Mapping Social Cognition Research in Social Sciences: A Bibliometric Study towards Achieving the Sustainable Development Goals (SDGs)

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DOI : https://doi.org/10.63230/jopacbis.1.1.48

Sections Info	ABSTRACT
Article history: Submitted: May 17, 2025 Final Revised: June 1, 2025 Accepted: June 3, 2025 Published: June 17, 2025 *Keywords:* Social cognition Social sciences Bibliometric SDGs	*Objective:* One of the fundamental urgencies of the SDGs and the starting point is the psychology and mental state of humans to realize good quality resources. This research aims to analyze the scientific trends regarding social cognition in social science conceptually, knowledgeably, and socially over the last decade in order to obtain the latest developments that have not been previously conducted. *Method:* This research employs a bibliometric approach through Rstudio Biblioshiny to illustrate scientific research data accessed through the Scopus database within the span of 2014-2024. *Results:* There is a positive overall trend in social cognition in social science, although there has been a downward trend since 2021. Based on the theory of mind, the development of the theme focuses on the psychological relationship between humans and technology. *Novelty:* The use of the latest year data and the contextualization of social cognition in social science represents a novelty in this research. This offers contributions for further researchers and policymakers to conduct collaborative research on topic development and monitoring.

INTRODUCTION

The 5.0 era society is influenced by the advancement of human psychology (Houdé, 2023; Thomson, 2020). The ability of individuals to interpret, respond, and make sense of everything they see in interactions becomes the key point in human development (Jones et al., 2019). From this, the concept of social cognition emerges. Social cognition becomes a crucial foundation in establishing healthy relationships and building effective interactions (Beaudoin & Beauchamp, 2020; Rezende & Shigaeff, 2023). In a complex social life, coupled with the domino effects of the digital world such as negative generalizations, the development of social cognition becomes a global concern (Gallese, 2024; Király, 2022). Understanding and developing social cognition is a preventive effort in maintaining mental well-being, which is one of the keys to the Sustainable Development Goals, particularly the third point (Bulut & Çağlar, 2025; Deng, 2019; Ryder-Maki et al., 2024).

In a more in-depth manner, social cognition relates to the interpretation of the social world. For instance, if someone tries to understand another person's anger and it is reflected in their behavior, that person is engaging social cognition. A human who is capable of recognizing another's perspective will become tolerant (Akpan & Searle-White, 2021; Huang et al., 2021). There are several key contexts that shape social cognition, including social perception, theory of mind, empathy, moral reasoning, emotion recognition, and neurological and psychiatric conditions (Atenas et al., 2019;

Labbé et al., 2018; Lee & Pinkse-Schepers, 2024). The development of social cognition in society determines how collaboration can be achieved for the sake of collective welfare.

Social cognition involves various fields of science, one of which is social science. This scientific domain is the closest and most popular to social cognition (Beaudoin & Beauchamp, 2020; Nowogrodzka, 2014). Through social psychology, sociology, and communication, social cognition plays a crucial role as a narrator in decision-making processes regarding responses to social realities experienced. Dramatic changes are presented with the emergence of various virtual communication platforms that open new areas of study regarding social cognition, which can change and be interpreted in multiple ways. Therefore, social cognition is not only a theoretical concept but also reflected in practices within both conventional and digital societies (Ribeiro & Silva, 2012; Shany-Ur & Rankin, 2014).

Theory of mind serves as a theoretical lens that guides the study of social cognition (Charles Chen, 2015; Quesque & Rossetti, 2020). Through this approach, the concept of social cognition can be studied for its role in shaping behavior, education, and communication. This theoretical dimension forms the basis for the development of various types of research related to social cognition as it can examine social processes such as empathy, emotion, and tolerance simultaneously. This is very dynamic in today's digital era, making the discussion context continuously evolve.

Conceptually, there is a gap in previous research that is still limited in discussing social cognition from a narrative or systematic approach in clinical and neurological contexts (Morellini et al., 2022). This indeed expands the discussion in the context of sociology and communication studies. However, with the rapid movement of the digital era, there is a particular need to outline the discussion of social cognition in order to gain a broader understanding of the topic.

Through the explanation above, the potential research trends related to social cognition in social science need to be explored to find the development of the latest concepts and knowledge. This is important considering the constantly changing social dynamics due to the effects of advancements in digital communication platforms and cultural transformations (Greenwald & Lai, 2020). By understanding research trends in social cognition, it will open up knowledge on how social cognition affects many aspects of modern civilization. Various related issues that may arise, such as mental health and character education, also become an implication. Therefore, the topic of social cognition in social science is beneficial in designing strategies to shape an advanced society (de Mello et al., 2022; Henry et al., 2015).

One way to analyze research trends is through a bibliometric approach. The bibliometric approach allows for the analysis of various scientific works from around the world, covering conceptual, intellectual, and social aspects (Marvi & Foroudi, 2023; Prakoso et al., 2024). This approach is quite popular among academics due to its

significance in a more comprehensive analysis of mapping a topic. Researchers can visualize networks of keywords, collaborations, and relationships among literature in a comprehensive manner. The results of this bibliometric analysis provide strategic insights into the direction of research development and the identification of research gaps (Andriansyah et al., 2025; Prahani et al., 2024). This approach can better complement the lack of mapping that focuses on social cognition.

Many previous studies have discussed the topic of social cognition using literature review methods. The research titled "Social Cognition in Adult ADHD: A Systematic Review" found that adults with ADHD experience disturbances in various domains of social cognition (Morellini et al., 2022). Research from Maresca et al., (2020) is more focused on the SC domains that are significantly affected in several neurological conditions. Different results are shown with the division of social cognition into emotion recognition, theory of mind, moral reasoning, and social cognition in general, thus giving rise to various evaluation tools.

