BIBLIOMETRIC ANALYSIS OF BIBLIOTHERAPY LITERATURE IN SOUTH AFRICA

by

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ABSTRACT

Many scholars have underscored the importance of reading and its associated benefits. Indeed, substantial evidence supports the notion that engaging with diverse forms of literature can function as a therapeutic intervention. Through this, the field of library and information science has the potential to significantly contribute to the clinical profession through the use of literature and books as adjunct therapeutic tools, commonly referred to as bibliotherapy. Bibliotherapy involves an interaction between readers and literature guided by professionals or through self-guidance and recommendations. It serves as an essential mechanism for stress relief and coping. Additionally, it proves valuable in offender rehabilitation and for individuals experiencing depression. The hypothesis of this study posits that there is a lack of research productivity concerning the sub-discipline of 'bibliotherapy' in South Africa. Despite its importance and long history, bibliotherapy appears to lack full recognition in South Africa. Through a quantitative approach, this study analyses publication trends in bibliotherapy literature in South Africa, utilising a bibliometric research design to assess its practice. Data were obtained from Scopus, Web of Science and Google Scholar. Data from each database were analysed separately, although there were some duplications. The study established that from the 1924 publications out of the three databases, only 328 were from South Africa from the period 1924 to 2022 indicating low level of publications. Furthermore, the most produced publications are from the field of Psychology, and Information Science, which shows the interdisciplinary nature of bibliotherapy in the two fields of study. The study recommends raising awareness regarding the therapeutic role of bibliotherapy within South African communities, particularly in schools and libraries. This can be achieved through the use of media outlets, including campaigns, radio broadcasts, and television interviews, as well as collaborations with educational systems, healthcare organisations, churches, and libraries to ensure that communities are familiar with the concept of 'bibliotherapy.' A further qualitative study to establish why bibliotherapy is not fully practised as reflected in literature is recommended. The contribution of this study is categorised into two areas as scholarly benefits: this is the potential for interdisciplinary collaboration between fields of study such as information science, psychology, linguistics, and criminology; and social benefits as the findings may encourage the public and reading clubs to consider the therapeutic potential of books. This could lead to the utilisation of books as tools for therapy and self-improvement, benefiting individuals and communities.

Keywords: bibliotherapy, bibliometrics; self-help books; reading therapy; poetry therapy; book therapy; literary therapy; narrative therapy; bibliophilic therapy; expressive therapy.

GLOSSARY

Altmetric: Altmetrics refer to a methodology employed to gauge the influence and engagement of scholarly works, such as publications and journal articles, across various social platforms.

Author productivity: The measure of research output generated by one or more authors.

Bibliometrics: The quantitative assessment of scientific proficiency, which is mostly determined by the number of citations and publications. It also involves the compilation of bibliographies on specific study fields, complemented by the inclusion of citations.

Bibliotherapist: A type of a professional therapist involved in facilitating reading to improve the emotional and mental health of individuals.

Bibliotherapy: The therapeutic approach entails the utilization of diverse written materials, including books, to aid individuals in managing their psychological or emotional challenges.

Librametrics: A quantitative research approach employed to examine the various services and activities offered within library contexts.

Lotka's law: The inverse square law that demonstrate the prominence of publications of various field for instance, libraries.

Patentometrics: Patentometrics is a component of the metrics methodology frequently employed by informetrics scholars to examine the diverse attributes of patent documents.

Poetry therapy: A structured therapeutic approach that centres on the therapeutic alliance between the therapist and the client.

Publication indicators: These quantitative measurements can be employed to evaluate the influence and significance of a particular academic works.

Publication trends:	The evolution and transformations in the production and distribution of these works across different academic subjects, fields, or geographies.
Reading therapy:	A form of counselling that employs literature as a tool to aid individuals in addressing their psychological or emotional challenges.
Scientometrics:	A quantitative measure that encompasses fundamental activities such as science and technology indicators, information systems, cognitive structures, and the interplay between technology and society.
Self-help books:	A substantial contribution to the advancement of societal understandings pertaining to many illnesses.
Webometrics:	A metric of indexing websites hyperlinks, and networks to trace the reflection of publications

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Philippians 4:13

'*For I can do everything through Christ, who gives me strength'*.

DECLARATION

Name: Koketso Bernice Manamela

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Exact wording of the title of the dissertation as appearing on the electronic copy submitted for examination: *Bibliometric analysis of bibliotherapy literature in South Africa.*

I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality. I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.



10 September 2023

SIGNATURE DATE

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ABBREVIATIONS

BC:	Before Christ
CA:	Co-publications
CAM:	Complementary and Alternative Medicine
CGRP:	Compound Growth Rate of Publications
DBS	Discipline Buddy System
GS:	Google Scholar
NHMRC:	Australian National Health and Medical Research Council
NoP:	Number of Publications
PAY:	Productivity per year
PoP:	Publish or Perish
RAE:	Research Assessment Exercise
UK:	United Kingdom
VoV:	VosViewer
WWI:	First World War
WWII:	Second World War
WoS:	Web of Science
YoP:	Year of Publication

CHAPTER ONE
INTRODUCTION: SETTING THE SCENE

1.1 Introduction and background

Bibliotherapy is considered as a therapeutic method that utilizes literature to enhance mental well-being. It acts as an adjunct treatment by using literature for healing and developmental purposes. According to Brewster, Sen, and Cox (2014) the application of bibliotherapy assist individuals in dealing with their deep life experiences following a therapeutic plan aligned to their needs. For example, Oluwaseye, Akanni and Busuyi (2017) elaborates that individuals tend to experience emotional and psychological instabilities, such as family background issues, financial instabilities, diagnosed illnesses, bullying and other difficulties, which, in turn, may negatively impact one's behaviour in society. This opens the door for different explanations for bibliotherapy according to the context and individuals being served. In this regard, Czernianin, Czernianin and Chatzipentidis (2019) view bibliotherapy as a method focusing on a patient's behaviour, looking at his or her diagnosis as a major requirement prior to the therapeutic process. In this case, the therapeutic process is examined according to the patient's diagnosis to prescribe beneficial components of literature to assist the patient during the bibliotherapy process. Bibliotherapy arose from the perception that reading could influence an individual's attitude and behaviour, thus making it an influential component in shaping, moulding, and altering values (Lenkowsky 1987).

In the case of children diagnosed with mild intellectual impairment, profound literature and reading skills remain mandatory due to the psychological and cognitive behaviour influenced by this diagnosis (Czernianin, Czernianin & Chatzipentidis 2019). For children, auditory literature, and sound recognition, in conjunction with motor functioning, are recommended. Bibliotherapy practices among children diagnosed with mild intellectual impairment require artistic, educational, and cognitive literature. Alabish and Jothimani (2019) explain bibliotherapy as a therapeutic adjunct using literature to support good mental health. However, the authors perceive it as versatile in nature, cost-effective, and usable for developmental and clinical purposes. Furthermore, the clinical approach of bibliotherapy usually encompasses patients in a hospital setting under the supervision of a psychiatrist or psychologist, as compared to the developmental approach, where librarians and bibliotherapists are the ones driving the scheme. For example, individuals undergoing psychotherapy are described under

the clinical approach, whereby individuals enthusiastic about personal growth are described under the developmental approach (Lutovac & Kaasila 2019). However, both approaches were found to be active, regardless of their differences and contexts. Although the scope of bibliotherapy is versatile, scholars explain bibliotherapy from two approaches, namely the clinical approach and the developmental approach. Calkins, Dollar and Wideman (2019) brings in a more comprehensive perspective of bibliotherapy as an interface between a reader and literature under the supervision of professionals, or guidance and recommendations in the case of self-reading. According to Le Roux (2017), individuals' social progress and fulfilments create a better understanding of their proximity and make one appreciate what the human mind can offer. As a result, this substantially indicates that bibliotherapy is an effective method relevant to every subject area. According to Basari and Uzunboylu (2018), it is evident that all subject areas in bibliotherapy play a significant role in guiding individuals to recognise and resolve their problems through the use of literature. For this study, Calkins, Dollar and Wideman's (2019) views regarding bibliotherapy will be adopted because they encompass the components of the study and cover all subject areas conducted under bibliotherapy. The interest of this study is based on the broad context of bibliotherapy literature instead of the types of bibliotherapy as explained by Alabish and Jothimani (2019) and Czernianin, Czernianin and Chatzzipentidis (2019).

Despite the importance of bibliotherapy, as alluded to above, it is not fully recognised in South Africa. Hence, this study sought to analyse the publication trends of bibliotherapy literature in South Africa to assess its visibility using a bibliometric research design. Kumar (2014) states that bibliometric techniques are important mathematical and statistical tools applied to media and books. It is widely applied by scholars for the evaluation of scientific literature and research (Ani, Ngulube & Onyancha 2017). Furthermore, bibliometrics is suitable as the study opts to analyse the immense pools of publication trends and developments in various disciplines. It is used for analytical performances by countries, universities, and regions to evaluate the publications of scholars, disciplines, and researchers. As a result, and due to the limited number of bibliotherapy literature (Basari & Uzonboylu 2018), critical attention will be given to publication trends in the discipline 'bibliotherapy'. This study further conducted a bibliometric analysis of bibliotherapy literature with a view to enhancing awareness and visibility within the South African context. A review and analysis of bibliotherapy literature by Lenkowsky (1987), although over two decades old, reveals that not much has been done in this niche area, especially in South Africa. A walk in several public hospitals by the researcher revealed that

bibliotherapy is not used for healing but to complement prescribed medication. This is compounded by the lack of libraries in many hospitals to support bibliotherapy, except in a few, such as Tara Hospital (Ngoepe & Manamela 2022). However, it should be noted that in South Africa, bibliotherapy is unconsciously applied in prisons for the rehabilitation purposes of offenders through projects such as correctional centres and book clubs. It is therefore necessary to establish, through bibliometric analysis of bibliotherapy literature, if it is indeed produced and visible in South Africa.

1.2 Brief history of bibliotherapy

The term 'bibliotherapy' has a long history dating back to ancient days, although it was practised unconsciously. It was first practised around 300 Before Christ (BC) by the ancient Romans and Greeks, as people could make use of text as a therapeutic tool (McCullis 2012). During that time, ancient Greece labelled library entrances as healing for the 'soul.' This is an indication that bibliotherapy has always been associated with libraries and later developed in hospitals for mentally ill patients as well as prison facilities for prisoners. Christine and Davis (2017) elaborate that during the 1940s, bibliotherapy was limited to hospitals and spread over time to include prisons, rehabilitation facilities, and correctional facilities. Furthermore, the scope of bibliotherapy expanded from the medical setting to diverse settings such as school libraries, prisons, public libraries, and community groups (Tukhareli 2015).

This was the beginning of the prescription of books for therapy. The concept of bibliotherapy was formally coined for the first time by Samuel McChord Chrothers in 1916 (Gupta, Mishra & Saini 2017). Since then, Samuel Bagster (a philosopher who first published a Hebrew Bible) has initiated the idea of using literature as medicine in institutions (Miller 2018). Therefore, its historical use contemporaneously developed after the presentations published by "The Atlantic Monthly" on bibliotherapy by Crothers to students, librarians, professional meetings, and school librarians and gained capacity. It has been more than 100 years since the use of bibliotherapy spread over the world, with continents such as Asia and Europe applying it. As Ngoepe and Manamela (2022) would attest, across developed countries such as the United Kingdom, Canada, and the United States, bibliotherapy is often employed as a non-medical intervention to advance mental well-being, for psychoeducational and psychosocial benefits, and for the recovery of patients during hospitalisation. The outcomes indicate that bibliotherapy is a successful treatment in the mentioned countries.

In a study conducted by Petterson (2018), it was shown that bibliotherapy can help people across the globe with different reading experiences. Additionally, bibliotherapy is able to improve their reading comprehension. Other authors link bibliotherapy to war trauma. For example, Christine and Davis (2017) indicate that bibliotherapy was often practised in hospitals as an adjunct treatment for First World War (WWI) veterans. In addition, it was applied to children for the first time in 1946, immediately after the Second World War (WWII). For instance, during WWI in the United States, booksellers and doctors used books to treat patients with traumatic stress disorder at the Alabama Military Hospital (Stip, Ostlundh & Aziz 2020). Similarly, Velez and Prieto (2018) conducted a study on bibliotherapy as a therapeutic instrument in the health-disease process in childhood. Half of the studies conducted came from the United States; four were in Europe; South America carried out five studies; and North America carried out seven studies. As indicated by the scholars above, as to where bibliotherapy is recognised and published, sadly, the African continent is not mentioned. According to Ilogho, Alaola, Adekeyea, Gesindea, Adeusia and Ifijeh (2020), the majority of bibliotherapy literature and studies come from the most advanced nations like the United States, Germany, France, the United Kingdom, and, more recently, Asian countries.

