

AI 환각에서 Ghost(fake) Reference까지



This case also highlights how the use of artificial intelligence (AI) can potentially contribute to the development of preventable adverse health outcomes. Based on the timeline of this case, it appears that the patient either consulted ChatGPT 3.5 or 4.0 when considering how he might remove chloride from this diet. Unfortunately, we do not have access to his ChatGPT conversation log and we will never be able to know with certainty what exactly the output he received was, since individual responses are unique and build from previous inputs.

^해당 남성에 대한 Case report. 당사자의 대화기록을 정확히 알 수는 없으나 GPT 3.5-4

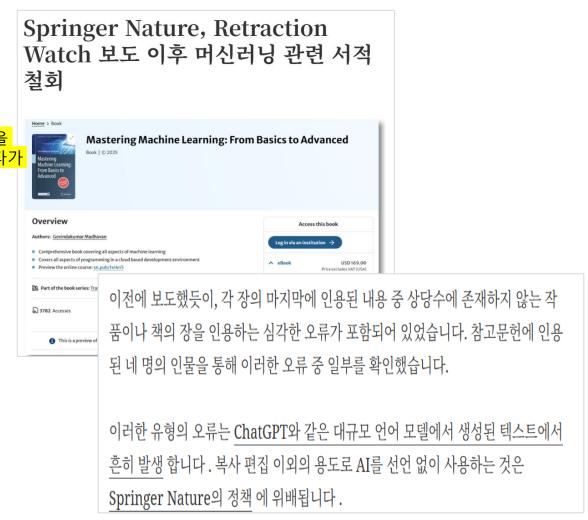
However, when we asked 버전에서 유사한 질문을 한 결과 결과값에서 브롬화 produced a response tha 나트륨을 추천하였음.ugh the reply stated that context matters, it did not provide a specific health warning, nor did it inquire about why we wanted to know, as we presume a medical professional would do.

Man who asked ChatGPT about cutting out salt from his diet was hospitalized with hallucinations, Doha Madani, NBC News.

Aug. 15, 2025, https://www.nbcnews.com/tech/tech-news/man-asked-chatgpt-cutting-salt-diet-was-hospitalized-hallucinations-rcna225055

Audrey Eichenberger, Stephen Thielke, Adam Van Buskirk. <u>A Case of Bromism Influenced by Use of Artificial Intelligence</u>. AIM Clinical Cases.2025;4:e241260. [Epub 5 August 2025]. doi:10.7326/aimcc.2024.1260

Ghost(fake) Reference 문제로 철회된 도서 사례)



Springer Nature to retract machine learning book following Retraction Watch coverage, RetractionWatch, Jul. 16, 2025, https://retractionwatch.com/2025/07/16/springer-nature-to-retract-machine-learning-book-following-retraction-watch-coverage/(Accessed on Aug. 25, 2025) *구글 번역으로 번역

범용적인 목적의 LLM

학습 데이터: "웹(Web)"

- 구체적이지 않고, 투명하지 않음
- 하지만 LLM 학습에는 효과적임

LLM이 다음과 같은 작업을 잘 수행할 수 있도록 도와줌:

- 패턴을 이해하고
- 일관된 텍스트 생성
- 번역 수행

User Query

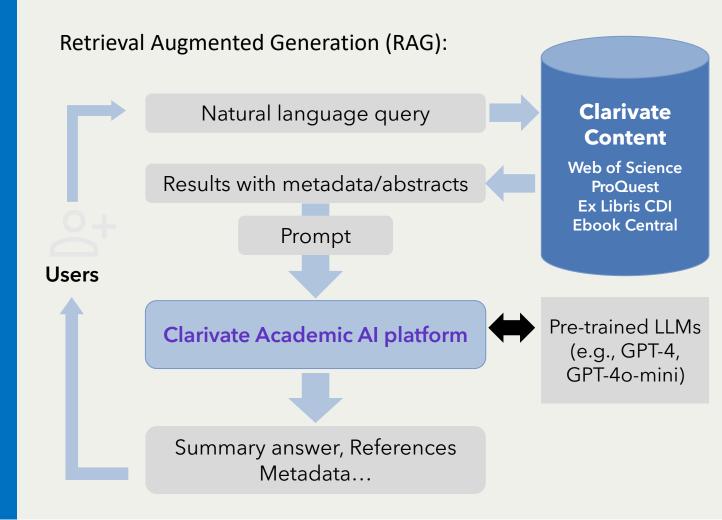
Pre-trained LLM (e.g. GPT-4)