On the other hand, social cognition with a bibliometric approach is very hard to come by. Some of them include bibliometric research that discusses the existence of social cognitive theory related to financial well-being. The most relevant article is titled "Tracing the Impact of Social Media on Social Cognition: Bibliometric Analysis," with implications that misinformation, fake news, and the post-truth era have become serious social issues on social media, especially after the COVID-19 pandemic, and this has a significant impact on the social cognition of society (Anthony et al., 2024). This research opens new opportunities for exploring contexts beyond just social media.

Looking at previous literature studies, there is a research gap in the absence of studies analyzing social cognition trends in social science using a broader bibliometric approach. It is important to note that social cognition also develops in other contexts such as education, politics, culture, economics, conflict, and public policy. Therefore, this research aims to fill the existing gap by mapping social cognition trends in social science through a bibliometric approach covering conceptual, intellectual, and social aspects. The novelty of this research lies in focusing on the context of social science with the use of data from the last 10 years that has not been studied before.

The contributions of this research are as follows: 1) For practitioners, this research provides data-driven insights into how social cognition impacts interactions in various contexts. 2) For other researchers, it offers a conceptual foundation and a research map that facilitates the exploration of advanced topics and gaps in the topic of social cognition. 3) For the government/policymakers, it provides scientific evidence to design policies based on social cognition in formulating effective social regulations.

The following are the research questions:

1. What is the main information from the development of the scientific literature related to social cognition in social sciences?

2. What is the main profile and source of scientific literature related to social cognition in social sciences?
3. What is the most cited review of social cognition in social sciences literature articles?
4. Which country is most productive and affiliated with social cognition in social sciences literature?
5. What are the keywords for trends and visualization mapping in the literature on social cognition in social sciences?
6. What is the conceptual, knowledge, and social structure related to the literature on social cognition in social sciences?
7. What are the potential and strategies for research development and policies related to the literature on social cognition in social sciences?

Several aspects above become important materials for exploring social cognition in support of the third SDG (well-being). The indication is as a scientific basis for understanding the dynamics of social cognition in line with mental and psychological well-being as key factors.

RESEARCH METHOD
Materials and Methods
This study employs bibliometric methods to identify patterns and developments in the body of research concerning "Social Cognition". Research trends represent the overall changes in the studies conducted by researchers on a specific subject. In other words, they indicate the increasing global interest and demand explored through scientific research (Marvi & Foroudi, 2023; Prakoso et al., 2024). Bibliometric analysis serves as a methodological tool to investigate and reveal prevailing patterns in existing literature. Through its application, researchers are able to trace key thematic directions and gain insights into the substance of prior studies. Access to bibliographic databases is crucial for locating scientific publications, including articles, authors, abstracts, and references. This research employs Scopus, a reputable and high-quality bibliographic database that grants access to a wide range of scientific publications meeting international standards. Scopus is widely recognized for its focus on curating and indexing scholarly publications of high academic standards.
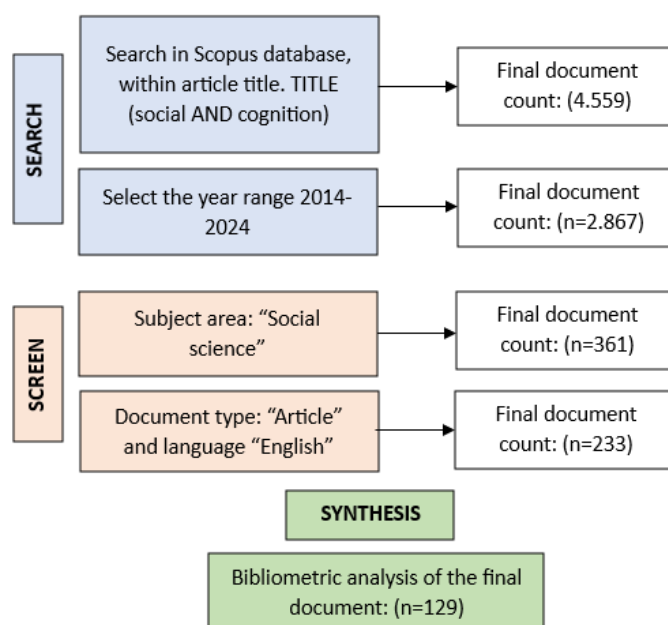
Bibliometric Data and Filtering Process
The bibliographic data search process was conducted in March 2025. The search process began by selecting the 'Article Title' field and typing 'Social cognition.' The filtering selection using 'Article Title' was chosen because it more accurately represents the research focus based on the selected theme and has been proven effective. From this category, 4,559 papers were obtained. Next is the categorization of the period from 2014

to 2024, making the data into 2,867 papers. In the screening process, there was a specification of the scientific context to 'Social science,' resulting in 361 articles. Then, the selection continued with the document type 'Article' and in 'English,' totaling 233 documents. In the synthesis stage, a manual filtering was carried out by the author in Microsoft Excel regarding the analysis of titles and abstracts to ensure that they truly fit the research topic. From this, 129 relevant articles were obtained and ready to be processed.

The manual screening process in Microsoft Excel uses inclusion and exclusion criteria. The inclusion phase involves selecting articles relevant to topics that develop within social themes such as education, communication, and social psychology. The exclusion phase involves eliminating articles that purely discuss social cognition in medical or biological fields without relating it to social aspects. The results obtained have been reviewed by two independent assessors who are experts in their field during the stages of article screening, accurate theme classification, and content analysis.

