A bibliometric analysis of the Role of Families on the Importance of Educational Strategies in Addressing Racism and Discrimination in Society

| Article Info | ABSTRACT | | |
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| Article history: | This bibliometric analysis delves into the extensive literature exploring | | |
| Received Jan, 2024 Revised Jan, 2024 Accepted Jan, 2024 | the intricate relationship between families, educational strategies racism, and discrimination. Utilizing databases such as PubMed Scopus, and Web of Science, the study systematically identifies 86 relevant papers published between 1976 and 2023. Through structured search strategy and the application of bibliometric tools lik | | |
| Keywords: | VOSviewer, the analysis maps the intellectual structure, key themes, | | |
| Bibliometric Analysis Families Educational Strategies Racism Discrimination | and research trends. The identified clusters, including themes like racial discrimination, socialization, and adolescent development, reveal the dynamic evolution of research in this field. High citation counts for influential literature, such as "American apartheid: segregation and the making of the underclass," and "Whose culture has capital? A critical race theory discussion of community cultural wealth," emphasize the lasting impact of seminal works. The study contributes to evidence-based policymaking, providing insights for addressing societal issues and guiding future research aimed at fostering a more inclusive and equitable society. | | |

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dynamic landscape In the of contemporary society, the pervasive issues of racism and discrimination continue to challenge the fabric of social harmony and [1]–[3]. Understanding equity the multifaceted dimensions of these challenges requires a comprehensive examination of the roles played by various stakeholders, with families emerging as pivotal agents in shaping attitudes, values, and educational strategies. This research embarks on a bibliometric analysis, delving into the extensive body of literature that explores the intersection between familial influence and educational approaches aimed at addressing racism and discrimination [4], [5].

The persistent challenges posed by racism and discrimination underscore the imperative for a holistic understanding of their roots and manifestations within society [6], [7]. Historically entrenched in systemic structures and perpetuated through societal norms, these issues continue to impact individuals across diverse backgrounds, reinforcing the need for comprehensive strategies that address both their overt and subtle manifestations [8]-[10]. Within this complex landscape, the role of families in shaping attitudes and values becomes a crucial focal point, influencing the trajectory of societal progress toward inclusivity and equality.

Families serve as the primary agents of socialization, where individuals first encounter and internalize cultural norms, beliefs, and biases [11]–[13]. The transmission of attitudes towards race and ethnicity within familial settings significantly contributes to the formation of one's worldview, influencing perceptions of self and others [14]. Understanding the intricate dynamics within families is essential for unpacking the roots of racial biases and exploring avenues for transformative change [15].

Educational institutions, as formalized settings for knowledge transmission, play a pivotal role in shaping norms societal and attitudes. The development and implementation of

educational strategies aimed at addressing racism and discrimination are critical components of fostering an inclusive society [16]–[18]. These strategies encompass curriculum design, pedagogical approaches, and institutional policies that challenge stereotypes, encourage critical thinking, and promote diversity [19].

However, the effectiveness of these educational strategies is deeply intertwined with familial influences. Families can either reinforce or challenge the lessons imparted in educational settings, creating a complex interplay between formal and informal channels of socialization. The exploration of this interconnection is vital for devising targeted interventions that leverage the synergies between familial and educational dynamics to create lasting societal change [20]-[22]. As the discourse on racism and discrimination continues to evolve, there is a body growing of scholarly literature addressing the multifaceted relationship between families and educational strategies [23]. A bibliometric analysis provides a systematic and quantitative approach to mapping this expansive terrain, enabling the identification of key themes, influential scholars, and potential research gaps. This research seeks to contribute to the existing body of knowledge by providing insights that inform evidence-based policies and interventions aimed at fostering a more equitable and inclusive society. By answering the following questions, this paper will contribute to the development of this field [24].

2. LITERATURE REVIEW

2.1 Family and Educational Strategy

The role of family in educational strategy is pivotal, serving as a foundational support system that significantly influences a academic child's development. Families play a crucial role in shaping a child's attitude towards learning, as they are the primary source of early education and values [25]. The encouragement and emphasis on

education within the family unit can set the tone for a child's educational journey [26], [27]. Families that prioritize and value learning create an environment where children are more likely to view education as important and strive for academic success. Additionally, the level of involvement, parental including communication with teachers, monitoring homework, and participating in school activities, can greatly impact a child's educational outcomes. A supportive and engaged family fosters a positive learning environment, reinforcing the significance education and of motivating the child to excel academically [28].

