 7 to December 15, 2009. This conference aimed to address key issues related to climate change and develop a global agreement on climate action.



You

When was the 2009 UN climate change conference held?



ChatGPT

The 2009 United Nations Climate Change Conference, commonly known as the Copenhagen summit, was held in Copenhagen, Denmark, from December 7 to December 18, 2009. I apologize for the oversight in my previous response. Thank you for pointing it out.



ChatGPT may generate **incorrect** information.



III. Using AI Tools for Reference Inquiries

Q. Research Question – I am trying to find articles related to younger children teens with an alcoholic parent or parents and its impact for my counseling class. I wanted to do family dynamics and alcohol addiction.



ChatGPT

It's great that you're looking to explore the impact of alcohol addiction on family dynamics, particularly in the context of younger children and teens. There is a wealth of literature on this topic, and you can find relevant articles in academic journals, books, and reputable online resources. Here are some suggestions to help you get started:

1. Academic Databases:

- **PubMed:** Search for articles related to "children of alcoholics" or "impact of parental alcoholism on family dynamics."
- **PsycINFO:** This database is focused on psychology, so you can find articles related to the psychological impact of parental alcoholism on children and teens.
- **ERIC (Education Resources Information Center):** This database covers education-related topics, including the impact of family dynamics on a child's academic and social development in the context of alcohol addiction.

2. Journals:

- Look for articles in journals that specialize in addiction, psychology, family studies, and counseling. Examples include the "Journal of Substance Abuse Treatment," "Journal of Family Issues," and "Addiction Research & Theory."

3. Books:

- Check out books written by experts in the field of addiction counseling and family therapy. For example, "Adult Children of Alcoholics" by Janet G. Woititz or "It Will Never Happen to Me: Growing Up with Addiction As Youngsters, Adolescents, Adults" by Claudia Black.

4. Online Resources:

- Explore websites of reputable organizations such as the National Institute on Alcohol Abuse and Alcoholism (NIAAA) or the Substance Abuse and Mental Health Services Administration (SAMHSA). These organizations often provide resources, research findings, and educational materials.

5. Counseling Journals:

- Look into counseling-specific journals such as the "Journal of Counseling & Development" for articles related to counseling approaches and interventions for families affected by alcohol addiction.

6. Google Scholar:

- Utilize Google Scholar to search for academic articles, theses, and conference papers on the topic



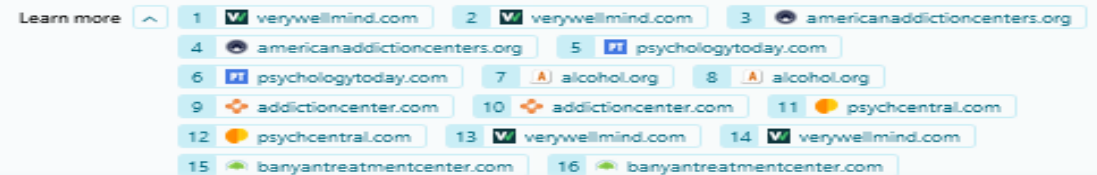
1. **Alcoholic Parents: How Children Are Affected:** This article discusses the psychological, emotional, interpersonal, and behavioral effects of being raised by alcoholic parents ¹.
2. **Children of Alcoholics: Growing Up with an Alcoholic Parent:** This article explores the cognitive, behavioral, psychosocial, and emotional consequences for children growing up with an alcoholic parent ².
3. **How Parental Substance Abuse Affects Children:** This article discusses the short- and long-term effects on children whose parents or caregivers use drugs or alcohol ³.
4. **Helping Children of Alcoholic Parents:** This article discusses the potential risks and issues children of alcoholic parents may face during childhood and as adults ⁴.
5. **How Growing Up With Alcoholic Parents Affects Children:** This article discusses the likelihood of children with alcoholic parents engaging in excessive drinking at some point in their life ⁵.



As for family dynamics and alcohol addiction, here are some articles:

1. **How Addiction Impacts the Family: 6 Family Roles in a Dysfunctional or Alcoholic Family:** This article discusses the six primary roles in an alcoholic family identified by Sharon Wegscheider-Cruse, a respected expert in the field of addictions and codependency ⁶.
2. **Effects of Alcoholism on the Family:** This article discusses how alcohol use disorders can affect families and provides tips on how families can cope ⁷.
3. **Understanding Alcohol Abuse and Family Roles:** This article discusses how addiction can shake the foundation of a family and change the family dynamic ⁸.
4. **Effects of Alcoholism on Families, Spouses and Children:** This article discusses how alcohol abuse can destroy families and lead to low levels of emotional bonding, expressiveness, and independence ⁹.
5. **Tips to manage how alcoholism can impact family dynamics:** This article provides tips on how to manage the impact of alcoholism on family dynamics ¹⁰.

I hope these resources are helpful for your class! If you need more information, feel free to ask.





III. Using AI Tools for Reference Inquiries



Q. Research Question – I am trying to find articles related to younger children teens with an alcoholic parent or parents and its impact for my counseling class. I wanted to do family dynamics and alcohol addiction.

- 2:01:15 [redacted]: Hello. I see that you are interested in articles regarding children with alcoholic parents and impacts. Let me take a look for you.
- 12:01:41 Patron: thank you
- 12:03:01 [redacted]: First off, I want to be sure that you have seen my **colleague's Library Guide** pertaining to Counselor Education: <https://libguides.tcnj.edu/c.php?g=966730&p=6984706>
- 12:04:08 [redacted]: Next, there are a **number of** ways we can search for this.
- 12:04:11 Patron: yes i see
- 12:05:44 Patron: thank you
- 12:06:16 Patron: there is one article named "Stress and coping among children of alcoholic parents through the young adult transition." and i believe id be more interested in this topic
- 12:06:52 [redacted]: I see that you have come up with some search terms "family dynamics" and "alcohol addiction" That is great. You can also search many of our databases using natural language searching. I am going to start by searching **PsychInfo**.
- 12:07:27 [redacted]: Did you need **scholarly articles**?
- 12:08:20 Patron: Yes I wanted some related to that **topic of transitions** that gets more detailed
- 12:08:26 Patron: I found that one
- 12:09:06 [redacted]: May I ask what you are referring to by "**transitions**"?
- 12:09:43 Patron: More of like children **transitioning into adults with growing up in a household of addiction**
- 12:10:41 [redacted]: I see. Is it **alcohol addiction in particular or addiction in general**?
- 12:10:56 Patron: alcohol to use more specific research
- 12:14:15 [redacted]: I see. So, there are a few ways to do this. I searched **DE "Children of Alcoholics" AND DE "Family"** and found some possibilities in PsychInfo. I do think it would be best to start out generally and then get more specific. Here are a few examples: <https://web.s.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=9&sid=eb20a4f9-7b38-4db1-a7c0-8c5ed29e44c0%40redis> and <https://web.s.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=10&sid=eb20a4f9-7b38-4db1-a7c0-8c5ed29e44c0%40redis>
- 12:15:12 [redacted]: Also, this one is specifically for teens in the UK: <https://academic.oup.com/alcalc/article/37/1/52/147187>
- 12:17:32 [redacted]: Does that get you started?
- 12:18:16 Patron: For that first link for some reason **it won't let me open it**
- 12:18:55 [redacted]: Okay. So if you run the search **DE "Children of Alcoholics" AND DE "Family" in PsvcInfo** you will have access to that one and others.
- 12:21:32 Patron: ok thank you
- 12:21:39 [redacted]: You can also simply **search the large search box on the library home page. I just - searched: children of alcoholics becoming adults**
- 12:22:02 [redacted]: There are **some books** and other articles that would likely help.
- 12:22:29 [redacted]: https://tcnj.primo.exlibrisgroup.com/permalink/01COLLNU_INST/921vpg/alma992984783405191
- 12:23:26 [redacted]: Does that get you started?
- 12:24:16 Patron: Yes thank you so much!
- 12:24:37 [redacted]: Of course. Please reach out again if you would like further guidance.
- 12:24:46 [redacted]: Have a good day.
- 12:25:16 System: Operator ended chat.