The research term was obtained in the following format: In Scopus. TITLE (social AND cognition) AND PUBYEAR > 2014 AND PUBYEAR < 2024 AND (LIMIT-TO (SUBJECT AREA , "SOCIAL SCIENCE")) AND (LIMIT-TO (DOCTYPE , "article")) AND (LIMIT-TO (LANGUAGE , "English")). Searching with the TITLE format is preferred over TITLE-ABS-KEY to find more relevant articles. If a topic, in this case social cognition, appears in the title, the topic is likely the main focus of the research (Prakoso et al., 2024). Below is an overview of the data filtering performed:

Figure 1. Article selection process.

Data Analysis

The filtered documents were exported in a CSV file format from Microsoft Excel, containing information such as author name, affiliation, title, country, journal name, and keywords. The files were then analyzed descriptively according to the research

questions. To present bibliographic data, this research utilizes Biblioshiny software (RStudio). This software offers a variety of features for in-depth bibliographic analysis of scientific publications, including metrics on the number of publications, citations, linkage networks, and keywords. Additionally, Biblioshiny offers standard and reliable bibliometric measurements and indicators. The software provides various features for comprehensive bibliographic analysis of scientific publications, including metrics on publication count, citations, network linkages, and keywords (Devaki et al., 2024). Additionally, Biblioshiny offers standard and reliable bibliometric measurements and indicators.

Quantitative descriptive analysis is used to extract key insights from research on social cognition, including details on titles, most productive journals or sources, leading countries in publication, and institutions with the highest affiliation. The study also explores citation patterns among authors through co-authorship analysis. In addition, knowledge co-occurrence mapping is conducted to visualize trends, development paths, keywords, and research themes related to social cognition. The occurrence and prominence of common keywords in this analysis reflect the popularity of a specific theme in the field (Moresi & Pinho, 2021). Therefore, keyword linkage analysis is used to evaluate the frequency of term appearances in the literature and their significance within the knowledge network.

The bibliometric metrics that are planned to be analyzed in this research include quantitative, conceptual, intellectual, and social aspects. Some examples include publication count, citation count, linkage networks, keyword co-occurrence mapping, citation pattern analysis, as well as standard bibliometric indicators available in the Biblioshiny application (Rstudio).

RESULTS AND DISCUSSION
Results
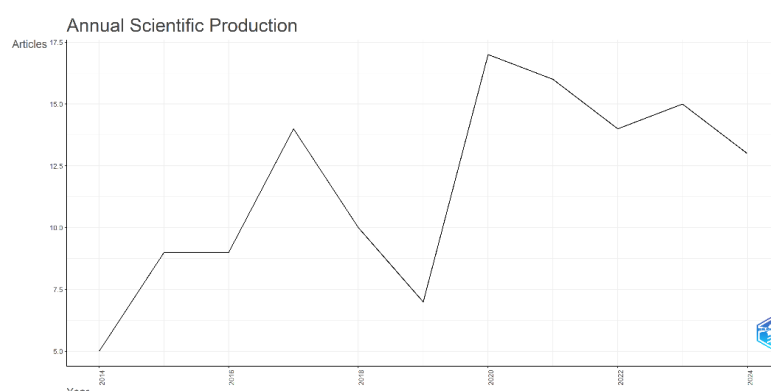*Main Information of Bibliometric*

Table 1. Main information.

Description	Result
Main information about the data	
Timespan	2014:2024
Sources (Journals, Books, Etc)	100
Documents	129
Annual Growth Rate %	10.03
Document Average Age	5.3
Average Citations Per Doc	15.39
References	8446
Document contents	
Keywords Plus (Id)	506

Description	Result
Author's Keywords (De)	443
Authors	
Authors	405
Authors Of Single-Authored Docs	32
Authors collaboration	
Single-Authored Docs	32
Co-Authors Per Doc	3.22
International Co-Authorships %	18.6
Document types	
Article	129

Table 1. Reflects basic information regarding the bibliographic data processed related to research on social cognition in social science. A total of 100 article sources were found, involving 405 authors with 129 validated articles. The annual growth rate reached 10.03%, indicating a growing research trend on related topics.
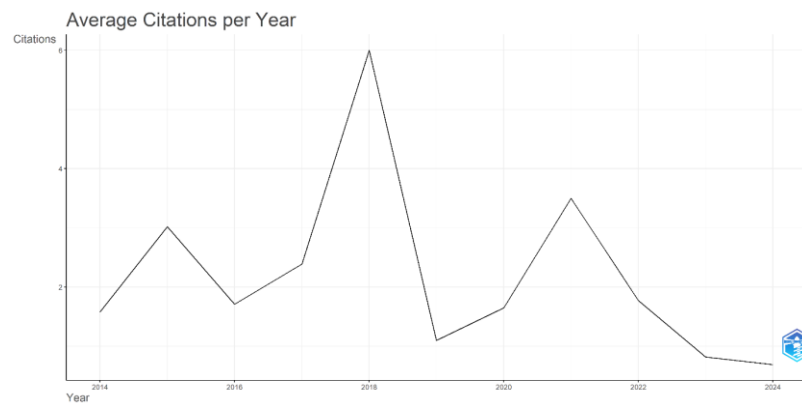
Publication Trends

Figure 2. Annual scientific production.

