

RESEARCH ARTICLE

# Nonprofits' role in the delivery of social services: A bibliometric analysis

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## Abstract

This study explores the evolving field of nonprofit organisations (NPOs) and their role in delivering social services, focusing on research trends from 1990 up to June 2024. It aims to examine scholarly trends, prevalent topics, and global contributions. Utilising bibliometric techniques – such as keyword co-occurrence and co-authorship network analysis – and the PRISMA framework for screening, we analysed 280 documents retrieved from Scopus. Findings revealed a significant increase in publications on NPOs and social services across various regions. The thematic landscape has evolved from foundational concepts in social service delivery to emerging topics such as advocacy, social capital, governance, and the impact of the COVID-19 pandemic on service provision. The study highlights the importance of international collaboration, interdisciplinary approach, and diverse funding sources in advancing NPO research. Additionally, it underscores the critical need to understand the interplay between NPO advancements and the broader social service ecosystem. This research contributes valuable insights for policymakers and practitioners, emphasising the necessity of adaptive and ongoing research to effectively harness the potential of NPOs while addressing regulatory and operational challenges. This study enriches the academic discourse and informs policy development in the dynamic field of NPOs and social services. Limitations include reliance on Scopus and specific search terms, which may omit relevant studies.

**Keywords:** Nonprofits; NPOs; Nonprofit Organisations; Social Services; VOSviewer

## 1. Introduction

Nonprofit organisations (NPOs) play a critical role in the delivery of social services, bridging gaps that exist in public and private sector provision (Bortolazzi, 2020). Lambin (2023) indicated that unlike their for-profit counterparts, nonprofits operate with a primary mission to serve the community rather than generate profit. Ressler et al. (2021) argue that this service-oriented focus enables nonprofits to address diverse social needs and enhance population well-being. The significance of nonprofits in the delivery of social services is underscored by their flexibility, specialised expertise, and ability to engage directly with underserved and marginalised communities (Adekugbe, & Ibeh, 2024).

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The role of NPOs in social service delivery has evolved appreciably over time. Historically, charitable organisations were often founded by religious institutions or philanthropic individuals who sought to address immediate social needs (Tu, 2021). As societies industrialised and urbanised, the scope of social services expanded beyond mere charity to encompass more structured and systematic approaches to addressing social issues (Casey, 2016; Roets et al., 2023). In the early 20th century, the expansion of the welfare state in many developed countries marked a shift toward government involvement in social services (Hemerijck, 2013). Despite this, nonprofits continued to play a crucial role in delivering specialised services, often targeting niches that government programmes did not adequately address (Henriksen et al., 2016). The mid-20th century saw a growing recognition of the need for collaboration between the public and nonprofit sectors, leading to increased funding and formal partnerships (Burger, & Veldheer, 2001; Casey, 2016).

According to Brewster et al. (2020), NPOs are involved in a diverse array of social services, which are referred to as public or private programmes designed to support individuals and communities by addressing needs related to health, welfare, education, and economic stability (Whitman et al., 2022). Kennedy-Kish et al. (2017) defined social services as including, but not limited to, health and wellness, education and youth services, housing and homeless services, economic development and employment, and advocacy and social justice. More specifically, Knickman et al. (2016) documented that NPOs provide healthcare services, including mental health support, substance abuse treatment, and preventive care. For instance, Chu et al. (2022) indicated that organisations such as the American Red Cross and Médecins Sans Frontières offer critical health services in both local and international contexts. Bryson (2018) also reported that nonprofits focus on educational initiatives, from early childhood education to adult literacy programmes, with Herrera et al. (2023) citing youth-oriented NPOs like Big Brothers Big Sisters which provides mentorship and support to help young people succeed academically and personally.

Addressing homelessness and housing insecurity has also been identified as one of the major foci for many nonprofits (Lee et al., 2021). For example, organisations, such as Habitat for Humanity, work to provide affordable housing solutions and support for those experiencing homelessness (Doleac et al., 2024). Choto et al. (2020) indicated that nonprofits engage in economic development activities, including job training and placement services, financial literacy programmes, and support for small businesses and entrepreneurs in disadvantaged communities. Alexander and Fernandez (2021) are also of the view that some nonprofits are dedicated to advocacy and social justice, working to address systemic inequalities and promote human rights. These organisations focus on issues such as racial justice, gender equality, and environmental sustainability (Rigolon, & Gibson, 2021).

While nonprofit organisations operate globally, Africa has been a focus due to its numerous challenges (Gabrielle, 2021). It is, thus, in this light that nonprofit organisations have long been integral to social service delivery in Africa, particularly in areas where governmental resources are limited (Mubangizi, 2022). The historical roots of nonprofit activity on the continent can be traced back to indigenous community-based systems of mutual aid and support, which were later supplemented by colonial-era missionary organisations that provided education, healthcare, and other social services (Marumahoko, 2023). Phiri (2023) stated that post-independence, many African countries experienced a shift in focus towards state-led social service provision. However, due to various challenges including political instability, economic constraints, and governance issues, the public sector often struggled to meet the growing demands for social services (Anyidoho, & Kpessa-Whyte, 2023). This created space for nonprofit organisations to step in and address critical needs (Shi et al., 2020). Given these factors, the role of NPOs in social service delivery is undeniable. Despite the acknowledgement of their significant contributions

across various empirical studies, there remains a limited understanding of the full extent and specific nature of their impact (Gazley, & Guo, 2020; Renz et al., 2023). This study – guided by social origins theory, which posits regional variations in nonprofit roles (Einolf, 2015; Salamon Anheier, 1998; Salamon et al., 2017) – addresses the problem of limited understanding of NPOs' evolving roles in social services, by analysing publication trends, document by source, documents by country, documents by funding sponsors, co-occurrence of author keywords, and co-authorship in terms of country. These objectives provide a comprehensive overview of how these organisations are studied and reported in academic circles (Sharifi, 2021).

Bibliometric analysis is used in this regard as it is a crucial tool for systematically exploring existing literature to develop a deeper understanding of the roles of NPOs in the delivery of social services. Bibliometric analysis offers a structured approach to reviewing the vast array of research related to nonprofit organisations (Ali et al., 2023). This method enables researchers to identify key studies, influential authors, and emerging trends within the field (Ji et al., 2020). Furthermore, as posited by Ali et al. (2023), bibliometric analysis is instrumental in identifying research gaps. Techniques such as bibliographic coupling allow researchers to pinpoint areas with limited exploration or heavy concentration of studies (Nájera-Sánchez et al., 2020). This insight is essential for highlighting specific sectors within social services or geographic regions that may need further investigation. Understanding the evolution of research on nonprofit organisations is another benefit of bibliometric analysis. It reveals how the focus and scope of studies have changed over time and helps in mapping the influence of different studies and authors through their citations (Mazov et al., 2020). This network of influences provides a clearer picture of the development of key concepts and theories related to nonprofit organisations. Moreover, bibliometric analysis aids in mapping research networks, showing how various studies are interconnected through shared references (Hossain et al., 2018). This network analysis not only illustrates the relationships between different research topics but also identifies core areas of focus within the nonprofit sector (Alsharif et al., 2020; Donthu et al., 2021; Moral-Muñoz et al., 2020).

This study significantly contributes to the literature on nonprofit organisations by providing a comprehensive bibliometric analysis of their role in social service delivery from 1990 to June 2024. By mapping global research trends, identifying thematic shifts, and highlighting regional disparities, it addresses a critical gap in understanding the scope and impact of NPO research. The findings offer a nuanced perspective on how NPOs have evolved to address emerging challenges, such as advocacy and governance, particularly in response to global events like the COVID-19 pandemic. For scholars, this study serves as a foundational resource for identifying under-researched areas, such as African NPO contributions, while for policymakers and practitioners, it provides evidence-based insights to enhance funding, collaboration, and regulatory frameworks. By integrating interdisciplinary and international perspectives, this research enriches the academic discourse and supports the development of more effective social service ecosystems. The remainder of the study is organised as follows: Methodology, Findings, Discussion and Conclusion, Limitations and Future Research.