J Child Fam Stud (2017) 26:1875–1887
DOI 10.1007/s10826-017-0717-5

CrossMark

ORIGINAL PAPER

The Patterns of Adaptation While Growing Up Under Parental Alcoholism: A Grounded Theory

Sihyun Park¹ · R...

JOURNAL OF FAMILY STUDIES
2022, VOL. 28, NO. 1, 216–238
<https://doi.org/10.1080/13229400.2019.1699849>

Routledge
Taylor & Francis Group

OPEN ACCESS Check for updates

Published online: 21 Aug 2019
© Springer Science+Business Media B.V. 2019

Abstract Parental alcoholism affects children, and...

'If I whistled in her ear she'd wake up': children's narration about their experiences of growing up in alcoholic families

Anneli Silvéén Hagström^a and Ulla Forinder^b

Shared experiences and individual contexts: A grounded theory approach for the continuing development of resiliency in adult children of alcoholics.

Authors: [Philips, Leah J.](#), Alliant International University, San Diego, CSPP, US

Source: [Dissertation Abstracts International, Section B: The Sciences and Engineering](#), Vol 82(7-B), 2021.

Publisher: US : ProQuest Information & Learning

Other Journal Titles: Dissertation Abstracts International

ISSN: 0419-4217 (Print)

ISBN: 979-8557054218

Language: English

Keywords: Adult children of alcoholics, Alcohol use disorder, Alcoholism, Grounded theory, Resilience

ChatGPT can NOT look past a paywall (journal/database site) or a firewall (private organization).

III. Using AI Tools for Reference Inquiries

Q. General Question – Tell me more about 9/11



ChatGPT

September 11, often referred to as 9/11, is a significant date in history. Here are some key events associated with September 11:

1. September 11, 2001 (9/11 Attacks):

- On this day in 2001, a series of coordinated terrorist attacks were carried out by the extremist group al-Qaeda against the United States. The attacks involved the hijacking of four commercial airplanes.
- Two planes were flown into the Twin Towers of the World Trade Center in New York City, causing both towers to collapse.
- Another plane crashed into the Pentagon, the headquarters of the United States Department of Defense, in Arlington, Virginia.
- The fourth plane, United Airlines Flight 93, crashed into a field in Pennsylvania after passengers attempted to regain control from the hijackers.

2. Aftermath:

- The 9/11 attacks resulted in the deaths of nearly 3,000 people and caused significant economic, political, and social consequences.
- The events of 9/11 had a profound impact on global geopolitics, leading to the United States' involvement in the War on Terror and the invasion of Afghanistan.

3. Memorials:

- In the years following the attacks, numerous memorials and commemorations have been established to remember the victims and honor the bravery of first responders.

4. Homeland Security Changes:

- The attacks prompted significant changes in security measures and policies, both in the United States and internationally. ↓

✓ Searching for 9/11 information

✓ Generating answers for you...

The September 11 attacks, also known as 9/11, were a series of airline hijackings and suicide attacks committed in 2001 by 19 militants associated with the Islamic extremist group al-Qaeda against targets in the United States^{1 2}. These attacks are considered the deadliest terrorist attacks on American soil in U.S. history^{1 2}.



Here are some key details:

- **Date:** The attacks occurred on September 11, 2001¹.
- **Targets:** The targets included the Twin Towers of the World Trade Center in New York City, the Pentagon in Washington, D.C., and a field near Shanksville, Pennsylvania².
- **Casualties:** Approximately 2,750 people were killed in New York, 184 at the Pentagon, and 40 in Pennsylvania¹. All 19 terrorists also died¹.
- **Aftermath:** The attacks triggered an enormous U.S. effort to combat terrorism¹.

For more detailed information, you may want to refer to comprehensive resources such as those available on Britannica¹ or BBC². Please note that these resources contain graphic descriptions and images that some may find disturbing.

Learn more [1](#) britannica.com [2](#) bbc.com [3](#) britannica.com

III. Using AI Tools for Reference Inquiries

Q. General Question – What is cloud computing in simple terms?



ChatGPT

Cloud computing is a technology that allows users to access computing resources (like servers, storage, databases, and software) over the internet, instead of owning and maintaining your own infrastructure. In simple terms, it's like renting computing power. You pay for what you use, and accessing them from anywhere is easy. This model enables businesses and individuals to scale their operations without the need for upfront investments in hardware, leading to cost efficiency.



Simply put, cloud computing is the delivery of computing services—including servers, storage, databases, networking, software, analytics, and intelligence—over the internet (“the cloud”) to offer faster innovation, flexible resources, and economies of scale. You typically pay only for cloud services you use, helping you lower your operating costs, run your infrastructure more efficiently, and scale as your business needs change.

By Microsoft

the delivery of computing services, storage, analytics, and referred to as “the cloud” resources, and key points:

Cloud computing provides on-demand services

Advantages of cloud computing pay for what you use, scale faster and avoid the cost of having to buy servers and data centers and

Cloud computing (over the internet) to connect devices by request and

Security concerns are common, but cloud providers are on secure and safe

Common cloud computing deployment models: public cloud, private cloud, and hybrid cloud. The choice depends on the specific needs of the user or the



III. Using AI Tools for Reference Inquiries:

Q. Can you find 5 graphic novels for ages 8-12 on identity, race, and the challenges that come with navigating different cultural environments?

Cont. Q. Can you provide me with the publication year and awards information?



ChatGPT

Certainly! While I can't perform real-time searches, here are five graphic novels suitable for ages 8-12 that delve into themes of identity, race, and navigating different cultural environments:

1. **"New Kid" by Jerry Craft**

- This graphic novel follows Jordan Banks, an African American seventh-grader, as he faces the challenges of being one of the few kids of color at his new, predominantly white school.

2. **"American Born Chinese" by Gene Luen Yang**

- Weaving together three stories, this graphic novel explores the experiences of being Chinese-American, addressing identity and cultural expectations.

3. **"El Deafo" by Cece Bell**

- A memoir in graphic novel format, it details the author's experiences growing up with hearing loss, providing insights into the challenges of fitting in and finding one's identity.

4. **"The Nameless City" by Faith Erin Hicks**

- In this graphic novel, the author explores the relationships between different ethnic groups in a city with a complex history, emphasizing themes of friendship, identity, and understanding.

5. **"Class Act" by Jerry Craft**

- A companion to "New Kid," this graphic novel explores the experiences of different characters at the same school, touching on themes of race, friendship, and identity.

These graphic novels offer engaging stories that address identity, race, and the challenges associated with navigating diverse cultural environments, making them suitable for readers aged 8-12.



