

# Urgency of identity communication issues research between 1983 to 2023: Bibliometric analysis



Likha Sari Anggreni<sup>a</sup> ✉ | Nunung Prajarto<sup>a</sup> | Novi Kurnia<sup>a</sup>

<sup>a</sup>Universitas Gadjah Mada, Yogyakarta Indonesia.

**Abstract** Communication identity is incorporated into three cultural contexts (individual, communal and public). Studies in this field have been around since the 90 s. Researchers conduct studies from various perspectives and different issues. This bibliometric study examines research patterns over a certain period of time using the keyword communication identity. The prioritized research question is What are the current trends in communication identity publications? What are the most popular themes in research on communication identity? So that it can be seen the urgency of research when it has found an important theme in the topic of communication identity. The data used is through the Scopus database in 1983-2023. The study findings show that the number of publications regarding communication identity has increased and decreased in certain years, while starting in 2022 it has started to increase and is expected to continue. The theme that became the focus of the study of communication identity found 7 main themes and found the soup topics of each topic. These topics are communication, group, identity, personal, identity gap, relational, and relationship. The urgency in the study of communication identity in the model found by researchers.

**Keywords:** bibliometric analysis, communication identity, Interpersonal communication, Vosviewer

## 1. Introduction

Identity is an ongoing process in which an individual determines, evaluates, and redefines who they are and how they relate to others in their environment. Identity is the main source of motivation for human behavior (Animashaun, 2023; Leitch & Harrison, 2016) and is a process that governs the social-cognitive strategies used to build, maintain, reconstruct personal identity and understand oneself through social roles (Di, 2011; Schwartz et al., 2011; Zhou et al., 2022). Identity is needed in a wide range of cultures to describe their respective individuals (Littlejohn et al., 2009). This identity includes personal, communal and public aspects. The existence of an identity becomes a link between the individual and the community that allows for good communication. Identity is a process of continuity in which individuals determine, evaluate and redefine who and how individuals behave toward others in their surroundings.

Self-identity is formed by a person either interacting personally with himself or interacting with his social environment. This identity consists of meanings learned and obtained from oneself as well as those meanings projected onto others when carrying out the communication process. The existence of identity can also be used as a meaning or a symbol to identify individual membership in a diverse community (Hecht et al., 2003; Kuiper, 2021). According to communication identity, when talking about identity, it combines three contexts, namely, individual, communal and public. The context of all three describes an integrated relationship, although each context can stand alone. Communication identity is a theory proposed by Michael Hecht; the basic premise of this theory is that identity is inherently a communicative process that must be understood as a transaction in which messages are exchanged (Hecht et al., 2002; Jung & Hecht, 2004; Kam & Hecht, 2009; Shin & Hecht, 2017). Messages are symbolic relationships between people who are part of the identity attestation process (Hecht, 1993; Hecht et al., 2002).

Identity formation is understood as a communication identity process that occurs through four layers, namely, the personal layer, the attestation layer, the relational layer, and the communal layer (Hecht & Choi, 2012). Each of these layers is formed in an integrated way. However, each individual basically has interpretations of different layers of communication identity because they are influenced by several factors, such as the environment, way of interacting, and personal factors. This can then cause conflicts between layers of a person's communication identity. The conflict between layers then causes an identity gap (Hosek & Rubinsky, 2019; Kuiper, 2021; Stewart, 2022a), so an adaptation process is needed to overcome this gap. The key concepts in communication identity (Day & Novak, 2022; Hecht, 1993; Jung & Hecht, 2004) are four layers of identity. These layers are personal, enactment, relational and communal layers that interact and are influenced by each other. The four layers of identity do not exist separately because they are interconnected with each other. However, for analytical purposes, the layers are often defined and understood separately.

The identity of communication outlines the nature of the individual, social and communal. It has a subjective meaning and an original meaning, which then encodes what is expressed in speech and defines membership in the community. This



identity process affects cognitive, behavioral and spiritual knowledge, which is formed from the facts of meaning expressed from symbols and signs of social interaction. In this process, along with current technological developments, good communication skills are needed for personal, communal and public business needs. The conceptualization of communication in CTI begins with the main theoretical steps used in CTI, namely, viewing communication as identity and viewing identity as communication. Previously, scholars focused on the role of communication in developing identity or how identity can cause people to communicate. For example, studies have investigated how parent–child communication influences identity development or how identity influences communication. Urban and Orbe originally believed that people with different African American identities would communicate differently in interethnic relationships (Urban & Orbe, 2010). Urban and Orbe attempted to speculate that a less salient African American identity would have less influence on communication than a more salient version of the identity. Instead, the salience of identity and communication together influenced the results. This can be interpreted as indicating that communication is identity and that identity is communication.

Bibliometric mapping is an important research subject in bibliometrics that is rapidly attracting the attention of communication identity studies. Bibliometric analysis has gained popularity as a rigorous method to explore and analyze vast amounts of scientific data, allowing researchers to decipher and map the cumulative knowledge and evolutionary nuances of established fields by effectively processing extensive unstructured data (Donthu et al., 2021). The following are the main research questions regarding communication identity used to guide the bibliometric analysis of this research. First, what are the current trends in communication identity publications? Second, what are the most popular themes in research on communication identity?