Output

© Clarivate[™]

학문적 신뢰성을 갖춘 콘텐츠에 기반해 결과를 도출하는 AI

 신뢰할 수 있는 사실과 정보에 기반한 결과 제공 환각(hallucination)과 편향 최소화



Academic community와 함께하는 책임감 있는 AI 구현



기회:

- 컨텐츠 가시성 증진
- 데이터 기반 인사이트 도출
- 개인화된 학습
- 생산성 및 효율성 증진

우려:

- 편향과 환각
- Learning shortcuts
- 악용사례 (예. Papermills)
- 표절

Al Framework



투명성

- 어떤 내용을 기반으로 나온 데이터인지 명백하게 확인 가능
- 적절한 출처 표기 및 인용 문헌의 간편한 접근



윤리

- 잘못된 정보를 줄이기 위한 조치
- 출판사의 저작권을 존중하고 상호 협력
- 신뢰할 수 있는 AI 구현을 위한 관계 기관과의 협력



정보 보호

- 위원회를 통한 피드백 수렴(Human-inthe-loop)
- 개인 정보 보호 및 정보보안 규정 준수
- 진화하는 글로벌 규정 준수



ProQuest Research Assistant 소개 (1)

- 제공 DB 목록
 - ✓ ProQuest One Academic
 - ✓ ProQuest Central (Korea)
 - ✓ ProQuest Dissertations & Theses Global (PQDT), PQDT Global Part A, and PQDT Global Part B
 - ✓ ProQuest One Academic Premium
 - ✓ ProQuest Central Premium
 - ✓ ProQuest One Applied & Life Sciences
 - ✓ ProQuest One Business
 - ✓ ProQuest One Education
 - ✓ ProQuest One Health & Nursing
 - ✓ ProQuest One Psychology
 - ✓ ProQuest One Religion & Philosophy
 - ✓ ProQuest One Social Sciences
 - ✓ ProQuest One Sustainability

✓ ProQuest One Community College

- ✓ ProQuest Digital Collections
 - ✓ ProQuest One Black Studies
 - ✓ ProQuest One Entertainment & Popular Culture
 - ✓ ProQuest One Global Studies & International Relations
 - ✓ ProQuest One History
 - ✓ ProQuest One Literature
 - ✓ ProQuest One Visual Arts & Design
 - ✓ ProQuest One Women's Studies

✓ APA 제품군 <mark>New!</mark>

- ✓ APA PsycTests
- ✓ APA PsyArticles
- ✓ APA PsycExtra
- ✓ APA PsycTherapy
- ✓ APA PsycBooks



ProQuest Research Assistant 소개 (2)

- 어떤 문헌의 유형에서 Research Assistant가 활성화 되어있나요?
 - ✓ 학술지
 - ✓ 무역 저널
 - ✔ 잡지
 - ✓ 뉴스(현재, 과거 및 전신 뉴스 포함)
 - ✓ 동영상
 - ✔ 논문
 - ✓ 회의록
 - ✓ 백과사전/참고서
 - ✓ 정부 및 공식 출판물
 - ✓ 보고서
 - ✓ 작업 문서
 - ✓ 표준 및 실무 지침
 - * 150단어 미만의 문서 및 참여하지 않기로 결정한 일부 출판사의 문서의 경우 기능이 표시 X



ProQuest Research Assistant

실제 이용자들의 패턴을 기반으로 한 통찰력

지난해 Clarivate는 AI 기반 ProQuest Research Assistant 개발 과정에서 다양한 사용자 및 고객 관점을 파악하기 위해 광범위한 사용자 연구 진행