ChatGPT

Certainly! Here's the publication year and award information for the mentioned graphic novels:

1. **"New Kid" by Jerry Craft**

- Publication Year: 2019
- Awards: Newbery Medal, Coretta Scott King Author Award, Kirkus Prize for Young Readers' Literature

2. **"American Born Chinese" by Gene Luen Yang**

- Publication Year: 2006
- Awards: Printz Award, Eisner Award for Best Graphic Album – New, Michael L. Printz Honor

3. **"El Deafo" by Cece Bell**

- Publication Year: 2014
- Awards: Newbery Honor, Eisner Award for Best Publication for Kids

4. **"The Nameless City" by Faith Erin Hicks**

- Publication Year: 2016
- Awards: Eisner Award for Best Publication for Kids

5. **"Class Act" by Jerry Craft**

- Publication Year: 2020
- Awards: Coretta Scott King Author Honor, Kirkus Prize for Young Readers' Literature

Please note that awards may vary, and these are some of the notable recognitions received by these graphic novels. Additionally, there may have been additional publications or awards since my last training cut-off in January 2022.



III. Using AI Tools for Reference Inquiries:

Q. Can you find me graphic novels for ages 8-12 on identity, race, and the challenges that come with navigating different cultural environments?

race graphic novels 8-12 years old

Books, Articles & More

Sign in to request items to be held Sign in DISMISS

No records found

There are no results matching your search "race graphic novels 8-12 years old".

Suggestions:

- Make sure that all words are spelled correctly.
- Try a different search scope.
- Try different keywords.
- Try more general keywords.
- Try fewer keywords.

race identity graphic novels ages 8-12

Books, Articles & More

Sign in to request items to be held Sign in DISMISS

0 selected 1-1 of 1 Results Personalize

1 **BOOK**
Borders
King, Thomas, 1943- author.; Donovan, Natasha, illustrator.
2021
Available at Gitenstein Library Children's/YA Collection (741.5973 King) and other locations >

race graphic novels ages 8-12

Books, Articles & More

Sign in to request items to be held Sign in DISMISS

0 selected 1-3 of 3 Results Personalize

1 **BOOK**
New kid
Craft, Jerry, author illustrator; Callahan, Jim (Graphic novel colorist) colorist
2019
Available at Gitenstein Library Children's/YA Collection (741.5973 Craft) >

2 **BOOK**
Borders
King, Thomas, 1943- author.; Donovan, Natasha, illustrator.
2021
Available at Gitenstein Library Children's/YA Collection (741.5973 King) and other locations >

3 **BOOK**
Red scare
Walsh, Liam Francis, author, illustrator.; Kurtzman, Patricia Krohn, donor.
2022
Available at Gitenstein Library Children's/YA Collection (741.5973 Walsh) >

III. Utilizing AI Tools for Multilingual Support

ChatGPT can support 50 languages



You

what is the chinese name of snow white



ChatGPT

The Chinese name for Snow White is "白雪公主" (Báixuě Gōngzhǔ).



ChatGPT

《白雪公主》是一部德国的童话故事，最早由格里姆兄弟 (Jacob和Wilhelm Grimm) 收录在他们的《格里姆童话》 (Grimm's Fairy Tales) 中。这个故事后来被改编成许多不同版本，并成为世界各地文化中的经典之一。

故事主要讲述了一个美丽的王后，因为她的魔镜告诉她白雪公主比她更美，于是便对白雪公主心生嫉妒，试图除掉她。白雪公主被放逐到森林中，但她遇到了七个小矮人，他们成了她的朋友和保护者。最后，邪恶的王后通过巧妙的手段仍然试图杀死白雪公主，但她最终被正义战胜。

这个故事已经成为经典，并在电影、电视、舞台剧等各种形式中被改编。如果你对这个故事感兴趣，你可以找到不同版本的童话书籍、儿童文学集，或者寻找相关的电影和动画片。



ChatGPT

《白雪姫》は、ドイツの童話であり、最初にヤーコプとヴィルヘルム・グリム兄弟によって彼らの「グリム童話集」に収録されました。この物語は後にさまざまなバージョンに改編され、世界中の文化の中でクラシックとなりました。

物語は主に美しい女王に焦点を当てており、彼女は魔法の鏡に白雪姫が彼女より美しいと告げられ、そのために白雪姫に嫉妬し、彼女を排除しようとします。白雪姫は森に追放されますが、そこで七人の小人に出会い、彼らは彼女の友達兼保護者となります。最終的には、邪悪な女王は巧妙な手段で白雪姫を殺そうとしますが、最終的には正義が勝ちます。

この物語はクラシックとなり、映画、テレビ、舞台劇などさまざまな形式で改作されています。この物語に興味がある場合、異なるバージョンの童話の本や子供向け文学集を見つけるか、関連する映画やアニメを探ることができます。



ChatGPT

"백설공주"는 독일의 동화로, 처음에는 아담과 빌헬름 그림 형제가 그들의 "그림 동화"에 수록했습니다. 이 이야기는 나중에 여러 가지 다른 버전으로 개작되어 전 세계의 문화 중 하나로 정평을 얻었습니다.

이 이야기는 주로 아름다운 여왕에 중점을 두고 있으며, 거울이 백설공주가 그녀보다 더 아름답다고 알려주면서 그녀는 백설공주에 대한 질투심을 품고 그녀를 제거하려고 합니다. 백설공주는 숲으로 추방되지만 거기서 일곱 난쟁이를 만나 친구이자 수호자가 됩니다. 마지막으로 악한 여왕은 교묘한 수단으로 백설공주를 죽이려고 하지만 결국 정의가 승리합니다.

이 이야기는 클래식이 되어 영화, 텔레비전, 무대 연극 등 다양한 형식으로 개작되었습니다. 이 이야기에 관심이 있다면, 다양한 버전의 동화 책이나 어린이 문학 모음을 찾거나 관련 영화와 애니메이션을 찾아볼 수 있습니다.

III. Utilizing AI Tools for Multilingual Support

ChatGPT can support 50 languages

To log in to RefWorks:

1. Open your browser and go to www.refworks.com/refworks. **Note:** Your login URL may be different. Please check with your Organization for the appropriate RefWorks login URL.

2. Organizational users from an authorized IP address simply enter your **Login Name** and **Password**. (Individual subscribers click on the **Individual Log-In** tab first, then enter the Login Name and Password.)

Logging in from Off-Site (Organizational Users Only):

1. In your browser, go to www.refworks.com. You'll be brought to the RefWorks Login Center where you'll see three tabs (Remote Access, Individual Log-In, Trial Log-In) .