## 2. Materials and Methods

This research uses qualitative methods with literature studies. A literature review is a method of scientific bibliographic analysis and is arranged systematically. The method includes collecting bibliographic data related to research objectives, collecting data using bibliographic methods related to research objectives, collecting data using bibliographic methods and organizing and presenting data. Bibliometric studies can be obtained from primary, secondary and tertiary journals covering a certain period and analyzed from various perspectives to determine the distribution of institutional articles, citation patterns, writing patterns and article length. In this bibliometric research, the Scopus scientific database was used to search for articles by entering the term "communication identity". This research uses the type of article documents that were published from 1983 to 2023 and that were published in the Scopus database. Scopus is a database that includes abstracts, a very comprehensive database of intellectual literature citations with more than 25,000 titles, 370 magazines, 800 book series, 200,000 nonserial volumes and 62 million entries in various disciplines (Aghaei Chadegani et al., 2013; Zhu & Liu, 2020). Scopus is one of the databases used for bibliometric analysis (Moral-muñoz et al., 2020). The database can provide a broad overview of research findings globally and trends in detail. The international scientific community has also considered and acknowledged Scopus as an important and useful source of information for academics, researchers and readers.

Bibliometric studies describe the trend of research articles in a topic and at a certain time period. This process involves identifying keywords for search purposes. This study uses the term "communication identity" or "communication theory of identity" when searching the Scopus database to obtain information about the title of the article. The search was conducted on August 1, 2023. The year limit in the search was articles published between 1983 and 2023. The final papers were limited to journal document types and English-language articles. Scopus produced 124 documents, 3 records of authors were missing, and 121 full-text articles were identified and included in the bibliometric synthesis.

This study will use analysis from the Scopus database to show profiles regarding keywords that have been determined at the start of the search. Then, the VoSviewer application is used to visualize the network based on keywords and article authors, and the Nvivo application is used to index the data components of journal articles by searching for words related to communication identities.

## 3. Results

The findings in this study are based on the three research questions mentioned in the previous section. The bibliometric results include document profiles, keywords, publication trends, and author coupling patterns in the Scopus database. Visualization maps will also be used to show publication trends based on keywords and publication patterns across documents, authors, sources and countries.

### 3.1. Document Profile

To answer the first research question, the document profile consists of document data by year, document type, and document subject area. The found document profile includes document data by year, subject area, author, country, and document source. A total of 124 documents were published, and the first studies began in 1983.

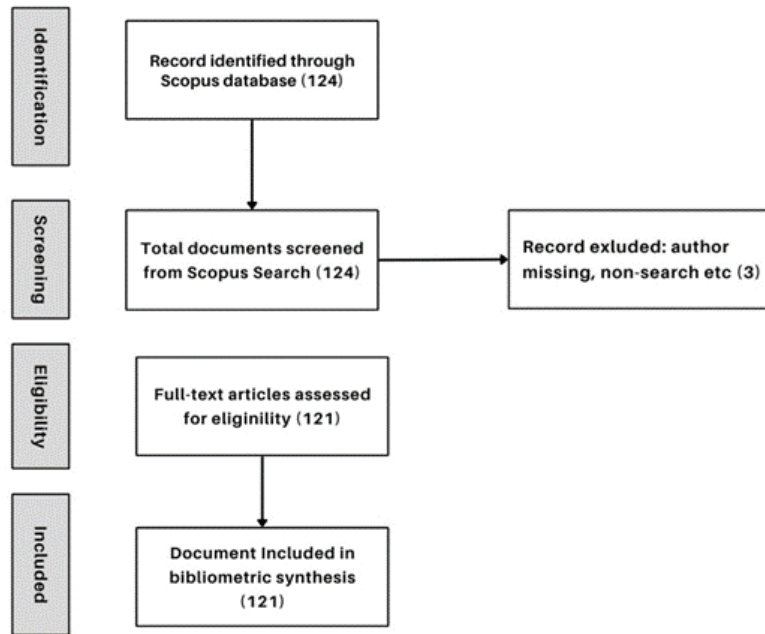


Figure 1 The PRISMA flow diagram used to identify, screen and include papers for our bibliometric review.

3.2. Document-by-year data

Figure 2 shows the trend in the number of publications associated with the communication identity keyword, which has gone up and down. In recent years, it has seen a decline, but in 2023, it will start to increase again up to 12 documents that have been published. One document was published for the first time in 1983 and was not published until 1993. From 1994 to 1996, there were still no publications, but they began to appear in 1997. Based on the figure, there have been several years of decreased numbers of documents from previous years, namely, in 2007, 2010, 2012, and 2017. In 2019, 12 documents were published, but this number decreased from 2020 to 2022.