The trend of research development on the topic of social cognition can be reviewed in figure 2. There was a positive fluctuation from 2014 to 2017, before a significant decline occurred. There was a massive increase in 2020, followed by a gently declining trend until 2024. Nevertheless, overall in the last decade, research on the topic of social cognition in social sciences has experienced significant development.
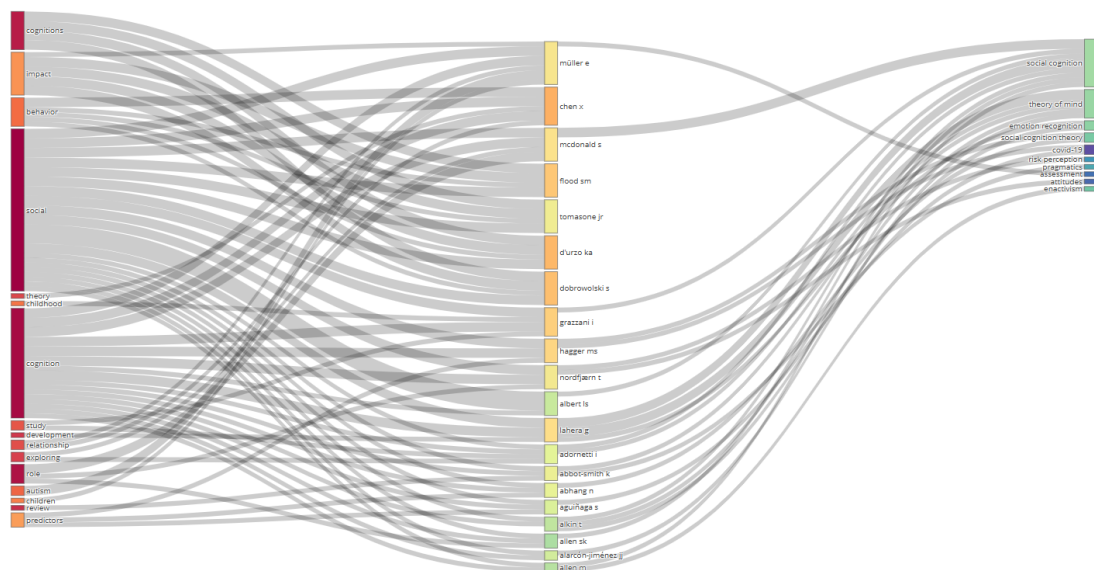
Average Citations

Figure 3. Average citations per year.

Figure 3. Illustrates the development of the average citations of articles related to social cognition. Initially, there was a fluctuating development starting from the vulnerable period of 2014-2018, before experiencing a sharp decline. Fluctuations occurred again from 2020 to 2024. The highest number of citations occurred in 2018.

Thematic Development

Figure 4. Thematic development of social cognition.

The Sankey diagram is shown in Figure 4, which illustrates the development or evolution of themes related to social cognition in social science in relation to the keywords progressed by several contributing authors. Several dominant terms such as "Social," "Cognition," "Cognitions," and "Impact" are discussed by authors such as Chen X, Grazzani I, and Lahera G, thus evolving into discussions on "Social Cognition," "Theory of Mind," and "Emotion recognition."
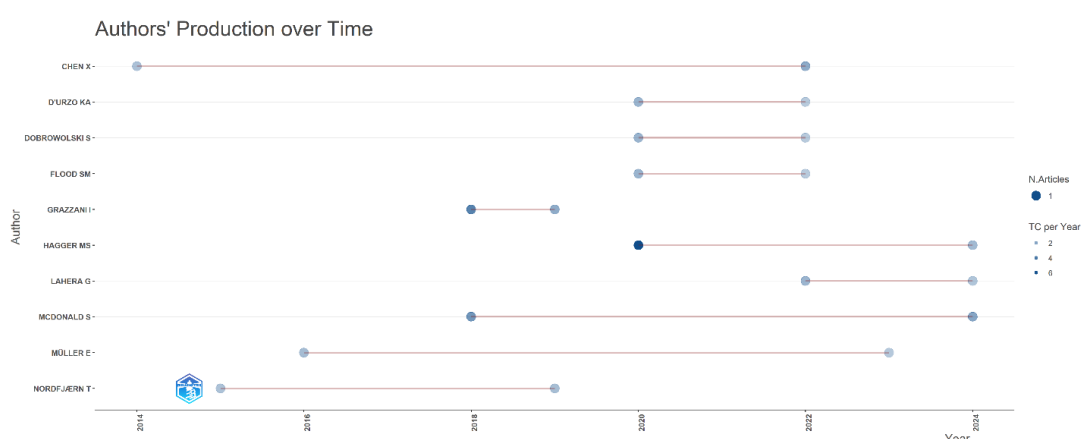
Researchers' Profiles and Source Titles

Table 2. Top authors.

Authors	Articles	H-index	Total citation
Grazzani I	2	2	42
Chen X	2	2	15
D'urzo KA	2	1	9
Dobrowolski S	2	1	9
Flood SM	2	1	9

Table 2. Represents the order of authors with the most significant contributions to the topic of social cognition in social science. Grazzani I leads with a total of two published articles, yet with the highest total citations amounting to 42. He is closely followed by Chen X as the second author with a total of 15 citations.

Figure 5. Top author production over time

The authors' production over the relevant time frame is illustrated in figure 5. Chen X has been the most consistent with publications from 2014 to 2022. The most recent writings in 2024 were produced by Hagger MS, Lahera G, and Mcdonald S. This indicates a consistent publication on social cognition in social sciences continuously.

Table 3. Top sources.

