## **ChatGPT for Academic Work**

ChatGPT shows promise for academic analysis but struggles with summarizing whole papers accurately.

Users should verify sources for accuracy.

#### Tip

To ensure accurate information when using ChatGPT, ask specific, clear questions and crosscheck the responses with reliable sources.

Analysis based on ChatGPT-4o, accessed at <a href="https://chatgpt.com">https://chatgpt.com</a> between 06/06/2024 and 07/06/2024

#### Tip

Asking ChatGPT to emulate someone can provide valuable insights or perspectives that align with that person's expertise or knowledge.

## **Prompts**

**Act** like a professor in management.

Read the research article uploaded.

Provide a **short summary** of the article.

Be **concise** but **don't miss out** on important information.

Use the **exact words** from the paper for evidence.

**Do not change** a single word for the evidence from the text.

Include page number for where you find the information.

Do not make up your own information.

Tell me the (1) aim, (2) Stated or assumed ontology, (3)

Stated or assumed epistemology, (4) Overall

findings/conclusions, (5) Limitations of the paper.

Create two table for the results.

Table 1 should be the summary of (1) - (5).

Table 2 should be the evidence of (1) - (5).

## **ChatGPT-4o Summary: Aim**

ChatGPT accurately identifies the main aim of the article, but occasional inaccuracies occur, often due to variations in article formatting, particularly in non-conventional practitioner journals like Article 1.

Article	Amel-Zadeh & Serafeim (2018)	Bernardi & Stark (2018)	Cho et al. (2010)	Wang & Esperança (2023)	Pozzoli et al. (2022)	Husted & Sousa-Filho (2017)
ChatGPT Aim	To enhance understanding and complement archival research on ESG information usage	Investigate the impact of mandating IR in South Africa on analyst forecast accuracy.	Investigate biased language and verbal tone in corporate environmental disclosures	To explore the impact of digital transformation on SMEs' market and ESG performance.	Determine associations between AC characteristics and ESG performance in EU listed companies	To explore the impact of different forms of sustainability governance on ESG performance, considering the role of institutional context (p. 1).
Actual aim	Why and how investors use reported ESG information.	We study the impact of the reporting regime change in South Africa on analyst forecast accuracy.	To investigate whether there are self-serving biases present in the language and verbal tone used in corporations' environmental disclosures.	Examines the influence of digital transformation on market and ESG performance in Chinese small and medium-sized enterprises	To investigate the impact of audit committee (AC) characteristics on ESG performance for European listed companies.	This study examines how the governance of sustainability projects as collaborative, inhouse, or outsourced projects, affects corporate ESG performance

## **ChatGPT-4o Summary: Ontology**

ChatGPT struggles to determine the appropriate ontology (realism vs. relativism); nevertheless, it occasionally presents evidence suggestive of realism.

Article	Amel-Zadeh & Serafeim (2018)	Bernardi & Stark (2018)	Cho et al. (2010)	Wang & Esperança (2023)	Pozzoli et al. (2022)	Husted & Sousa-Filho (2017)
ChatGPT Ontology	Assumes ESG factors are real and measurable aspects affecting financial performance	Assumes a link between ESG disclosures and future financial performance.	Realist	Firms' internal resources and capabilities are crucial in shaping performance (RBV and DCV).	AC characteristics impact ESG performance in a measurable way	Sustainability challenges are complex, requiring governance that can assemble intricate configurations of resources and capabilities beyond a single firm's capabilities (p. 12).
Group's comment	Mention of realist ontology.	Not answering the question.	Mention of realist ontology.	Not answering the question.	Not answering the question.	Not answering the question.

## **ChatGPT-4o Summary: Epistemology**

ChatGPT consistently suggests a positivist epistemology for all cases, diverging from Crotty's (1994) example; however, it's important to note that positivism advocates for an objective pursuit of knowledge.

Article	Amel-Zadeh & Serafeim (2018)	Bernardi & Stark (2018)	Cho et al. (2010)	Wang & Esperança (2023)	Pozzoli et al. (2022)	Husted & Sousa-Filho (2017)
ChatGPT Epistemolo gy	Assumes a positivist approach, using empirical data from surveys	Positivist, using empirical data and balanced panel research design with fixed effects.	Positivist	Positivist approach using empirical data and statistical methods.	Positivist approach using quantitative data to test hypotheses	Empirical and positivist approach using hierarchical linear modeling and fixed-effects regression analysis (p. 13).
Group's comment	Positivist approach is accurate for the quantitative research.	Positivist approach is accurate for the quantitative research.	Positivist approach is accurate for the quantitative research.	Positivist approach is accurate for the quantitative research.	Positivist approach is accurate for the quantitative research.	Positivist approach is accurate for the quantitative research.