As a result, this is questioning the bibliotherapy practices on African continents. Furthermore, the uncertainty and applicability of bibliotherapy in Africa are concerning since it has existed for a long time but has not been optimally practised. Hence, Ilogho et al. (2020) conducted a study to identify challenges hindering the lack of bibliotherapy practices in Africa. Regarding the South African context, there are no clear indications of the application of bibliotherapy. According to Le Roux (2017), there are regular complaints regarding the lack of reading culture in the South African context. This is emphasised by Ngoepe (2021) in a recent opinion piece in the Sowetan Newspaper, which states that reading in South Africa is associated with formal schooling. This implies that reading is rarely used for leisure or for bibliotherapy. If people cannot read when they are well and sound, how will they read when they are sick, stressed, or in jail? While books are often used for anxiety, free time, self-care, work, and love, bibliotherapy practice is often overlooked in sub-Saharan Africa. In South Africa, for example, Ngoepe and Manamela (2022) indicate that bibliotherapy is mostly unconsciously practised by a few individuals and insufficiently produced.

1.3 Problem statement

It is fundamental for researchers, particularly in quantitative studies, to clearly indicate the problem of the study since it establishes a full comprehension of the findings. Giri and Biswas (2019:108) describe the problem of the study as a statement that can be used to determine the in-depth of the research problem statement. For this study, the researcher indicates that 'there is a lack of publication productivity in the discipline of bibliotherapy in South Africa. For example, Le Roux (2017) opines that 85% of the South African population is labelled as non-readers, and more than half of the citizens have no books in their households. Therefore, a lack of reading culture can hinder the society from becoming familiar with and practicing bibliotherapy. This also impact the production of publications as it becomes unpractical to produce research on a discipline that is not acknowledged or recognized. Additionally, if the society possess poor interest in reading and the healing power emerging from books, ultimately this prevents bibliotherapy from taking place.

Furthermore, Robinson and Zhang (2011) indicate that between 70% and 95% of citizens in developing continents, which include Africa, Asia, Latin America, and the Middle East, make use of traditional medicine and herbals as their primary care to manage health needs. Besides the use of drugs for treatment and healing, Pal (2002) emphasises that there are also other healing treatment approaches, such as philosophers and therapists, existing outside the frame of conventional treatment, categorised as Complementary and Alternative Medicine (CAM thereafter). According to Pal (2002), CAM consists of heterogeneous methods of therapeutics provided to promote readers' health and wellbeing without the use of drugs or medication, and bibliotherapy is one of the most beneficial therapies in this regard.

The use of literature as a treatment does help individuals with mental health disorders improve their quality of life (Czernianinhttps, Czernianinhttps & Chatzipentidis 2019). Also, 60% of the 121 respondents in the study of Pehrsson and McMillen (2010) acknowledged bibliotherapy as a therapeutic treatment, which is best considered an independent discipline derived from literature. Xu, Liu, Guo, Gao, Gao, Liu, Li and Yang (2020) indicate that, besides being an important part of art therapy, bibliotherapy also has a wide range of publications across the globe. In contrary, there is not a comprehensive study that focuses on the development and trends in this field and in other parts of the globe, especially in Africa (Miller 2018). In this regard, the study opts to analyse publication patterns and trends of bibliotherapy literature within the South African context, using bibliometric research design.

1.4 The purpose and objectives of the study

This study sought to conduct a bibliometric analysis of bibliotherapy literature in South Africa with the view to analysing its growth and productivity in terms of publications. The specific objectives were to:

- Analyse the publication trends of bibliotherapy literature in South Africa
- Identify the majority of publishing authors in bibliotherapy literature.
- Analyse subject areas published in bibliotherapy literature.
- Identify the most prolific journals on bibliotherapy literature in South Africa
- Identify the top publishing affiliations for bibliotherapy literature in South Africa

1.5 Scope and delimitation of the study

According to Akanle, Ademuson and Shittu (2020), the scope of the study is a section that allows the researcher to discuss the various aspects of the research, such as the main findings, the objectives, and the research areas. For this study, the scope evolves around databases instead of human beings. In addition to that, the study involves no human interaction; as a result, databases remain the target population. Furthermore, the study is based on the biggest online databases in the world to retrieve publication trends in bibliotherapy within the South African context. This database encompasses the Web of Science, Scopus and Google Scholar. Also, regarding the delimitation of the study, Theofandis and Fountouki (2018) indicate the delimitation of the study as the author's responsibility for setting the limits that they deem necessary to ensure that the study's objectives and goals are not lost. For the purpose of this study, the initial publication year of bibliotherapy, up until the current year as retrieved from the above-mentioned databases forms components of the limitations of the study. For instance, the WoS indicates limitations of 1946–2023 and 1922–2023 for Scopus. Moreover, this study includes the identification of search term keywords using VosViewer software as another component of the limitations of the study. In essence, the interest of this study is based on the comprehensive context of bibliotherapy literature instead of the practices and types of bibliotherapy.

1.6 Conceptual framework

It is significant for researchers to project a framework that will guide the entire study, regardless of whether the study relies on a theoretical or conceptual point of view. According to Adom, Adom, Hussain and Agyem (2018) the significance of both conceptual and theoretical frameworks is to provide enough justification for the study. Furthermore, the frameworks are selected based on the objectives of the study, including what the researcher intends to archive. Alternatively, both the theoretical and conceptual frameworks are frequently used interchangeably however, they play different roles. For instance, Kivunja (2018) explains that a theoretical framework is made up of existing theories that have been previously published and are commonly used to come up with a comprehensive understanding of the study. On the other hand, a conceptual framework refers to the integration of the interlinking concepts of a study, providing a comprehensive understanding of the phenomenon to be studied (Jabareen 2009).

Looking at the nature and objectives of this study, it is important to consider the notation of a conceptual framework (De Vos et al. 2011:35). In addition to that, a study that consists of a clear conceptual framework determines a profound scientific structure and direction for the study (Ngulube, Mathipa & Gumbo 2015). Hence, the researcher opted for a conceptual framework as there were insufficient existing theories to create a solid framework regarding the phenomenon. Moreover, opting for a conceptual framework helped identify and construct the researcher's worldview when looking at the phenomenon. It also provides an overview of the various factors that will affect the development of the study. According to Ngulube, Mathipa and Gumbu (2015), researchers use conceptual frameworks to rigorously understand and explain their world. As a result, the researcher deemed critical to link concepts of metrics, one of the bibliometric design, databases, and the indicators to formulate the conceptual framework for the study (see fig 1.1).

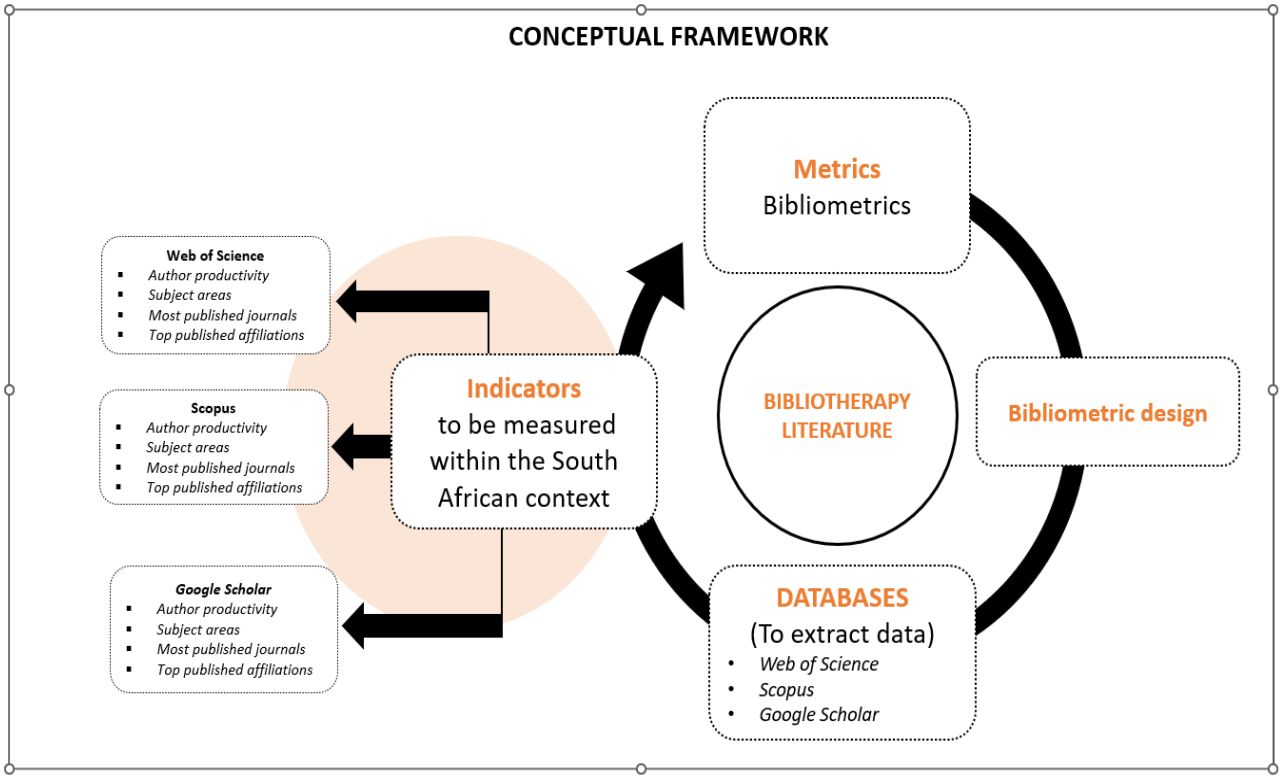


Figure 1.1: Conceptual framework consolidated by the researcher (2023)

The conceptual framework used in this study is derived from various literary constructs, including metrics as indicated above. Additionally, Chellappandi and Vijayakumar (2018) state that metrics are derived from the application of mathematical techniques to the content of scientific studies. It was later expanded to serve as a catch-all, rather than an umbrella for other metrics. These discipline metrics include, for example, scientometrics, webometrics/cytometrics, librametrics, almetrics, patentometrics, and bibliometrics. As a result, the study was conducted using bibliometrics design. Furthermore, the conceptual framework incorporates selected databases which includes WoS, Scopus, and GS. Finally, the conceptual framework focuses on the indicators to be indexed in the bibliotherapy literature. Publication trends, authors, subject areas, journals, and affiliations are among the indicators. As a result, in Chapter Two of the study, a comprehensive conceptual framework is discussed.

1.7 Preliminary literature review

A literature review is a summary of other researchers' existing knowledge or theories that forms part of research (Mudavanhu 2017). It provides context for the study by exposing its objectives in the form of themes (Bruce 1994). Maluleka (2014), on the other hand, explains that the

process of reviewing literature prevents researchers from re-instilling knowledge into their existing knowledge. The review of related literature for this study will be divided into five themes that correspond to the study's research objectives: the trends growth of bibliotherapy publications, author productivity, journal productivity, productivity by subject, and bibliotherapy productivity by affiliations. The indicative themes are of considerable significance since, they establish the presence of deficiencies and potential areas for further investigation which necessitate the study (Pagliarussi 2020). As a result, in chapter two of this study, a detailed literature review will be discussed.

1.8 Significance of the study

According to Adu and Okeke (2022:32), the significance of a study is an integral component of any academic work. It is often articulated to elucidate the study's purpose and its potential contributions to the advancement of academic knowledge. Consequently, concerns have been raised regarding the deficient reading culture in South Africa, owing to the paucity of empirical evidence in research (Le Roux 2017). As long as this reading culture deficit persists, the application of bibliotherapy as a healing tool through the use of books will remain limited (Aramide 2020). It is imperative for the country to foster a robust reading culture, recognizing books as a complementary therapeutic tool. To the best of the researcher's knowledge, the extent and application of bibliotherapy in both clinical and non-clinical settings within the country remain opaque.