Source name	N	Citescore	H-index	G-index	M-index	TC	PY-start
Cognition	6	6.4	6	6	0.545	267	2015
Social neuroscience	5	3.4	4	5	0.400	60	2016
Synthese	5	3.3	5	5	0.556	194	2017

Source name	N	Citescore	H-index	G-index	M-index	TC	PY-start
Behavioral sciences	4	2.6	2	4	0.333	44	2020
Developmental psychology	4	5.8	3	4	0.273	121	2015

Table 3. Provides data regarding the order of journal sources that contribute the most related to social cognition in social science. The best source is Social Cognition with a total of 6 published articles starting from 2015. Meanwhile, Neurosciences is in the second position with a total of 5 published articles. This type of journal indicates how social cognition in social science is discussed and the appropriate context.

Most Influential Literature

Table 4. The most highly cited social cognition paper from 2014 to 2024.

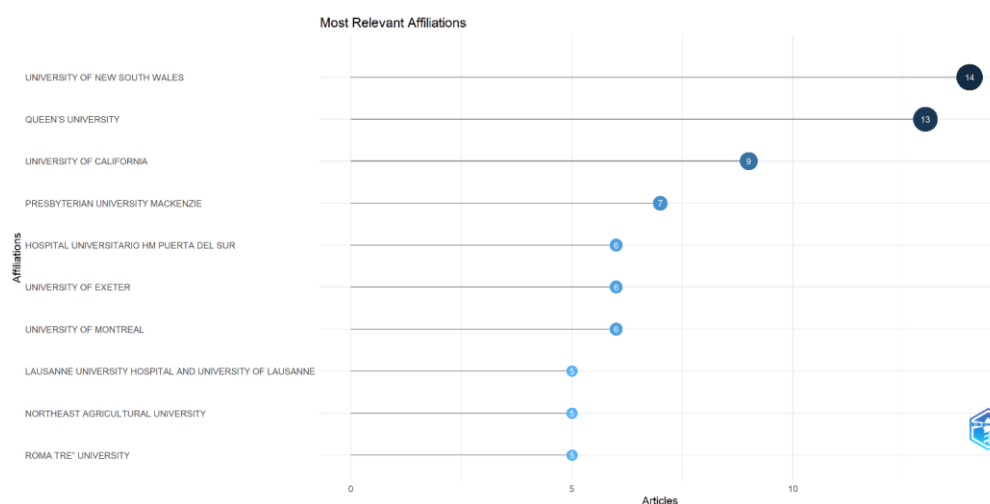| Paper	DOI	Total citation	TC per year	Normalized TC	Source
Yoganathan et al., (2021)	10.1016/j.tourman.2021.104309	174	34.80	9.94	Tourism management
Matthews et al., (2018)	10.1080/15475441.2018.1455584	158	19.75	3.29	Language learning and development
Gallagher & Allen, (2018)	10.1007/s11229-016-1269-8	141	17.63	2.94	Synthese
Bradford et al., (2015)	10.1016/j.cognition.2015.02.001	95	8.64	2.86	Cognition
Black & Barnes, (2015)	10.1016/j.poetic.2015.07.001	92	8.36	2.77	Poetics

Table 4. Illustrates articles discussing social cognition in social science that have the most impact based on total citations and their impact on other articles. The best article is titled "Check-in at the Robo-desk: Effects of automated social presence on social cognition and service implications." Meanwhile, the second article is titled "Individual Differences in Children's Pragmatic Ability: A Review of Associations with Formal Language, Social Cognition, and Executive Functions."

Top Countries and Affiliations

Table 5. Top countries.

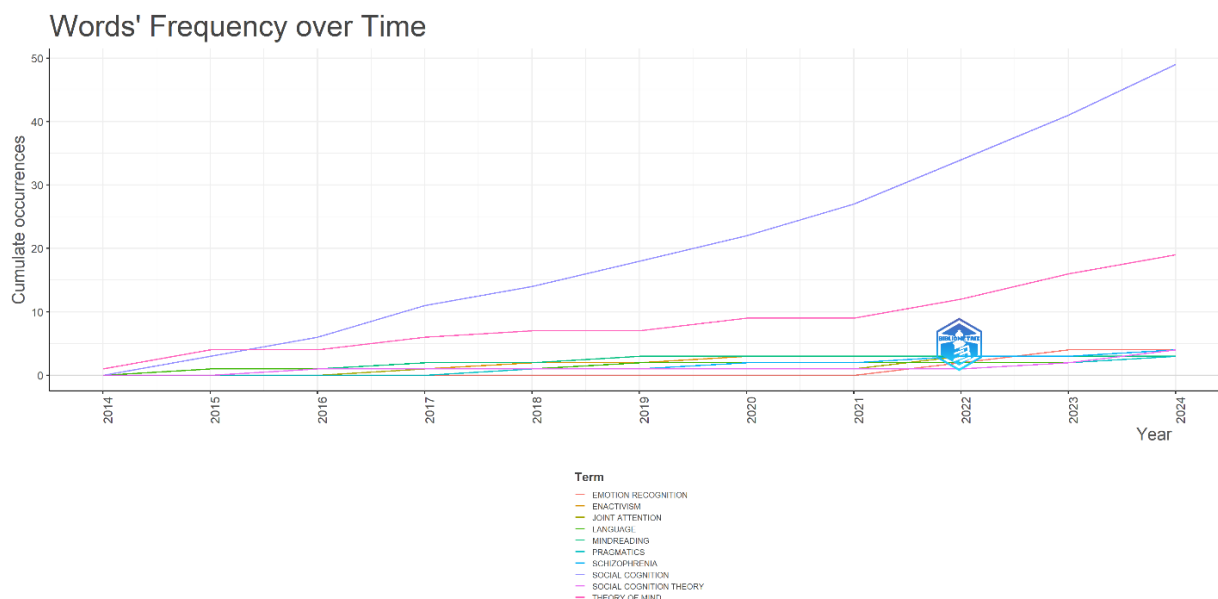| Country	F	TC	Average article citations
USA	94	574	16.90
UK	46	272	34.00
Australia	33	237	29.60
Canada	33	183	20.30
Italy	31	82	13.70

Table 5. Ranking countries by authors who contributed the most to the topic of social cognition in social science. The USA shows the best position with the highest total research citations of 574. This is followed by the UK and Australia with frequencies of 46 and 33 respectively.