AI 및 기술적 트렌드가 학생, 사서, 강사에게 미치는 영향을 알아보기 위한 **탐색적 연**구 수행



인터뷰와 설문조사를 통해 AI가 연구 및 학습 과제를 해결하는 데 어떻게 기여하는 지 파악



사용자 테스트 기반 UX의 직관성 및 이용자 친화적 설계 테스트



고객 및 관계 분야 자문위원회의 정기적인 리뷰, 피드백 수렴



60+ 1대1인터뷰

수백건 사용성 테스트 및 활동

수천건 만족도 피드백 수렴

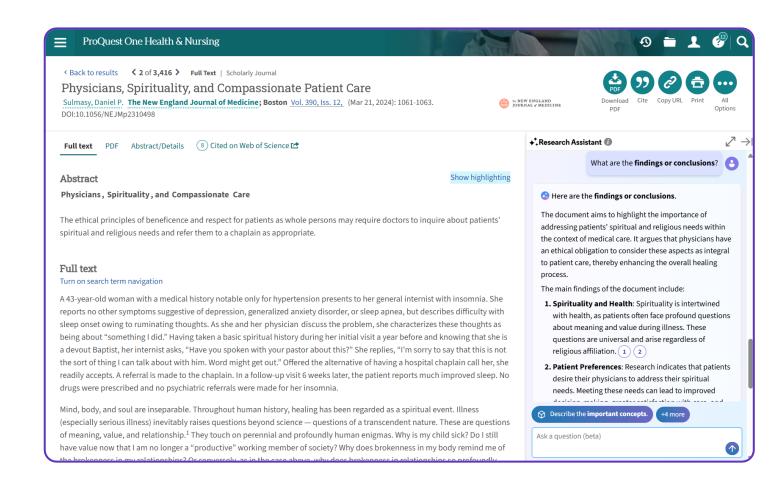
10+ 자문 위원회 리뷰

ProQuest Research Assistant

문헌 기반 인사이트를 통해 연관된 주제 탐색 효율성 증진

ProQuest Research Assistant는 학생, 연구자 교수자 모두에게 필요한 사항을 지원:

- 더 효율적인 검색
- 신속한 문헌 요점 파악
- 문헌의 내용을 보다 깊이 게 탐색 할 수 있도록 지원
- 낯선 주제 분야를 검색 할 때에도 활용

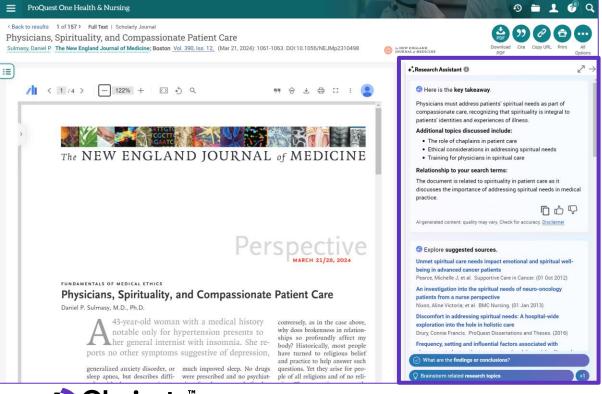




ProQuest Research Assistant: 연구 및 문헌 탐색의 핵심적인 니즈를 지원

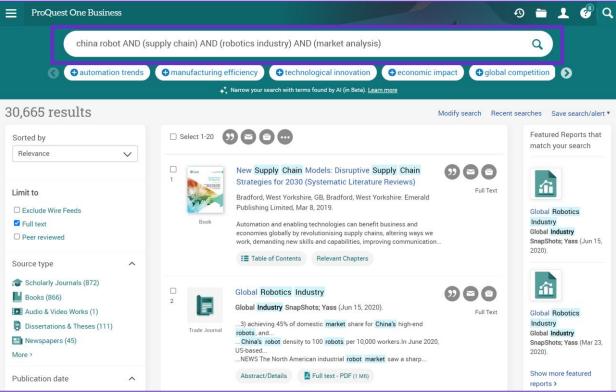
1: 문헌으로 부터 검색

문헌의 내용을 기반으로 인사이트, 가이드, 다음 단계의 탐색을 지원



2: 보다 타겟화 된 검색 지원

연관된 검색어를 손쉽게 적용하여 타겟화 된 검색



1: Starting on a Document: 인사이트, 가이드, 추가적인 문헌 탐색 지원

문헌 탐색 시 핵심적인 테스크를 기반으로 구현된 기능과 함께하는 스마트한 검색

Key takeaways 를 기반으로 원하는 내용의 문헌인지 신속하게 파악 Important concepts 를 기반으로 핵심적인 개념 습득 및 검색에 활용

Related topics 을 통해 문헌과 연계된 추가적인 연구주제 제안

Here is the key takeaway.