## ChatGPT-4o Summary: Overall findings/conclusions

While ChatGPT generally delivers accurate conclusions, occasional instances of poorly worded responses may lead to confusion; however, its overall performance is commendable.

Article	Amel-Zadeh & Serafeim (2018)	Bernardi & Stark (2018)	Cho et al. (2010)	Wang & Esperança (2023)	Pozzoli et al. (2022)	Husted & Sousa-Filho (2017)
ChatGPT Overall findings	Investors use ESG for financial materiality; ethical motivations influence screening strategies; ESG integration and engagement are most beneficial; future increase in positive screening and active ownership expected	IR improves the relationship between ESG disclosures and forecast accuracy.	Poor environmental performers use more optimistic and less certain language	Digital transformation significantly impacts market and ESG performance; digital adoption and innovation culture are critical.	AC characteristics enhance ESG- related controls, managing risks and improving ESG performance	Collaborative governance is the most effective for improving ESG performance. Institutional context significantly influences the effectiveness of sustainability governance (pp. 12-13).
Actual findings from abstract	The primary reason survey respondents consider ESG information in investment decisions is because they consider it financially material to investment performance.	Results consistent with theory that the level of environmental, social and governance disclosures is a mediating variable in determining the effectiveness of IR.	Disclosures of worse environmental performers exhibit significantly more "optimism" and less "certainty" than their better-performing counterparts.	Digital transformation and firm competitiveness indirectly and positively affect ESG through the intermediary variable (firm market performance).	A significant positive effect of audit committee independence and expertise on ESG performance.	Collaborative governance produced the greatest ESG performance benefits, followed by in-house and outsourced.

### **ChatGPT-4o Summary: Limitations**

ChatGPT generally presents the study's limitations accurately as provided by the authors; however, we observe that these limitations tend to be overly broad, although it's unclear if these are the only limitations mentioned.

Article	Amel-Zadeh & Serafeim (2018)	Bernardi & Stark (2018)	Cho et al. (2010)	Wang & Esperança (2023)	Pozzoli et al. (2022)	Husted & Sousa-Filho (2017)
ChatGPT Limitations	Response bias, low response rate, mainstream investment professional sample	Small sample size and unique research setting in South Africa.	DICTION's limitations, small sample size, cross- sectional design, and limited generalizability	Geographical focus on Zhejiang Province, China; cross-sectional study limits causality.	Yearly ESG data, potential biases, limited study period, exclusion of non- EU/developing countries	Use of proxies that do not fully capture the range of sustainability projects and a limited three-year data panel. Future research should explore alternative forms and extend the panel (p. 13).
Group's comment	Valid limitations	Valid limitations	Valid but not specific limitations	Valid but not specific limitations	Valid but not specific limitations	Valid limitations

### Performs well ...

The ChatGPT-40 model performs decently in literature reviews but occasionally lacks specificity, requiring users to seek additional information.

It also struggles to provide accurate sources.

... but lacks depth.

"Useful yet limited. 7/10"
Vis (2024)

"Accuracy of sources remains a challenge."

Jasmine (2024)

"Good for generating ideas, but verification is necessary."

"ChatGPT can make mistakes.

Check important info"

OpenAl (2024)

#### **Tip**

Users should exercise caution, doubt and scepticism with ChatGPT.

Note: Analysis is based on uploading whole article to ChatGPT-4o

## Which metaphor do you think best describes ChatGPT's role?







## ChatGPT-40 as a sketch artist

Capturing the essence of a scene, ChatGPT-40 sketches out the basic outlines and themes of a topic, offering a preliminary draft.

Yet, like sketches lacking intricate detail, its output requires refinement and fleshing out by the author to achieve a complete picture.

#### **Perspectives**

Offer alternative viewpoints, prompting authors to consider different perspectives in their work.

#### **Organises**

Help organize thoughts and arguments, providing a framework for structuring the overall narrative.

#### **Translates**

They translate the complex studies and concepts into more accessible language.

#eli5

#### **Extracts**

Extracting valuable insights and nuggets of knowledge from complex studies for review.



# Authors as the artisans

The artisans take the raw sketches from ChatGPT and craft them into intricate works of literature through careful refinement and embellishment.

## **Optimizing ChatGPT**

These recommendations streamline academic paper review, and continuously improve research outcomes with the sketch artist's assistance.

#### **Use small texts**

Reduces noise, provides targeted feedback, and facilitates efficient analysis.