Hence, there is an urgent need to address the issues concerning the existence and visibility of bibliotherapy through a bibliometric analysis of the literature, in order to assess the level of publications preceding its practical implementation. For instance, the practice of bibliotherapy could have been particularly beneficial to citizens during lockdown, providing a means to alleviate stress. It is worth pondering how many individuals turned to books for solace during these trying times. Since the healing power of books has been acknowledged, many readers intuitively grasp the benefits inherent in engaging with reading materials. Consequently, some readers become so engrossed in reading that they may not even realize they are engaging in bibliotherapy. These avid readers are often referred to as self-help readers, reading without formal guidance from a bibliotherapist. In a nutshell, South Africa appears to lack bibliotherapy, despite its significance and extensive historical background. The impetus for lack of bibliotherapy stems from the researcher's extensive experience working in a hospital

setting over the years. As a result, the significance of this study centres around the scholarly benefits of interdisciplinary collaboration amongst fields of study such as information science, psychology, linguistics, and criminology. This further includes awareness of the therapeutic function of bibliotherapy in South African communities, with a specific focus in hospitals, schools, and libraries. However, this can be accomplished by utilizing various media platforms such as campaigns, radio broadcasts, and television interviews, along with partnerships with educational institutions, healthcare organizations, churches, and the wider community. Hence, this study employs a quantitative methodology to examine the patterns of publication in bibliotherapy literature in South Africa. The research design employed is bibliometric, which allows for an analysis of the publication's productivity.

Moy (2017) noted that Samuel McChord Chrothers was a pivotal figure in this context. Consequently, the publication productivity within the domain of bibliotherapy literature assumes paramount importance in this study. Furthermore, the study's findings will serve as a foundational resource for raising awareness about bibliotherapy within the community. The intention is to incorporate bibliotherapy as a valuable component of community engagement initiatives, reaching out to schools and libraries across South Africa. This initiative will be spearheaded by the Department of Information Science at the University of South Africa.

1.9 Definition of key terms

It is essential that the study include the necessary definitions to help make the concepts more understandable. As Saurombe (2016) emphasises, these definitions serve the critical purpose of facilitating a more accurate and thorough analysis of the concepts and ideas under examination. Therefore, this study places particular emphasis on defining four essential terms: bibliotherapy, self-help books, reading therapy, and poetry therapy. These definitions are integral to the context of the study and are elaborated upon below.

1.9.1 Bibliotherapy

The concept of bibliotherapy encompasses the meeting point of books and individuals with the aim of addressing emotional and physical issues. According to Oztemic and Tekindal (2022), bibliotherapy allows individuals to recover from various illnesses in exchange for connecting

them with various reading materials and improving their quality of life. Alternatively, bibliotherapy services can be provided using other artistic methods, such as poems.

1.9.2 Self-help books

The concept of a self-help book is like a book of advice; however, it focuses on providing readers with the necessary resources to solve their own problems. In contrast, self-help books also refer to self-improvement, which is regarded as a significant contribution to the development of social concepts regarding various illnesses (Wikipedia 2022, Sv 'self-help book'). Furthermore, self-help books help readers generally understand the complex and ineffable aspects of behavioural and emotional life.

1.9.3 Reading therapy

Reading therapy is a type of counselling that uses books to help individuals deal with their psychological or emotional problems. It is predicated on the idea that reading can enhance one's wellbeing and offer knowledge development and inspiration (Yang & Lin 2022). Alternatively, Bruneau and Pehrsson (2014) elaborate on reading therapy as a procedure that entails the utilisation of reading materials to aid in one’s self-healing. For instance, in the case of children, reading assists in managing their contentious situations in addition to helping them recognise trauma by developing healing.

1.9.4 Poetry therapy

Poetry therapy is the practice of expressing one's feelings through various language and arts activities such as writing, speaking, and reciting poems (Park, Kim & Kim 2022). It is a type of therapy that is commonly used as part of a treatment plan or to encourage readers to write their own works of literature with the assistance of therapists. During poetry therapy services, individuals are usually encouraged to explore their own emotional responses and expressions. In contrast, Good Therapy (2016) emphasises the important role played by librarians in the field of poetry therapy. For instance, librarians practice poetry therapy in the form of reading poetry aloud and discussing it as part of the programme to encourage and reach out to individuals receiving the treatment.

1.10 Research methodology

Research methodology refers to the systematic and scientific set of techniques or tools employed to uncover answers to a study's questions while simultaneously minimising uncertainties associated with a phenomenon. This involves following procedures such as data collection and data analysis (Gomez & Mouselli 2018:7). On the contrary, Ngulube (2005) contends that there isn't a one-size-fits-all research methodology; rather, each methodology possesses its own advantages and drawbacks. Consequently, researchers have the flexibility to select from various methodologies for their studies.

In this particular study, a quantitative approach was employed with a descriptive bibliometric design. Data collection was conducted using online databases, including Microsoft Word and Excel, for subsequent data analysis and presentation. Additionally, VosViewer software was utilised to identify keywords for conducting bibliographic queries. The methodology also encompasses considerations for reliability, validity, and ethical considerations.

Chapter 3 delves into a comprehensive discussion of the research methodology employed in this study.

1.11 Ethical considerations

A research study includes ethical considerations. According to Islam (2019:15), ethical clearance refers to the rights and risks that both a researcher and participants may face during the research process. It is used in fields such as social science research and, depending on the nature of the study, involves humans as participants. However, the University of South Africa's guidelines indicating ethical considerations were followed for this study. Informed consent forms, confidentiality, privacy, and anonymity are examples of these.

For example, the Unisa Ethical Research Policy is based on the university's vision for African universities to promote research that will ultimately benefit South Africans. Ethical clearance is also sought to ensure that all standards of excellence, ethical behaviour, social responsibility, and scholarly integrity are upheld.

As a result, the researcher will follow the guidelines for ethical consideration established by the University of South Africa, and the study will be conducted ethically. These guidelines

cover academic fraud, plagiarism, and data misrepresentation. In addition, before collecting data, the researcher will seek ethical approval. Although the study has no participants because it is a desktop study, the researcher will adhere to the three broad issues during the study's execution.

1.12 Structure of the study

The dissertation is structured into six chapters.

Chapter 1: Background and introduction of the study

In Chapter 1, the following elements will be addressed: the introduction and background to the study; the study setting; the conceptual framework; the research statement; the purpose of the study; the research questions; and the significance of the study.

Chapter 2: Conceptual framework and literature review

The second chapter outlines the study's conceptual framework as well as a literature review. The study's literature review will cover the following themes in chronological order: (literature publication trends using bibliometric techniques, subject areas where bibliotherapy is published, authors' publication trends using bibliometric techniques, and journal publication trends).

Chapter 3: Research methodology

This chapter discusses research methodology elements while keeping the study's path in mind. Among these are research paradigms, approaches, methods, and data collection.

Chapter 4: Data analysis and presentation

This chapter discusses the current data analysis and the study's findings.

Chapter 5: Discussion and interpretation of findings

This chapter contains the study's interpretations and findings.

Chapter 6: Conclusions and recommendations

This chapter discusses the conclusion and provide recommendations.

1.13 Summary

The background information titled 'Bibliometric analysis of bibliotherapy literature in South Africa' was presented in this chapter. In addition, the hypothesis, purpose, research objectives, study significance, scope and limitations, and ethical considerations are discussed. The chapter concludes with an overview of the dissertation's structure and organisation. Given the preceding statement, the following chapter of the study presents the conceptual framework and literature review.

CHAPTER TWO
CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1 Introduction

The first chapter of this study provided a general introduction and background information. In this chapter, we apply the suggested conceptual framework to review the existing literature on bibliotherapy. A conceptual framework can be described as a structured cognitive framework that facilitates the development and examination of specific theories or concepts. Additionally, Xiao and Watson (2019) emphasise that a literature review is an indispensable component of academic research. Moreover, in the realm of social sciences, van der Waldt (2020) highlights the significance of both the conceptual framework and the literature review, as they are intertwined components that complement each other, contributing to the completion of a comprehensive study. Therefore, the following section offers a comprehensive overview of the conceptual framework and literature review in this study.

2.2 Conceptual framework

The conceptual framework combines several related concepts to explain a phenomenon relevant to the study. It also serves as the main component of a study, containing various key concepts and ideas that are organised according to the study's goal and direction (Adom, Hussain & Agyem 2018). On the other hand, different researchers attempt to explain the concept of conceptual framework in various ways. For example, van der Waldt (2020) stated that because researchers have different perspectives and patterns of thinking, the phenomenon of 'conceptual frameworks' is often explained and used differently in a study.

As a result, Ravitch and Riggan (2017) explain that a conceptual framework is a component of the research structure that is frequently used to assist a study in identifying the main theoretical tenets or concepts. Typically, this structure is used to conceptualise key concepts and their relationships (Ravitch & Riggan 2017). A conceptual framework, on the other hand, is a 'blueprint' that guides the research. However, it derives from existing theories in a field of study that reflect a study's hypothesis (van der Waldt 2020).

In this case, researchers create their own blueprint from borrowed existing theories to lay the groundwork for research, resulting in a researchable conceptual framework (Adom, Hussain & Agyem 2018). As a result, the components of the conceptual review are merged into a consolidated framework in this study, namely the metrics, bibliometrics law, databases, and indicators. Following that, the literature review is discussed in relation to the objectives' themes.

2.2.1 Metrics

According to Hauser and Zettelmeyer (2016), metrics are quantitative measures used to assess the impact of academic and scientific research, as well as to assess the quality of the work being done. Metrics include scientometrics, webometrics/cytometrics, librametrics, almetrics, and patentometrics. However, bibliometrics were used in this study. Other metrics are outside the scope of this research. It should be noted that, while the metrics are used in the framework, they are also a research design in this study.

2.2.1.1 Bibliometrics

Prior to exploring the concept of 'bibliometrics,' Wolfgang Nacke first proposed the term informetrie in German in 1985, which later evolved into informetrics and became widely recognised around the world (Qiu et al 2017). Chellappandi and Vijayakumar (2018) define bibliometrics as a sub-discipline of information sciences that focuses on the application of mathematical techniques to the content of scientific studies. As a result, it grew into a catch-all, rather than an umbrella of other metrics. Scientometrics, webometrics/cytometrics, librametrics, almetrics, patentometrics, and bibliometrics are examples of these metrics. Furthermore, informetrics as an umbrella discipline is subdivided into major categories. This includes metrics/indicators and laws, while the latter employs a variety of statistical, mathematical, and research methods in the form of quantitative methods (Qiu et al. 2017).

However, for the purposes of this study, the researcher chose bibliometrics because it is appropriate for investigating the study's objective. According to Onyancha (2020), the scope of bibliometrics evolves from the evolution of research, methodological approaches, and outline of research disciplines in Library and Information Science (LIS).

In a nutshell, researchers can use the term bibliometrics interchangeably as a discipline inquiry or for research purposes. Furthermore, bibliometrics is a fundamental research metric that draws on a variety of scientific and academic fields. It is also active in fields such as engineering, natural science, and mathematics (Maltseva & Batageij 2020). However, it is a relatively new field, emerging as a research metric in information science (Mathankar 2018). Bibliometrics was on the rise in the 1960s, and researchers were eager to integrate various interdisciplinary approaches into one before being implemented in the field of LIS. As a result, according to Mathankar (2018), bibliometrics has become the most widely used field in information science and library research.

However, it is estimated that literature on this topic accounts for more than 25% of total library and information science contribution (Mathankar 2018). According to de Bellis (2009), bibliometrics is the process of analysing and measuring various elements of any publications and literature, including books, reports, and periodicals. Furthermore, bibliometrics is used to investigate and communicate a variety of indicators such as publication trends, author productivity, and some citations. Donthu, Kumar, Mukherjee, Pandey, and Lim (2010) elaborate researchers use bibliometrics analysis for a variety of reasons. This includes investigating intellectual structures on disciplines, collaboration patterns, and journal and article performance for methodological purposes. In light of this study, and of all the metrics mentioned in this study, the researcher chooses to focus on bibliometrics because it is related to the study's objectives. Furthermore, the researcher will discuss the indicators, scope of the bibliometrics law, and how they contribute to the study.