Furthermore, the family's socio-economic status and cultural background can also influence educational strategies [29]. Families with higher socio-economic status often have greater access to educational resources, such as books, tutoring, and educational technology, which can contribute to a child's academic success [30]. Moreover, cultural values and expectations within a family can shape the educational goals and aspirations of the child. For instance, some families may prioritize certain career paths or higher education, influencing the child's choices and motivation in their academic pursuits [31]. In essence, the family serves as a crucial foundation for the development and implementation of effective educational strategies, influencing a child's mindset, values, and opportunities in the realm of education.

2.2 Family and Racism and Discrimination in Society

The family plays a significant role in shaping attitudes and perspectives on racism and

discrimination within society. Families are often the first social unit where individuals learn about values, beliefs, and cultural norms [32]. The way parents and caregivers discuss, address, or even perpetuate ideas related to race and discrimination can profoundly impact person's а understanding of these issues. Families contribute to either challenging or reinforcing societal norms around racism. Open discussions about diversity, inclusion, and respect for all races within the family can promote a more tolerant and understanding perspective. Conversely, if families perpetuate discriminatory beliefs or engage in prejudiced behaviors, it can contribute to the perpetuation of biases within society [33].

Moreover, the family serves as a microcosm of society, reflecting broader social attitudes. It is within the family that individuals often first encounter diversity, and the family's response to these encounters can shape an individual's worldview [34]. Families that actively address and confront racism can contribute to breaking the cycle of discrimination, fostering empathy, and promoting a more inclusive society [35]. In contrast, families that pass on prejudiced beliefs may inadvertently contribute to the continuation of discriminatory practices [33]. Therefore, the family is a crucial agent in shaping attitudes towards racism, either challenging or perpetuating societal norms and influencing future generations' perspectives on diversity and inclusion [36], [37].

2.3 Educational Strategy and Racism and

Discrimination in Society

Educational strategies aimed at addressing racism and discrimination in society are integral to cultivating an inclusive and equitable learning environment [16], [38]. To achieve this, curricula should incorporate diverse perspectives, histories, and authors, promoting a more accurate and comprehensive understanding of different cultures and experiences. Teachers play a crucial role in facilitating open discussions about racism, fostering empathy, and providing anti-bias education to equip students with the tools to challenge discriminatory beliefs [39], [40]. Extracurricular initiatives, such as cultural exchange programs and diversity workshops, further contribute to creating a school culture that celebrates differences and encourages respect. mutual By engaging both students and their families in these efforts, educational institutions can foster a collective commitment to dismantling systemic preparing inequalities, future generations to actively contribute to a more just and inclusive society [17].

Educational strategies against racism and discrimination must encompass a multifaceted approach within the curriculum and school environment. Incorporating diverse perspectives and histories into the curriculum helps challenge stereotypes and build a more inclusive narrative. Additionally, fostering open discussions and implementing anti-bias education equips students with critical thinking skills to confront discriminatory beliefs [16]. Beyond the classroom, extracurricular activities, cultural exchange programs, and community engagement initiatives play vital roles in promoting diversity and understanding . By integrating these elements, educational institutions can contribute significantly to shaping a generation that is empathetic, culturally competent, and actively

works towards dismantling systemic inequalities in society [41].

3. METHODS

In the initial phase of the bibliometric analysis, the selection of relevant scholarly literature was undertaken by systematically searching databases such as PubMed, Scopus, and Web of Science. This approach ensured a comprehensive coverage of the subject matter. A structured search strategy was then developed, incorporating pertinent keywords and controlled vocabulary terms such as "family," "educational strategies," "racism," and "discrimination." The use of Boolean operators refined the search to ensure relevance. Inclusion criteria focused on articles explicitly discussing the role of families in the context of educational strategies addressing racism and discrimination. Conversely, exclusion criteria encompassed studies unrelated to the specified topics, non-English publications, and articles lacking peer review. To extract bibliometric data, including citation counts, authorship patterns, and keyword frequency, bibliometric software such as VOSviewer was employed. These tools facilitated the creation of visual representations of bibliographic networks, offering a deeper understanding of research trends.