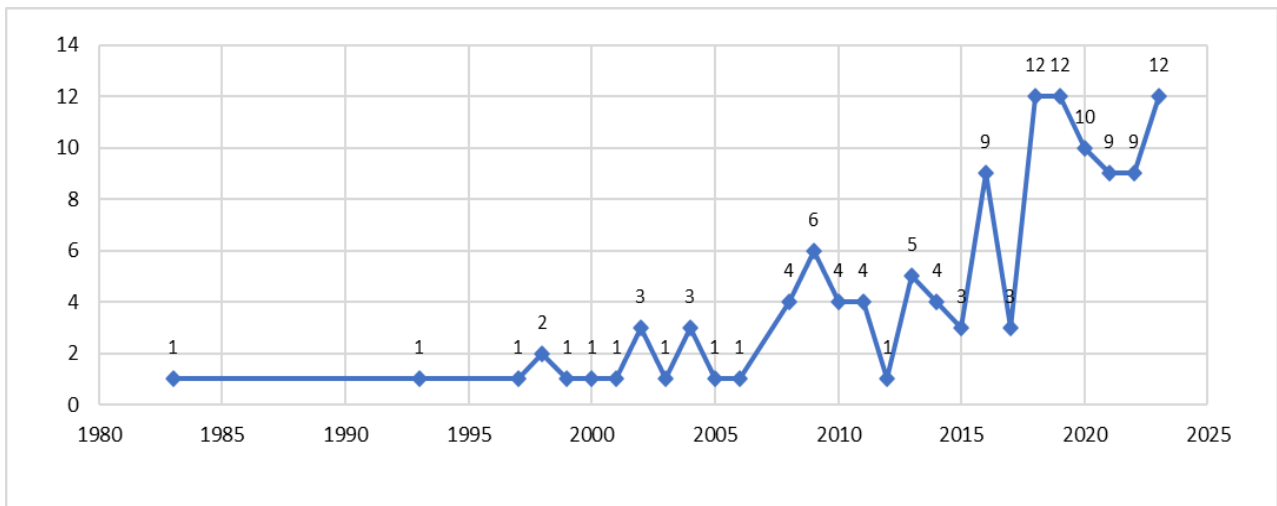


Figure 1 Citescore publication by year.

3.3. Publication by author

Figure 3 shows the data of authors who have published at least 2 documents regarding communication identity. One author has published 11 documents, namely, Hecht M.L., and one author has published 5 documents, Rubinsky, V. Three authors have published 4 articles, namely, Compton, C.A., Faulkner, S.L., Jung, and E. Three authors have published 3 articles, namely, Berquist, G., Orbe, M.P., and Soliz, J. Finally, there are 9 authors who have published 2 documents, namely, Kam, J.A., Krieger, J.L., Krok-Schoen, J.L., Kuiper, K., Palmer-Wackerly, A.L., Paxman, C.G., Pitts, M.J., Wagner, P.E., and Zanin, A.C.



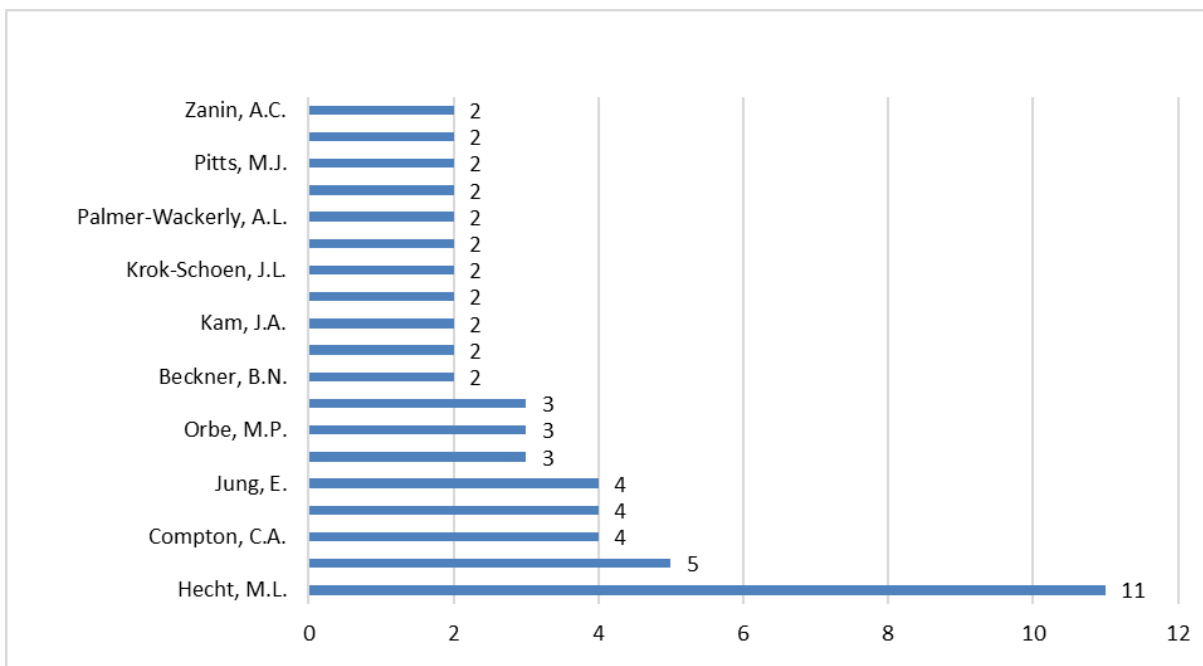


Figure 3 Number of publications by author.

### 3.4. Affiliate Resources

According to the analysis of the Scopus database shown in Figure 4, at least 3 articles were published on the affiliate. The affiliate with the most publications is Pennsylvania State University, which has published 10 documents. Four affiliates published 4 documents, namely, Bowling Green State University, the University of Southern Mississippi, the University of Florida, and the University of Nebraska–Lincoln. Finally, 8 affiliates published 3 documents, namely, Western Michigan University, Ohio State University, Arizona State University, the University of Missouri, the University of Maine, Ohio University, the University of Kentucky, and Kent State University.