Figure 6. Top affiliations.

Affiliates with the largest contributions to publications on social cognition. The University of New South Wales from Australia, Queen's University from Canada, and the University of California from the USA are the ones that contribute the most writings from their researchers.
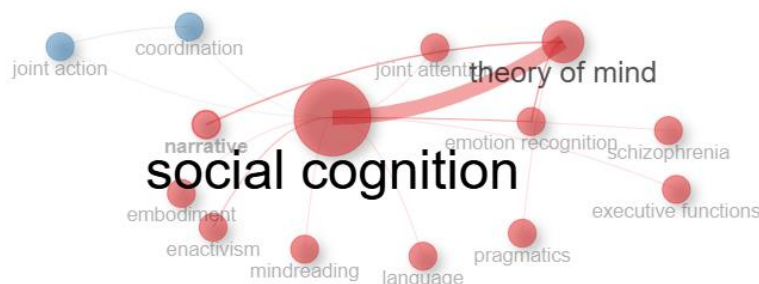
Knowledge Structure Analysis

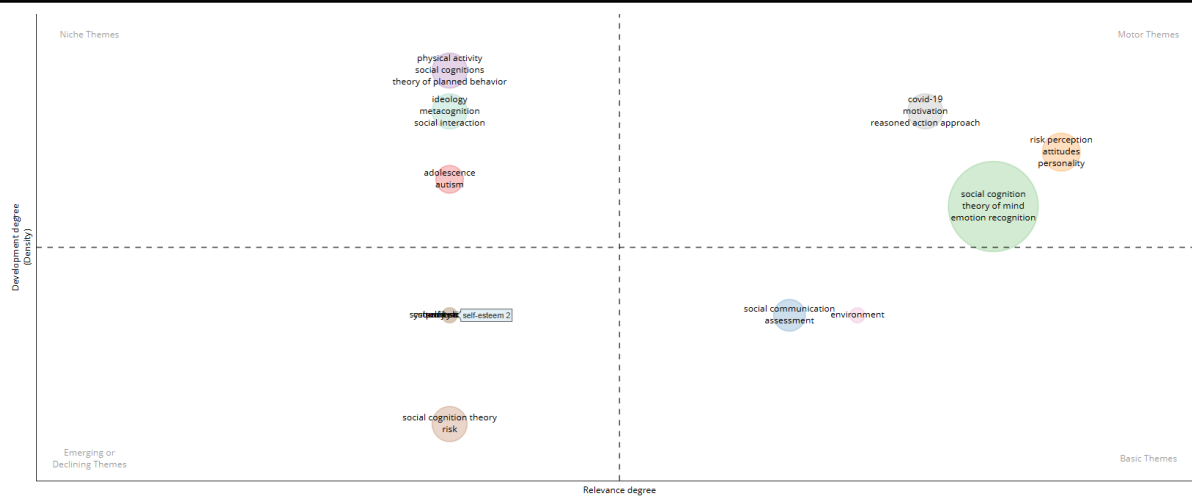**Figure 7.** Words' frequency over time.

Figure 7. Illustrates the development of keywords related to social cognition in social science. The most developed context is certainly social cognition, which has been continuously evolving over the last decade. This is followed by 'Theory of Mind,' which is connected to social cognition.

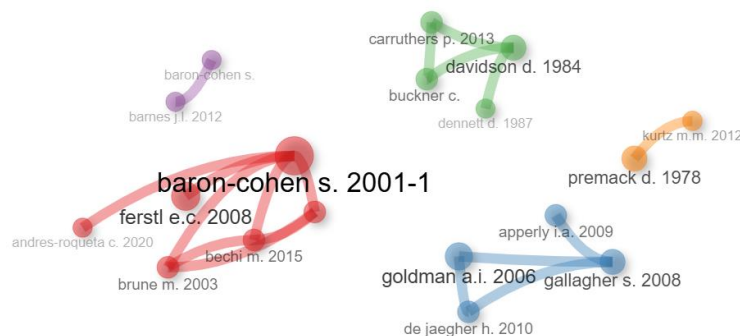### *Conceptual Structure Analysis*

Figure 8. Co-occurrence network.

Figure 8. presents the co-occurrence network of publications on social cogntion, A visual representation illustrating the relationships between keywords within a collection of publications. This co-occurrence network is organized into multiple thematic clusters, each grouping related terms that reveal key themes and prevailing research trends (Prahani et al., 2024). It is known that the keyword "Social Science" is closely related to "Theory of Mind."

Figure 9. Thematic map.