## **2. Methodology**

This study conducted a comprehensive analysis of the literature on the role of nonprofit organisations (NPOs) in the delivery of social services, using a thorough bibliometric methodology to evaluate its findings. The study included papers published between 1990 and June 2024, selected from the Scopus database for its extensive thematic coverage and article volume (Mingers & Lipitakis, 2010; Sánchez et al. 2017). A sub-analysis examines African NPOs, reflecting social origins theory's emphasis on regional variations in nonprofit roles (Salamon & Anheier, 1998)

(within current data). The time frame for inclusion was limited to ensure the relevance and comparability of the data. The chosen starting point of 1990 was based on the increasing recognition of the roles of NPOs in scholarly discussions (Stötzer et al., 2022). The search was stopped in June 2024 to avoid incomplete publication data for the latter half of 2024, which could compromise the accuracy of the document population representation, as many studies post-June were still in the production process.

Scopus contains an enormous compilation of scholarly works, accommodating over 22,000 articles from more than 5,000 foreign periodical publishers (Liu et al., 2023). It touches upon a broad spectrum of disciplines, including nonprofits, social services, social welfare, philanthropy, innovation, and charity, among others. Owing to the significantly wide-ranging plethora of subjects spanned in this compilation, such as the roles of NPOs, covering social service delivery, it was deemed the ideal data reservoir for this investigation. The search methodology was exhaustive and accurate, following the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) (Page et al., 2021; Figure 1). To avoid generating an excessively large number of unrelated publications, the search terms, which included 'roles of nonprofit organisations in the delivery of social services' and 'nonprofits' roles in the delivery of social services,' narrowed the collection of articles to those published between 1990 and June 2024, considering only publications written in English. This refined approach evolved to encapsulate the most contemporary and pertinent scholarly sources while adapting to evolving terminology. The search terms are as captured below:

*(TITLE-ABS-KEY (nonprofits' AND role AND in AND the AND delivery AND of AND social AND services) OR TITLE-ABS-KEY (nonprofits' AND role AND in AND the AND delivery AND of AND housing) OR TITLE-ABS-KEY (nonprofits' AND role AND in AND the AND delivery AND of AND education) OR TITLE-ABS-KEY (nonprofits' AND role AND in AND the AND delivery AND of AND infrastructure)) AND PUBYEAR > 1989 AND PUBYEAR < 2025 AND (EXCLUDE (LANGUAGE, "Hungarian")) AND (EXCLUDE (DOCTYPE, "cr" ))*

Initially, a broad search yielded 1,003,711 publications, reflecting the extensive literature on social services and related fields. However, after applying rigorous screening criteria to focus specifically on the role of nonprofit organisations in social service delivery, the dataset was refined to 280 scholarly works. This significant reduction underscores the relatively niche focus of research on NPOs within the broader social services domain. Rigorous screening excluded articles published after the study period, non-English works, duplicates, errata, articles from unrelated disciplines, grey literature, and still in formal publication processes. To find the latest research on the roles of NPOs in the delivery of social services, the selected articles' abstracts, introductions, methodologies, and conclusions were thoroughly analysed.

The study used VOSviewer for its robust capabilities in bibliometric analysis (Ejaz et al., 2022). VOSviewer is particularly noted for its advanced visualisation capabilities. It excels at creating detailed and interactive maps of bibliometric networks, such as citation networks, co-authorship networks, and keyword co-occurrence maps (Huang et al., 2022). These visualisations are highly intuitive and allow researchers to explore complex relationships within the literature easily (McAllister et al., 2022). Through mapping out connections between publications, authors, and keywords, VOSviewer helps in identifying clusters of related research and uncovering key trends and patterns that might not be immediately apparent through traditional analytical methods (Yang, & Thoo, 2023). Essentially, VOSviewer is ideal for its robust visualisation of bibliometric networks, offering an interactive way to explore research connections, making them well-suited for analysing the role of nonprofit organisations in the delivery of social services.

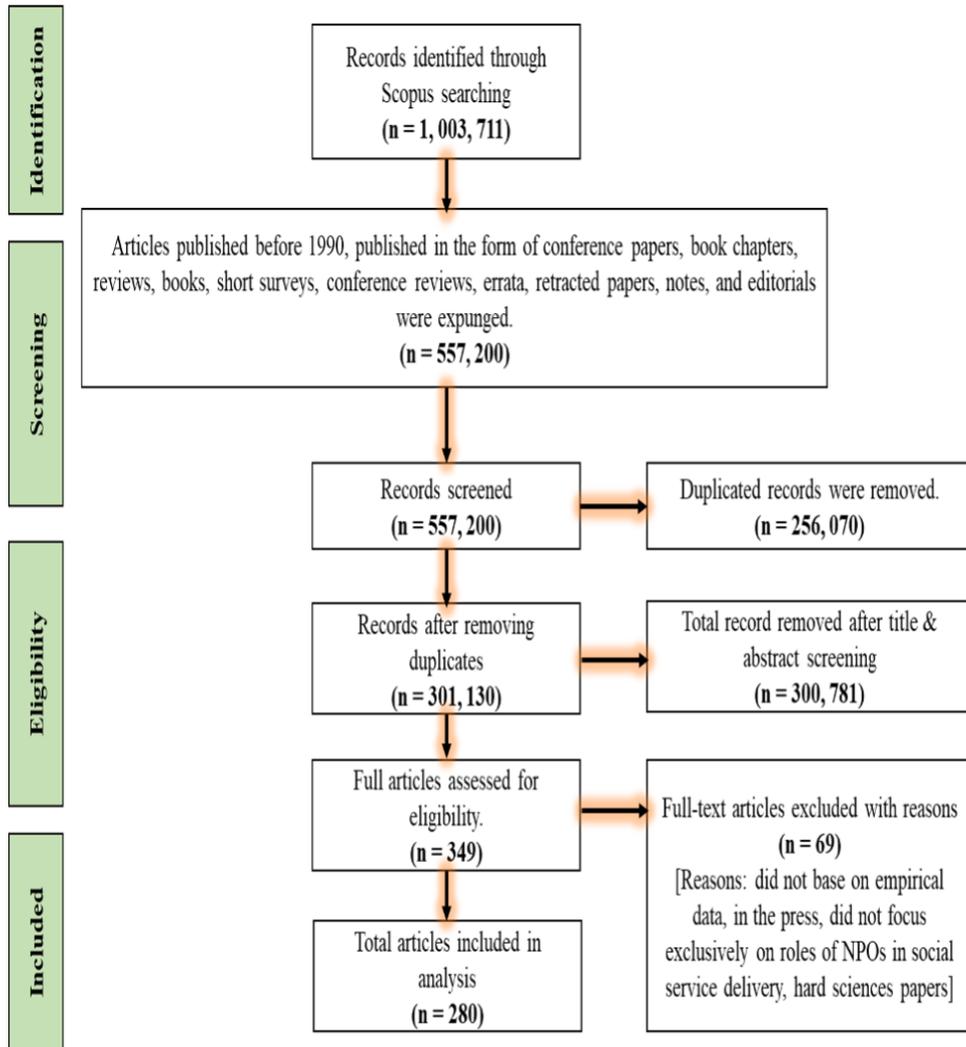


Figure 1. PRISMA flow  
Source: Adapted from Page et al. (2021).