Physicians must address patients' spiritual needs as part of compassionate care, recognizing that spirituality is integral to patients' identities and experiences of illness.

Additional topics discussed include:

- The role of chaplains in patient care
- Ethical considerations in addressing spiritual needs
- Training for physicians in spiritual care

Relationship to your search terms:

The document is related to spirituality in patient care as it discusses the importance of addressing spiritual needs in medical practice.



Al-generated content: quality may vary. Check for accuracy. Disclaimer

Here are the important concepts.

- 1. Physicians: Physicians are medical professionals responsible for diagnosing and treating patients, and in this document, they play a crucial role in addressing patients' spiritual needs as part of holistic care. Their engagement with spirituality is emphasized as essential for respecting patients as whole persons and improving patient outcomes.
- 2. Spirituality: Spirituality refers to the ways individuals relate to transcendent questions of meaning, value, and relationship, which are integral to the human experience of illness and healing. The document highlights its importance in patient care, suggesting that addressing spiritual needs can significantly enhance patient satisfaction and quality of life.
- **3.** <u>Chaplains</u>: Chaplains are specialized practitioners trained to provide spiritual care

Here are related research topics.

- Spirituality in patient care: Understanding the role of spirituality in patient care is crucial for enhancing patient satisfaction and overall health outcomes.
- 2. Physician-patient relationship: Exploring the dynamics of the physician-patient relationship can lead to improved communication and trust, which are essential for effective care.

Q

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- 3. Ethics of spiritual care: Investigating the ethical considerations surrounding spiritual care in medicine is important for ensuring respectful and appropriate patient interactions.
- Training physicians in spiritual care:
 Researching effective training methods for physicians in spiritual care can enhance their ability to address patients' spiritual

1: Starting on a Document: 인사이트, 가이드, 추가적인 문헌 탐색 지원

문헌 탐색 시 핵심적인 테스크를 기반으로 구현된 기능과 함께하는 스마트한 검색

Findings & Conclusions 연구의 결과 및 결론을 워클릭으로 탐색

Here are the findings or conclusions.

The document provides a comprehensive literature review on the risks and benefits of social media use among children and adolescents. Its primary goal is to examine the reasons for social media engagement, the adverse effects associated with its use, and the safety concerns that arise from these platforms. The review highlights the dual nature of social media, emphasizing both its potential benefits for social connection and the significant risks it poses to mental health and safety.

Key findings from the review include:

- 1. Prevalence of Use: A staggering 95% of adolescents aged 13 to 17 use social media platforms, with a notable percentage of younger children (40% of those aged 8 to 12) also engaging with these platforms despite age restrictions. 1
- 2. Benefits of Social Media: Social media can foster peer connections, enhance self-esteem, and provide social support. It serves as a vital tool for adolescents to connect with others who share similar interests, which can be particularly beneficial for those feeling socially excluded. 1 2
- 3. Adverse Effects: The review identifies several negative consequences of social media use, including increased risks of cyberbullying, mental health issues such as anxiety and depression, and problematic social media use characterized by excessive reliance on these platforms. 3 4 The design of social media encourages excessive use, which can lead to

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Mind Map 문헌의 주제를 기반으로 한 시각화 기능



Essential Details 문헌에 기술 된 각 영역을 보다 쉽게 파악 할 수 있도록 지원

Here are the essential details.

Main Point

The article discusses the rising rates of depression among adolescents and young adults, exploring potential contributing factors such as smartphones and social media (1)

Key Points

Major depression rates among teens increased from 8.7% in 2005 to 11.3% in 2014.

Experts debate the role of digital devices, with some linking increased screen time to mental health issues.