#### **Specific prompts**

Clear instructions will yield more relevant and useful responses.

#### "Be critical"

Evaluate the coherence, relevance, and implications of the content provided by to ensure scholarly rigor.

#### **Experiment and learn**

Learn from the responses and adapt your strategies to maximize the benefits of the tool in your paper review process.

# Using ChatGPT-3.5 to extract information from abstract

#### **Prompt**

Based on this abstract from a journal article, write in point form with (1), (2), ..., (n).

- (1) Background,
- (2) Objective
- (3) Methodology,
- (4) Results,
- (5) Machine learning application

#### DOI PURPOSE: To describe the epidemiology of intra-abdominal (1) Background: The study aims to describe the epidemiology of intra-a infection in an international cohort of ICU patients according (2) Objective: The objective is to classify cases of intra-abdominal i to a new system that classifies cases according to setting of (3) Methodology: The study is a multicenter observational epidemiologi (4) Results: The cohort included 2621 patients, with different setting 10.1007/s0013 infection acquisition (community-acquired, early onset (5) Machine learning application: No specific mention of a machine lea In this study, we analyzed the antibiotic resistance of Analysis of antibiotic resistance in carbapenem-resistant gram-negat carbapenem-resistant gram-negative bacteria (CR-GNB) in Development of a predictive model intensive care unit (ICU) patients and developed a predictive 10.3389/fcimb, model. We retrospectively collected the data of patients with (2) Objective: Identify risk factors for CR-GNR infection BACKGROUND: This study aimed to apply the (1) Background: - Study aimed to develop a model for predicting multidrug-resistant or backpropagation neural network (BPNN) to develop a model Backpropagation neural network (BPNN) used for model development. for predicting multidrug-resistant organism (MDRO) infection 10.1186/s4056 in critically ill patients. METHODS: This study collected To develop a model for predicting MDRO infection in critically ill BACKGROUND: Acute distress respiratory syndrome (1) Background: ARDS patients with veno-venous ECMO support are prone (ARDS) patients with veno-venous extra corporeal (2) Objective: To investigate whether a multiple-site decontamination (3) Methodology: Retrospective observational study conducted in three membrane oxygenation (ECMO) support are particularly (4) Results: 241 patients were included, with 69 in the MSD group and 10.1186/s1361 exposed to ECMO-associated infection (ECMO-AI). (5) Machine learning application: Not mentioned in the abstract. The decision on when it is appropriate to stop antimicrobial (1) Background: Decision on when to stop antimicrobial treatment is complex and unde treatment in an individual patient is complex and Ceasing too early or excessive treatment can have negative consequent under-researched. Ceasing too early can drive treatment Under- and over-treatment can contribute to antimicrobial resistance 10.3389/fdgth.; failure, while excessive treatment risks adverse events. (2) Objective: BACKGROUND: Staphylococcus aureus (SA) is one of the (1) Background: Staphylococcus gureus (SA) is a major pathogen respons. main pathogens responsible for healthcare-associated (2) Objective: To describe the prevalence of SA-HCAI among colonized p (3) Methodology: Retrospective cohort study of a PICU in a French univ infection (HCAI) in pediatrics. The aim of this study was to (4) Results: Among 1381 patients colonized with SA, 8% had methicillin 10.1016/j.arcpe describe the prevalence of SA-HCAI among colonized (5) Machine learning application: No specific mention of machine learn BACKGROUND: Intensive care unit (ICU) patients are critically ill and have low immunity. They will undergo various trauma medical procedures during diagnosis and treatment. 10.12998/wjcc. The use of high-dose hormones and broad-spectrum (1) Background: ICU patients have low immunity and are at risk for nos BACKGROUND: This study aimed to analyze the (1) Background: The study gimed to analyze HAI rates and antimicrobial Healthcare-Associated Infections (HAI) rates and (2) Objective: The objective was to assess the impact of the pandemic (3) Methodology: The cohort included hospitals reporting HAI rates, mi antimicrobial consumption in Intensive Care Units (ICU) in (4) Results: 220 ICUs were included, and CLABSI rates increased signif. 10.1016/j.clins; São Paulo city during the COVID-19 pandemic and compare (5) Machine learning application: No specific mention of a machine lea Nosocomial infections in the neonatal intensive care unit (1) Background: Nosocomial infections in the neonatal intensive care (NICU) tend to cluster and multidrug-resistant (MDR) (2) Objective: To investigate clusters of late-onset neonatal sepsis ( (3) Methodology: Retrospective cohort study of neonates admitted to the pathogens are rising in developing countries. We did a

ChatGPT output

Input