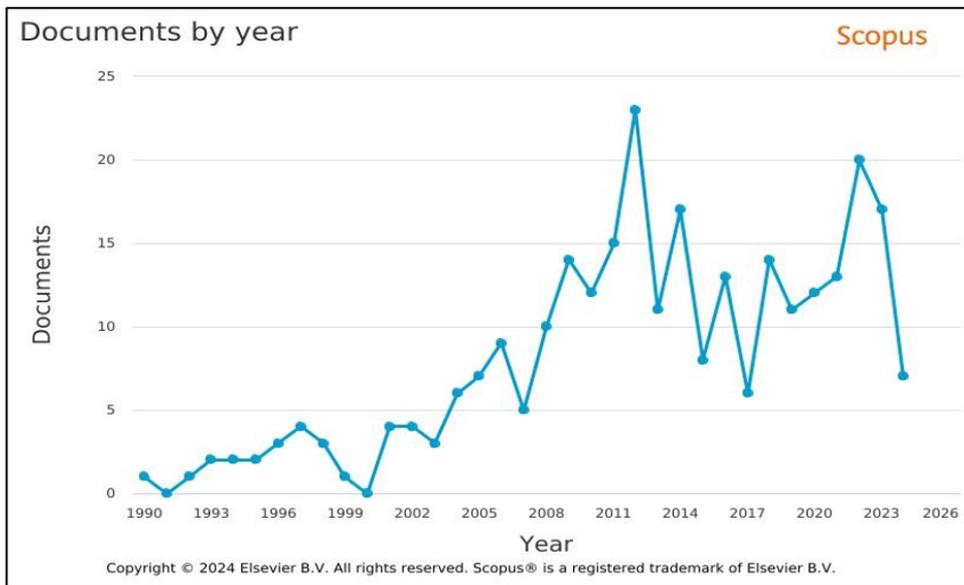
### 3. Results and discussion

This section presents the findings and discussion from the bibliometric analysis. It is organised into the following subsections: publication trends, source analysis, geographic distribution, funding landscape, thematic evolution, collaboration networks, the role of nonprofits in social service delivery, and the overall discussion.

#### 3.1 Publication trends

From 1990 to June 2024, research on NPOs' roles in social service delivery has not increased consistently, as seen in Figure 2. Research in this domain gained increasing attention from 1991 to 1997, after which the trend declined. It picked up after 1999, growing consistently through to 2011 after which several fluctuations were recorded. Though the search was done

in the middle of 2024 (i.e., June), it was expected that the number of documents churned out would show some encouraging uptrend, however, this was not the case, as depicted in Figure 2. The increases recorded between 2019 and 2022 could be attributed to the COVID-19 pandemic when a lot of people needed the intervention of NPOs. This might have fueled the interest of researchers to produce works that were significant for areas such as health delivery, accommodation provision, and awareness creation, among others (Mncube, 2023; Santos, & Laureano, 2022). These elements draw the attention of NPOs, according to Stötzer et al. (2022). Currently, rising socio-economic issues (Delardas et al., 2022) contrast with the declining attention to studies on NPOs' roles (Figure 2). This calls for the need to pay attention to the contemporary issues facing people and how NPOs' roles in the delivery of social services are timely to address some of these issues.



**Figure 2.** Document per year  
Source: Scopus (2024)

### 3.2 Source analysis

Figure 3 illustrates a comparison of publications on the roles of NPOs in the delivery of social services per year, categorised by source and indexed in Scopus. This analysis focuses on the period from 1994 to 2024, when the top 10 publication sources began publishing on NPOs' roles in the delivery of social services. A diverse array of journals has made invaluable contributions to the literature, demonstrating the increasing interest in NPOs' roles in the delivery of social services. The majority of the journals, including 'BMC Health Services Research,' 'Administration in Social Works,' and 'Nonprofit and Voluntary Sector Quarterly,' began publishing articles in the 2000s. This timing coincided with the emergence of the HIV/AIDS crisis, poverty and economic inequality, terrorism security concerns, climate change and environmental issues, and refugee crisis (Burkle Jr, 2006; Fourie, 2006), all of which required awareness creation and sensitisation across settlements (Abdieva, 2023).

Undoubtedly, these crises and harsh conditions accelerated the roles played by NPOs in the delivery of social services, while also introducing new directions for NPOs' efforts and initiatives (Pitowsky-Nave, 2024; Stötzer et al., 2022). The significant increase in publications

between 2011 and 2015 can be attributed to concerns over the Syrian Civil War and its resulting humanitarian crisis, spilling over to other jurisdictions and territories (Dag, 2018; Vignal, 2017). Millions of Syrians had to flee their homes and seek refuge in neighbouring countries and beyond (Dag, 2018; Yazgan et al., 2015). This crisis prompted a significant response from both governments and nonprofit organisations to address the immediate needs of refugees, including shelter, food, medical care, and protection (Yazgan et al., 2015). The international community was heavily engaged in providing humanitarian aid, managing the refugee crisis, and attempting to mediate and resolve the ongoing conflict, triggering scholars and researchers to put pen to paper.

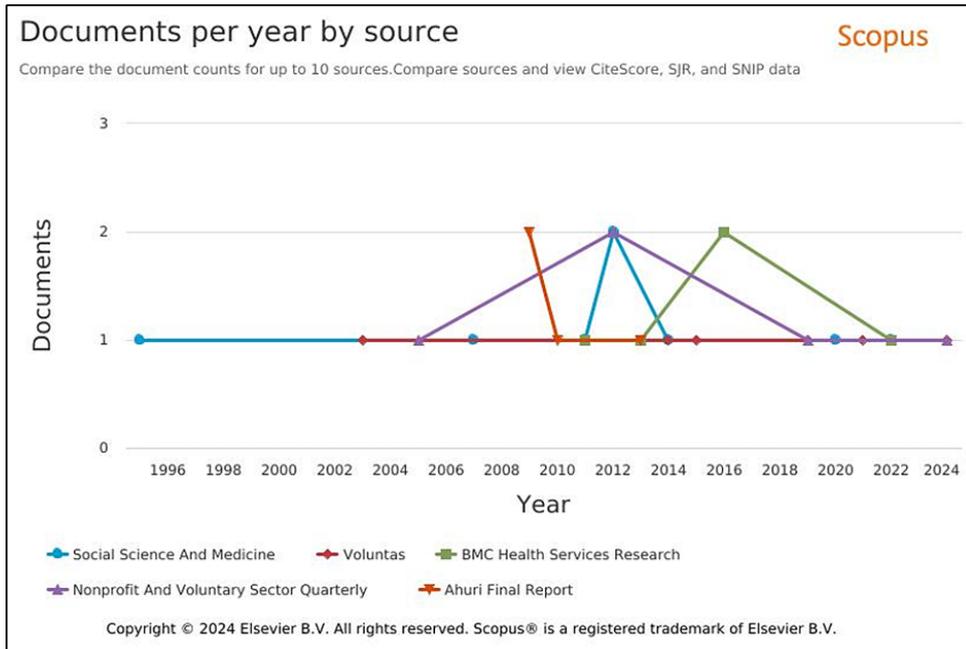


Figure 3. Documents by source  
Source: Scopus (2024)

### 3.3 Geographic distribution

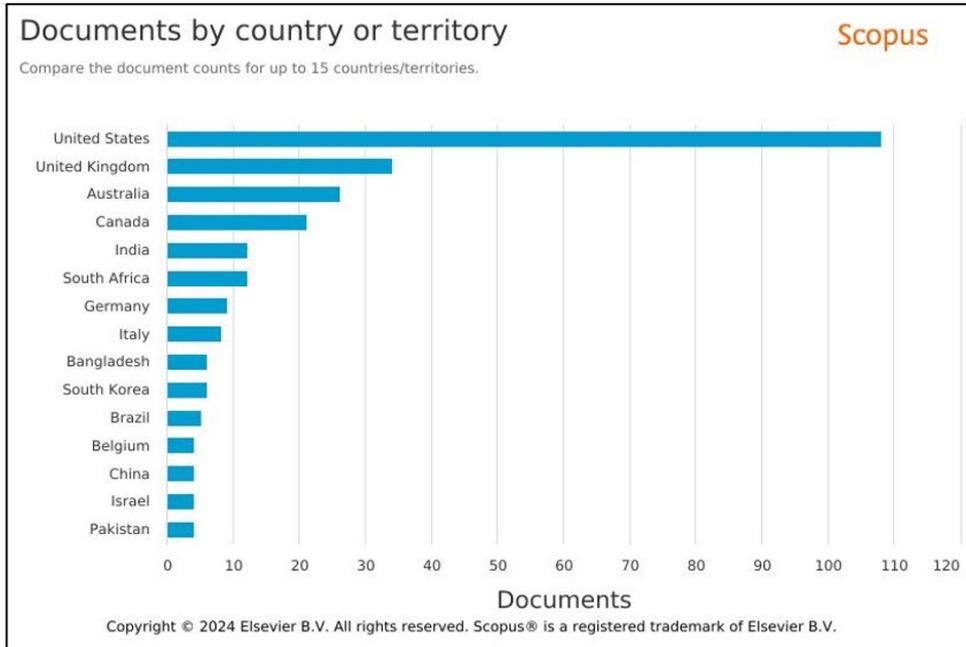
Figure 4 displays an extensive map of the Scopus database illustrating the vast research output in the domain of NPOs' role in the delivery of social services across various countries. Data reveals that the United States has emerged as a primary publisher, trailed by the United Kingdom and Australia. Social origins theory suggests that these regional disparities in research output, as shown in Figure 4, stem from historical differences in nonprofit sector development (Salamon et al., 2017; Salamon & Anheier, 1998). For instance, the robust nonprofit infrastructures in the U.S. and U.K., shaped by long-standing philanthropic traditions, contrast with Africa's limited contributions, which reflect a legacy of community-based systems and post-colonial state dominance in service provision. The predominance of these nations in NPOs' role in the delivery of social services can be attributed to the well-established and robust infrastructure for research and academic publishing in these countries (Henriksen et al., 2012; McGregor-Lowndes, & Williamson, 2018). These nations benefit from extensive funding for research, a high level of academic collaboration, and a significant presence of both government and