Another approach to analyzing conceptual structures is through thematic maps (Figure 9.) which illustrate various themes within a specific domain. While centrality represents the relevance of a research field, density indicates the degree of development of a theme. In the context of niche themes, it is divided into two main clusters and one intersection cluster with several examples of terms such as "Social cognitions", "Metacognition", and "Adolescence". In terms of the motor quadrant, several examples are "Motivation" and "Emotion Recogntition". In the emerging or declining quadrant, "Social Cognition Theory", "Self-esteem", and "risk" come first. Finally, some examples such as "Social communication" and "Environment", are themes in the basic quadrant.

Intellectual Structure Analysis

Figure 10. Co-citation network.

The co-citation network, depicted in Figure 10, presents the framework of interconnected literature in citations. The red cluster is dominated by Baron-cohen s 2001. The blue cluster emphasizes Goldman A.I 2006. Meanwhile, the green cluster is dominated by Davidson D. 1984.
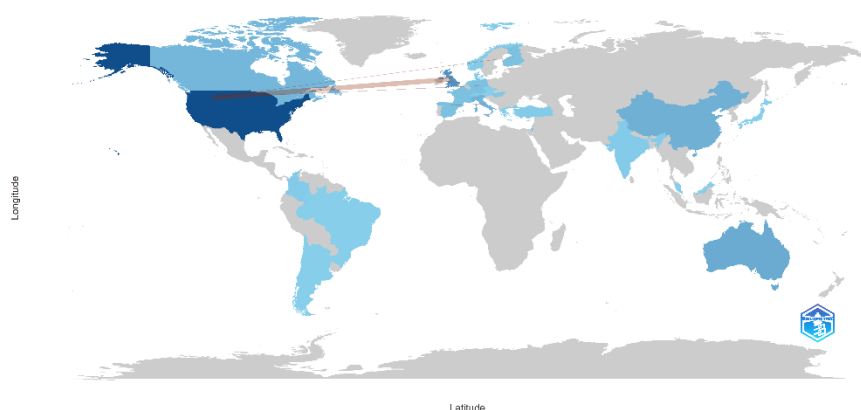
Social Structure Analysis

Figure 11. Collaboration network.

Figure 11 illustrates collaboration between authors in research related to social cognition in social science. There are 10 clusters of collaboration between authors with the strongest position in red, with the center being Tomasone Jr, Dobrowolski S, Flood SM, and D'urzo KA. The second is colored brown encompassing Altman S, Becker A, and Bendlow F. The third is purple with authors like Lahera G and Arrilaga Gonzalez.

Figure 12. Country collaboration map.

Figure 12 illustrates the collaboration network between countries symbolized by brown lines. The image shows a strong collaboration between the USA and the UK. Meanwhile, there are also minor collaborations such as between the USA and Finland and between the USA and Germany.

Discussion

Trends or developments in research on the topic of social cognition in social science have cumulatively experienced growth over the last decade, although there has been a decline in the last four years. This result is certainly different from (Anthony et al., 2024), the most relevant research which shows an upward trend in social cognition associated with social media, especially after the COVID-19 pandemic. This is understandable because of the different contexts and focuses of the research (Kowalski & Tu, 2003; Manolov, 2023). This research discussion points towards attitudes and social norms and their various internal and external causes, which are more established in nature.

The existence of this fact is evidence that social cognition in social science is a concept that has been established for a long time and has been widely tested in the past (Garcia-Marques & Garcia-Marques, 2021; Kim & Hommel, 2019). Additionally, various high-impact publications such as Kim & Hommel, (2019) dan Yoganathan et al., (2021) indicates a shift towards social cognition studies that utilize robotics, digital survey algorithms, and neuroimaging techniques. However, much of the literature is still within the context of conventional social psychology, so this change is not yet fully mainstream. This does not mean that the topic of social science is irrelevant, but its development may be more oriented towards contexts outside of social science. This also does not necessarily diminish the contribution of the topic to the SDGs. Providing cultural context, values, and norms can still be included. In essence, it is about maintaining the balance of humanization amid technological development (Donati, 2021; Gavrilina, 2022).

Grazzani, Ilaria, as the author who contributed the most to the research on social cognition in social science, is a researcher from the University of Milan-Bicocca, Italy, who is actively engaged in scientific publications within the context of psychology in education (Grazzani, 2024). Collaboration with researchers can be carried out to obtain more accurate research results. Meanwhile, to achieve novelty in topics and relevance, it is highly recommended to collaborate with Hagger MS, Lahera G, and McDonald S (Fernández-Fernández et al., 2024; Kaushal et al., 2020; McDonald et al., 2018). This can be combined with access to scientific information from Cognition as the best publication journal relevant to the mentioned research topic. Cognition has a scope that involves the study of thought.

The most contributing article is "Check-in at the Robo-desk: Effects of automated social presence on social cognition and service implications," which discusses the use of humanoid robots in hotel services, as well as their relationship with consumer perceptions regarding the interactions that occur (Yoganathan et al., 2021). Humanoid robots increase psychological risks, but this does not threaten service quality. The indications are clear that social science has entered the realm of robotic development to review social cognition. Meanwhile, the second contribution is research from Matthews et al., (2018). which discusses the relationship between formal language, social cognition, and executive function in children. This research can be developed by looking at the limitations presented to expand the context of social cognition.

On the other hand, many publications by authors from the USA show positive contributions to related topics. Some of the most likely factors that can explain this data are the development of theories and methodologies that align with the evolving social conditions of American society. This is important considering that America is one of the most influential countries (Leydesdorff & Wagner, 2007; Poitras & Larivière, 2023). This includes the use of neuroimaging techniques to study brain structures associated with social cognitive abilities and the development of standardized test batteries for clinical assessments. The USA's contributions also involve collaborative research with the UK.