2. In the **Remote Access** tab, enter your organization's **Group Code** and click on **Go To Login**.

3. Enter your personal **Login Name** and **Password**.



ChatGPT

登录RefWorks:

1. 打开您的浏览器并访问 www.refworks.com/refworks。注意：您的登录网址可能不同。请与您的组织核实正确的RefWorks登录网址。
对于来自授权IP地址的组织用户，只需输入您的登录名和密码。（个人订户请先点击个人登录选项卡，然后输入登录名和密码。）
2. 远程登录（仅适用于组织用户）：
在浏览器中访问 www.refworks.com。您将被带到RefWorks登录中心，您将看到三个选项卡（远程访问、个人登录、试用登录）。
在远程访问选项卡中，输入您的组织群组代码，然后点击“转到登录”。
输入您的个人登录名和密码。



IV. Case Studies in Health Sciences

A. Selected AI tools

- ChatGPT 3.5
- Bard
- Claude

B. Two Cases:

- One is for a traditional literature review (LR)
- The other is for a systematic review (SR)

C. Methodology

- Ask the two questions to each AI tool
 - Could you please find a few peer-reviewed journal articles about the effect of 39-week rule on adverse pregnancy outcomes? (LR)
 - Could you please help develop a comprehensive search strategy to search for relevant literature on the use of simulation-based training for patient care among paramedics and EMTs? (SR)

ChatGPT 3.5

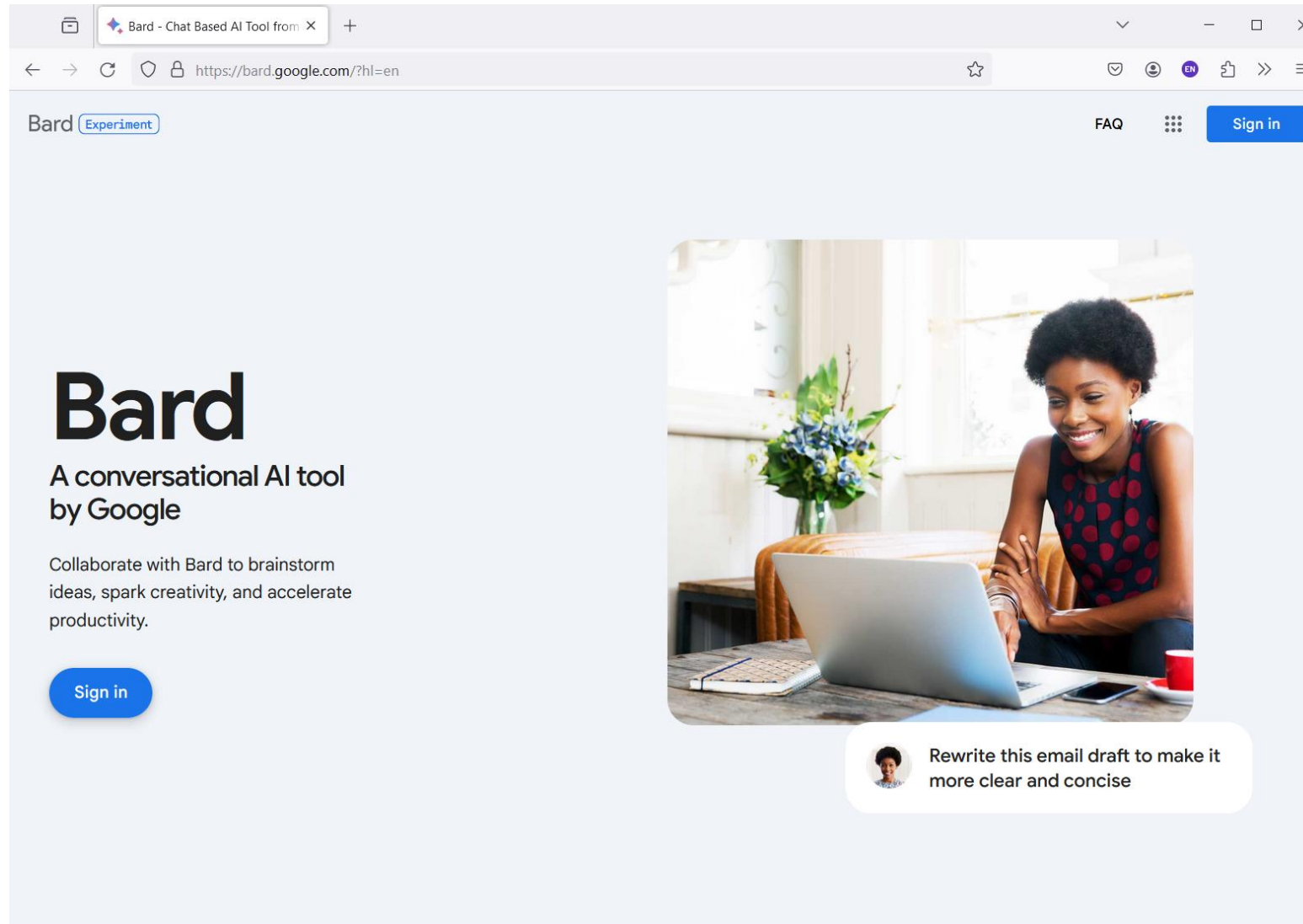


Image generated by Bing Chat

A screenshot of the ChatGPT login page. The browser address bar shows 'https://chat.openai.com/auth/login'. The page has a yellow background on the left and a white background on the right. On the left, the text reads 'ChatGPT ●' and 'Help me pick an outfit that will look good on camera ●'. On the right, under the heading 'Get started', there are two blue buttons: 'Log in' and 'Sign up'. At the bottom right, there is the OpenAI logo and links for 'Terms of use' and 'Privacy policy'.

<https://chat.openai.com/>

Bard



The screenshot shows a web browser window with the URL <https://bard.google.com/?hl=en>. The page features the word "Bard" in a large font, followed by the subtitle "A conversational AI tool by Google". Below this, a paragraph describes the tool's capabilities: "Collaborate with Bard to brainstorm ideas, spark creativity, and accelerate productivity." A "Sign in" button is visible. To the right, a photograph shows a woman smiling while working on a laptop. A chat prompt is displayed at the bottom right: "Rewrite this email draft to make it more clear and concise". The top right of the page includes links for "FAQ" and "Sign in".


Bard [Experiment](#) [FAQ](#) [Sign in](#)