nonprofit organisations actively engaged in social services (McGregor-Lowndes, & Williamson, 2018).

Additionally, the mature and diverse nonprofit sectors in the United States, the United Kingdom, and Australia provide a wealth of case studies and practical examples that contribute to a rich body of academic literature (Cipriano et al., 2023). Furthermore, according to Warburton et al. (2018), these countries often face complex social challenges that drive research into the effectiveness and impact of nonprofit organisations in delivering social services. The availability of data, combined with a strong tradition of academic inquiry and public interest in social issues, fosters a conducive environment for research output. The presence of influential journals, conferences, and academic networks in these regions also supports the dissemination and growth of knowledge in this field.

While Figure 4 in its entirety illustrates a growing scholarly interest in the role of NPOs in the delivery of social services, Africa appears to be lagging in this area. Apart from South Africa, no other African country made it to the top 15 countries in the analysis. This disparity can be attributed to several factors. Firstly, limited research funding in many African countries restricts the capacity of institutions to conduct and publish studies on this topic. Without sufficient financial resources, research efforts may be hampered, and valuable insights into the role of NPOs may remain underexplored (Baluch, & Ridder, 2021). Additionally, as opined by Skandrani et al. (2021), challenges related to infrastructure and resources can impede research activities. Many regions lack access to essential academic databases, research facilities, and trained personnel, further constraining the ability to undertake comprehensive studies (Mer, & Viridi, 2021).

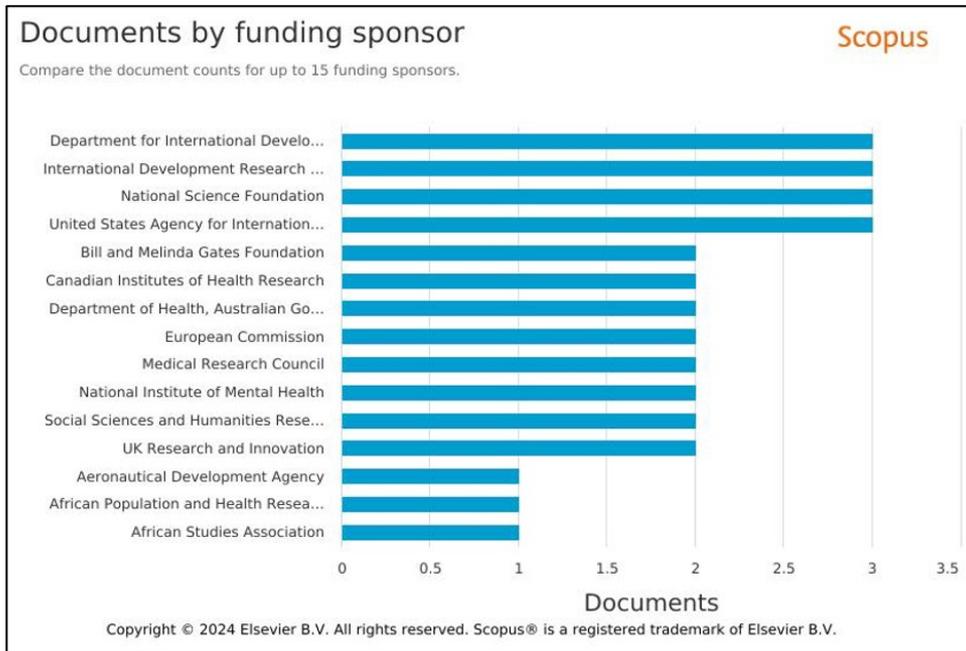
Political and economic instability in several African nations also plays a significant role. Such instability often shifts priorities away from long-term research projects towards immediate crisis management, limiting the focus on issues such as the impact of NPOs in social services. Moreover, difficulties in data collection and management due to logistical constraints hinder thorough research and analysis, preventing the generation of robust findings (Sibisi, & Makka, 2022). The absence of established academic and professional networks for NPO research in many African countries further limits collaboration opportunities and the dissemination of research results (Gazley, & Guo, 2020). As explained by Nsanzumuhire and Groot (2020), without these networks, scholars find it challenging to share insights and advance the field. Finally, there is a lower level of awareness or prioritisation of the role of NPOs in social services within certain regions in Africa (Morkel, 2022). This lack of emphasis affects both research interest and the allocation of resources, resulting in fewer studies being conducted and published (Jönsson, & Huzzard, 2021).



**Figure 4.** Documents by country or territory  
 Source: Scopus (2024)

### 3.4 Funding landscape

Figure 5, obtained from the Scopus database, visualises the funding landscape pertaining to studies on the roles of NPOs in the delivery of social services. It underscores the wide collection of establishments that have nurtured research in this realm. The substantial support from the Canadian Institute of Health Research, the UK Government's Department for International Development (DFID), and the International Development Research Centre, among others, underscores significant investment in research on NPOs' roles, highlighting countries' dedication to the importance of social services. As can be seen, the majority of the top funders are based in Europe or America, with Africa lagging once again. This might be due to the limited financial resources and research infrastructure available in many African countries, which hampers their ability to secure substantial funding for studies on the role of NPOs in social services (Ayinkamiye, & Spencer, 2021). The concentration of major funding sources in Europe and America reflects these regions' more established research networks, greater financial capacities, and stronger institutional support for social service research. Consequently, the disparity in funding availability exacerbates the research gap between these regions and Africa. Furthermore, the emphasis on research by major funders often aligns with their strategic interests and priorities (Ayinkamiye, 2021), which can influence the allocation of resources. African countries face additional challenges such as political instability, economic constraints, and less developed academic networks, all of which impact their ability to attract and utilise research funding effectively (Lindsey et al., 2021).



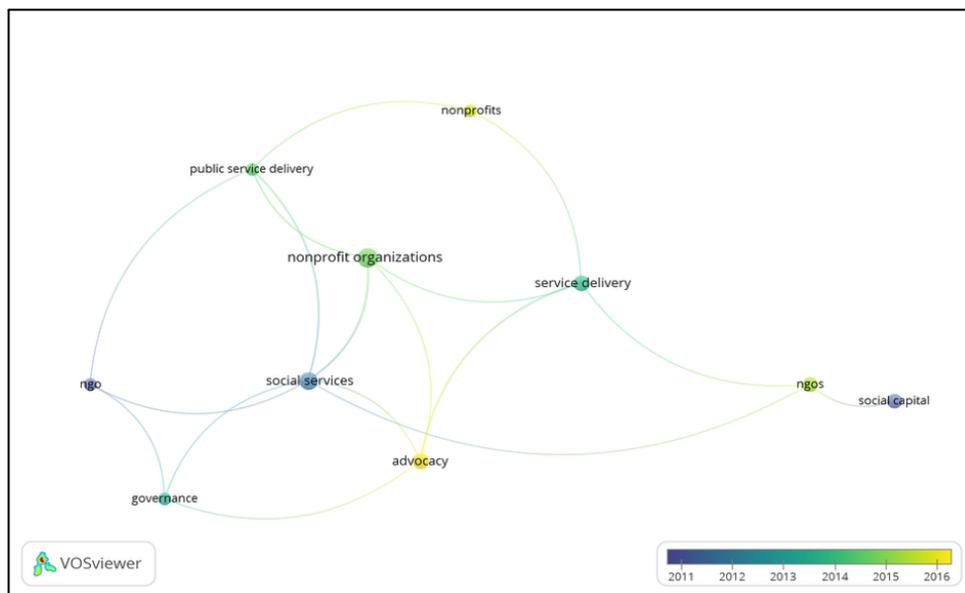
**Figure 5.** Documents by funding sponsors  
 Source: Scopus (2024)