This could serve as a reference for researchers in other countries for contributions and analysis of shared population characteristics.

The benefits of information from influential affiliations such as the University of New South Wales from Australia, Queen's University from Canada, and the University of California from the USA can serve as references to sharpen research and learn effective ways to analyze social cognition in social science. On the other hand, the development of the keyword "Social Cognition" is very significant, indicating a positive existence. The connection with the theory of mind can serve as a foundation for conducting research with strong references (Martins & Panciera, 2023; Quesque & Rossetti, 2020; Westra, 2022). As for recommended topics that can be developed from this connection, they include emotion recognition and joint attention.

The discussion in the red cluster within the co-occurrence network explains that the existence of research supports and is linear with the theory of mind, which is one of the fundamental thoughts in this research. This theory has been proven relevant within the conceptual framework that places the ability to understand the thoughts and intentions of others as a fundamental aspect of social interaction (Lee & Pinkse-Schepers, 2024). This is supported by terminologies such as emotion recognition as an element that enhances dynamics. The blue cluster, which includes joint action and coordination, is closely related to the theory of mind. Its implications in real-life practice influence social dynamics. Many papers confirm that emotions in social interactions remain a primary focus (Fortier et al., 2016; Olsson & Ochsner, 2008).

From the perspective of the thematic map, it is important to observe motor themes, as they are key to the development of themes and drivers (Prahani et al., 2024). Terms such as COVID-19, motivation, and theory of mind can be noted by researchers. If there are discussions about the issues mentioned in motor themes, the topic of social cognition tends to develop. Another important aspect is emerging or declining themes, which can be beneficial for themes that are closest to social cognition and have the potential to develop in the future, specifically self-esteem.

The main citation cluster in red refers to the article "Theory of mind and autism: A review" (Baron-Cohen, 2000). This research serves as a foundation for social cognition connected with various research contexts in social sciences. It is highly recommended to be a fundamental preliminary study in developing social cognition and various related topics. In the second cluster, namely Goldman, (2006), it delves deeper into psychology, philosophy, and neuroscience. This is also important to be cited and studied to grasp the concept of social cognition. The collaboration of the authors is reflected in the red cluster. Their contributions are demonstrated in several studies, namely (D'Urzo et al., 2020; Flood et al., 2022). This collaboration network can be utilized by other researchers to establish connections and learn from each other about social cognition.

Future Research Direction Related to SDGs and Policy Recommendations

Future research directions are strongly recommended not only to discuss social cognition in social science theoretically but also to relate it to the relationship between

humans and technology. Given the characteristics of technology acceptance towards social cognition, every society will definitely be different (Abbasi et al., 2010; Mupaikwa & Bwalya, 2023). This presents a novelty in the location and analytical systems used, thus having potential for the future. This potential could support the achievement of the SDGs by integrating several contexts such as self-esteem, motivation, and resilience, which are essential for the development of human resources and learning.

In addition, this study offers a structure for a future-research agenda with SDG anchors as table 6.

Table 6. Structure future-research agenda

Contexts	Future research description	Related SDGs target
Self-esteem	Examining the relationship between self-esteem and social cognition in the digital era	SDGs 3 (well-being)
Motivation	Exploring intrinsic and extrinsic motivation in the educational and work environment in the digital era	SDGs 4 (education) dan SDGs 8 (Decent work and economic growth)
Resilience	Analysis of social adaptation in the challenges of social resilience in the era of Society 5.0	SDGs 3 (well-being)
Theory of mind	Exploration of theory of mind in human interaction with AI	SDGs 9 (Innovation)

For policymakers, increasing research and the application of education in the field of social cognition within social sciences must continue to be promoted. Monitoring the development of social cognition in various sectors such as education, services, and society must be conducted due to the rapid changes in psychology and technology. Human interaction with technology should be intensified with socialization on how humans cope with developments and respond. Collaboration between international governments is crucial for collaborative research in the field of social cognition linked to neuroscience and psychology.

CONCLUSION

Fundamental Finding: Over the past decade, research on social cognition in the social sciences has shown dynamic growth, although it has declined since 2021. The intellectual landscape is primarily driven by theory of mind, which serves as a key driving theme, reinforced by foundational works from Baron-Cohen (2001). This insight

highlights the value of bibliometric monitoring in supporting policies aligned with the SDGs, particularly in advancing inclusive education and interaction between humans and technology. **Implication:** This research has several implications that social cognition develops through phenomena present in society, particularly in relation to technology. The offer of social cognition is important for policymakers to monitor the impact of the development of social cognition in the fields of education, services, and the general public, as it is an essential component of psychological human quality development. Collaboration between policymakers and researchers for the exploration of related topics is highly needed. **Limitation:** This research only uses data from the Scopus database, so articles in other databases such as Google Scholar and Web of Sciences (WOS) have not been recorded. The time range from 2014 to 2024 does not include early publications of 2025 and several decades prior that could potentially change the direction of the trend. **Future Research:** In order to broaden the scope of the literature, future research needs to combine data from Google Scholar and WOS in addition to Scopus to capture more varied sources and reduce bias in the database. Furthermore, the application of alternative theoretical frameworks such as social cognitive theory is essential to identify whether the clustering patterns and literature attention differ compared to the theory of mind. Emerging themes such as motivation and resilience related to the digital world and AI should also be studied more thoroughly, especially concerning specific SDGs targets, to make the research results more relevant to policy. By observing social cognition trends through bibliometric methods, stakeholders can develop evidence-based social and educational policies and programs that enhance community mental well-being and the quality of education.

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