2.2.2 Bibliometrics law

Bibliometrics enabled the measurement, analysis, and disclosure of meaningful trends, including the mathematical framework for calculations. Since the advent of bibliometrics, analysing publication trends has remained an ad hoc task. Bibliometrics is a technique for measuring texts, documents, and information that gave rise to metric laws (Mathankar 2018). According to Mathankar (2018), the bibliometric theory is founded on three popular laws: Lotka's law, Zipf's law, and Broadford's law. These laws are primarily concerned with insight, trends, and knowledge of various subject areas or disciplines found in the literature/publications. Bradford, for example, focuses on core journals and the scattering of articles, whereas Lotka focuses on publication productivity by countries, authors, and/or any

given subject area/discipline. A Zipfs that focuses on the frequency of words used in an article is also available (Yang & Dong 2017). Ultimately, regardless of how they are applied, these laws revolve around their common denominator in terms of publication. Tandale (2017), on the other hand, indicates that bibliometrics laws can be used in a variety of ways, contributing significantly to investigate studies conducted by various groups and individuals, including institutions. That does not, however, make one law superior to the other. As a result, researchers apply all applicable laws based on the value required from the subject area/discipline of interest. Given the foregoing, the researcher chose Lotka's law of productivity as one of the aspects contributing to the conceptual framework.

2.2.2.1 Lotka's law

According to Barik and Jena (2020), Lotka invented the law and named it the classic inverse square law of scientific productivity in 1926. The law was created in order to quantify and describe patterns of authorship, such as the frequency of publication. Since then, the law has been used to calculate the productivity of publications in a variety of academic disciplines, including library and information science (Tran & Aytac 2021). Furthermore, Lotka developed the law to demonstrate the quality of publications in Physics, as it was the only outstanding discipline contributing enormous publications in comparison to the other disciplines (Bensman & Smolinsky 2017). However, the law did not receive the attention it deserved in its early stages. It later gained attention after many philosophers, including Husain and Fatima (2017), interacted with it and applied it (Barik & Jena 2020).

Lotka's law, according to Bensman and Smolinsky (2017), is the first scientometrics law of informetric laws. It includes the scientist's literature productivity as well as the relationship between authors and the quality of their papers (Yang & Dong 2017). Despite the fact that Lotka's law was limited to the fields of chemistry and physics during the twentieth century. Furthermore, chemistry and physics were the fastest developing phenomena, with 98% of literature published in that field (Yang & Dong 2017). However, this caused the law to be developed in the present day over time. For example, more diverse aspects were derived from this law, including the applicability of Lotka's law from an anthropology standpoint in the form of human development, including contributions to human progress. Looking at Lotka's law from an empirical standpoint, author productivity is a measure based on the duration of a specific period within a specific subject area (Yang & Dong 2017). This was due to the law

becoming a hot spot in the field of research after the 1960s, as well as the rapid development of informetric theory (Yang & Dong 2017). As previously stated, Lotka's law has been applied by various philosophers who have developed a keen interest in measuring publication trends. Other philosophers rejected the law, while others accepted and applied it (Naqvi & Fatima 2017; Da Silva, Perlin, Matsushita, Santos, Imasato & Borenstein 2019). According to Barik and Jena (2020), Lotka's law is empirical and encompasses many cultural factors and disciplines; as a result, it has many manifestations. This also demonstrates the law's diversity, as it can be fully applicable in disciple A, partially applicable in disciple B, or not applicable at all. Despite its applicability, the law was rejected by some of the authors (Kumar 2017). For example, from 1963 to 1972, researchers examined the applicability of Lotka's law to the study of library and information science by producing over 600 contributions from two journals, Library Quarterly and College and Research Libraries. According to the findings of the study, Lotka's theory does not apply to the field of library and information science (Kumar 2017).

Similarly, as mentioned by Kumar (2017), Murphy examined the number of authors featured in an American Chemical Society journal published in 1973. According to his findings, the number of contributions did not correspond to the relevance of Lotka's law as expected. However, Lotka's law is not always rejected; studies have aggressively indicated positive outcomes of the law. For example, the law was found to be applicable in both Nigerian biochemical and entomological literature (Gupta 1987, 1989; Maz-Machado, Madrid, Jimene-Fanjul and Leon-Mantero 2017). Similarly, Manthiramoorthi, Sara, Kumar and Thirumagal (2019) confirmed the law's applicability in information literacy research output from 2008 to 2017. In addition, the international business literature was examined to determine whether Lotka's law applied to author productivity distribution (Naqvi & Fatima 2017).

Finally, Sobrino, Caldes and Guerrero (2008) examined Library and Information Science Abstracts (LISA) articles published between 1996 and 2008, concluding that the data fit Lotka's law exceptionally well. On the other hand, Ahmad and Batcha (2020) reported that Lotka's law did not fit and is not applicable in medicine, as discovered in a study conducted by (Worthen 1978). Furthermore, Lotka's law was declared inapplicable in computer science literatures in a study conducted by Radhakrishnan and Kernizan (1979) (Ahmad & Batcha 2020). Another statement on the importance of Lotka's law came from an empirical study of scientific productivity, in which Lotka's exponent values and the Kolmogorov-Smirnov (K.S) tests were

tested. As a result, the outcomes did not indicate the law's applicability and fitness (Ahmad & Batcha 2020).

Da Silva, Perlin, Matsushita, Santos, Imasato and Borenstein (2019) conducted a large-scale study of Brazilian research productivity in journals listed on the SCImago Journal Rank and Journal Citation Reports (JCR).

Lotka's law was regarded as a strong productivity law in the report after massive outputs gained on Brazilian researchers. Furthermore, da Silva et al (2019) stated that the law should not be ignored, but rather continue to be applied. As a result, despite the fact that some researchers disagree with it and question its applicability, Lotka's law cannot be ignored. As a result, it leads to the conclusion that the applicability and fitness of Lotka's law are influenced by how researchers treat and study productivity. Regardless of different researchers' perspectives, Lotka's law is a law of complexity; however, its complexity is derived from the indicators contributing to measuring the degree productivity of publications, including impacts.

Measurement of institutions, departments, research groups, countries, databases, and journal bodies, for example (Machado et al. 2017). This means that the applicability of Lotka's law may serve different purposes for different researchers depending on their goals. For example, it is possible for researcher 'A' to measure author productivity, and for researcher 'B' to measure the productivity impact of an 'institution', applying Lotka's law. This simply means that the same law can be applied to different indicators and still produce valid results. However, the primary goal of this research is to examine the productivity of bibliotherapy as a discipline. Because Lotka's law is regarded as the productivity law, the researcher thought it was appropriate to adopt and apply the law.

2.2.2.2. Applicability of Lotka's law

The applicability of Lotka's law has always been accompanied by the equation, which has previously and continuously been applied in various disciplines. For instance, Kushairi and Ahmi (2021) conducted a study on *'Flipped classroom in the second decade of the Millenia'*: a bibliometrics analysis was applied with Lotka's law, whereby Lotka's equation was used to find the results of the study. Alfred James Lotka, the mathematician, ecologist, demographer, and chemist, developed an equation for calculating the publication productivity after publishing a paper in the Washington Academy of Science Journal (Chaturbhuj & Sadiki 2020). Many

researchers applied the equation, and some of them found it applicable, useful, and valuable. On the other hand, Sen (2010) indicated that Lotka's law equation focuses on author productivity. Additionally, there are other indicators where Lotka's equation can also be applied. For example, discipline productivity, institution productivity, and country productivity are not calculated in the same way as author productivity. Furthermore, Sen (2010) opines that discipline productivity and author productivity are two different indicators that signify different calculations. For example, when applying Lotka's equation to calculate the publications of large bodies or institutions over a long period, the outcomes can be generally accurate but statistically exact (Chaturbhuj & Sadiki 2020). In contrast, suppose the researcher intends to calculate author productivity. Lotka contrived the equation to calculate author productivity as follows:

$X^n * y = c$

Lotka presented the number of author publications with 'n' as a constant exponent, which gives a set of data. 'X' represents the number of articles published. According to Lotka, the latter 'Y' represents the number of authors, with a frequency of 'X', which represents the number of articles. 'C' remains a constant number. Regarding the equation '$X^n * y = c$', Lotka concluded that the number of authors with 'n' publications is described by a power law to form 'c/n in a bibliography, where 'c' is a constant (Chaturbhuj & Sadiki 2020). Furthermore, Lotka elaborated that "according to any given set of data ('n' number of authors), 60% will produce one publication from the population of all the authors. Therefore, out of the very same 60% population, about 15% of authors will produce two publications, and 7% of publications will be produced, which means out of the 7% population, only one author will produce three publications. For example, suppose there are 1000 authors from a specific discipline or subject: 600 will produce one publication, 250 will produce two publications, 111 will produce three publications, and so on' (Bensman & Smolinsky 2017). In addition, Sen (2010) indicates that Lotka ignored the value of fractional authorship and gave one credit to all authors. For instance, if there are ten papers published by 20 authors, each author's productivity is 0.5.

In view of the above, the researcher's interpretation opines that 'the higher the number of authors from a subject area or discipline, the lower the number of publications persisting in descending order'. Alternatively, this indicates that Lotka's law equation for calculating author productivity differs according to how researchers use it; for example, equations applied to measure collaborative papers, disciplines, and institutions may differ (Sen 2010). Also, the law

has various equations derived by other researchers inspired by Lotka. According to Kumar and Senthilkumar (2019), the equation of author and publication frequency has been verified and tested over various data sets by various researchers. For example, in 1963, Price introduced a similar equation for measuring productivity called the Prince square root law of scientific productivity. Ultimately, in this study, the researcher will embark on Lotka's law for direction to investigate a discipline productivity 'bibliotherapy' using a bibliometric route to trace the historical trends. Therefore, the next section of this study will focus on the literature review.

2.2.3 Databases

According to Pacauskas and Naukkarinen (2020), the following are the major databases around the world: Scopus, Web of Science, and Google Scholar are a few examples. As a result, the researcher chooses to collect and retrieve data from the aforementioned databases based on the indicators or objectives of the study as specified in the study's conceptual framework. The study's third chapter contains a detailed description of databases.

2.2.4 Indicators

In bibliometrics, various indicators can be used to measure and analyse publication productivity. These indicators include author productivity, publication productivity such as patents, citations, co-authorship, discipline productivity, and co-words on researchers, countries, institutions, and databases (Roldan-Valadez, Salaza-Ruiz, Ibarra-Contrera & Rios 2019). A researcher, for example, can choose to assess the productivity of co-authored publications. Furthermore, depending on what the researcher intends to investigate, the indicators can focus on measuring and analysing the cooperation networks between institutions. Bibliometrics indicators, on the other hand, can be used as entry points to describe and express questions that arise in scientific investigations.

This is due to the ambiguity of bibliometrics, which can measure a variety of indicators. For example, researcher 'A' may choose to examine database productivity as an indicator, whereas researcher 'B' may choose to examine journal productivity; however, each bibliometric indicator has its own path. Regardless, indicators complement each other despite their differences. As a result, the researcher intends to concentrate on the specific indicators that contribute to the publication productivity of 'bibliotherapy' as a discipline in this study. As

shown in Chapter 1, figure 1.1, the indicators include publication trends, author productivity, journal productivity, subject area publications, and the impact of a discipline 'bibliotherapy' from author citations. The aforementioned indicators support a global analysis of bibliotherapy publication. In this regard, the researchers will be able to gain a thorough understanding of the bibliotherapy publication trends. Furthermore, when conducting a bibliometrics study, it is critical to clearly state indicators in order to avoid biased or invalid results. As a result, indicators aid in directing the study's direction. In addition, the researcher will demonstrate how the indicators were used in Chapter 4 of the study.

2.3 Literature review

According to Galvan (2022:13), conducting a literature review is one of the crucial steps taken by researchers with the motive of defining and reviewing the literature of a study. However, it forms part of a complete research project, which remains a necessity in a research context. Xiao & Watson (2019) define literature review as an essential part of academic research. It provides an overview of the various aspects of a study, and its conclusions are often used to make informed decisions. Similarly, it is part of a bigger research effort, whereby researchers get into more details regarding the literature of a discipline they intend to introduce and provide an overview of the main findings of a study (Hempel 2020:12). In a nutshell, a literature review is when the researcher critically analyses relevant literature in a given discipline.