Bard

A conversational AI tool by Google

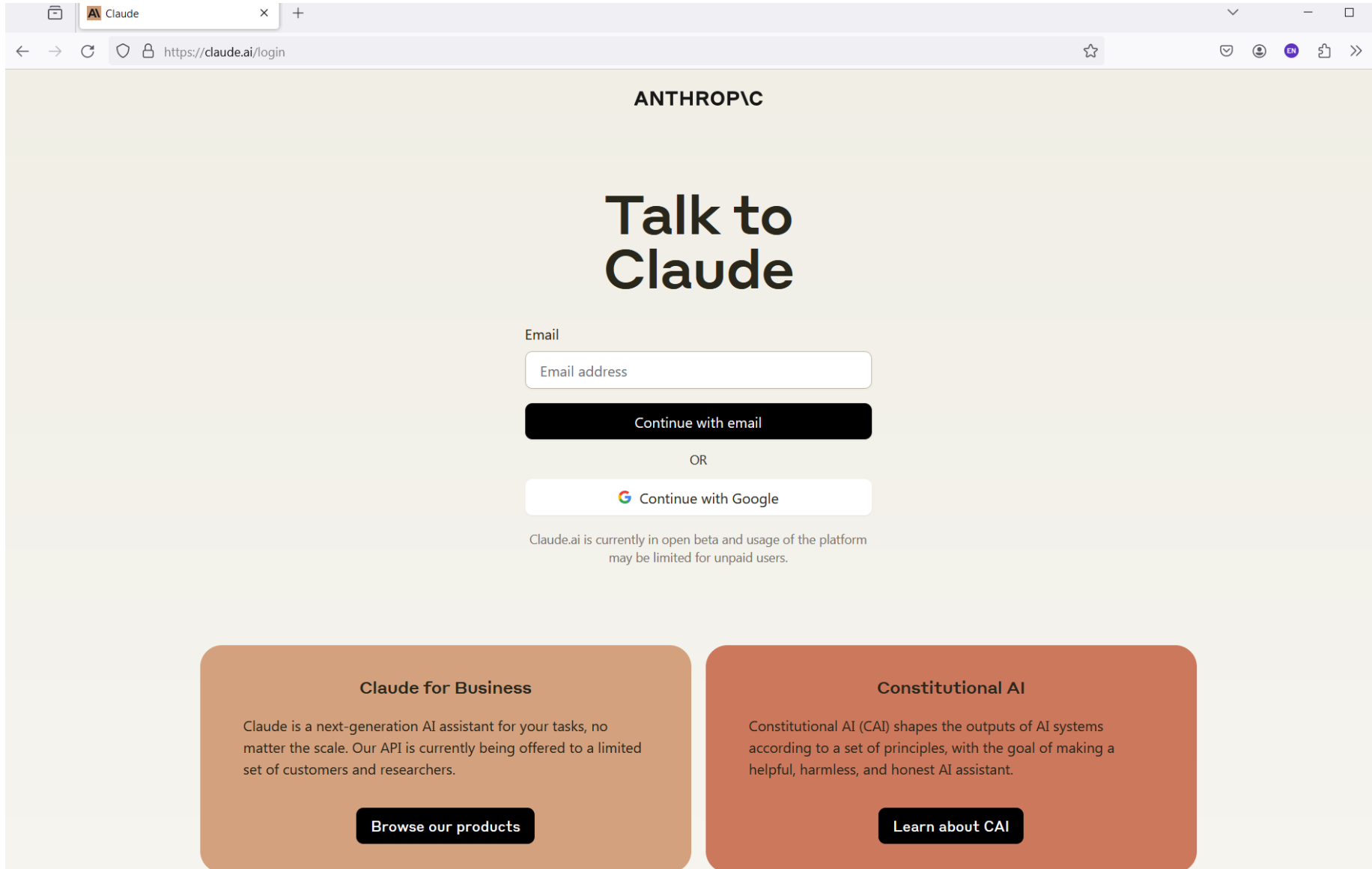
Collaborate with Bard to brainstorm ideas, spark creativity, and accelerate productivity.

[Sign in](#)

 Rewrite this email draft to make it more clear and concise

Google [Privacy & Terms](#)

Claude



The screenshot shows a web browser window with the URL <https://claude.ai/login>. The page features the Anthropic logo at the top, followed by the heading "Talk to Claude". Below this is a login form with an "Email" label, an input field for "Email address", and a "Continue with email" button. An "OR" separator is followed by a "Continue with Google" button. A disclaimer states: "Claude.ai is currently in open beta and usage of the platform may be limited for unpaid users." At the bottom, there are two promotional cards: "Claude for Business" with a "Browse our products" button, and "Constitutional AI" with a "Learn about CAI" button.


ANTHROPIC

Talk to Claude

Email

Continue with email

OR

 Continue with Google

Claude.ai is currently in open beta and usage of the platform may be limited for unpaid users.

Claude for Business

Claude is a next-generation AI assistant for your tasks, no matter the scale. Our API is currently being offered to a limited set of customers and researchers.

[Browse our products](#)

Constitutional AI

Constitutional AI (CAI) shapes the outputs of AI systems according to a set of principles, with the goal of making a helpful, harmless, and honest AI assistant.

[Learn about CAI](#)

Case Studies – Traditional LR

Question: Could you please find a few peer-reviewed journal articles about the effect of 39-week rule on adverse pregnancy outcomes?

Using ChatGPT 3.5

Query Date: 12/26/2023
Browser: Edge

ChatGPT 3.5 ▾

You

Could you please find a few peer-reviewed journal articles about the effect of 39-week rule on adverse pregnancy outcomes?

ChatGPT

I'm sorry, but I'm not able to browse the internet or access real-time databases, including peer-reviewed journal articles. However, I can guide you on how to search for these articles.

To find peer-reviewed journal articles on the effect of the 39-week rule on adverse pregnancy outcomes, you can follow these steps:

1. **Use Academic Databases:**
Utilize academic databases like PubMed, JSTOR, ScienceDirect, or Google Scholar. These databases contain a wealth of scholarly articles.
2. **Keyword Search:**
Use relevant keywords to narrow down your search. For example, you could use terms such as "39-week rule," "adverse pregnancy outcomes," "term elective induction," or related phrases.
3. **Boolean Operators:**
Combine keywords using Boolean operators (AND, OR, NOT) to refine your search. For example, "39-week rule AND adverse pregnancy outcomes."
4. **Filters:**
Utilize filters provided by the databases to narrow down results based on publication date, study type, or other relevant criteria.
5. **Check Institutional Access:**
If you're affiliated with an academic institution, check if you have access to journals through your library. Many institutions provide access to a wide range of journals.
6. **Review Citations:**
Look at the citations in relevant articles to find additional sources. This can lead you to other studies that may be relevant to your research.



Remember to critically evaluate the articles you find, checking factors such as study design, sample size, methodology, and the conclusions drawn by the authors. Additionally, consider the publication date of the articles to ensure you're accessing the most recent and relevant information.


Case Studies – Traditional LR


Question: Could you please find a few peer-reviewed journal articles about the effect of 39-week rule on adverse pregnancy outcomes?

Using Bard

Query Date: 12/26/2023
Browser: Chrome


Could you please find a few peer-reviewed journal articles about the effect of 39-week rule on adverse pregnancy outcomes?


[View other drafts](#) ▼ 

 **Peer-Reviewed Journal Articles on the 39-Week Rule and Adverse Pregnancy Outcomes:**

Here are a few recent peer-reviewed journal articles exploring the effects of the 39-week rule on adverse pregnancy outcomes:

- **Impact of the “39-week rule” on adverse pregnancy outcomes: a statewide analysis:** This study published in the American Journal of Obstetrics & Gynecology MFM in 2023 analyzed birth data from South Carolina before and after the implementation of the rule. It found a significant increase in several adverse pregnancy outcomes after the rule, including cesarean delivery, hypertensive disorders, chorioamnionitis, and postpartum hemorrhage.
- **62: Impact of the “39-week rule” on adverse maternal outcomes: a statewide analysis:** This companion study, also published in 2023 in the American Journal of Obstetrics & Gynecology, focused on maternal outcomes rather than neonatal outcomes. Similar to the first study, it found a significant increase in the composite adverse maternal outcome after the 39-week rule was implemented.
- **Impact of the “39-week rule” on adverse neonatal outcomes: a population-based cohort study:** This 2022 study published in the Journal of Maternal-Fetal & Neonatal Medicine examined data from nearly 700,000 deliveries in Sweden and found no significant association between the rule and adverse neonatal outcomes like perinatal death, neonatal intensive care unit admission, or respiratory distress syndrome.
- **The 39-week rule: Balancing neonatal and maternal risks of late-term pregnancy:** This 2020 review article published in the American Journal of Perinatology summarizes the existing evidence on the effects of the 39-week rule and highlights the complexity of balancing potential benefits and risks for both mothers and babies.

These are just a few examples, and further research is ongoing to better understand the full implications of the 39-week rule. It’s important to note that studies have yielded mixed results, and additional factors beyond the policy itself may contribute to observed changes in pregnancy outcomes.