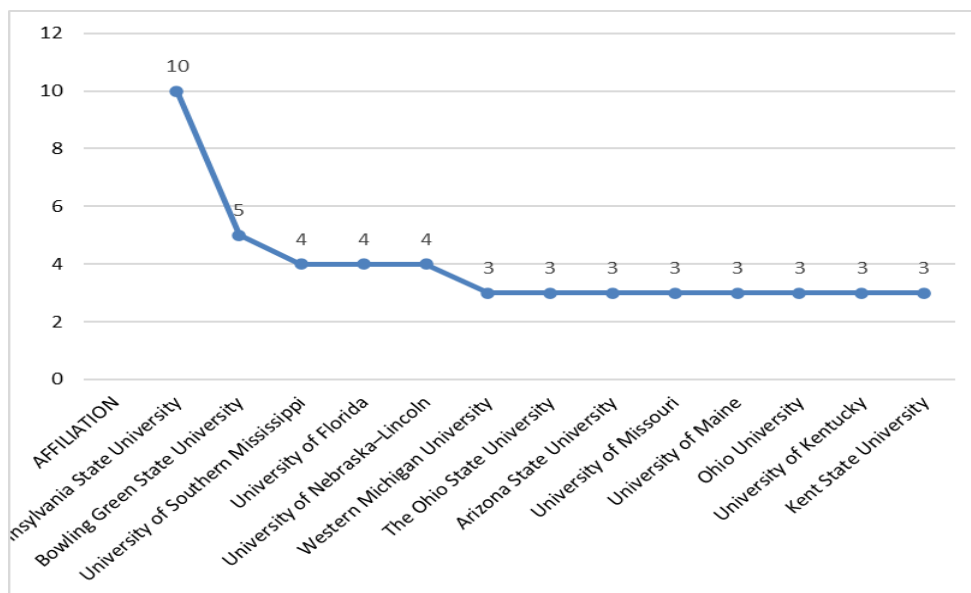


Figure 4 Affiliation of published documents.

### 3.5. Documents by Subject Area

The relevant data based on the subject area are shown in Figure 5. The size of the subject area based on the figure shows that most of the published studies are in the fields of Social Sciences (103 documents; 52.8%), Arts and Humanities (30 documents; 15.4%), Psychology (20 documents; 10.3%), and Business, Management and Accounting (13 documents; 6.7%). Other fields published fewer than 10 documents, namely, Computer Science (4.6%), Engineering (2.6%), Medicine (2.1%), Environmental Science (1%), Health Professions (1%), Nursing (1%), and other fields, accounting for as much as 2.6%.



Documents by subject area

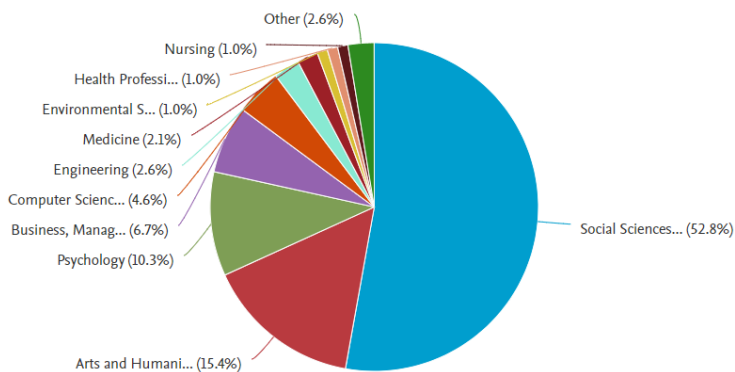


Figure 5 Document by subject area.

### 3.6. Documents by source

Figure 6 shows a graph of the Scopus database analysis of the documents based on their sources. On average, each source publishes 2 documents, namely, from Communication And Sport, Communication Education, Communication Teacher, Journal Of Family Communication, Journal Of Language And Social Psychology, Journal of Communication Malaysian Journal Of Communication, Qualitative Research Reports In Communication, and Southern Communication Journal. There are 3 sources that publish 3 documents, namely, Communication Monographs, Journal of Communication, and Western Journal of Communication. Sumber Communication Quarterly published 4 documents, followed by the Journal of Social and Personal Relationships with 6 documents and Health Communication with 7 documents. The most common source of published articles about communication identity is Communication Studies, which has published 10 documents.

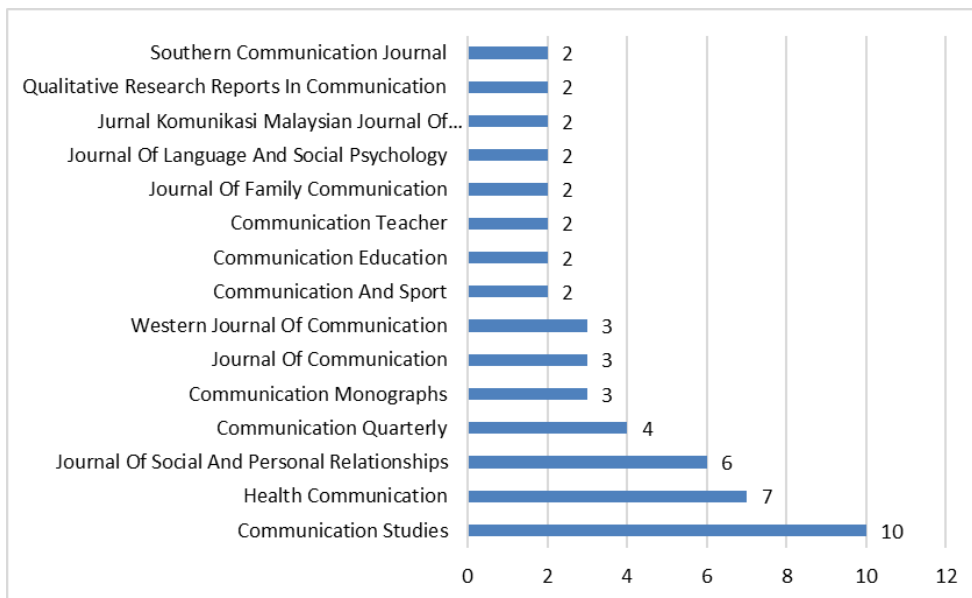


Figure 6 Document by subject area.