Table 1. Data Citation Metrics

| Publication | : 1976-2023 | | |
|---------------------------------------|---------------------------------|--|--|
| years | . 1976-2025 | | |
| Citation years | : 48 (1976-2024) | | |
| Paper | : 860 | | |
| Citations | : 348691 | | |
| Cites/year | : 7264.40 | | |
| Cites/paper | : 405.45 | | |
| Cites/author | : 220098.46 | | |
| Papers/author | : 481.10 | | |
| Author/paper | : 2.44 | | |
| h-index | : 261 | | |
| g-index | : 580 | | |
| hI,norm | : 199 | | |
| hI,annual | : 4.15 | | |
| hA-index | : 72 | | |
| Papers with | : | | |
| ACC | 1,2,5,10,20:833,816,707,490,276 | | |
| Source: Publish or Perish Output 2024 | | | |

Source: Publish or Perish Output, 2024

The table provides a comprehensive overview of a researcher's scholarly impact and productivity spanning from 1976 to 2023. Over the course of 860 published papers, the researcher has accumulated a substantial citation count of 348,691, resulting in an impressive average of 7264.40 citations per year. The researcher's work demonstrates consistent influence, with an average of 405.45 citations per paper. The citations per author are notably high at 220,098.46, suggesting significant individual impact. The researcher has collaborated with others, with an average of 481.10 papers per author and 2.44 authors per paper. The h-index and g-index stand at 261 and 580, respectively, indicating the researcher's substantial and enduring impact, while hI,norm at 199 and hI,annual at 4.15 provide additional metrics of influence. The hA-index, at 72, suggests a significant number of highly cited papers. The researcher has also contributed to the field of ACC, with papers at various citation thresholds, showcasing

versatility and impact across different levels of citation recognition. Overall, this table reflects a prolific and highly impactful academic career.

4. RESULTS AND DISCUSSION

From the 860 literatures collected, based on the counting of titles and abstracts with the comprehensive counting method, a total of 4230 terms were obtained with a minimum occurrence of 10 times. From the 4230 terms, 127 thresholds were formed which will then be re-selected to produce the most relevant terms to the topic in question. Thus, 76 thresholds are the number of thresholds that will be analyzed. The first research question can be answered by conducting network mapping using the Network Visualization feature in the VOS Viewer application. The results of the analysis are illustrated in Figure 1 below.

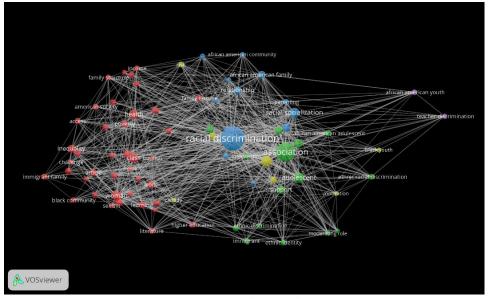


Figure 1. Network Visualization Source: Data Analysis, 2024

Based on Figure 1 above, the literature on this topic is divided into five clusters. Each of these clusters is then represented with different colors. The first cluster is represented with red color, this cluster consists of 40 items. While the second cluster is a cluster with a total of 15 items with

green color. The third cluster is represented in blue with a composition of 12 items. The fourth cluster with a composition of 7 items is yellow and the last cluster is purple with a total of two items. Table 2 below shows in detail the composition of items in each cluster.

| Cluster | Items | | | | | |
|---------|--|--|--|--|--|--|
| 1 | Access, American society, black | | | | | |
| | community, black family, challenge, | | | | | |
| | critical race theory, difference, | | | | | |
| | diversity, family income, family | | | | | |
| | structure, health, higher education, | | | | | |
| | immigrant family, income, inequality, | | | | | |
| | larger society, politic, position, | | | | | |
| | poverty, prejudice, race ethnicity, | | | | | |
| | racial disparity, racist, school policy, | | | | | |
| | sexism, woman | | | | | |
| 2 | Adjustment, adolescent, African | | | | | |
| | American adoles, association, ethnic | | | | | |
| | discrimination, ethnic identity, ethnic | | | | | |
| | racial discriminant, immigrant, | | | | | |
| | intervention, mental health, | | | | | |
| | perceived discrimination, racial | | | | | |
| | ethnic discrimination, racial identity, | | | | | |
| | support | | | | | |
| 3 | African American, African American | | | | | |
| | community, African American | | | | | |
| | family, neighborhood, parenting, | | | | | |
| | racial discrimination, racial | | | | | |
| | socialization, social support | | | | | |
| 4 | Academic achievement, black youth, | | | | | |
| | motivation, resilience, risk, | | | | | |
| | socialization | | | | | |
| 5 | African American youth, teacher | | | | | |
| | discrimination | | | | | |