Other factors include societal pressures and the visibility of mental health discussions

Sources

The information is supported by studies from the journal Pediatrics and insights from various psychologists and researchers (2) (4)

Implications

The article suggests a complex interplay of factors affecting mental health, including societal expectations, digital device usage, and the impact of mass shootings on youth (5) (4)

Tone

The tone is analytical, presenting various viewpoints on the causes of rising depression rates among young people (2) (3)

Study Limitations

Only one of the 36 studies employed a randomized approach, and there are few proven methods to keep children safe while using social media. (7)

Essential Details

문헌의 단락과 유기적 연계

Essential details 문헌의 유형에 따라 맞춤화 된 세부 정보

- 문헌의 주요 영역에서 핵심적인 내용을 추출:
 - 학술지 논문의 경우, 연구 방법, 가설 및 결과와 같은 영역을 기반으로 축약
 - 뉴스의 경우, 보도 기사의 톤, 미디어 출처, 핵심 사항 등으로 구성
 - 문헌의 내용 중 어떤 단락을 기반으로 생성된 내용인지 손쉽게 파악 가능. HTML 형식 Full text에서는 'Show in document'를 통해 해당 단락으로 손쉽게 이동하여 세부 내용 확인 가능

What are the essential details? Here are the essential details. Main Point The literature review exa Quote from document both the positive aspect: cyberbullying. (1)(2 Participating in challenges can overstimulate the brain's reward center. These triggers can change brain structure much like other addictions (Office of the U.S. Surgeon General, 2023). Digital dependency or social media addiction Purpose/Hypothesis may develop and cause impulse control issues (Reed, 2023). These impulse control issues also cause problematic The review aims to ident digital behavior (Reed, 2023). Due to these changes in the brain and impulse control issues, education aimed at adolescents. (3) changing behavior may not be effective for this age group. Educating the parent to limit opportunities for immature judgment may be more appropriate (Falgoust et al., 2022). Legislation and Legal Action Regarding Social Study Design/Methods Media Concerns In the United States, Section 230 of the Communications Decency Act of 1996 shields social media The review analyzed 36 a companies from liability for illegal content user's posts (U.S. Department of Justice, 1996). published between 2019

Results/Outcomes

Findings indicate that problematic social media use is linked to mental health issues such as depression, anxiety, and perceived stress, as well as behavioral problems like cyberbullying (5) (6)

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Implications

The review suggests a need for more research and focus on safety recommendations for social media use among youth, emphasizing the role of healthcare professionals in educating families. (3) (7)

Study Limitations

Only one of the 36 studies employed a randomized approach, and there are few proven methods to keep children safe while using social media. 7



12

Findings & Conclusions

문헌의 단락과 유기적 연계

연구 결과 및 결론

문헌의 결과 및 결론을 원클릭으로 보여주는 기능.

문헌의 내용 중 어떤 단락을 기반으로 생성된 내용인지 손쉽게 파악 가능. HTML 형식 Full text에서는 'Show in document'를 통해 해당 단락으로 손쉽게 이동하여 세부 내용 확인 가능 music [26]. Later, he also developed the enhanced system named Ossia and composed a new piano piece every three minutes at the Gaudeamus Music Week 2002 in Amsterdam [67]. In 2016, Marco Scirea et al. developed an evolutionary algorithm-based improvisation music generation system called MetaCompose [27]. The system can not only automatically generate chords, melodies and accompaniment but also create music in different emotional states in real time. In 2020, Roberto De Prisco et al. used evolutionary algorithms to develop an automatic composition synthesizer called EvoComposer, which successfully solved the problem of inharmonious four-part harmonies (bass, tenor, alto and soprano) in previous automatic music generation [28]. EvoComposer achieved Bach-style four-part harmonies by conducting an in-depth analysis of Bach's music and selecting a fitness function. Users only need to select one of the parts, and EvoComposer will automatically generate the other three parts, bringing a harmonious four-part harmony effect to music creation.

Evolutionary computation is an effective method that can help composers reduce their burden in the early stages of creation and quickly produce innovative and diverse melodies. By randomly mutating and combining music clips, it not only provides a fast and effective way to create music, but also interacts with users to adjust the style of music creation according to personal preferences. However, due to the subjectivity of musical aesthetics, it is very challenging to define a fitness function that reasonably evaluates music clips. In addition, it may take a lot of computing resources and time for the algorithm to evolve high-quality music works, which increases the computational cost of the

evolutionary algorithm. In recent years, evolutionary computed generation [3].