### 3.7. Visualization network based on keywords

The bibliometric analysis uses the VOSviewer application to display network visualizations based on keywords and authors. The data sources used were 121 documents retrieved from the Scopus database. Visualization using VOSviewer to determine the network between nodes and edges is shown in Figure 7, Figure 8 and Figure 9. Nodes represented in the form of different colored circles can be researchers, countries, keywords, publications or journals (Perianes-Rodriguez et al., 2016; van Eck & Waltman, 2017); then, full-text citation analysis with topic modeling assisted and supervised by network analysis



algorithms can be used. Its aim is to improve classical bibliometric analysis and publication/keyword/country/author rankings. Using the method of utilizing the context of citations taken from a large number of full-text publications, each citation or publication is represented by a probability distribution on a series of predetermined topics, where each topic is labeled with keywords marked by the author.

Next, the writer will use the distribution of publication topics to produce a citation graph with vertex prior and edge transition probability distributions. The publication importance score for each specific topic is calculated using PageRank with edge and vertex distributions. The edges show the relationship between the two nodes and the strength of the relationship, which is represented by the distance between the nodes. The closer the distance between one node is to another, the greater the correlation between these nodes (Donthu et al., 2021). Then, mapping is performed to obtain a detailed bibliometric picture (Perianes-Rodriguez et al., 2016). Moreover, cluster mapping is useful for providing an overview of bibliometric clustering (Donthu et al., 2021). According to the VOSviewer image visualization, each circle shows a word representation that appears on the node. The size of the circle means that the larger the size of the circle is, the more words that appear in the article from the retrieved database.

Based on Figure 5, the circle of nodes represents keywords that often appear, both those mentioned by the author and those that were successfully filtered by the VoSviewer application using the Scopus database. Keywords are taken from the title and abstract data. In terms that are close together in the visualization shown in the picture, words with large nodes include those in the communication theory of identity, identity, human, human, female, male, adult, and communication. In total, the results of the data screening revealed 56 keyword items divided into 5 clusters (Table 1).

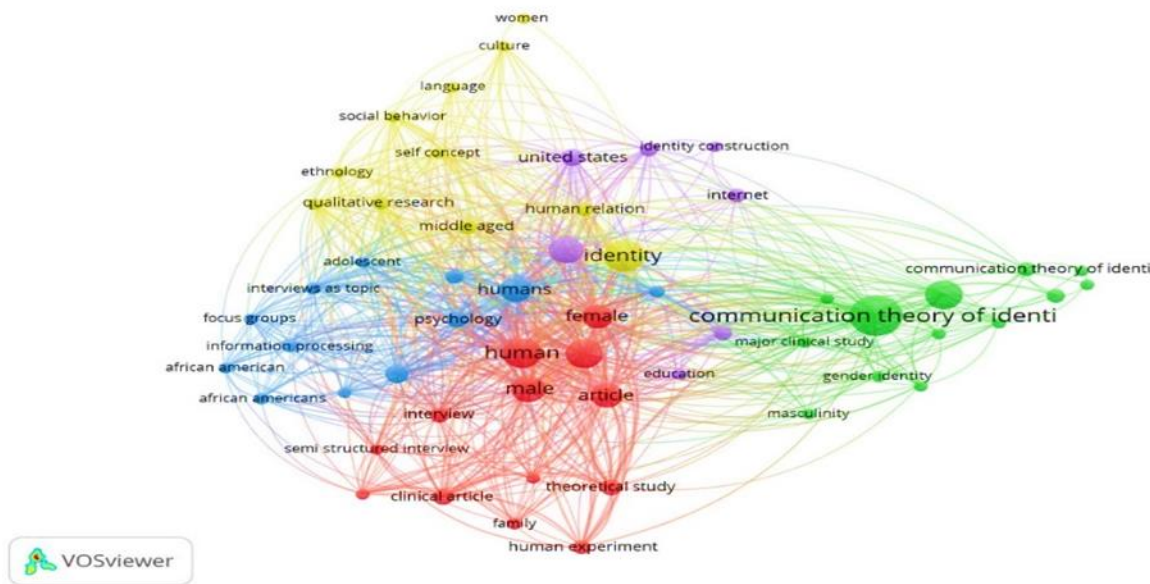


Figure 7 VOSviewer using a Scopus data visualization network based on keywords.

Table 1 The distribution of clusters and their items is visualized based on keywords by VOSviewer.

Cluster (56 items)	Keywords
Cluster 1 (13 items)	Adult, article, clinical article, family, female, grounded theory, human, human experiment, interview, interviews, male, semi structured interview, theoretical study
Cluster 2 (13 items)	Communication theory, communication theory, controlled study, gender identity, identity gap, identity gaps, identity negotiation, identity work, major clinic study, masculinity, sexual communication, sexuality, transgender
Cluster 3 (12 items)	Adolescent, african american, african americans, decision making, focus groups, humans, information processing, interpersonal communication, interpersonal relations, interviews as topic, psychology, young adult
Cluster 4 (11 items)	Culture, ethnology, human relation, identity, language, middle aged, qualitative research, self concept, social behavior, social identification, women
Cluster 5 (7 items)	Communication, education, ethnicity, identity construction, internet, perception, united states