For example, Majid, Yun-Ke, Aye, Khine and Yu-Wai (2015) conducted a bibliometric analysis on the discipline 'information literacy', and some of the themes covered as part of the literature review of the study were: the total number of information literacy publications; top authors and their affiliations; literature distribution by subject, country, and document type; and annual growth in information literacy literature. Fundamentally, one of the most important factors that a literature review considers is the formation of future research and implementations, including the main goals of the review (Hempel 2020:127). For instance, a literature review permits researchers to provide an overview of a discipline, so it may develop to an extensive level, such as developing effective policies and solving certain problems in research. Moreover, researchers use a literature review to better comprehend the subject or discipline and make it more relevant to their field of study. It also aids researchers in the creation of a successful and relevant study proposal (Kumar 2019:100).

Looking at the purpose of a literature review, Cooper et al. (2018) indicate that its significance encompasses a comprehensive literature search to avoid overlooking important studies in a field. Additionally, the purpose of a literature review in a study encompasses a brief explanation of the problem of the study at a comprehensive level. In a nutshell, a literature review should demonstrate the strong foundation of a discipline. Also, it should provide the necessary justification for the study and help in providing the basic facts (Galvan 2022:13). Additionally, a literature review provides a brief overview of the literature in a discipline, such as whether there is a declining or inclining growth of literature. Therefore, in this study, the researcher focuses on discussing the productivity trends of a discipline 'bibliotherapy'. Additionally, the inclusion of a literature review will help the researcher gain a deeper understanding of the discipline and the claims made in the literature.

As a result, the researcher intends to verify the validity of the claims made by other published studies. Moreover, the researcher aims to provide an overview of the relevant knowledge on bibliometric analysis of bibliotherapy literature. Furthermore, the researcher aims to highlight a summary of existing knowledge, focusing on the trends of a discipline. The researcher intends to come up with new ideas by pointing out knowledge gaps. In view of the above, the researcher will typically focus on consulting the most relevant sources. According to Xiao and Watson (2019), when searching for sources to contribute to the body of a study, researchers are required to select the most relevant information. On the other hand, there are different types of literature reviews that researchers might adopt when conducting a study, for example, narrative or traditional literature, meta-synthesis, meta-analysis, and systematic literature reviews (Hempel 2020:40). As a result, Xiao and Watson (2019) (insert the other one) define different types of literature reviews as follows:

- Meta-analysis literature - A meta-analysis is a type of systematic review that combines quantitative findings with statistical analysis to enhance understanding. This type of review is commonly used to take the findings from multiple studies and analyse them using a statistical technique.
- Meta-synthesis literature review - Meta-synthesis is a technique that combines the findings of various qualitative research studies. It can be used to identify their common themes and core elements. The findings of these studies can then be integrated and used. The goal of a meta-analysis is to reduce the number of findings.

It involves analysing and synthesising the key elements of the study to create new interpretations and conceptualisations.

- Systematic literature review - a systematic literature review is conducted to analyse the literature in a specific discipline. They aim to answer well-focused questions related to clinical practice.
- Narrative/traditional literature review - a review that provides a comprehensive analysis of the various studies that have been written about a discipline. It usually focuses on the relevant studies and compiles the information into a body of literature. Although it is usually focused on the relevant studies, it can also consider other factors such as the quality of the material and the reader's expectations. This type of review can be useful in gathering a large amount of literature on a discipline. It can also be used to produce a comprehensive analysis of the various studies that have been published on that subject based on a specific period.

Based on the foregoing, the researcher chose traditional/narrative literature review as the best fit for the study. However, the nature of this study influences the chosen literature review, with narrative literature reviews commonly used when a researcher intends to review the background of a specific discipline (Hempel 2020). The historical trends and development of a discipline, according to Bourhis (2017), are an important part of the narrative literature review. For instance, reviewing disciplines for a study aimed at analysing publication trends. As a result, the researcher provides an overview of a particular discipline's historical productivity. Furthermore, the literature review for this study will include an overview of the following main themes that are relevant to this study: bibliometrics publication trends, journal publication trends, and subject areas where bibliotherapy is published. These themes will be derived from the most relevant sources, which will be based on bibliometrics analysis of bibliotherapy. Furthermore, the themes of the literature review for this study correspond to the conceptual framework.

2.3.1 Bibliotherapy as an adjunct therapy

According to Jack and Ronan (2008), bibliotherapy was first established as part of religious practices and has since expanded and shifted outside of the religious context into libraries, including schools. Furthermore, Jack and Ronan (2008) state that, following World War I, bibliotherapy practices expanded to patient libraries, with librarians serving as facilitators. On

the contrary, (Basbane 2001) elaborate that the history of bibliotherapy as a tool for emotional problem-solving dates back centuries, but it has been practised under various names depending on the country and era. Bibliocounselling, book matching, library therapeutics, and guided reading were among the terms used. Regardless of the efficacy of bibliotherapy practises, it is not considered a medical treatment for acute illnesses; rather, it benefits people with chronic conditions as well as those facing social challenges (Gupta, Mishra & Saini 2017). Furthermore, Floyd (2003) claims that medical research supports the use of bibliotherapy as a treatment for human disorders such as depression. The debate over the efficacy of bibliotherapy, on the other hand, has raged since its inception. As a result, the scope of bibliotherapy practices has grown over time, but there is still a global lack of knowledge and practises. One of the reasons why bibliotherapy is not practised regularly or widely is a lack of evolution, understanding, and development. According to Floyd (2003), while numerous studies have demonstrated the efficacy of bibliotherapy, it is not always clear how to use it effectively. As a result, evidence to support the claims made about this approach is limited (Jack & Ronan 2008). In this regard, the variability can make drawing firm conclusions about the therapy's effectiveness difficult. The sections that follow discuss bibliotherapy practices in various countries.

2.3.1.1 Bibliotherapy as an adjunct therapy in the global point of view

Bibliotherapy began in 1811 in the United States and was facilitated by a hospital in Massachusetts (Xu et al. 2020). According to Pettersson (2018), bibliotherapy was first facilitated in the form of religious literature, whereby patients were provided with bibles in each ward. Alternatively, as far as bibliotherapy practices are concerned, England introduced the first national project in 2013, supported by the UK Arts Council (Canty 2017). The project supported the practices of local libraries to create the Reading Well Books on Prescription scheme. Furthermore, the scheme looked at common mental health conditions in Reading Well Books on Prescription for Dementia and Reading Well. Consequently, the scheme managed to reach over 635,000 people (Canty 2017). On the other hand, the concept of bibliotherapy is still new in Malaysia, and less of the population reads regularly. It is alluded to by Noordin, Noordin, Abidin, Shaifuddin, Saman and Aziz (2022) that the population at the National Library of Malaysia reads less. In addition to that, a study conducted by the National Library of Malaysia (Perpustakaan Negara Malaysia, or PNM) revealed that the country's residents still maintain an average reading level of two books a year. In that regard, bibliotherapy is still not

well acknowledged in other parts of the globe. Similarly, there is still some confusion about the difference between self-development and self-help books in Turkey (Basbanes 2001). As a result, Tanrikulu (2011) elaborates that more studies are required in the Turkish context to determine how mental health practitioners and clients perceive and use bibliotherapy. Consequently, one of the crucial factors that can be considered part of the bibliotherapy practices within society is a consistent reading habit.

2.3.1.2 Bibliotherapy as an adjunct therapy in Africa

In spite of its importance, historically, bibliotherapy has been less widely practised in Africa (Oelofsen 2012). For example, Nigeria is one of the recent countries in Africa to make use of bibliotherapy. However, Dahunsi (2022) indicates that the majority of African countries have a strong storytelling culture, and it is one of the therapies used in societies to instil moral values. Furthermore, this has extended to bibliotherapy practices, and it is currently used in other parts of Africa to help children develop moral values and avoid engaging in immoral activities (Dahunsi 2022). For example, Aramide (2020) elaborates that bibliotherapy is a new intervention method being recently discovered in Nigerian schools, managed by the Nigerian School Library Association (NSLA) and the Library Registration Council of Nigeria (LRCN). Contrary to that, Aramide (2020) indicates that studies have shown that over the years, children, adolescents, and families have been experiencing various problems that can negatively affect their well-being. Some of these include divorce, racism, and death. Moreover, other problems, such as bullying and substance abuse, are also known to affect the well-being of adolescents. Even though it has been around for a long time, most African countries still lack knowledge regarding the execution of bibliotherapy practices (Janaviien 2010).

2.3.1.3 Bibliotherapy as an adjunct therapy in South Africa (2.3.1.3)

In chapter one, the practise of bibliotherapy was linked to a reading culture. According to Manamela (2020), the process of transforming reading into an established culture or habit is known as bibliotherapy. This means that prior to beginning bibliotherapy practices, some reading should take place. According to Le Roux (2017), within the South African context, reading is still a challenge for the majority of the population, and there are numerous complaints about the lack of a reading culture in the country. In regard to that, the country consists of about 85% non-readers, and this results in a lack of bibliotherapy practices (Le Roux 2017).

Furthermore, it was not surprising with the results of reading for comprehension that out of the 32 countries with comparable trend data between 2016 and 2021, a decline in reading outcomes was seen in 21 countries, including SA. The results show that 81% of our fourth-grade learners cannot read for meaning. This shows that SA's reading crisis is worsening. One way of improving the ability to read is to read a lot. Unfortunately, when it comes to indigenous African languages, it has been indicated that only 2% of children's books published commercially in South Africa are in these languages, yet 80% of the population speaks a home language other than English or Afrikaans, which dominate publications (Ngoepe & Letsoalo 2023). Given these statistics, bibliotherapy is highly unlikely to be practised. Additionally, there is currently no clear understanding of the role bibliotherapy plays in South Africa (Miller 2018). However, philosophers such as Martinec, Simunovic and Jerkovic (2022) have conducted studies on bibliotherapy to gain a deeper understanding of the various aspects of bibliotherapy in the country.

For instance, Tukhareli (2011) conducted research on the function of bibliotherapy in a library setting and identified specific bibliotherapeutic strategies to use when assisting people with HIV/AIDS in the library of Nkosi's Haven South Africa in the city of Johannesburg. The study mainly targeted the facility's resident population, looking at the bibliotherapy development of the young and juvenile population. Alternatively, Olelofsen (2012) conducted a study on bibliotherapy practices to determine how carers and social workers in disadvantaged communities can use bibliotherapeutic techniques to help children from fractured families feel more at home. In conclusion, Gupta, Mishra and Saini (2017) indicate that there is still more in-depth research that needs to be conducted due to the scarcity of experienced and skilled library professionals, which is a significant limitation of bibliotherapy practices. Similarly, Janaviien (2010) asserts that the main barriers to the availability of bibliotherapy in society are a lack of reading, skills and knowledge, as well as distrust. In that regard, Furness and Casselden (2012) further suggests that a global standard should be developed for the provision of bibliotherapy practices in all libraries.

2.4 Publication productivity of bibliotherapy literature

Millions of individuals seek medical therapy whenever they experience physical, or more accurately, emotional, discomfort because there are various healing therapies, such as bibliotherapy, that can be used for healing purposes. According to Christe and Davis (2017),

bibliotherapy has existed for more than 90 years since Alabama collaborated with a team of psychiatricians and social workers during the Worldwide War (WWW). However, it was initially designed to treat depression (Wang, Bressington, Leung, Davidson & Cheung 2020). During the 1950s, the use of bibliotherapy became more prevalent due to the development of a theoretical model by Carolyn Shrodes (Alabish & Jothimani 2019). McCulliss (2012) elaborates that in 1904, bibliotherapy became accepted as a branch of librarianship in the United States. During the time when E. Kathleen Jones, a trained librarian, became Administrator of Libraries at McLean Hospital in Waverly, MA, in 1904, bibliotherapy became accepted. According to Miller (2018), researchers later established bibliotherapy in hospital libraries as a new profession. Furthermore, academics and librarians recognised the value of literature and books as objects of knowledge by transforming them into tools for improving individuals' emotional well-being and mental health. Recently, countries such as Sweden have promoted mental health awareness using literature, whereby bibliotherapeutic activities take place in healthcare centres (Pettersson 2018). Furthermore, doctors appear to be more likely to prescribe reading as a treatment than to scrutinise it (Miller 2018). In addition to that, bibliotherapy later gained advancement as a treatment in rural and remote areas. Besides being a treatment, its advancement has developed since it is more cost-effective than traditional therapy and can help avoid high-cost treatments such as psychotherapy (Xu, Liu, Gau, Gao, Gao, Liu, Li, Li & Yang 2020).