2.4. Deep Learning

Deep learning is an algorithm based on neural networks that scollects a large amount of **music** data for standardized encocharacteristics and requirements of the **music** data, and repe sufficiently small. The trained model is then used to generate include recurrent neural networks, Generative Adversarial Net diffusion models.

2.4.1. Recurrent Neural Network

A recurrent neural network (RNN) is a sequential memory arc melodies. It can memorize previous notes and predict the pos repeating this process, it can generate coherent musical piec 문서에서 인용

In adherence to the ethical guidelines and standards for review articles, we have excluded all unpublished or proprietary data from our research, including experimental results of new music generation systems. Additionally, due to the rapid development in this field, some of the latest advancements might not be fully reflected in this survey. Consequently, this survey is limited by the availability of the existing literature and the defined scope of the investigation, and therefore may not fully reflect the most recent advancements in the field. We encourage readers to refer to emerging studies for timely updates in this rapidly evolving field. Future work will focus on optimizing the proposed emotional generation system, with experimental results to be disseminated through peer-reviewed publications. 5. Conclusions Driven by the development

of technological progress, music and AI technology have been deeply integrated as music AI. Music generation is one of the representative fields of music AI.

In 1989, Peter Todd first used RNNs to generate simple melod.

could generate new melodies similar to the training one. In 1994, Michael Mozer et al. proposed an RNN-based music generation model named CONNECT. After training with Bach's music works, this model can not only generate grant () elodies with chords but also compose note by note [30]. However, as the length of pieces and the remaining with the compose note by note [30].

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literature and the need for ongoing exploration.

The main findings of the document include:

- Technological Integration: The document emphasizes the deep integration of music and AI technologies, particularly in the realm of music generation, which is identified as a key area of development within music AI.
- Limitations of the Survey: It notes that the survey excludes unpublished or proprietary data and may not fully capture the latest advancements due to the fast-paced nature of the field. This limitation is acknowledged as a significant factor in the scope of the investigation.
- Model Comparisons: The document discusses various models used in music generation, such as Generative Adversarial Networks (GANs), Variational Autoencoders (VAEs), and diffusion models. Each

AI가 생성한 내용이 문헌 중 어느 단락을 기반으 생성하였는지 투명하게 파악 가능 ③④⑤

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ting the need for future

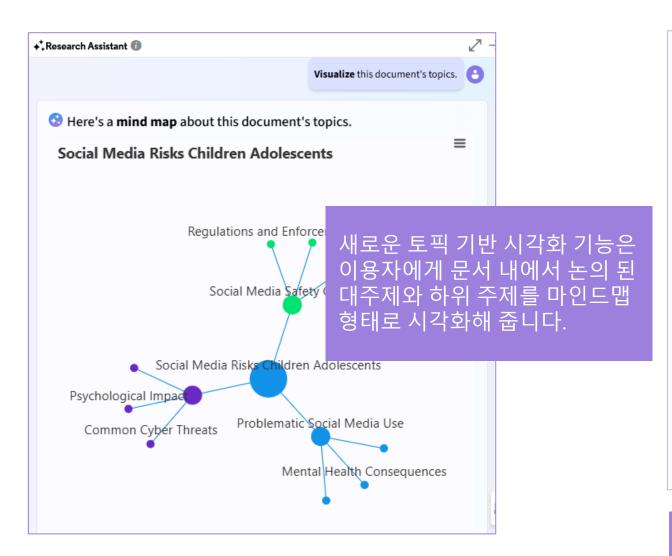
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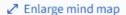
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ation systems. It

문헌의 주제를 기반으로 한 시각화 기능





Social Media Risks Children Adolescents

This document reviews the risks and adverse effects of social media use on children and adolescents, including problematic use, cyberbullying, mental health issues, and safety concerns.

Problematic Social Media Use ^

The document discusses problematic so dependency, its predictors, and its negation behavior in children and adolescents.