### 3.5 Thematic evolution

Figure 6 presents a visualisation capturing the evolving focus of academic discussions on NPOs and their role in delivering social services over time. Utilising VOSviewer's network modelling, the map illustrates how priorities have shifted, with nodes in darker azure tones representing earlier research periods and transitioning to more yellowed hues for recent years. The sustained emphasis on "social services" in deeper cobalt shades indicates the ongoing significance of this topic throughout the timeline, reflecting its central role in the discourse. Current discussions continue to centre on critical themes such as "nonprofit organisations", "public service delivery", and "service delivery", which have become prominent areas that are increasingly recognised as needing thorough examination, as noted by recent studies (Tortia et al., 2022). The colour gradient also reveals changes in focus, with emerging topics such as "advocacy" and "nonprofits" becoming more prominent in recent years. This shift highlights the growing attention to practical advancements and the evolving needs within the social services sector (Bruzelius, 2020).

The outer regions of the visualisation, in warmer hues, reflect a broadening focus as new areas of interest emerge. The inclusion of terms like "governance", "advocacy" and "social capital" in brighter shades underscores the impact of organisational dynamics and community engagement on social service delivery. This shift indicates the growing recognition of how organisations and communities are reshaping the field, necessitating further research into their benefits and challenges. Overall, Figure 5 provides a detailed snapshot of the evolving academic landscape concerning NPOs and social services. It demonstrates the dynamic nature of research priorities, emphasising the increasing importance of addressing emerging challenges and leveraging new and dynamic avenues in the sector. The visualisation not only offers insight into current research trends but also highlights the rapid progression and adaptation required in

the field, shaped by community involvement and evolving social needs.



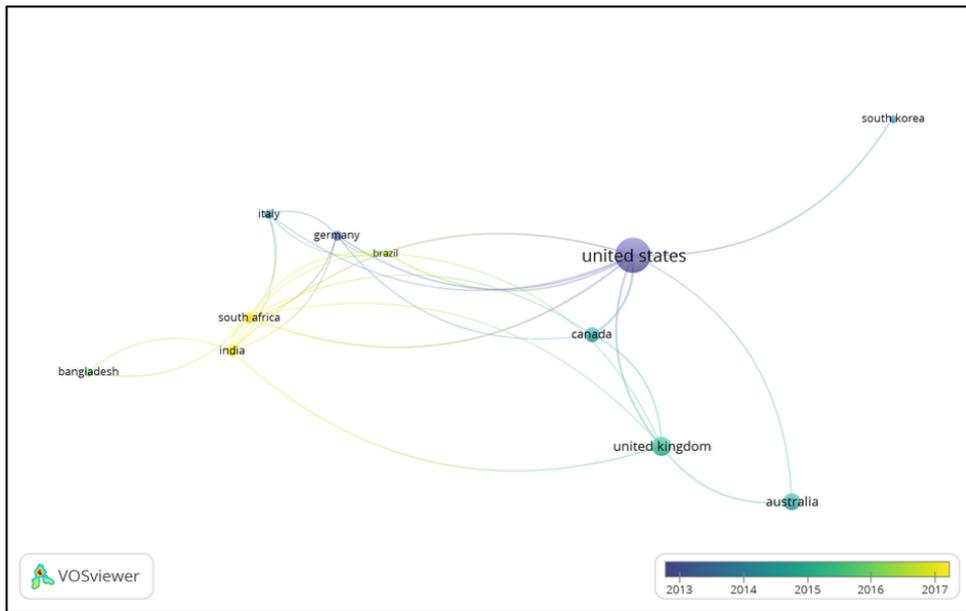
**Figure 6.** Co-occurrence (Author keywords)  
Source: Scopus (2024)

### 3.6 Collaboration networks

Figure 7 presents a VOSviewer co-authorship network map that visually represents the collaborative relationships between different countries in the field of nonprofit organisations and social services research, highlighting global collaboration networks critical to understanding NPO research trends. Nodes reflect the volume of publications by country, while connecting lines indicate the strength and frequency of collaborations. The map reveals significant activity from countries like the United States, the United Kingdom, and Australia, indicating their prominent role in advancing research on NPOs and social services. These nations not only produce substantial research independently but also engage in extensive international collaboration. The visibility of the United States and the United Kingdom highlights their long-standing commitment to exploring the effectiveness and impact of NPOs, while Australia's contributions reflect its robust research infrastructure and focus on social service innovation.

Additionally, the map highlights the increasing influence of other pivotal countries such as Canada, Germany, and Italy. These nations are making notable contributions to the field, supported by their strong research networks and emphasis on practical solutions. The involvement of these European leaders underscores their role in shaping global discussions on social services and the impact of NPOs. Emerging nations such as Bangladesh, South Africa, India, and Brazil are also gaining recognition for their contributions, demonstrating the growing international importance of research in these regions. The map shows how global collaboration is essential for addressing the complex challenges faced by NPOs and enhancing the effectiveness of social service delivery. In the coming years, we can expect a shift in the colour scheme towards more temperate tones, reflecting an increase in collaborative efforts across the field. This trend highlights the growing recognition of the need for a collective approach to tackling global social challenges and advancing research on NPOs. The increased emphasis on multi-national

cooperation reflects the sector's broadening focus and the necessity of addressing issues that transcend geographical boundaries.



**Figure 7.** Co-authorship (countries)  
Source: Scopus (2024)

### 3.7 Roles of nonprofits in social service delivery

The bibliometric analysis reveals that nonprofit organisations play multifaceted roles in delivering social services, addressing critical gaps in public and private sector provision. The literature highlights NPOs' contributions across health, education, housing, economic development, and advocacy, as evidenced by key studies within the dataset. For instance, NPOs like the American Red Cross and Médecins Sans Frontières provide essential healthcare services, including mental health support and emergency care, particularly in crisis contexts (Chu et al., 2022; Knickman et al., 2016). In education, organisations such as Big Brothers Big Sisters offer mentorship programmes that enhance youth outcomes (Herrera et al., 2023). Housing-focused NPOs, like Habitat for Humanity, address homelessness and housing insecurity through affordable housing solutions (Doleac et al., 2024).

Additionally, NPOs engage in economic development by providing job training and financial literacy programmes, supporting disadvantaged communities (Choto et al., 2020). The emergence of advocacy and social justice as key themes, as shown in Figure 5, underscores NPOs' growing role in addressing systemic inequalities, such as racial justice and environmental sustainability (Alexander & Fernandez, 2021; Rigolon & Gibson, 2021). These roles are particularly pronounced in Africa, where NPOs supplement limited governmental resources, though research on this region remains limited (Mubangizi, 2022). The shift toward governance and social capital in recent literature (Figure 5) further indicates that NPOs are increasingly recognised for their organisational dynamics and community engagement, which enhance service delivery effectiveness. This synthesis underlines the need for continued research to fully understand NPOs' impact and to address regional disparities in research focus.

### **3.8 Discussion**

This complex area of study has yielded valuable insights into the evolving role of nonprofit organisations in delivering social services, reflecting the profound changes in the sector (Tu, 2021). The growing body of research underscores the need to understand NPOs' intricate roles and their significant impact on social service delivery worldwide. Some studies explored the potential challenges and pitfalls, while others highlighted the innovative promise of NPOs. Balancing both opportunities and challenges will be crucial in shaping resilient social service institutions for the future. The global landscape of NPO research also revealed significant contributions from technologically advanced nations and emerging economies alike. This highlights the importance of integrating NPOs into diverse social service frameworks and adopting a coordinated international strategy to address challenges such as resource allocation and service delivery inefficiencies. Effective regulation and interdisciplinary collaboration are essential for promoting innovation while ensuring effective oversight (Bozic, 2021).