Additional Resources:

- The American College of Obstetricians and Gynecologists Committee on Practice Bulletins and Journals. **Induction of Labor.** Obstet Gynecol 2012; 119:1119–39.
- The Society for Maternal-Fetal Medicine. **SMFM Committee on Perinatal Health Opinion: Elective Delivery Before 39 Weeks’ Gestation.** Am J Obstet Gynecol 2013; 208:50e1–5.

Case Studies – Traditional LR

Question: Could you please find a few peer-reviewed journal articles about the effect of 39-week rule on adverse pregnancy outcomes?

Using Claude.ai

Query Date: 12/26/2023

Browser: Firefox

AI
Impact of 39-Week Gestation Policy on Neonatal Health ▾

Could you please find a few peer-reviewed journal articles about the effect of 39-week rule on adverse pregnancy outcomes? YZ

Here are a few relevant peer-reviewed journal articles on the effect of the 39-week rule on adverse pregnancy outcomes:

- Oshiro BT, Kowalewski L, Sappenfield W, Alter CC, Bettegowda VR, Russell R, Curran JS, Rankins NC, Mourelatos Y, Ruiz R, Nelin T, D'Alton ME. A multistate quality improvement program to decrease elective deliveries before 39 weeks of gestation. *Obstet Gynecol.* 2013 May;121(5):1025-31. doi: 10.1097/AOG.0b013e31828ea099.
- Clark SL, Miller DD, Belfort MA, Dildy GA, Frye DK, Meyers JA. Neonatal and maternal outcomes associated with elective term delivery. *Am J Obstet Gynecol.* 2009 Feb;200(2):156.e1-4. doi: 10.1016/j.ajog.2008.08.068.
- Tita AT, Landon MB, Spong CY, Lai Y, Leveno KJ, Varner MW, Moawad AH, Caritis SN, Meis PJ, Wapner RJ, Sorokin Y, Miodovnik M, O'Sullivan MJ, Sibai BM, Langer O, Thorp JM, Ramin SM, Mercer BM; Eunice Kennedy Shriver NICHD Maternal-Fetal Medicine Units Network. Timing of elective repeat cesarean delivery at term and neonatal outcomes. *N Engl J Med.* 2009 Jan 8;360(2):111-20. doi: 10.1056/NEJMoa0803267.
- Clark SL, Frye DR, Meyers JA, Belfort MA, Dildy GA, Kofford S, Englebright J, Perlin JA. Reduction in elective delivery at <39 weeks of gestation: comparative effectiveness of 3 approaches to change and the impact on neonatal intensive care admission and stillbirth. *Am J Obstet Gynecol.* 2010 May;202(5):449.e1-6. doi: 10.1016/j.ajog.2010.03.011.

Let me know if you need any clarification on these studies or would like me to find some additional resources on this topic.

AI

📄 Copy
 ↺ Retry

🗨️

Case Studies – Traditional LR

Question: Could you please find a few peer-reviewed journal articles about the effect of 39-week rule on adverse pregnancy outcomes?

Search results from PubMed using human-developed search strategy:

- Cochrane, A. C., Batson, R., Aragon, M., Bedenbaugh, M., Self, S., Isham, K., & Eichelberger, K. Y. (2023). Impact of the "39-week rule" on adverse pregnancy outcomes: a statewide analysis. *Am J Obstet Gynecol MFM*, 5(4), 100879. <https://doi.org/10.1016/j.ajogmf.2023.100879>
- Hill, W. C. (2017). US term stillbirth rates and the 39-week rule: a cause for concern? *Am J Obstet Gynecol*, 216(1), 85-86. <https://doi.org/10.1016/j.ajog.2016.08.025>
- Mandel, H. C. (2016). A Multi-State Analysis of Early-Term Delivery Trends and the Association With Term Stillbirth Trends in Stillbirth by Gestational Age in the United States, 2006-2012 Stillbirth and the 39-Week Rule: Can We Be Reassured? *Obstet Gynecol*, 127(4), 802. <https://doi.org/10.1097/aog.0000000000001366>
- Nicholson, J. M., Kellar, L. C., Ahmad, S., Abid, A., Woloski, J., Hewamudalige, N., Henning, G. F., Luring, J. R., Ural, S. H., & Yaklic, J. L. (2016). US term stillbirth rates and the 39-week rule: a cause for concern? *Am J Obstet Gynecol*, 214(5), 621.e621-629. <https://doi.org/10.1016/j.ajog.2016.02.019>
- Pilliod, R. A., Dissanayake, M., Cheng, Y. W., & Caughey, A. B. (2019). Association of Widespread Adoption of the 39-Week Rule With Overall Mortality Due to Stillbirth and Infant Death. *JAMA Pediatr*, 173(12), 1180-1185. <https://doi.org/10.1001/jamapediatrics.2019.3939>
- Vilchez, G., Nazeer, S., Kumar, K., Warren, M., Dai, J., & Sokol, R. J. (2018). Risk of Expectant Management and Optimal Timing of Delivery in Low-Risk Term Pregnancies: A Population-Based Study. *Am J Perinatol*, 35(3), 262-270. <https://doi.org/10.1055/s-0037-1607042>

Case Studies – Search Strategy for SR

Question: Could you please help develop a comprehensive search strategy to search for relevant literature on the use of simulation-based training for patient care among paramedics and EMTs?

Using ChatGPT 3.5

Query Date: 2/26/2023
Browser: Edge

ChatGPT 3.5 ▾

You
Could you please help develop a comprehensive search strategy to search for relevant literature on the use of simulation-based training for patient care among paramedics and EMTs?

ChatGPT
Certainly! Developing a comprehensive search strategy involves identifying relevant keywords, using appropriate search operators, and targeting relevant databases. Here's a step-by-step guide for creating a search strategy on the use of simulation-based training for patient care among paramedics and EMTs:

- 1. Define the Research Question:**
 - What is the specific aspect of simulation-based training you are interested in?
 - Example: "How does simulation-based training impact patient care outcomes among paramedics and EMTs?"
- 2. Identify Keywords and Synonyms:**
 - Simulation-based training
 - Patient care
 - Paramedics
 - Emergency Medical Technicians (EMTs)
 - Prehospital care
 - Simulation training
 - High-fidelity simulation
 - Medical simulation
 - Emergency response
- 3. Use Boolean Operators:**
 - Combine keywords using Boolean operators (AND, OR, NOT) to refine or broaden your search.
 - Example: (simulation-based training OR medical simulation) AND (paramedics OR EMTs) AND patient care
- 4. Include Synonyms and Related Terms:**
 - Consider variations in terminology or acronyms.
 - Example: ("simulation-based training" OR "simulated training" OR "medical simulation") AND ("paramedics" OR "emergency medical technicians" OR "EMTs") AND "patient care"

5. Use Truncation and Wildcards:

- Include variations of words using truncation or wildcards to capture different forms.
- Example: (simulat* OR "high-fidelity simulation") AND (paramedic* OR "emergency medical technician*" OR EMT*) AND "patient care"

6. Search in Relevant Databases:

- Explore databases such as PubMed, CINAHL, Scopus, and PsycINFO.
- Example: Conduct the search in PubMed using your refined keywords.

7. Filters and Limits:

- Apply filters based on publication date, study type, or other relevant criteria.
- Example: Limit the search to articles published in the last 5 years.

8. Review Citations and References:

- Check the citations and references of relevant articles for additional sources.

9. Consider Grey Literature:

- Include conference proceedings, theses, and reports.
- Example: Search for conference proceedings on simulation-based training for paramedics.