각 하위 주제에 대한 간략한 설명과 각 주제에 대한 문서의 내용이 함께 제공 됩니다.

More about Problematic Social Media Use 🚯

Predictors and Risk Factors

Factors such as loneliness, social anxiety, impulsivity, and early social media exposure increase the risk of problematic social media use.

More about Predictors and Risk Factors 1

Mental Health Consequences

Problematic social media use is linked to depression, anxiety, psychological distress, and behavioral dysfunction in youth.

More about Mental Health Consequences 🕎



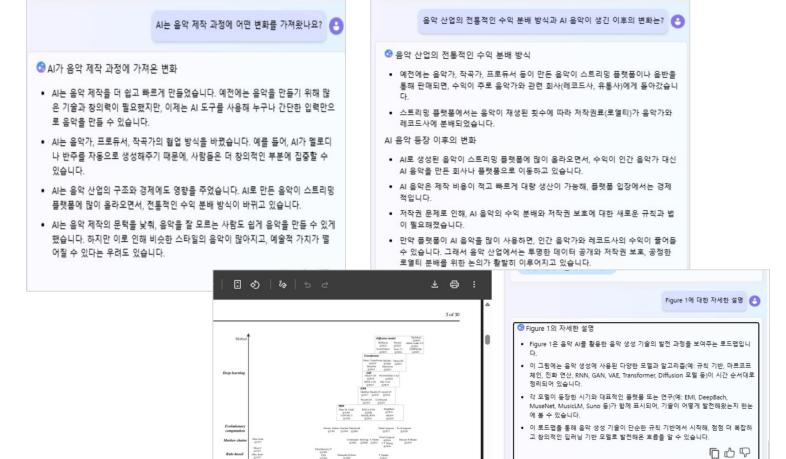
하위 주제에 대한 추가적인 탐색 포인트



문헌 기반 다국어 채팅 기능

대화형 도구에 대한 도서관 및 이용자 수요 충족

- Chat형태의 생성형 Al 도구에 익숙해진 이용자의 기대를 충족
- 출처를 알 수 없는 데이터를 기반으로 한 답변이 아닌 도서관에서 지원되는 양질의 학술자료를 기반으로 한 AI **기능** 구현
- 학생들은 문헌 탐색 과정에서 직접 질문하고 해당 문서의 내용 만을 기반으로 답변
- Ask Question 기능은 **다국어 질문 및** 답변을 지원
- 어렵게 느껴질 수 있는 해외학술자료도 손쉽게 접근하고 내용을 파악 할 수 있도록 지원





2: 보다 타겟화 된 검색 지원

아 다르고 어 다른 검색어 뭐를 쓸지 모르겠다고요? 검색 결과 기반 추천 검색어를 활용해보세요!

자연어 검색에 익숙한 이용자, 해외 학술자료 검색 시, 영어 검색어 표현에서 어감을 살리기 어려워하는 학생들을 위한 추천 검색어 기능.

- 유사한 의미의 검색어 제안
- 검색결과를 보다 좁혀서 알맞은 범위를 설정할 수 있도록 지원
- 타겟화 되고 연관성이 높은 검색 결과를 찾을 수 있도록 지원
- 사용자 테스트 과정에서 긍정적인 피드백

예) AI 음악에 대한 학술자료 검색





ProQuest Research Assistant 이용자 반응

Increased engagement

- ProQuest Research Assistant를 활용한 이용자는:
 - **31%** 더 문서의 내용을 스크롤하여 탐색하는 경향이 있습니다.
 - **40%** 더 문헌을 활용합니다. (활용의 기준: 인용, 다운로드, 인쇄, 저장, email)
- Key Takeaway 기능에서 "Show more" 를 클릭한 이용자는 **76%** 더 문서를 활용합니다.

ProQuest Research Assistant helps with...

"문헌의 내용을 미리 파악하고 더 잘 이해할 수 있도록 도와 줍니다. ."

"정확하고 간결하고 명확해서 시간을 절약하여 문헌을 검토할 수 있도록 도와 줍니다. "

"문헌 탐색에 쓰이는 시간 소모를 굉장히 줄일 수 있었습니다. 감사합니다!!" " ProQuest Research Assistar 제공하는 통찰력과 연구 가이드로 활용하기에 매우 유용합니다."