Brewster (2017) attests that incorporating books into therapy decreases the cost of treatment, decreases treatment time, and provides access to treatment options for those who would not otherwise be able to afford them. Due to the increasing popularity of bibliotherapy, it is more prevalent in developed and developing countries than in Africa and other regions. For example, Miller (2018) elaborates that prior to the 20th century, there had been some scattered practices of using literature and books for therapeutic purposes in America; however, this was known as "moral treatment. Moreover, Xu et al. (2020) indicate that the United States (US) is identified as the first country with the most publications on bibliotherapy, followed by the United Kingdom (UK), whereby Sweden and the Netherlands followed with the most collaborations with other various countries. Surprisingly, only 6.67% consult books to solve problems they are having, while 23.33% only consult books for a good story (Cannon 2018). Also, based on the above-mentioned outcomes of Cannon (2018), one might wonder if books are mainly used for bibliotherapy. Furthermore, it seems like books are being used more for problem-solving

than therapeutic purposes. As a result, this sparks further research on literature and books based on their functions in general.

Regardless of that, bibliotherapy has been practised in various subject areas by a wide variety of individuals (Gualano, Martorana, Viglino, Andriolo, Thomas, Gramaglia, Zeppegno & Siliquini 2017). These groups of people include children, individuals, and groups of councillors (Aramide 2020). Furthermore, global researchers have been able to publish literature on various subject areas in bibliotherapy. For example, Abraham, De-Schryver and van der Molen (2020) published a paper on assessing '*The effectiveness and use of bibliotherapy implementation among children with autism by board-certified behaviour analysts (BCBA*)', from the department of health and psychology at Grand Valley State University in the USA. From the University of Nevada in Las Vegas, a paper was published on '*A national survey of bibliotherapy preparation and practices of professional counsellors,* conducted from the mental health point of view (Pehrsson & McMillen 2010). Fitzgerald and Hurst (2017) opine that bibliotherapy is mainly applied in areas such as psychology, algophobia, substance abuse, anxiety, mood disorders, and physical disorders. Alternatively, researchers tend to frequently focus on bibliotherapy as a theme or discipline without considering it from a metric standpoint. According to Gao, Ge, Shi, Sun, Liu, Wang, Shang, Wu and Tian (2019), it is significant for researchers to familiarise themselves with the use of metrics to index the trends of a discipline.

For example, researchers can opt to publish studies such as 'a metric analysis of bibliotherapy'. As a result, Xu et al. (2020) are among the researchers who considered publishing a metric study on bibliotherapy. Furthermore, their study entitled 'The *100 most-cited articles on bibliotherapy: a bibliometric analyses'* looked at investigations to describe trends in bibliotherapy. Consequently, all publications encompassing bibliotherapy published from 1980 to 2020 were recognised and chosen from the Web of Science Core Collection's Science Citation Index Expanded, Social Sciences Citation Index, and Arts & Humanities Citation Index (Xu et al. 2020). From an African point of view, bibliotherapy appears to be unpopular and performing poorly in comparison to the rest of the world (Aramide 2020). However, this might prevent researchers from conducting additional research on bibliotherapy, particularly in terms of indexing its productivity or publication trends. According to Dahunsi (2020), the lack of a reading culture in African communities is attributed, for example, to the fact that most African parents are unable to read to their children. Furthermore, Llogho, Alao, Adekeye, Gesinde and Adeusi (2019) contemporary literature and publications on bibliotherapy come from developed countries such as the US, France, Germany, and the UK as compared to the

African continent. Hence, multiple researchers from around the globe have used bibliotherapy to help people with mental health issues and behavioural disorders (Llgho et al. 2019).

Ultimately, there is a lot of literature on bibliotherapy; however, not much indigenous work is being produced in the African context. Also, there is an abundance of literature on bibliotherapy in the external context as compared to the African context (Lligho et al. 2019). In view of the above, researchers need to consider conducting and publishing more research on bibliotherapy within the African context. Furthermore, information and context regarding bibliotherapy remain significant to contribute to the African research density. In the same vein, there are regular complaints about the lack of a reading culture in South Africa. As a result, a lack of reading results in the non-existence of bibliotherapy since it is originally derived from reading. According to Le Roux (2017), due to the lack of reading norms or culture in the country, insufficient publications on bibliotherapy in South Africa remain minimal. As a result, there are not many studies that focus on the use of bibliotherapy (Joubert & Hay 2019). Regardless of that, Downing (2013) conducted a study from the University of South Africa published on the '*effectiveness of bibliotherapy in group therapy to assist pre-adolescents in dealing with bereavement after divorce*' in education. Alternatively, Joubert and Hay (2019) introduced One of the most effective interventions that can be used for bibliotherapy is known as Readme-to-Resilience (Rm2R). This is a tool that involves reading stories that can help children and adults develop resilient behaviours. Furthermore, it has been shown that this type of intervention can help individuals with mild to moderate anxiety and depression (Joubert & Hay 2019)

2.4.1 Publication trends of bibliotherapy literature

One of the most significant tasks in the world today is conducting research, which, in the end, produces information and knowledge in the form of publications. Kumar (2018:12) elaborates that conducting research is another type of scientific communication that aims to describe a situation, phenomenon, or programme in detail. For example, providing information about a community's living conditions, scientific spheres, and various organisational services (Kumar 2018:12). Furthermore, researchers frequently read scientific publications related to various topics. However, this is due to the inquisitive nature of mankind, whereby the development of science and new knowledge continues to evolve and grow. According to Mazov, Gureev and

Glinskikh (2020), most researchers pay attention to a scientific topic, conduct research, and publish the results.

Currently, the number of publications has steadily increased over the years, and this is further evidenced by the fact that many of the disciplines are covered by various researchers across the globe (Donthu, Kumar, Mukherjee, Pandey & Lim 2010). Also, numerous prominent scholars and journals from various fields have published highly influential articles that capture the latest trends, often using techniques such as bibliometrics (Mukherjee, Lim, Kumar, & Donthu 2022). The increasing internationalisation of nations and technological advancements have also resulted in the rise of scientific publications across different institutions. This has also contributed to the increasing number of documents being published and disseminated by scientists from different countries (Bokor-Billmann, Langan & Bilmann 2020). In view of the above discussions, this indicates that the number of published works forms part of the research context, which requires researchers to index trends in the current works produced. Hence, today's research realm has more advanced techniques that can be used specifically for indexing and analysing publication trends, such as bibliometrics. According to Delasalle (2017), bibliometrics should not be limited to only researchers in academia. For example, the role of the librarian should also expand to include knowledge of bibliometric techniques. In addition to this, the involvement and development of publication trends techniques will enable researchers to pass on knowledge to a wider context in Africa, which will result in high productivity in publications.

At this stage, Onyancha (2018) indicates that there are calls for researchers to actively participate in metrics research alternately, not only for publication trends but also in providing metric data to different relevant parties so that they can make informed decisions. Also, since scientific publications, trends, and research form a very significant strategy of producing knowledge, there are various forms of knowledge produced by African researchers however, not in bibliotherapy. For example, indigenous knowledge, library and information science, science, and technology. The following are some of the researchers who produced knowledge regarding publication trends and bibliometrics techniques in Africa. Onyancha and Maluleka (2011) produced a study on '*knowledge production through collaborative research in sub-Saharan Africa: how much do countries contribute to each other's knowledge output and citation impact*? Maluleka and Also, Sooryamoorthy (2017) suggests that collaboration between academic institutions and industry can result in higher productivity trends of bibliotherapy, using a bibliometric technique. Onyancha (2020) acknowledged that research

collaboration boosts publication productivity (outputs), including citation impact. As a result, this can boast publication productivity on bibliotherapy literature. According to Kahn (2011), South Africa's scientific output has been relatively constant from the 1980s to 2004. It then showed a steep upward trend from 2004 to 2006. However, this could have that no one saw the need for indexing publication trends. Contrary to that, Olisah and Adams (2021) indicate that a number of multidisciplinary studies began publishing knowledge using bibliometric techniques in South Africa, and this has been increasing in the number of academic papers that are affiliated with local institutes and also partnering with European countries. For example, Molatudi, Molotja and Pouris (2008) conducted a study on 'A bibliometric study of bioinformatics research in South Africa'. The outcomes of the study indicated that South African literature publication trends have grown by 66.5% since 2001, but its share of the world's production is not on par with that of other countries such as India and Australia. Despite the preceding discussion, South Africa is still considered a developing country. As a result, some researchers may still find it difficult to produce publications. However, in comparison to the rest of Africa, South Africa has risen to the top in aspects of publication trends in literature. Maluleka (2021) indicates that Africa generates very little knowledge while accounting for a large segment of population demographics. During the analysis period, South Africa produced more than one-quarter (26%) of all publications in Africa.

Additionally, it is closely followed by Egypt, accounting for 21% of all publications from the continent. Furthermore, between 2000 and 2015, both countries (South Africa and Egypt) produced nearly half (47%) of all publications published in Africa. Therefore, South Africa, as a developing country, needs to increase its literature concerning bibliotherapy. According to Maluleka (2021), for developing countries, it is significant to participate and compete on an equal footing with their counterparts and to invest massively in knowledge and research production. The more knowledge and literature produced, the easier it will be to publish and practice bibliotherapy. According to Jaca, Chinwe, Balakrishna, Pienaar and Wiysonge (2021), several publications are produced by countries in high-income regions such as the US, Canada, Europe, and Central Asia, which are greater than those in low- and middle-income countries such as Sub-Saharan Africa. This indicates that there will still not be so many studies conducted on bibliotherapy in Africa. Also, the publication trends concerning bibliotherapy are a bit slow since they are still unfamiliar to most African researchers. This might be due to the fact that institutions in low- and middle-income states, particularly in Africa, encounter immense

challenges with research funding since their governments do not provide adequate funding (Jaca et al. 2021).

Also, Viera (2022) conducted a study entitled "International research collaboration in Africa: a bibliometric and thematic analysis." The study caught the interest of scientists all over the world, and one-third of the articles were written entirely by non-African researchers, mainly researchers from North America, the United Kingdom, and the Netherlands. Another article on this topic was co-authored by non-African researchers; however, there were a few articles authored by researchers from Kenya and South Africa (Viera 2022). In this regard, there might be some implications contributing to low publication trends in bibliotherapy literature in Africa. For example, lack of knowledge, poor research collaboration, limited access to expensive instruments or high costs of technological apparatus, the difficulty of research problems, and the expansion of interdisciplinary research (Onyancha 2020). As a result, researchers should broaden their research knowledge, particularly in the discipline of bibliotherapy.

2.4.2 Author productivity of bibliotherapy literature

For instance, Davis (2017) conducted research on the historical analysis of bibliotherapy and its prospective solutions. The study used the keywords 'bibliotherapy, bibliotherapy research, bibliotherapy in libraries, bibliotherapy' to extract the relevant papers. Moreover, the results of the study indicated that bibliotherapy was proved useful as a therapeutic method, as evidenced by a total of 97% of the 33 analysed publications. Additionally, the study took place in the Virgin Islands of the United States by (Davis 2017). This further indicates that there may be more authors publishing articles on bibliotherapy, specifically focusing outside the African environment, validating a lack of bibliotherapy literature in Africa. For instance, Unitarian clergyman Samuel Crothers, first coined and published the term bibliotherapy in a 1916 edition of the Atlantic Monthly.

The purpose was to outline a technique for connecting individuals facing difficulties with literature that is pertinent to their situation. Furthermore, in a study conducted by Davis (2017), which revealed that scholar Kenneth B. Cronje (1994) authored seven articles that defined the concept of bibliotherapy. The articles were primarily intended to provide a clear definition of the meaning of 'bibliotherapy'. The authors; Mister GM, Indra R, and Stralen P. from Manado

State University in Indonesia, along with Sahril N. from Universitas Negeri Makassar, conducted a study on '*Bibliotherapy in the Pandemic Time: a Bibliometric Analysis*' (Mister, Indra, Stralen & Sahril 2022). The objective of the study was to obtain comprehensive statistical data on the productivity and influence of studies in bibliotherapy, specifically focusing on the impact of spreading of the coronavirus on students and their language acquisition. The findings revealed that a total of 148 international articles assess the productivity of research on bibliotherapy. Therefore, this quantity of articles further demonstrates a lack in production or research interest for the concept of bibliotherapy. Also, it appears that bibliotherapy has a limited presence throughout the African continent (Mister et al 2022) However, the predominant focus is on narrative techniques rather than bibliotherapy methods. According to McDowell (2019), communities in Africa have traditionally utilized storytelling as a method of transmitting values, wisdom, and cultural information between generations, as compared to bibliotherapy practices. This implies that there is a greater need for increased publications on bibliotherapy, in terms of author productivity.