Recent advancements in technology have transformed research on NPOs, leading to a deeper understanding of how digital tools and innovations impact service delivery and governance. Analysing the complex relationships between NPOs and traditional social service structures requires expertise in technology, economics, and regulatory fields (Suykens et al., 2023). Research centres focusing on these domains have produced new insights, emphasising the need for future cross-domain collaboration to fully grasp the benefits and challenges of technological changes in social services. This analysis further revealed the intricate networks of co-authorship and co-occurrence of author keywords that drive NPO research across different countries and disciplines. Scholars from various fields are increasingly recognising the importance of collaboration to share insights, enhance understanding, and develop strategies to address the evolving nature of social services. The nature of co-authorship networks highlighted the complex collaborations required to advance knowledge in this area. No single discipline holds a monopoly on understanding; diverse perspectives across borders foster innovative approaches to perennial challenges. These collaborative networks contribute to shared progress and knowledge.

As NPOs continue to evolve and adapt, research must explore their connections to broader social service risks and opportunities. The dynamic environment of social services demands robust frameworks to manage risks and adapt regulations that support NPO advancements. Recent research underscores the crucial role of NPOs in informing policies and practices, ensuring growth while maintaining stability. As discussed by Adro and Leitão (2020), it is essential for research to keep pace with the rapid changes in the sector. The strategic value of NPO research is partly reflected in the investments made both domestically and internationally. Such support encourages significant projects and balances opportunities with thorough risk management, crucial for ensuring reliability. Ongoing progress highlights the role of research in navigating the trade-offs between innovation and stability in the social services sector. As indicated in this review, academics must provide insights that enable continued progress without compromising the strength or trust in the system. Adaptability to regulatory changes is essential for maintaining a focus on both implementation and oversight.

The continuous evolution of social services driven by NPOs brings both opportunities and challenges. This analysis emphasises the need for sustained academic scrutiny to effectively manage these changes. Maximising the benefits of NPOs while safeguarding stability requires ongoing study and international collaboration. Academia must attentively monitor the impacts and respond with sound regulations and solutions that balance progress with protection. As NPOs continue to innovate and influence social services, judicious oversight will be critical to ensuring continued benefits with manageable risks.

While research on NPOs' influence on social service delivery has significantly increased, assessing its global impact remains crucial. The expanding literature stressed the recognition

that NPOs profoundly affect social services worldwide. Publications span various disciplines and countries, emphasising the universal stakes involved. Therefore, coordinated efforts are necessary to address challenges through a comprehensive understanding of diverse perspectives. Local factors such as regulation and societal adoption also shape outcomes, necessitating tailored solutions. A holistic approach and international cooperation are key to understanding NPOs' role in complex social systems as changes accelerate (Yalman Yildirim, 2024).

#### 4. Conclusions

This bibliometric analysis of nonprofit organisation literature from 1990 up to June 2024 maps global research trends, revealing thematic shifts toward advocacy, governance, and crisis response. The findings highlight NPOs' critical role in addressing gaps in social service delivery, particularly in health, education, and economic development, while revealing significant regional disparities in research output. Countries like the United States, United Kingdom, and Australia lead due to robust academic infrastructures, whereas limited contributions from regions like Africa reflect funding constraints, infrastructural challenges, and political instability. Social origins theory attributes these disparities to historical and institutional differences, such as Africa's reliance on community-based systems versus the established nonprofit sectors in the U.S. and U.K. These disparities emphasise the need for a more inclusive approach to NPO research to capture diverse perspectives and enhance global social service ecosystems. The study's insights call for sustained international collaboration and adaptive regulatory frameworks to support NPOs' evolving roles. By addressing research gaps, particularly in underrepresented regions, future studies can better inform policymakers and practitioners, ensuring resources and strategies strengthen NPOs' impact worldwide.

#### 5. Recommendations for practitioners and policymakers

The findings of this bibliometric analysis offer several actionable recommendations for practitioners and policymakers to enhance the role of NPOs in social service delivery. First, practitioners should prioritise international collaborations, as evidenced by Figure 7, to share best practices and resources, particularly for NPOs in under-resourced regions like Africa. For example, establishing partnerships with organisations in the United States or the United Kingdom could facilitate knowledge transfer and capacity building (Gazley & Guo, 2020). Second, policymakers should increase funding for NPO research in Africa, addressing the disparity highlighted in Figure 4, by creating targeted grants or regional research hubs to support local scholars (Ayinkamiye & Spencer, 2021). Third, NPOs should integrate digital tools to enhance service delivery, as suggested by recent technological advancements in the sector (Suykens et al., 2023), such as using data analytics for programme evaluation. Fourth, policymakers should develop regulatory frameworks that balance innovation with oversight, ensuring NPOs can adapt to emerging challenges like advocacy and governance without compromising accountability (Bozic, 2021). Finally, practitioners should focus on building social capital through community engagement, as indicated by Figure 5, to strengthen service delivery impact. These recommendations aim to bridge research gaps, enhance NPO effectiveness, and inform evidence-based policies for sustainable social services.

#### 6. Limitations and future research

While this bibliometric review offers a comprehensive analysis of the research landscape concerning non-profit organisations and social services, several limitations must be acknowledged. First, the study was limited to documents within the Scopus database. Although extensive, Scopus may exclude relevant articles from smaller or regional journals crucial to the field. Additionally,

the focus on scholarly publications may have excluded valuable insights from industry reports, white papers, and other forms of 'grey' literature that contribute significantly to understanding NPOs and social services. Another limitation is the reliance on specific search terms, which might have inadvertently excluded relevant studies that do not use the exact keywords.

Furthermore, bibliometric methods such as co-authorship and co-occurrence of keywords, among others, inherently reflect past impacts, often overlooking the most recent or emerging trends in the field. To advance future research and gain a more comprehensive understanding of NPOs and social services, it is essential to broaden the analytical scope. Incorporating a wider array of databases and grey literature sources would enhance the depth of analysis. Utilising advanced text-mining and natural language processing techniques could help uncover emerging patterns and topics more effectively. Implementing a longitudinal approach would also be beneficial, allowing researchers to track changes in research topics and collaborations over time. This could provide insights into how significant global events, such as the COVID-19 pandemic, have influenced research trajectories.

Additionally, qualitative studies that delve into the content of key articles could offer a richer understanding of the impact of NPO developments on social service delivery. Methodologies like case studies, expert interviews, and thematic analysis could offer a nuanced exploration of the field's complexities, beyond publication and citation metrics. However, despite these limitations, this review provides valuable insights into the existing research landscape and emphasises critical areas for further exploration. It also lays the groundwork for more comprehensive future reviews and stresses the value of continual reassessment to keep pace with the evolving landscape of NPO research. By mapping out the contributions, trends, and gaps in the literature, it serves as a foundational resource for scholars and practitioners aiming to deepen their understanding of NPOs and social services. The analysis underscores the importance of interdisciplinary collaboration and the integration of diverse methodological approaches to fully capture the dynamic and multifaceted nature of the sector. Moreover, this review indicates the need for ongoing engagement with policymakers, practitioners, and other stakeholders to ensure that future research remains relevant and impactful. By bridging the gap between academic research and practical application, there is an opportunity to better inform decision-making processes and contribute to the development of more effective and sustainable social services. As the field continues to evolve, embracing a more holistic and inclusive approach to bibliometric analysis will be crucial in capturing the full spectrum of knowledge that drives innovation and progress in NPOs and social services.