10. Stay Updated:

- Set up alerts or notifications for new publications in your field of interest.

Example Search String for PubMed:

- ("simulation-based training" OR "medical simulation") AND ("paramedics" OR "emergency medical technicians" OR "EMTs") AND "patient care" AND ("pre-hospital care" OR "prehospital care")

Remember to tailor the strategy based on the specific databases you are using and refine it based on the results obtained. Adjusting keywords and terms may be necessary as you iterate through the search process.

Case Studies – Search Strategy for SR

Question: Could you please help develop a comprehensive search strategy to search for relevant literature on the use of simulation-based training for patient care among paramedics and EMTs?

Using Bard

Query Date: 12/26/2023
Browser: Google

Could you please help develop a comprehensive search strategy to search for relevant literature on the use of simulation-based training for patient care among paramedics and EMTs?

View other drafts ▾ 🔊

◆ Absolutely, I can help you develop a comprehensive search strategy to find relevant literature on the use of simulation-based training (SBT) for patient care among paramedics and EMTs. Here are some key elements to consider:

Databases:

- **Medical databases:** These include PubMed, CINAHL, Cochrane Library, Scopus, Web of Science, and EMBASE. They offer comprehensive coverage of medical literature with advanced search features.
- **Education databases:** Consider ERIC and PsycINFO for research on educational approaches and learning outcomes.
- **Conference proceedings:** Websites like Google Scholar and conference websites can be helpful for recent research presented at conferences.

Keywords:

- Use a combination of keywords related to **SBT, paramedics/EMTs, and patient care.**
- **SBT keywords:** simulation, simulation-based training, simulation training, high-fidelity simulation, virtual simulation, manikin-based training, scenario-based training.
- **Paramedics/EMTs keywords:** paramedic, EMT, emergency medical technician, pre-hospital care, prehospital emergency care.
- **Patient care keywords:** patient care, clinical skills, medical skills, decision-making, communication, teamwork.

Boolean operators: Combine keywords using Boolean operators like **AND, OR, and NOT** to refine your search. For example, "(simulation OR manikin) AND (paramedic OR EMT) AND patient care".

Filters: Utilize filters available in each database to narrow down your search. These might include publication date, publication type (e.g., research articles, reviews), language, and study design.

Additional strategies:

- Check the reference lists of relevant articles you find to discover additional research.
- Consider searching grey literature such as reports and white papers from governmental agencies or professional organizations.
- Utilize snowballing: search for articles referencing key papers you've already identified.

Here are some example search strings you can adapt:

- (simulation OR manikin) AND (paramedic OR EMT) AND patient care
- "simulation-based training" AND prehospital emergency care
- high-fidelity simulation AND decision-making skills AND paramedics
- virtual simulation AND communication skills AND EMTs

Remember, the specific search strategy will depend on your specific research question and interests. Feel free to adapt and refine these suggestions to fit your needs.

I hope this helps! Let me know if you have any other questions.

Case Studies – Search Strategy for SR

Question: Could you please help develop a comprehensive search strategy to search for relevant literature on the use of simulation-based training for patient care among paramedics and EMTs?

Using Claude: Search Date: 12/26/2023 | Browser: Firefox

Developing a Search Strategy for Simulation Training of Paramedics and EMTs

Could you please help develop a comprehensive search strategy to search for relevant literature on the use of simulation-based training for patient care among paramedics and EMTs?

Here is a suggested comprehensive search strategy to find relevant literature on the use of simulation-based training for patient care among paramedics and EMTs:

Databases:
PubMed, CINAHL, Ovid MEDLINE, Cochrane Library, PsycINFO

Search Terms:

Population Terms:
"Emergency Medical Technicians" OR EMT OR EMTs OR "paramedics" OR "emergency medical services personnel"

Intervention Terms:
"simulation training" OR "simulation-based training" OR "simulation education" OR "medical simulation" OR "patient simulation"

Outcome Terms:
skills OR performance OR competence OR knowledge OR confidence

Patient Care Terms:
"patient care" OR "clinical skills"

Boolean Operators:
AND, OR

Search Strategy:

PubMed:
("Emergency Medical Technicians" OR EMT OR EMTs OR "paramedics" OR "emergency medical services personnel") AND ("simulation training" OR "simulation-based training" OR "simulation education" OR "medical simulation" OR "patient simulation") AND (skills OR performance OR competence OR knowledge OR confidence) AND ("patient care" OR "clinical skills")

CINAHL:
(MH "Emergency Medical Technicians+") OR (MH "Paramedics+") AND (MH "Simulation+") AND (MH "Clinical Competence") OR (MH "Treatment Outcomes+") AND (MH "Patient Care+")

- Ovid MEDLINE:
1. Emergency Medical Technicians/
 2. EMT.tw.
 3. Paramedics/
 4. or/1-3
 5. Simulation Training/
 6. Medical Simulation/
 7. Patient Simulation/
 8. (simulation adj3 (training or education or learning)).tw.
 9. or/5-8
 10. Clinical Competence/
 11. Treatment Outcome/
 12. (skill\$ or performance or competence or knowledge or confidence).tw.
 13. or/10-12
 14. Patient Care/
 15. (patient care or clinical skills).tw.
 16. or/14-15
 17. 4 and 9 and 13 and 16

Cochrane Library:
(Emergency Medical Technicians OR EMT OR EMTs OR paramedics OR emergency medical services personnel) AND (simulation training OR simulation-based training OR simulation education OR medical simulation OR patient simulation) AND (skills OR performance OR competence OR knowledge OR confidence) AND (patient care OR clinical skills)

- PsycINFO:
1. Emergency Medical Technicians/
 2. Paramedics/
 3. 1 OR 2
 4. Simulation Training/
 5. Treatment Outcomes/
 6. Clinical Competence/
 7. (simulation adj3 (training or education or learning)).tw.
 8. 4 OR 5 OR 6 OR 7
 9. (skill\$ or performance or competence or knowledge or confidence).mp.
 10. Patient Care/
 11. (patient care or clinical skills).tw.
 12. 10 OR 11
 13. 3 AND 8 AND 9 AND 12

This search strategy utilizes a combination of relevant Medical Subject Headings (MeSH terms) when available in each database and keyword searching to capture relevant literature on the use of simulation for training paramedics and EMTs on patient care skills and outcomes. The strategy aims to find the intersection of these important concepts through the use of Boolean operators AND and OR.

The search can be modified as needed, for example adding date limits or limiting to certain study types. The final results should be screened carefully for relevance to the research question. Please let me know if you would like me to clarify or expand this search strategy further.

Question: Could you please help develop a comprehensive search strategy to search for relevant literature on the use of simulation-based training for patient care among paramedics and EMTs?