2.4.3 Bibliotherapy literature on journal productivity

Journals are marked as spectrum of publication in various discipline across the globe. They incorporate in four main functions, which are registration, dissemination, certificate, and archival records (Mabe 2009). According to Ocholla, Ocholla and Onyancha (2012), journals support researchers to gain recognition, specifically in journals that are highly rated, dignified and valued. Consequently, researchers across the globe use journals to create and distribute scholarly publications. Mouton and Valentine (2017) found an increase in competition in publishing among researchers from a global context, including a high demand of publishing in highly rated journals in India and China. Although journals vary in size and type, according to Gadd, Fry and Creaser (2018), there are small to medium journal publications that strive to compete with larger journals across the globe. From the current existing larger journals globally, Elsevier, Springer and Blackwell have been identified as the highest ranked and best producing journals with each consisting of over 2 000 journals (Gadd et al. 2018). In addition, Johnson et al. (2017) indicated in a report issued by EU OpenAIRE that about 50% of articles were published by the world's top five journals, namely SAGE, Taylor & Francis, Springer Nature, Reed-Elsevier, and Blackwell. Even though the above journals are identified as the leading sources of the academic publications (Ocholla et al. 2013), journals such as Library and Information Science are active concerning scholarly publications. For instance, Sethi and

Panda (2012), conducted a study on the publication trends of academic articles in LIS. The findings of the study indicated that 1 000 research papers were analysed.

Similarly, Hussain et al. (2011) conducted a bibliometric study on articles published in the Electronic Library Journal. Nevertheless, it is essential to identify journal productivity on bibliotherapy, regardless of whether they are among the world's top five journals. Rhea (1981) defines bibliotherapy as an interdisciplinary topic that integrates library science, psychology, and adult education. Therefore, it can be produced in large numbers by various journals across the globe. However, the 1930s discovered 63% of publications produced in journals not specifically related to libraries. Similarly, Surulinathi, Muthuraj and Rajkumar (2018) conducted a study on '*Measuring the research productivity on bibliotherapy: a global perspective*'. The findings of the study indicated that during the study period from 1989 to 2015, a total of 237 journals published research on bibliotherapy however, the compilation of produced journals excludes Library and Information Science (LIS) journals. This suggests that bibliotherapy literature has been produced however, few LIS journals have published it. Additionally, this demonstrates a lack of adequate knowledge on bibliotherapy, regardless of its significance as an interdisciplinary concept.

Regarding the African context, a report issued by the African Development Bank Group (ADBG) in 2014 indicated that Africa was rising as a developing continent, whereby researchers and publication journals were marginalised (Chiware & Becker 2018). According to Russell (1998), research fields in Africa are considered irrelevant in the global journal context; therefore, African researchers make use of journals that are visible in and have an impact globally. However, this may be due to the limited number of journal publications receiving a subsidy or financial support from the Bureau of Scientific Publications (Onyancha 2017). Regardless of this, South African journals are acknowledged as the most exceptionally performing journals in Africa, and 17 South African journals managed to constitute 90% of journals in Africa indexed in the Journal Citation Report (JCR) in 2002 however not on bibliotherapy (Pouris 2005). Moreover, the South Africa Medical Journal was ranked top in terms of the impact on 2 237 citations, as compared to LIS journals (Pouris 2005). It was also indicated that articles published in the South African journals are used by researchers at global level, for example, in Canada, the USA, Europe and Australia (Jeenah & Pouris 2008). In addition, a study conducted by Mouton and Valentine (2017) on journal publication trends based on the extent of South African authored articles in predatory journals indicated that 4 246 papers were published in South African journals.

2.4.4 Bibliotherapy literature on productivity by subject area

Researchers have the ability to close the knowledge gap that exists between different scientific areas. Furthermore, researchers frequently read and interact scientific publications related to various subject areas. However, this is due to the inquisitive nature of mankind, whereby the development of science and new knowledge continues to evolve and grow. However, Mazov, Gureev and Glinskikh (2020) indicate that, most researchers pay attention to a scientific subject area, conduct research, and publish the results. Currently, the number of publications in various subject areas has steadily increased over the years. This further evidenced by the fact that many of the subject areas are covered by various researchers across the globe (Donthu, Kumar, Mukherjee, Pandey & Lim 2010). Also, numerous prominent scholars and journals from various subject areas have published highly influential articles that capture the latest trends, often using techniques such as bibliometrics (Mukherjee, Lim, Kumar, & Donthu 2022). The increasing internationalisation of nations and technological advancements have also resulted in the rise of scientific publications across different institutions. This has also contributed to the increasing number of documents being published and disseminated by scientists from different countries (Bokor-Billmann, Langan & Bilmann 2020). In view of the above discussions, it is indicated that the number of published works forms part of the research context, which requires researchers to index trends in the current works, including subject areas produced.

Hence, today's research realm has more advanced techniques that can be used specifically for indexing and subject areas. However, it is stated that little is known about the worth and efficacy of bibliotherapy; therefore, published literature of subject areas on bibliotherapy continues to remain insufficient due to lack of understanding for the workings of the concept (Brewster, Cox & Sen 2014). According to Christe and Davis (2017), bibliotherapy has existed for more than 90 years since Alabama collaborated with a team of psychiatrics and social workers during WWI. For instance, Millions of individuals seek medical therapy whenever they experience a physical, or more accurately, an emotional discomfort. This is due to the fact that, there are various healing therapies such as bibliotherapy that can be used by individuals for healing purposes. Due to its existence at global level, bibliotherapy has been practiced based and in various subject areas across a wide variety of people (Gualano, Martorana, Viglino,

Andriolo, Thomas, Gramaglia, Zeppegno & Siliquini 2017). These groups of people include children, individuals, and groups of councillors (Aramide 2020). Looking at the global perspective, Abraham, De-Schryver and Van der Molen (2020) published a paper on assessing the '*effectiveness and use of bibliotherapy implementation among children with autism by board-certified behaviour analysts (BCBA)*, from the department of health and psychology in Grand Valley State University in USA. From the University of Nevada in Las Vegas, a paper was published on '*a national survey of bibliotherapy preparation, and practices of professional counsellors conducted from the mental health point of view*' (Pehrsson & McMillen 2010). Additionally, Fitzgerald and Hurst (2017) opine that bibliotherapy is applied in areas such as in psychology, algophobia, substance abuse, anxiety, mood disorders and physical disorders. In regards, to the African perspective Magaji (2016), from Nigeria published a study in the field of Psychology on '*bibliotherapy as a problem-solving skill of counsellors and teachers for character and skills development in Ogun state, Nigeria*.

Looking at bibliotherapy literature on productivity by subject area within the South African, Tukhareli (2015) elaborates that, bibliotherapy was initially introduced as treatment and recreation for patients and then expanded outside the hospital context to non-clinical subject settings. For example, the non-clinical subject setting is included in subject areas such as prisons, community, public libraries, and schools. For instance, Tukhareli (2011) published literature on library and youths as subject areas, titled "Bibliotherapy from a library setting: reaching out to vulnerable youth". In addition, Tukhareli (2015) conducted a study on the use of bibliotherapy to promote consumer health information in a library setting within the health sciences library. In the same vein, Downing (2013) from the University of South Africa published on the *effectiveness of bibliotherapy in group therapy to assist pre-adolescents in dealing with bereavement after divorce*' in the field of education. Apart from the insufficient publications on bibliotherapy in South Africa, there are typical complaints about a lack of reading norms/culture in the country (Le Roux 2017). Consequently, the introduction of additional reading material leads to the acquisition of more knowledge on bibliotherapy, which in turn leads to an increase in the number of subject areas published in the concept.

2.4.5 Bibliotherapy literature by affiliation productivity

In order to facilitate the global dissemination of research knowledge, scholars and researchers are affiliated with specific organizations that promote knowledge invention. For instance, in a

recent bibliometric analysis study conducted by Hottenrott and Lawson (2017) there has been a notable rise over the past 15 years in the percentage of academics who are affiliated with universities. Furthermore, these affiliations are in the form of organizations or educational institutions. They offer a range of services to scholars, for collaborations and funding support. Hottenrott and Lawson (2022) elaborate that, the funding efforts have a clear goal of enhancing the global research capacity and performance of science systems. For example, In the 1980s, the United Kingdom (UK) implemented the Research Assessment Exercise (RAE), which uses research evaluation to allocate a portion of its higher education funding. This has led to the emergence of a scholar transfer market and is believed to have boosted scholar mobility (Hare 2003). In contrary, the absence of an academic affiliation can hinder the productivity of publications, especially within the academic discipline. Basically, this involves scholars lacking a definitive affiliation with a specific institution. Additionally, academic affiliations are evaluated based on the number of publications produced, mainly though a bibliometrics analysis (Joseph, Jose & Ettaniyil 2023) Therefore, scholarly publications lacking a particular affiliation may fail to attain the intended audience, given that affiliations typically facilitate the dissemination of scholarly work on a global scale. In a nutshell, affiliations increase the visibility of participating universities in global rankings and boost the reputation of the scholars involved (Hottenrott and Lawson 2022).

Considering the publication productivity of bibliotherapy literature in terms of affiliations, majority of scholars affiliated with academic institutions do not publish research on bibliotherapy (Davis 2017). Moreover, bibliotherapy is believed to be one of the least-produced disciplines in South Africa, with less affiliated scholars. According to Jack and Ronan (2008), the current amount of literature on bibliotherapy is quite extensive, there is still a scarcity of articles that provide an in-depth overview of its therapeutic history. For instance, scholars such as Agnes Balint affiliated the University of Pecs in Hungary conducted a study on '*how 'bibliotherapy can benefit cancer patients by addressing spiritual needs and promoting general well-being*'. Moreover, the study's findings demonstrated that bibliotherapy enabled the patients to cultivate the long-lasting skill of introspective reading, equipping them for treatment and recovery (Balint & Magyari 2020). This is in inclusion to Jessica Smith, a professor affiliated with the University of Washington conducted a study on '*accessible, low-cost interventions and self-help treatments, such as bibliotherapy, can overcome treatment hurdles for depression*', funded by the Australian National Health and Medical Research Council (NHMRC). The study revealed that individuals from the chosen sample, who were

experiencing mild, moderate, and severe depression, participated in cognitive behavioural therapy, meditation-based intervention, and bibliotherapy. Ultimately, Joseph, Jose and Ettaniyil (2023) elaborate that, a scholar named; Shanshan Wang and colleagues affiliated with Beihang University conducted a study on 'the development and verification of evidence-based bibliotherapy is a valuable tool for caretakers of individuals with dementia, including scholars and healthcare professionals. In addition, in a study conducted by Joseph, Jose and Ettaniyil (2023), on '*a scientometric analysis of bibliotherapy: mapping the research landscape*, the purpose of the study encompassed a comprehensive evaluation of the research landscape in bibliotherapy, focusing on its development, current trends, and significant contributions. The findings of the study indicated a total of 1703 articles globally on bibliotherapy, from 828 different sources, spanning 1942 to 2023. In addition to that, the study demonstrate that Uppsala University retains the lead amongst the affiliations in terms of the number of publications, with a total of 41. It was followed by the Karolinska institute and the University of Alabama in close proximity, with both having 36 publications (Joseph, Jose and Ettaniyil 2023).

Hottenrott, Rose and Lawson (2020), carried out a study to scrutinize the publication output of 40 nations based on their affiliations, aiming to evaluate the impact. The study examined forty countries and twenty-six scientific disciplines over a span of twenty-four years. However, the findings indicate countries that have adopted significant structural financing reforms in the past twenty years have experienced a notable increase in the number of authors with affiliations. For instance, notable countries that have implemented the mentioned funding support are China in 2002, Norway in 2003, Russia in 2005, Germany in 2006, Singapore in 2008, France in 2008, and Israel in 2010 (Schiermeier 2017). Based on the aforementioned findings, South Africa does not rank among the countries with the most prolific publication productivity among those with affiliations. In regard to the publication-probability-affected discipline of bibliotherapy, scholars who are not affiliated with or who are unaware of what bibliotherapy entails will further undermine the concept and prevent it from being ranked among the top affiliations globally. Therefore, scholars in LIS need to be familiar with the concept of "bibliotherapy," be members of a particular affiliations, and publish on the concept 'bibliotherapy' in order to gain a global recognition.