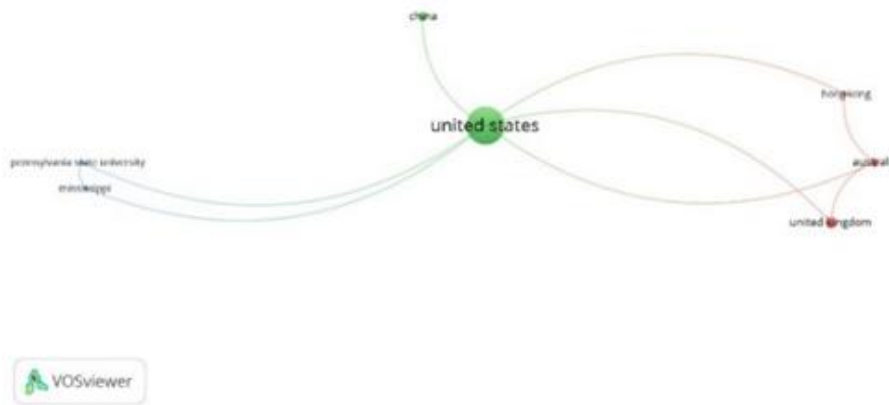
### 3.8. Visualization network by country



Based on the results of 121 documents, it was found that countries had written articles on the theme of communication identity within the period 1983-2023. There were 3 clusters and 7 items (Table 2). The most dominant country for writing articles related to communication identity is the United States.

**Table 2** The distribution of clusters and their items is visualized by country.

Cluster	Countries
Cluster 1 (3 items)	Australia, Hongkong, United Kingdom
Cluster 2 (2 items)	China, United States
Cluster 3 (2 items)	Mississippi, Pennsylvania State University

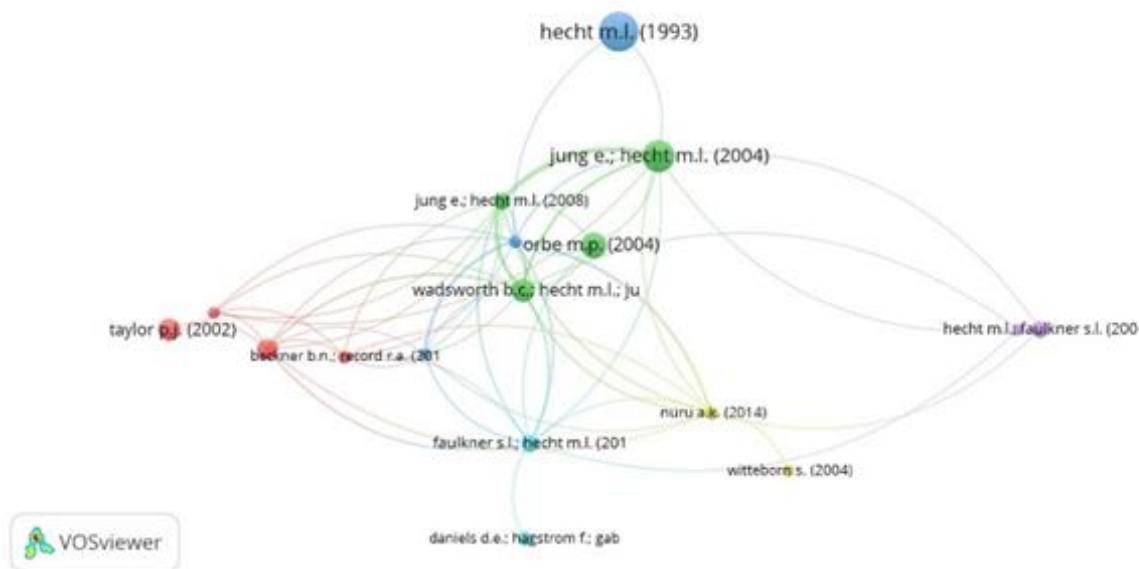


**Figure 8** VOSviewer using a Scopus data visualization network based on countries.

### 3.9. Visualization network by authors

Based on data for bibliographic network searches coupling documents from 121 documents with a minimum number of citations of 20 were used, and 28 met the thresholds.

Figure 3, Table 3 and Figure 9 show the network of writers with the largest nodes, which means that they write a lot and are related to other writers, namely, Hecht and Jung. The other authors are also quite visibly networked with each other, showing the existence of 6 clusters in the visualization displayed in Figure 9.