### **Biography notes**

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## References

- Abdieva, Y. (2023). Humanitarian Intervention. In *The Palgrave Encyclopedia of Global Security Studies* (pp. 754–758). Cham: Springer International Publishing.
- Adekugbe, A. P., & Ibeh, C. V. (2024). Innovating service delivery for underserved communities: Leveraging data analytics and program management in the US context. *International Journal of Applied Research in Social Sciences*, 6(4), 472–487.
- Alexander, J., & Fernandez, K. (2021). The impact of neoliberalism on civil society and nonprofit advocacy. In *Nonprofit Policy Forum* (Vol. 12, No. 2, pp. 367–394). De Gruyter.
- Ali, I., Balta, M., & Papadopoulos, T. (2023). Social media platforms and social enterprise: Bibliometric analysis and systematic review. *International Journal of Information Management*, 69, article 102510.
- Alsharif, A. H., MD Salleh, N. Z., & Baharun, R. (2020). Bibliometric analysis. *Journal of Theoretical and Applied Information Technology*, 98(15), 2948–2962.
- Anyidoho, N. A., & Kpessa-Whyte, M. (2023). Africa's social policy trajectories since the colonial period (Working paper, E92023). GETSPA.
- Ayinkamiye, E. (2021). An investigation of funding models that influence the sustainability of selected non-profit organisations in Cape Town (Doctoral dissertation, Cape Peninsula University of Technology).
- Ayinkamiye, E., & Spencer, J. (2021). An investigation of funding models that influence the sustainability of selected non-profit organisations in Cape Town, South Africa. *African Journal of Public Affairs*, 12(3), 62–90.
- Baluch, A. M., & Ridder, H. G. (2021). Mapping the research landscape of strategic human resource management in nonprofit organizations: A systematic review and avenues for future research. *Nonprofit and Voluntary Sector Quarterly*, 50(3), 598–625.
- Bortolazzi, O. (2020). Nonprofit management context: The Middle East and North Africa. In *The Routledge Companion to Nonprofit management* (pp. 91–102). Routledge.
- Bozic, A. (2021). Global trends in a fragile context: Public–nonpublic collaboration, service delivery and social innovation. *Social Enterprise Journal*, 17(2), 260–279.
- Brewster, A. L., Wilson, T. L., Frehn, J., Berish, D., & Kunkel, S. R. (2020). Linking Health And Social Services Through Area Agencies On Aging Is Associated With Lower Health Care Use And Spending: An examination of the potential health impacts of establishing partnerships between hospitals and Area Agencies on Aging. *Health Affairs*, 39(4), 587–594.
- Bruzelius, C. (2020). Non-for-profits and EU citizens' cross-border social rights in different welfare states. *Journal of Social Policy*, 49(3), 601–621.
- Bryson, J. M. (2018). *Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement*. John Wiley & Sons.
- Burger, A., & Veldheer, V. (2001). The growth of the nonprofit sector in the Netherlands. *Nonprofit and Voluntary Sector Quarterly*, 30(2), 221–246.
- Burkle Jr, F. M. (2006). Globalization and disasters: Issues of public health, state capacity and political action. *Journal of International Affairs*, 241–265.
- Casey, J. (2016). Comparing nonprofit sectors around the world: What do we know and how do we know it?. *Journal of Nonprofit Education and Leadership*, 6(3), 187–223. Available here

- Choto, P., Iwu, C. G., & Tengeh, R. K. (2020). Non-profit organisations and socio-economic development in South Africa: A literature analysis. *Humanities & Social Sciences Reviews*, 8(2), 689-600.
- Chu, E., Lubis, N., & Alcock, R. (2022). Improving mass casualty planning in low resource settings: Médecins Sans Frontières and International Committee of the Red Cross perspective. *British Journal of Anaesthesia*, 128(2), e92-e96.
- Cipriano, M., Za, S., & Bednar, P. M. (2023). The digital transformation of non-profit organisations in the United Kingdom: A multiple case study. *ITAIS 2023 Proceedings*. Available here
- Dag, R. (2018). The spillover effect of the Syrian crisis on the peace process in Turkey. *Journal of Asian and African Studies*, 53(8), 1251-1270.
- Delardas, O., Kechagias, K. S., Pontikos, P. N., & Giannos, P. (2022). Socio-economic impacts and challenges of the coronavirus pandemic (COVID-19): an updated review. *Sustainability*, 14(15), article 9699.
- do Adro, F. J. N., & Leitão, J. C. C. (2020). Leadership and organizational innovation in the third sector: A systematic literature review. *International Journal of Innovation Studies*, 4(2), 51-67.
- Doleac, A., Langar, S., & Sulbaran, T. (2024). Balancing Sustainability: An Analysis of Habitat for Humanity Affiliates in Mississippi. *Sustainability*, 16(4), article 1609.
- Donthu, N., Kumar, S., Pandey, N., & Gupta, P. (2021). Forty years of the International Journal of Information Management: A bibliometric analysis. *International Journal of Information Management*, 57, article 102307.
- Einolf, C. J. (2015). The social origins of the nonprofit sector and charitable giving. In *The Palgrave handbook of global philanthropy* (pp. 509-529). London: Palgrave Macmillan UK.
- Ejaz, H., Zeeshan, H. M., Ahmad, F., Bukhari, S. N. A., Anwar, N., Alanazi, A., ... & Younas, S. (2022). Bibliometric analysis of publications on the omicron variant from 2020 to 2022 in the Scopus database using R and VOSviewer. *International Journal of Environmental Research and Public Health*, 19(19), article 12407.
- Fourie, P. (2006). AIDS, Poverty and Development in Southern Africa. In *The Political Management of HIV and AIDS in South Africa: One Burden Too Many?* (pp. 25-49). London: Palgrave Macmillan UK.
- Gabrielle, E. L. (2021). *African Nongovernmental Organizations and Their Relationships with Globally Northern Funders: A Study of the Expression of Everyday Creative Agency*. University of Nebraska at Omaha.
- Gazley, B., & Guo, C. (2020). What do we know about nonprofit collaboration? A systematic review of the literature. *Nonprofit Management and Leadership*, 31(2), 211-232. Hemerijck, A. (2013). *Changing welfare states*. Oxford University Press.
- Henriksen, L. S., Smith, S. R., & Zimmer, A. (2012). At the eve of convergence? Transformations of social service provision in Denmark, Germany, and the United States. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 23, 458-501.
- Henriksen, L. S., Smith, S. R., Thøgersen, M., & Zimmer, A. (2016). On the road towards marketization? A comparative analysis of nonprofit sector involvement in social service delivery at the local level. *Local public sector reforms in times of crisis: National trajectories and international comparisons*, 221-236.

- Herrera, C., DuBois, D. L., Heubach, J., & Grossman, J. B. (2023). Effects of the Big Brothers Big Sisters of America Community-Based Mentoring Program on social-emotional, behavioral, and academic outcomes of participating youth: A randomized controlled trial. *Children and Youth Services Review*, 144, article 106742.
- Hossain, N. U. I., Dayarathna, V. L., Nagahi, M., & Jaradat, R. (2020). Systems thinking: A review and bibliometric analysis. *Systems*, 8(3), article 23.
- Huang, Y. J., Cheng, S., Yang, F. Q., & Chen, C. (2022). Analysis and visualization of research on resilient cities and communities based on VOSviewer. *International Journal of Environmental Research and Public Health*, 19(12), article 7068.
- Ji, Y. G., Tao, W., & Rim, H. (2020). Mapping corporate social responsibility research in communication: A network and bibliometric analysis. *Public Relations Review*, 46(5), article 101963.
- Jönsson, J., & Huzzard, T. (2021). Responding to funding scarcity: governance challenges in Swedish and South African development partnerships. *Journal of Accounting & Organizational Change*, 17(1), 91-110.
- Kennedy-Kish, B., Sinclair, R., Carniol, B., & Baines, D. (2017). Case critical: Social services and social justice in Canada. *Between the Lines*.
- Knickman, J., Krishnan, K. R. R., Pincus, H., Blanco, C., Blazer, D., Coye, M., ... & Vitiello, B. (2016). Improving access to effective care for people who have mental health and substance use disorders. *National Academy of Medicine*.
- Lambin, R. A. (2023). Philanthropic donor agencies and social policy in sub-Saharan Africa—New perspectives to the “welfare mix”. *Journal of International and Comparative Social Policy*, 39(3), 306-318.
- Lee, B. A., Shinn, M., & Culhane, D. P. (2021). Homelessness as a moving target. *The Annals of the American Academy of Political and Social Science*, 693(1), 8-26.
- Lindsey, P., Baghai, M., Bigurube, G., Cunliffe, S., Dickman, A., Fitzgerald, K., ... & Robson, A. (2021). Attracting investment for Africa’s protected areas by creating enabling environments for collaborative management partnerships. *Biological Conservation*, 255, article 108979.
- Marumahoko, S. (2023). Urban local government service delivery in post-Mugabe Zimbabwe. In *Global encyclopedia of public administration, public policy, and governance* (pp. 13123-13130). Cham: Springer International Publishing.
- Mazov, N. A., Gureev, V. N., & Glinskikh, V. N. (2020). The methodological basis of defining research trends and fronts. *Scientific and Technical Information Processing*, 47, 221-231.
- McAllister, J. T., Lennertz, L., & Atencio Mojica, Z. (2022). Mapping a discipline: a guide to using VOSviewer for bibliometric and visual analysis. *Science & Technology Libraries*, 41(3), 319-348.
- McGregor-Lowndes, M., & Williamson, A. (2018). Foundations in Australia: Dimensions for international comparison. *American Behavioral Scientist*, 62(13), 1759-1776.
- Mer, A., & Viridi, A. S. (2021). Human resource challenges in NGOs: need for sustainable HR practices. *World Review of Entrepreneurship, Management and Sustainable Development*, 17(6), 818-837.
- Mingers, J., & Lipitakis, E. (2010). Counting the citations: A comparison of Web of Science and Google Scholar in the field of business and management. *Scientometrics*, 85(2), 613-625.