Source: Data Analysis, 20234

The second question can be answered by using the Overlay Visualization feature in the VOS Viewer application. The results of this analysis are attached in Figure 2 below. The VOS Viewer application is automatically only able to analyze trends for eight years, from 2006 to 2014. During these eight years, the development of research on this topic is significant. In 2006, research focused on topics such as black community, American community, motivation, and politics. From 2008 to 2010, topics such as poverty, inequality, difference, African American adolescent, racist, and racial disparity attracted the attention of researchers. From 2010 to 2012, the research continued to grow and become more complex and broad with many researchers focusing their attention on topics such as African American youth, racial socialization, family income, risk, family structure, immigrants, and social support. Most recently, in 2014 to the present, research has continued to grow by focusing on topics such as association, racial discrimination, adjustment, parenting, ethnic racial discrimination, perceived discrimination, and teacher discrimination. The evolution of this topic, shows that the topic of family, education, and racism is a topic that continues to grow and attract the attention of researchers in various generations.

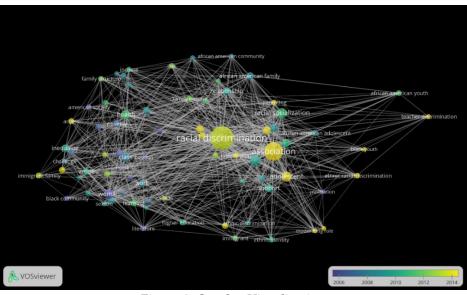


Figure 2. Overlay Visualization Source: Data Analysis, 2024

Table 3 below shows some of the literature with the highest number of citations. The identification of this literature is important because it is the key and basis for future research development.

| Citations | Authors and year | Title | |
|-----------|------------------|-----------------------|--|
| 15971 | DS Massey, | American | |
| | NA Denton | apartheid: | |
| | (2019) | segregation and | |
| | | the making of the | |
| | | underclass | |
| 11887 | TJ Yossi | Whose culture has | |
| | (2005) | capital? A critical | |
| | | race theory | |
| | | discussion of | |
| | | community | |
| | | cultural wealth | |
| 9133 | CB Stack | All our kin: | |
| | (1997) | Strategies for | |
| | | survival in a black | |
| | | community | |
| 8132 | DW Sue, CM | Racial | |
| | Capodilupo, | microaggressions | |
| | GC Torino | in everyday life: | |
| | (2007) | implications for | |
| | | clinical practice | |
| 7069 | G Ladson- | Just what is critical | |
| | Billings | race theory and | |
| | (2020) | what's it doing in a | |
| | | nice field like | |
| | | education? | |
| 6140 | VC McLoyd | Socioeconomic, | |
| | (1998) | disadvantage and | |
| | | child development | |
| 4154 | CG Coll, K | An integrative | |
| | Crnic, G | model for the | |

| Citations | Authors and year | Title | |
|-----------|------------------|-----------------------|--|
| | Lamberty, | study of | |
| | BH Wasik | developmental | |
| | (1996) | competence in | |
| | | minority children | |
| 3893 | ZD Balley, N | Structural racism | |
| | Krieger, M | and health | |
| | Agenor, J | inequities in the | |
| | Graves, N | USA: Evidence | |
| | Linos (2017) | and interventions | |
| 3893 | CE Sleeter, | Making choices for | |
| | CA Grant | multicultural | |
| | (2008) | education: Five | |
| | | approaches to race, | |
| | | class and gender | |
| 3690 | DR Williams, | Discrimination | |
| | SA | and racial | |
| | Mohammed | disparities in helth: | |
| | (2009) | evidence and | |
| | | needed research | |

Source: Publish or Perish Output, 2024

The last question regarding potential topics in the future can be answered with the Density Visualization feature which is able to identify the intensity of occurrence of each item. The more often the term appears indicates that the term has high saturation and complexity. While a faint intensity indicates that the term is rare and still has potential. Terms such as family income, motivation, black youth, teacher discrimination, African American youth, risk, parenting, poverty, American society, black community, and immigrant community are some of the potential terms based on the interpretation in Figure 3 and Table 4 below.