**Figure 9** VOSviewer using a Scopus data visualization network based on authors.



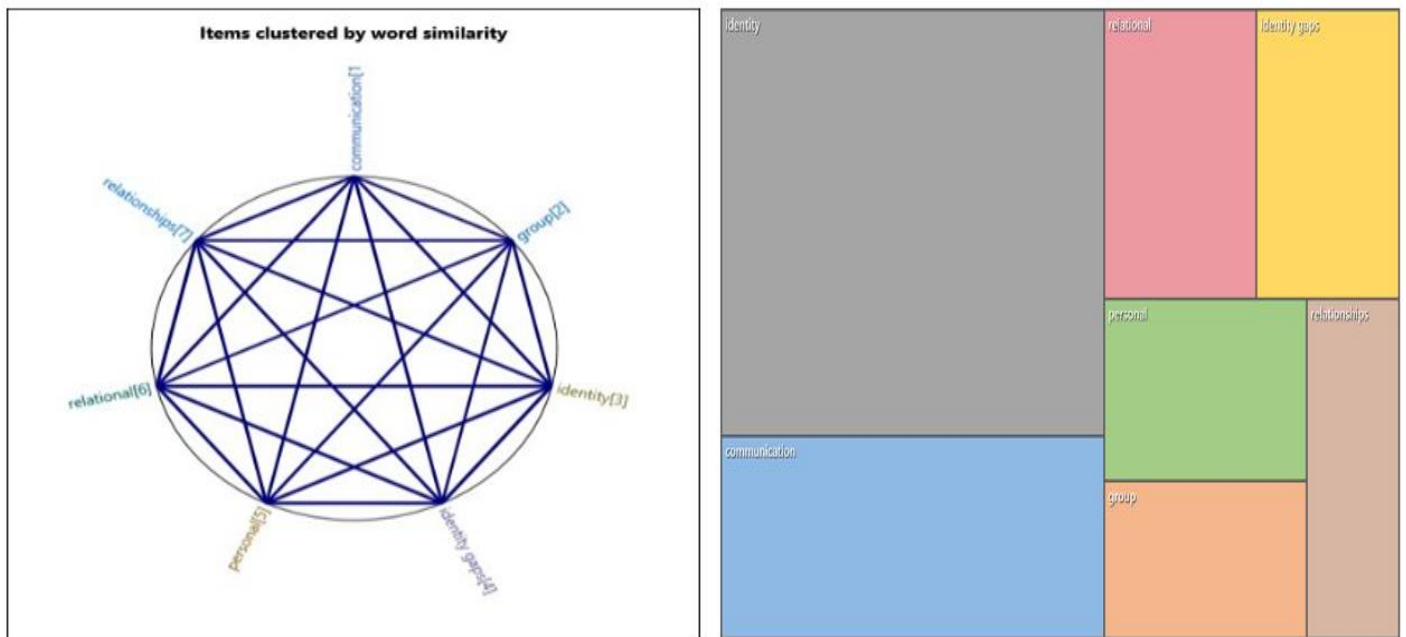
**Table 3** The distribution of clusters and their items is visualized by the authors.

Cluster	Authors
Cluster 1 (4 items)	Beckner B.N.; Record R.A. (2016) Brooks C.F.; Pitts M.J. (2016) Kam J.A.; Hecht M.L. (2002) Taylor P.J. (2002)
Cluster 2 (4 items)	Jung E.; Hecht M.L. (2004) Jung E.; Hecht M.L. (2008) Orbe M.P. (2004) Wadsworth B.C.; Hecht M.L.; Jung E. (2008)
Cluster 3 (3 items)	Compton C.A. (2016) Hecht M.L. (1993) Wagner P.E.; Kunkel A.; Compton B.L. (2016)
Cluster 4 (2 items)	Nuru A.K. (2014) Witteborn S. (2004)
Cluster 5 (2 items)	Hecht M.L.; Faulkner S.L. (2000) Hecht M.L.; Faulkner S.L.; Meyer C.R.; Niles T.A.; Golden D.; Cutler M. (2002)
Cluster 6 (2 items)	Daniels D.E.; Hagstorm F.; Gabel R.M. (2006) Faulkner S.L.; Hecht M.L. (2011)

**4. Discussion - Categorization and Thematic Mapping**

**4.1. Theme Categorization**

Thematic categorization analysis of 121 documents using Nvivo 12 plus software. Figure 8 shows that there are 7 themes spanning 1983-2023: identity, communication, relational, identity gap, personal, relationship, and group. Then, from the categorization of themes that are processed through the autoencoder feature in the NVivo 12 Plus software using the identification theme, eight categorizations of the theme "communication identity" appear. Furthermore, each of these themes is subdivided into several indicators



**Figure 10** Theme Categorization using NVivo 12 Plus.

**4.2. Dominant Topics in the Research Development Map**

Word frequency query analysis was performed using NVivo 12 Plus software on 121 articles in the Scopus database to explore the words that appeared most often in research studies related to the theme of communication identity from 1983–2023. The most dominant and highly related words/topics in this article are communication, identity, social self, and women studies. The word that often appears as the theme of communication identity in all documents that have been collected is in accordance with Figure 11. Visualization filtering was carried out using the NVivo 12 plus application by selecting the 50 words most written by the authors in the document.





has been a study of the identity gap, namely, sexual self-disclosure and the identity gap regarding sexual and relational outcomes in various relationships (Rubinsky, 2022), as well as the cooperative communication gap, a statement regarding cooperative identity and the sociology of cooperative education (Diamantopoulos, 2022). The second is personal-relational identity gaps; these studies include studies of STEM identities (science, technology, engineering, and mathematics) (Stewart, 2022b) and studies of original birth certificates for adopted children (Rizzo Weller, 2022). The third area is related to the relational gap, which involves the study of individual-centered education for prospective nurses using a holistic approach in teaching (Manankil-Rankin et al., 2022) and the experiences of international postgraduate students and their accompanying partners (de la Serna, 2022).