- Mncube, T. (2023). Exploring how NPO leaders maintained effective organisational performance amid the Covid-19 pandemic. *OpenUCT*. <http://hdl.handle.net/11427/39660>
- Moral-Muñoz, J. A., Herrera-Viedma, E., Santisteban-Espejo, A., & Cobo, M. J. (2020). Software tools for conducting bibliometric analysis in science: An up-to-date review. *Profesional de la Información*, 29(1). <https://doi.org/10.3145/epi.2020.ene.03>
- Morkel, C. (2022). The state and civil society in building a capable developmental state: A case of the National Department of Social Development and the non-profit organisations sector in South Africa. *Journal of Public Administration*, 57(1), 54-74.
- Mubangizi, B. C. (2022). The Interplay between Civil Society and Local Government in South Africa: Conflict and Collaboration in the Delivery of Public Services. *African Journal of Development Studies*, (s1), article 39.
- Nájera-Sánchez, J. J., Ortiz-de-Urbina-Criado, M., & Mora-Valentín, E. M. (2020). Mapping value co-creation literature in the technology and innovation management field: A bibliographic coupling analysis. *Frontiers in psychology*, 11, article 588648.
- Nsanzumuhire, S. U., & Groot, W. (2020). Context perspective on University-Industry Collaboration processes: A systematic review of literature. *Journal of Cleaner Production*, 258, article 120861.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *Bmj*, article 372.
- Phiri, M. Z. (2023). Against Imperial Social Policy: Recasting Mkandawire's Transformative Ideas for Africa's Liberation. *Critical Sociology*, 49(3), 437-455.
- Pitowsky-Nave, N. (2024). From "crisis" to "opportunity": Israeli social service nonprofits' responses to COVID-19. *Human Service Organizations: Management, Leadership & Governance*, 48(3), 271-284.
- Renz, D. O., Brown, W. A., & Andersson, F. O. (2023). The evolution of nonprofit governance research: Reflections, insights, and next steps. *Nonprofit and Voluntary Sector Quarterly*, 52(1\_suppl), 241S-277S.
- Ressler, R. W., Paxton, P., Velasco, K., Pivnick, L., Weiss, I., & Eichstaedt, J. C. (2021). Nonprofits: A public policy tool for the promotion of community subjective well-being. *Journal of Public Administration Research and Theory*, 31(4), 822-838.
- Rigolon, A., & Gibson, S. (2021). The role of non-governmental organizations in achieving environmental justice for green and blue spaces. *Landscape and Urban Planning*, 205, article 103970.
- Roets, G., Kessl, F., & Lorenz, W. (2023). New charity economy and social work: Reclaiming the social dimension of public life in the context of changing welfare rationales. *Social Work & Society*, 21(2), 1-21.
- Salamon, L. M., & Anheier, H. K. (1998). Social origins of civil society: Explaining the nonprofit sector cross-nationally. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 9, 213-248.
- Salamon, L. M., Sokolowski, S. W., & Haddock, M. A. (2017). Explaining civil society development: A social origins approach. JHU Press.

- Sánchez, A. D., del Río, M. D. L. C., & García, J. Á. (2017). Bibliometric analysis of publications on wine tourism in the databases Scopus and WoS. *European Research on Management and Business Economics*, 23(1), 8–15.
- Santos, M. R., & Laureano, R. M. (2022). COVID-19-related studies of nonprofit management: A critical review and research agenda. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 33(5), 936–951.
- Scopus. (2024). Search results for publications on ‘nonprofits’ role in the delivery of social services’ (1990 – June 2024). Retrieved July 24, 2024, from <https://www.scopus.com>
- Sharifi, A. (2021). Urban sustainability assessment: An overview and bibliometric analysis. *Ecological Indicators*, 121, article 107102.
- Shi, Y., Jang, H. S., Keyes, L., & Dicke, L. (2020). Nonprofit service continuity and responses in the pandemic: Disruptions, ambiguity, innovation, and challenges. *Public Administration Review*, 80(5), 874–879.
- Sibisi, N., & Makka, A. (2022). Financial challenges experienced by South African non-profit organisations regarding CSR implementation. *Social Responsibility Journal*, 18(6), 1089–1105.
- Skandrani, H., Kooli, K., & Doudech, N. (2021). Inhibitors of non-for-profit organisations’ activities and survival in a crisis context. *Qualitative Market Research: an international journal*, 24(4), 521–554.
- Stötzer, S., Kaltenbrunner, K., Grüb, B., & Martin, S. (2022). Coping with COVID-19—which resilience mechanisms enabled Austrian nonprofit organizations to weather the pandemic storm?. *Schmalenbach Journal of Business Research*, 74(4), 497–535.
- Suykens, B., Maier, F., Meyer, M., & Verschuere, B. (2023). Business-like and still serving society? Investigating the relationship between NPOs being business-like and their societal roles. *Nonprofit and Voluntary Sector Quarterly*, 52(3), 682–703.
- Tortia, E. C., Sacchetti, S., & López-Arceiz, F. J. (2022). A human growth perspective on sustainable HRM practices, worker well-being and organizational performance. *Sustainability*, 14(17), article 11064.
- Tu, X. (2021). Understanding the role of nonprofit organizations in the provision of social services in China: an exploratory study. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 32(4), 767–779.
- Vignal, L. (2017). The changing borders and borderlands of Syria in a time of conflict. *International Affairs*, 93(4), 809–827.
- Warburton, J., Moore, M., & Oppenheimer, M. (2018). Challenges to the recruitment and retention of volunteers in traditional nonprofit organizations: a case study of Australian meals on wheels. *International Journal of Public Administration*, 41(16), 1361–1373.
- Whitman, A., De Lew, N., Chappel, A., Aysola, V., Zuckerman, R., & Sommers, B. D. (2022). Addressing social determinants of health: Examples of successful evidence-based strategies and current federal efforts. *Off Heal Policy*, 1, 1–30.
- Yalman Yıldırım, Z. (2024). Guiding principles for university and nonprofit organization collaboration in industrial design education [Ph.D. - Doctoral Program]. Middle East Technical University. <https://hdl.handle.net/11511/110410>

- Yang, K., & Thoo, A. C. (2023). Visualising the knowledge domain of reverse logistics and sustainability performance: Scientometric mapping based on VOSviewer and CiteSpace. *Sustainability*, 15(2), article 1105.
- Yazgan, P., Utku, D. E., & Sirkeci, I. (2015). Syrian crisis and migration. *Migration Letters*, 12(3), article 181.