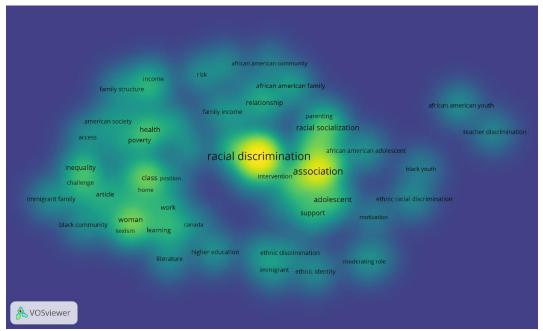


Figure 3. Density Visualization Source: Data Analysis, 2024

| Most Occurrence | | Fewest Occurrence | |
|-----------------------|------------|----------------------------|------------|
| Item | Occurrence | Item | Occurrence |
| Racial discrimination | 274 | Motivation | 10 |
| Association | 171 | Larger society | 10 |
| Socialization | 56 | Neighborhood | 10 |
| Adolescent | 50 | Racial disparity | 11 |
| Woman | 48 | Perceived discrimination | 11 |
| Health | 43 | African American community | 11 |
| Racial identity | 36 | Black youth | 11 |
| Support | 32 | Challenge | 13 |
| Inequality | 31 | Critical race theory | 13 |
| Adjustment | 28 | Sexism | 13 |

Table 4. Most and Fewest Occurrence

Source: Data Analysis Result, 2024

The table presents the frequency of occurrence for specific items in a dataset, highlighting the most and fewest occurrences. Among the most frequently mentioned items, "Racial discrimination" tops the list with 274 occurrences, followed by "Association" at 171, and "Socialization" at 56. Other notable terms include "Adolescent" (50), "Woman" (48), and "Health" (43). On the other hand, the least mentioned items include "Motivation," "Larger society," and "Neighborhood," each with only 10 occurrences. Slightly more occurrences, at 11, are associated with items such as "Racial disparity," "Perceived discrimination," "African American community," and "Black youth." Terms like "Challenge," "Critical race theory," and "Sexism" have slightly higher

occurrences at 13. This distribution suggests a focus on issues related to racial discrimination, social associations, and adolescent development in the dataset, while some concepts like motivation and larger societal factors are less frequently discussed.

Comparison with Previous Studies

Bibliometric analysis is a method used to study the intellectual structure of research, identify key contributors, thematic areas, and hotspot topics. In the context of the term families and education, racism, and discrimination, several studies have employed bibliometric analysis to explore

these topics. One study performed а bibliometric analysis on more than 15,000 research papers listed in the Web of Science (WoS) database to explore the intellectual structure of social segregation research, key contributors, thematic areas, and hotspot topics. The study revealed a marked increase in segregation research, particularly from a spatial/urban perspective, and the interrelationship between segregation and other social concepts, such as social equality, cohesion, integration, and inclusion. Another study, analyzed article titles and abstracts from 1940 to 2019 to identify topic clusters in the fields of marriage and family, children and family, and issues of child development and education. The study focused on influential articles based on citation count and identified articles with the most prominent themes for the periods before and after 2019. A third study, examined the thematic evolution of terms related to equity in education, including examining race in education scholarship. The study used scientific mapping in the Web of Science database to identify key authors, articles, and themes related to equity in education

Implication

This bibliometric analysis provides valuable insights into the extensive body of literature exploring the intersection of families, educational strategies, racism, and discrimination. The identified clusters and trends reveal the evolving landscape of research over the years, highlighting key themes such as racial discrimination, socialization, and adolescent development. The analysis not only underscores the significance of familial influences on educational strategies but also identifies

potential avenues for future research. The high citation counts of influential literature, such as "American apartheid: segregation and the making of the underclass," and "Whose culture has capital? A critical race theory discussion of community cultural wealth," emphasize the enduring impact of certain works in shaping scholarly discourse. Overall, this study contributes to evidence-based offering a systematic policymaking by understanding of the field, promoting awareness of critical issues, and guiding future research endeavors aimed at fostering a more inclusive and equitable society.

5. CONCLUSION

this bibliometric In conclusion, analysis sheds light on the complex interplay between families, educational strategies, racism, and discrimination, offering a comprehensive overview of the evolving scholarly landscape. The identified clusters and research trends illustrate the dynamic nature of the field, emphasizing the enduring impact of certain seminal works and the continuous growth of research interest in the topic over the years. The high citation counts of influential literature underscore the lasting relevance of key contributions. The analysis not only reaffirms the pivotal role of families in shaping attitudes and values but also emphasizes the critical connection between familial influences and the effectiveness of educational strategies in addressing societal issues of racism and discrimination. The implications of this study extend to policymakers, educators, and researchers, encouraging evidence-based interventions and highlighting potential avenues for further exploration in the pursuit of fostering a more just, inclusive, and equitable society.

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