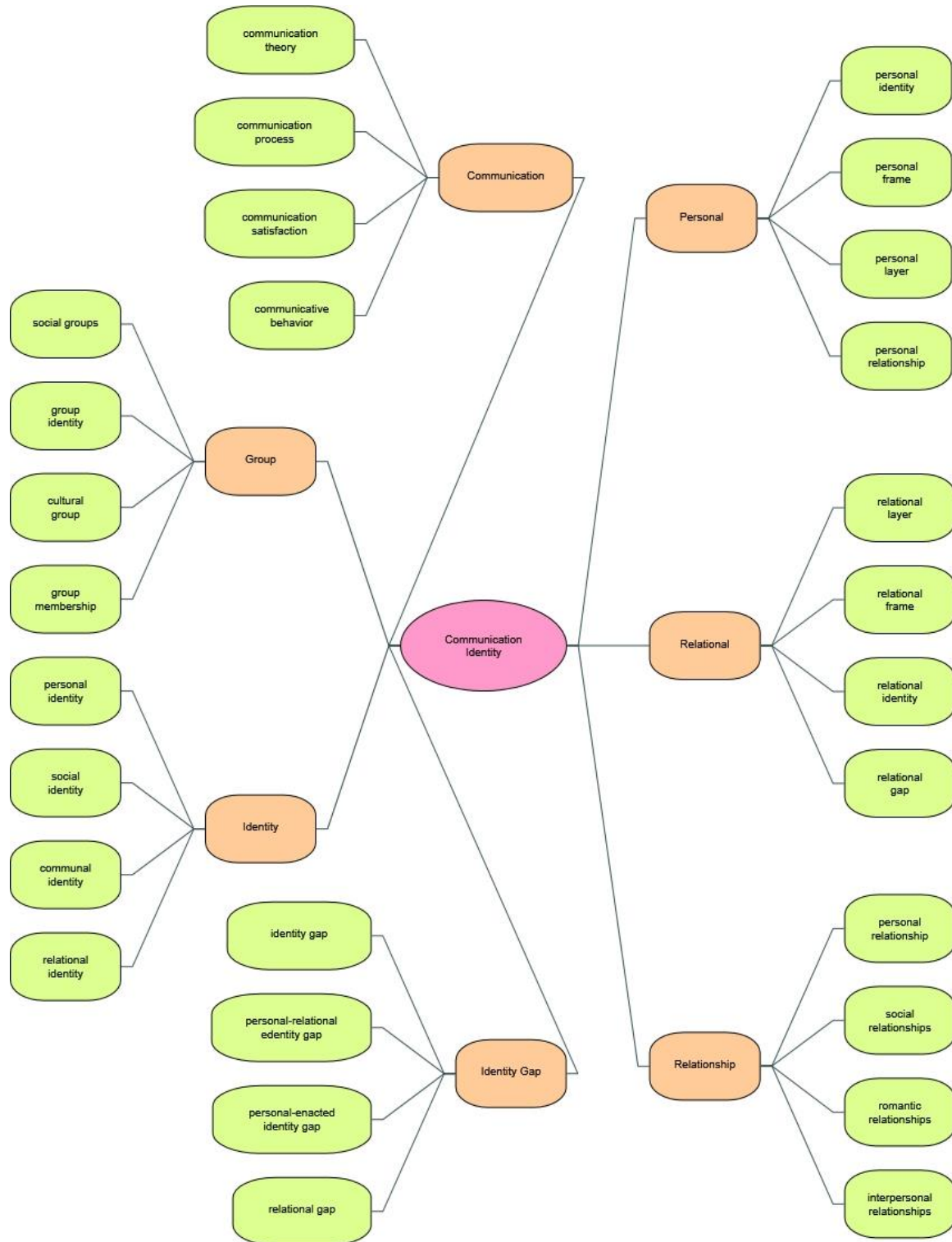


Figure 12 Formulation of the communication identity theme model.



The fifth perspective is personal. The subtopics with the most articles were personal identity (37 articles), personal frame (23 articles), personal layer (20 articles), and personal relationships (18 articles). Studies on personal identity, including personal identity and community resilience from Sadiq Khan's rhetoric (Reed & Bramlett, 2022) and autism and gender dysphoria disorders in childhood, use a psychodynamic perspective (Francisca et al., 2022).

The sixth perspective is Relational. The four subtopics with the most articles are the relational layer (24 articles), relational frame (24 articles), relational identity (20 articles), and relational gap (8 articles). The study of the relational layer focuses on adults who have been reunited with at least one biological family member who experienced a shift in identity related to their original birth certificate (Rizzo Weller, 2022), as does the relational layer on the study of the health problems of members who may experience medical, personal and social uncertainty (Thompson et al., 2022). The next research area is relational identity, which includes cases in which turning point analysis has been performed to document events that influence the development of female athletes' identities during the transition to high school (Zanin et al., 2022).

The last important perspective on the topic of Relationship. The four subtopics with the most articles were personal relationships (18 articles), social relationships (15 articles), romantic relationships (10 articles), and interpersonal relationships (10 articles). Studies on the topic of social relationships include studies of stroke patient communities that support rehabilitation (Lamont et al., 2022) and studies of the concept of moral license in the literature on corporate social responsibility (Feldmann et al., 2022). The next subtheme that often appears is the theme of romantic relationships, namely, studies on the predictions and symptoms of depression and loneliness through family identity (Bernhold, 2022) and studies on individual predictors and interpersonal characteristics of online romantic relationships (Campbell & Parker, 2022). Next, interpersonal relationships regarding wildlife law enforcement as well as interpersonal relationships between junior forest guards and supervisors in protected areas were studied (Moreto et al., 2022).

## 5. Final considerations

Communication identity is widely discussed in the subject area of the social sciences. This study is mostly focused on gaining broader debates and perspectives from researchers in the social field, even though it is actually a large opportunity in other fields of science. Research using bibliometric analysis for the theme of communication identity over a period of time has never been conducted by previous researchers. The important and practical implication of this research is finding the model offered regarding communication identity. Researchers identified 7 major themes that are often mentioned by researchers, namely, communication, group, identity, personal, identity gap, relational, and relationship. The limitation of this research is that the scope of knowledge is quite broad, so it is not detailed in detailing and disclosing certain problems. The duration taken is long enough so that the analysis carried out is not detailed and specific. This study suggests several ideas for further research with subthemes according to the model that has been developed by the researcher. Future research should analyze one particular field so that it can explain the issue in more detail. Therefore, further studies based on the results of the theme model mapping are needed.

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## Ethical considerations

Not applicable.

## Conflict of Interest

The authors declare no conflicts of interest.

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