Human-developed search strategy for PubMed

A complete list of search strategies for all the selected databases/sources (PubMed, CINAHL, Cochrane Library, Scopus, WoS, and GS) is available in the cited article)

("Allied Health Personnel"[Majr] OR "allied health personnel"[tiab] OR "Emergency Medical Technicians"[Mesh] OR "emergency medical technician"[tiab] OR "emergency medical technicians"[tiab] OR EMT [tiab] OR EMTs[tiab] OR Paramedic [tiab] OR Paramedics [tiab])

AND

("Simulation Training"[Mesh] OR "Simulation training"[tiab] OR "Simulation-Based Training"[tiab] OR "SBT"[tiab] OR "interactive learning"[tiab] OR "patient simulation"[tiab])

AND

("Patient Care"[Mesh] OR "patient care"[tiab] OR "Clinical Competence"[Mesh] OR "clinical competence"[tiab] OR "clinical skill"[tiab] OR "clinical skills"[tiab] OR "Quality of Health Care"[Mesh] OR "quality of health care"[tiab] OR "efficiency of care"[tiab] OR "Length of Stay"[Mesh] OR "hospital length of stay"[tiab] OR "Patient Safety"[Mesh] OR "patient safety"[tiab] OR "Patient Satisfaction"[Mesh] OR "Patient Satisfaction"[tiab])

225 search results (no filters applied; Search Date: 12/26/2023)

V. Performance Evaluation - Metrics

- Metrics used for evaluation
 - Metrics for evaluating the LR question: relevance and accuracy.
 - Metrics for the SR question: following the PRISMA-S Checklist - Search Strategies
- Outcome Measures
 - Traditional LR
 - Relevance (R), 1 (least), 2, 3, 4, 5 (most)
 - Accuracy (A), 1 (least), 2, 3, 4, 5 (most)
 - Comments
 - SR (whether or not in compliance with PRISMA-S for Search Strategies)
 - Yes
 - No
 - Somewhat
 - Comments

V. Performance Evaluation - Outcomes

Performance Outcomes

- **Traditional LR**

- ChatGPT 3.5

- R: 1

- A: 3

- Not able to browse the Internet and access real-time databases; but the guidance provided can be useful

- Bard

- R: 4

- A: 2

- Generated 4 titles with brief summaries (#1 PMID36708964, #2 not a peer-reviewed article, #3 & #4 titles can't be verified)

- Claude.ai

- R: 4

- A: 4

- Generated 4 formatted references, possibly in NIH style but without PMID and/or PMCID. All are verifiable, available in PubMed; However, they are not related to the "39-week rule".

- **SR**

- ChatGPT 3.5

- No

- Instead of providing a developed search strategy as was asked, it provided the step-by-step guide for creating a search strategy.

- Bard

- Somewhat

- Provided very general search strings, but not comprehensive. It does suggest database & keywords, etc.

- Claude.ai

- Yes

- It suggested databases and search terms, and it provided search strategies for each database with the search mechanisms unique to each database.

VI. Implications & Concerns

- Impact of AI on traditional library/librarian roles
 - References services
 - Research support
 - Learning materials
 - Academic writing / editing
- Considerations for future library services & Strategies for balancing AI and human expertise
 - Utilize AI to perform repetitive tasks to free up librarians' time for higher level services
 - Provide basic references services
 - Respond to FAQ Chat questions off library hours
- Concerns
 - Security & Privacy concerns
 - Ethical considerations
 - Legal issues

GenAI in Academic Databases - Coming

- PubMed
- EBSCOHost
- Web of Science
- UpToDate
- Scopus – due to launch early 2024

The screenshot shows a news article from Nature dated 02 August 2023. The article title is "ChatGPT-like AIs are coming to major science search engines". The breadcrumb trail is "nature > news > article". Navigation links include "Explore content", "About the journal", "Publish with us", "Subscribe", "Sign up for alerts", and "RSS feed". A blue button says "Access through your institution" and a white button says "Buy or subscribe". A "Related Articles" section is partially visible at the bottom.

The screenshot shows the Elsevier website for Scopus AI. The breadcrumb trail is "Home > Products > Scopus > Scopus AI". The main heading is "Scopus AI: Change the way you view knowledge". Below the heading, it says "Elsevier's new generative AI provides you with concise, trustworthy AI-based summaries of your queries." and "Whether you are looking to get up to speed on a new field". A photograph of a woman wearing glasses and smiling is on the right side of the page.

VII. Conclusion

- Generative AI Tools can help academic librarians to
 - Answer basic and/or ready reference questions
 - Teach information literacy and research process
 - Develop students learning materials
- Not all AI tools are created equal or provide the same level of services. In terms of responding to the LR and SR queries as 12/26/23:
 - Claude provides most relevant responses in both LR and SR queries
 - ChatGPT 3.5 provides the least relevant
 - Bard stands in the middle among the three
- AI tools
 - lack critical thinking, abstract reasoning, personal/human experience, creativity, transparency, context awareness, and physical interaction, etc.
 - may provide inaccurate and/or misinformation, and bias, etc.
 - may cause security breach, invasion of privacy, copyright infringement, academic and research misconduct, etc.
 - depends on technology (hardware, software, electric power, internet, etc.)
- Librarians should not avoid using the AI tools. Better understanding how AI tools work can help us leverage AI strengths to provide more efficient library services
- Limitations of this project: The tools were selected based on their popularity & accessibility. Future studies may choose those AI tools that were designed for literature reviews.

References

- Lund, B. D., & Wang, T. (2023). Chatting about ChatGPT: how may AI and GPT impact academia and libraries? *Library Hi Tech News*, 40(3), 26-29.
- Michalak, R. (2023). From Ethics to Execution: The Role of Academic Librarians in Artificial Intelligence (AI) Policy-Making at Colleges and Universities. *Journal of Library Administration*, 63(7), 928-938. <https://doi.org/10.1080/01930826.2023.2262367>
- Mukherjee, S., & Patra, S. K. (2023). Chatbots: A review of their potential applications in library services. *Qeios*. <https://doi.org/10.32388/R3USN5>
- Panda, S., & Kaur, N. (2023). Exploring the viability of ChatGPT as an alternative to traditional chatbot systems in library and information centers. *Library Hi Tech News*, 40(3), 22-25.
- Patra, S. K., & Kirtania, D. K. (2023). OpenAI ChatGPT generated content and similarity index: A study of selected terms from the library & information science. *Annals of library and information studies*, 70(2), 99. <https://doi.org/10.56042/alis.v70i2.1189>
- Pothier, W., & Condon, P. (2023). Cultivating a Data Literate Workforce: Considerations for Librarians. *Portal (Baltimore, Md.)*, 23(4), 629-636. <https://doi.org/10.1353/pla.2023.a908694>
- Qureshi, R., Shaughnessy, D., Gill, K. A. R., Robinson, K. A., Li, T., & Agai, E. (2023). Are ChatGPT and large language models “the answer” to bringing us closer to systematic review automation? *Systematic reviews*, 12(1), 72-72. <https://doi.org/10.1186/s13643-023-02243-z>
- Ruixue, Z., Yongwen, H., Weilu, M., Wenjia, D., Guojian, X., & Tan, S. (2023). Insights and reflections of the impact of ChatGPT on intelligent knowledge services in libraries. *Journal of Library and Information Sciences in Agriculture*, 35(1), 29.
- Subaveerapandiyan, A. (2023). Application of Artificial Intelligence (AI) In Libraries and Its Impact on Library Operations Review. *Library philosophy and practice*, 1-19.
- Van Noorden, R. (2023). ChatGPT-like AIs are coming to major science search engines. *Nature*, 620(7973), 258. <https://doi.org/10.1038/d41586-023-02470-3>
- Yan, R., Zhao, X., & Mazumdar, S. (2023). Chatbots in libraries: A systematic literature review. *Education for information*, 1-19. <https://doi.org/10.3233/EFI-230045>

Thank You!



Acknowledgement: All the images in the slides were generated by MS Bing Chat.