> **Library Journal** ProQuest One Sustainability 리뷰

"Research Assistant가 필요한 작업을 수행하는데 얼마나 유용한가요?"

85%

5점 척도 (4, 5점 만족도 기준)



FAQ

Research Assistant의 특정 기능만을 비활성화/활성화 할 수 있나요?

A. 현재는 불가능 합니다. 이와 같은 기능에 대한 수요가 있는 경우 저희에게 말씀해주세요.

Research Assistant 별도 사용료가 있나요?

A. 아니요. 해당 기능은 ProQuest의 지속적인 플랫폼 발전의 일환으로 무료로 제공됩니다.

Research Assistant는 Al 환각에 대한 걱정 없이 활용할 수 있나요?

A. Research Assistant에서 사용하는 LLM은 외부 학습 데이터와 완전히 독립적입니다. 개별 문서의 전문을 사용하여 텍스트를 생성함으로써, 정확도와 관련성이 매우 높습니다. Research Assistant의 각 기능은 문헌의 원문을 기반으로 생성 되며, 생성된 내용의 원래 단락을 찾아갈 수 있도록 지원하는 기능도 포함되어 있습니다.

Research Assistant는 이용자나 학생의 개인정보를 저장하진 않나요?

A: 아니요. Research Assistant는 세션 내에서 사용자 입력만 처리하는 로컬 호스팅 LLM을 기반으로 합니다. 개인 정보는 공유되거나 저장되지 않습니다.

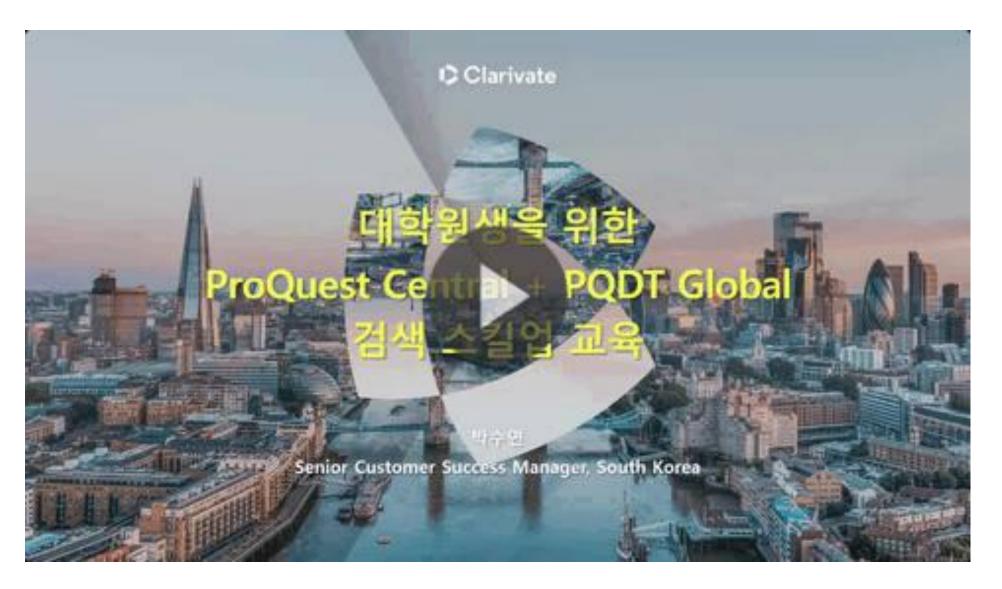


관련 웨비나 1) ProQuest 생성형 AI와 함께 더욱 스마트하게 검색하기





관련 웨비나 2) ProQuest Research Assistant를 포함한 다양한 검색 스킬 알아보기





도움말

ProQuest Research Assistant FAQs:

https://support.proquest.com/s/article/ProQuest-Research-Assistant-FAQs?language=en_US

• ProQuest 한국어 LibGuides 모음: https://proquest.libguides.com/korean

*DB 및 솔루션에 관련된 이용교육 일정 및 개별 DB Libguides, 이용교육 영상 및 자료 제공