2.5 Summary

The conceptual framework and literature review were presented in this chapter. Regardless, the researcher emphasised various concepts derived from metrics, bibliometrics, and indicators that formed the conceptual framework of this study. Aside from that, these concepts will provide guidance during data collection processes in the study's fourth chapter. As a result of the aforementioned concepts, a more collaborative theory emerged, which formulated the entire conceptual framework. Alternatively, the literature review for this study was conducted using the following two main themes: The first theme focused on bibliotherapy as an adjunct therapy from a global, African, and South African perspective. Given the study's broad scope, it was necessary to generalise all aspects of bibliotherapy as an adjunct therapy from various demographics. Furthermore, the second theme focuses on the trends in literature publication using bibliometrics as a research technique. This theme's goal is to provide a clear and comprehensive overview of the study's main goal. It also aims to assist the researcher in developing efficient data collection methods. As a result, the chapter that follows discusses how the study was carried out by providing a description of the research methodology.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter discussed the study's conceptual framework and literature review. This chapter focuses on reviewing the methodological processes that must be followed in order to complete a comprehensive study. It is essential for researchers to understand the methodological processes and methods available for completing a study. Giri and Biswas (2019:1) emphasise the importance of selecting appropriate research methodologies for the study in order to complete the study. In addition, the researcher should understand a research technique that is compatible with the methodological processes and methods. As a result, research methodology plays an important role in research because it consists of goals that help find a solution to a problem or improve people's quality of life (Jagdale, Hude & Chabukswar 2022). A research project, on the other hand, is a structured inquiry that aims to identify and develop effective scientific methods to solve problems and inquires in the field of social sciences, according to Kumar (2019).

This chapter describes the study's planning and execution procedures. This study's methodological approach focuses on various aspects of research. Research paradigms, research approach, research design, target population, data collection procedures, data analysis and presentation, reliability and validity, and ethical consideration are all included. As a result, the researcher must be familiar with the various methodological processes and methods, including techniques, in order to effectively employ them. This includes the development of tests or indices, the selection of appropriate research techniques, and the application of these methods and techniques, according to Jagdale, Hude and Chabukswar (2022). As a result, the term 'methodology' is derived from the term 'methods,' which refers to a method of collecting data (Babariya & Gohel 2017). Although the terms 'methods' and 'methodology' are frequently used interchangeably, they have distinct characteristics and are both involved in the execution of a research project (Jagdale Hude & Chabukswar 2022). Research methodology, on the other hand, is a scientific method for systematically solving a research problem. It entails researching the various steps that researchers commonly take when conducting their research. Furthermore, a research methodology seeks to answer questions such as why a study was conducted, how

the problem was defined, what data were gathered, and how the method was applied (Giri & Biswas 2019). A good research methodology, on the other hand, assists the researcher in clearly understanding what he or she is working on. Furthermore, this enables the researcher to map out the proper steps to complete a study in their chosen field. In that case, as shown in Figure 3.1, this chapter discusses the research paradigm, approach, and design used in this study, as well as the data collection tools used and their analysis.

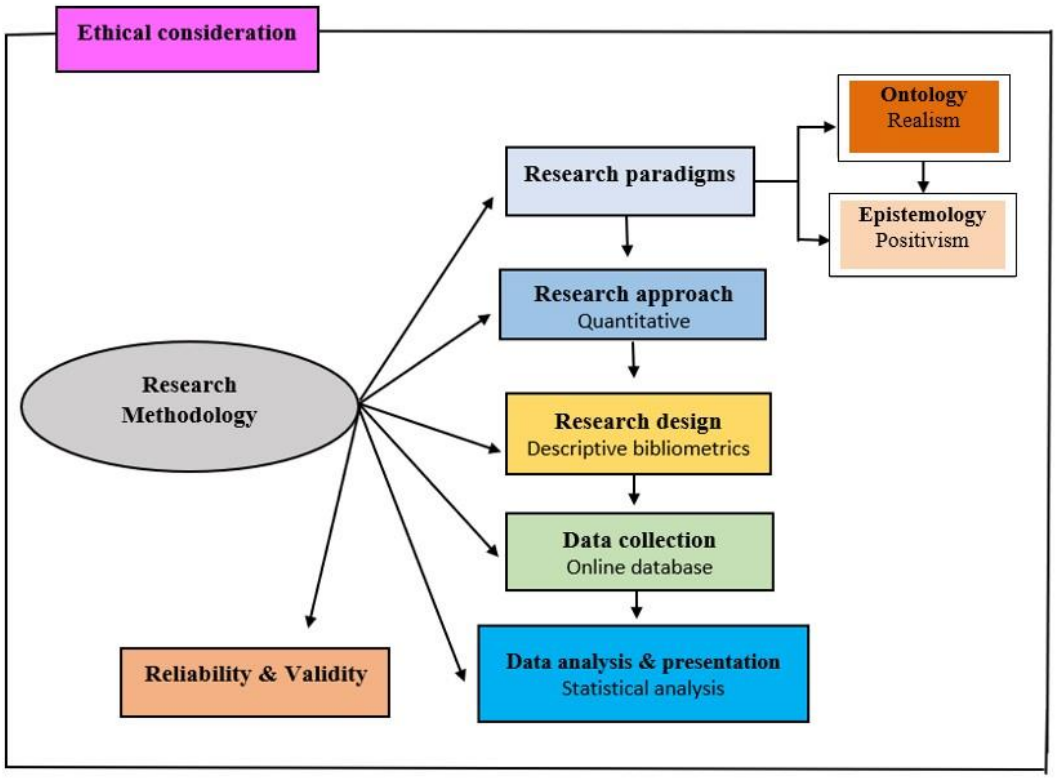


Figure 3.1: Research methodology (Researcher 2022)

3.2 Research paradigms

According to Kamal (2019), the term paradigm is derived from the Greek word for pattern. It is commonly perceived as a way of looking at the world associated with a scientific topic. Similarly, paradigms are defined as a mode of thought that examines the world through the lens of various assumptions and concepts. Okesina (2020), on the other hand, prefers the term 'philosophy,' rather than 'paradigm,' and defines it as the researcher's vision of the world or assumptions that guide the entire research.

There are four major paradigms that govern how social science research is conducted, according to Rehman and Alharthi (2016) and Gohary and Hatem (2009). Positivism, critical

theory, pragmatism, and interpretivism are examples. Figure 3.2 depicts their associated strategies, methods, and differences.

Item	*Positivism*	*Post-Positivism*	*Critical theory*	*Constructivism / interpretive*
Ontology	*Naive Realism* - Real reality (apprehendable reality) is assumed to exist. - Knowledge is summarised in the form of time and context free generalisations which take the form of cause-effect laws.	*Critical realism* - Reality is assumed to exist but to only imperfectly apprehendable because of flawed human intellectual mechanisms and the fundamentally intractable nature of phenomena.	*Historical realism:* Reality is assumed to be apprehendable that was once plastic and was shaped by a congeries of social, political, cultural, economic, ethnic, and gender factors.	*Relativist* - Realities are apprehendable in the form of multiple intangible mental constructions, socially and experientially based. - Reality is relative to observer, as there are many socially constructed realities that are not subject to any natural laws.
Epistemology	*Dualism/ Objectivism*: - The investigator and the investigated object are assumed to be independent entities and can not affect each other. - When influence in either direction (threats to validity) is recognised or suspected various strategies are followed to reduce or eliminate it. - Findings are true	*Modified Dualism/ Objectivism*: - It is possible to approximate reality but it is never fully known. - Special emphasis is placed on external guardians of objectivity such as critical traditions and the critical community. - Findings are probably true	*Transactional/ Subjectivist*: - The investigator and the investigated object are assumed to be interactively linked, with the values of the investigator inevitably influencing the inquiry. - Therefore findings are value mediated	*Transactional/ Subjectivist*: - The investigator and the object of investigation are assumed to be interactively linked so that the findings are literally created as the investigation proceeds. - Therefore findings are created by the investigator.

Figure 3.2: Classification of Research Paradigms (Gohary & Hatem 2009)

Scientific research begins with a set of procedures based on a set of assumptions (Rehman & Alharthi 2016). According to Khaldi (2017), the researcher's philosophical assumptions determine the scope, paradigms, and methods that will be used to carry out the entire research. Furthermore, the motivation behind the philosophical assumption led to scientific research that appears feasible. As a result, it is critical to conduct scientific research that is guided by a specific philosophy and accompanied by a paradigm, such as ontological philosophical assumptions with positivism as a paradigm. Furthermore, according to Okesina (2020), philosophers in social science recognise paradigms as part of scientific research because they preserve and clearly state the researcher's intentions. As a result, Saunders, Lewis and Thornhill (2019:113) show that a paradigm has four components or dimensions: ontology, epistemology, methodology, and axiology. Other philosophers, on the other hand, concentrate solely on three

aspects of a paradigm: ontological philosophy, epistemology, and axiology. Some people, on the other hand, prefer ontology, epistemology, and methodology (Davies & Fisher 2018). For example, after defining the preceding paradigm steps, this study chooses to focus on the two paradigm elements, namely ontology and epistemology. Regardless of whether the methodology is simply a component of the paradigms, the methodology in this study is differentiated in a specific direction, as will be discussed later in this chapter.

3.2.1 Ontology

Ontology refers to the nature of reality (Davies & Fisher 2018). On the other hand, and depending on the researcher's perspective, the concept of ontology may be explained in a variety of ways. On the contrary, some of the researchers view it as a way of describing various aspects of the social world, such as its predictability or its complexity (Hesse-Biber 2010). For example, Hesse-Biber (2010) indicates that there are two world views deriving from ontological philosophical assumptions: the first one focuses on the relationship between humans and the social world, while the second one considers the world to be constructed through rituals and interactions. Additionally, the ontological philosophical assumption viewed by Sunders, Lewis and Thornhill (2019:114) and Makombe (2017) as an assumption that the multiple realities of a research problem can be explored and derived from the interactions between the researchers and the participants. Ultimately, the ontological assumption of this study encompasses the single reality of a lack of bibliotherapy literature; however, the researcher's assumptions revolved around personal experiences.

Additionally, the researcher's assumptions are grounded in the experiences gained through contact with the external world. This type of knowledge facilitates humanity's accumulation of valuable and diverse backgrounds over the course of its history in the form of tracing patterns (Empirical Knowledge 2021). In contrary to that, there are other ontologies that can be opted when conducting a study for instance, positivism, pragmatism, and constructivism. However, the present study employs a realism theory, which will be expounded upon in the next paragraph of this chapter.

3.2.1.1 Realism

According to Sobh and Perry (2005), realism theory refers to the idea that reality possesses an inherent existence that is separate from the cognitive faculties of the researcher, thereby confirming the existence of an external reality. Therefore, in this study, the researcher chose to follow the realism theory. Hence, the motivation of the researcher originates from the independent reality of a lack of literature on bibliotherapy, leading to a study to confirm this claim in relation to the hypothesis. Based on the researcher's external observations, it was seen that there is a notable lack of familiarity with the discipline of bibliotherapy. As a result, it is necessary to examine and analyse the productivity of publications in order to gain a deeper understanding of the subject. In summary, realism is an ontological perspective that centres on the fundamental essence of existence, or reality. Within this area of study, it is characterised as an independent reality, as per the researcher's viewpoint. Therefore, in the context of realism, it implies that there is a reality that is independent of human perception and observation. Additionally, according to realists, scientific theories are designed to provide precise descriptions of external reality. The reality is believed to be studied and comprehended by scientific methods; hence, the bibliometric analysis of bibliotherapy literature in South Africa.

3.2.2 Epistemology

Epistemology is the study of how people come to know what they know. Nguyen (2019) defines epistemology as "how the researcher learns, the nature of the knowledge, and how the researcher communicates it in order to contribute expertise in a field of study." Epistemological philosophy, on the other hand, is an assumption that focuses on the interaction between the researcher and the discipline being studied. This is also because of the relationships that exist between the researcher and the person who decides what knowledge study to conduct (Kivunja & Kuyini 2017). As a result, the concept of epistemology poses specific questions. For example, what are the connections between our knowledge and what is known? Also, how did we learn what we know? And what exactly is knowledge? As a result, Kivunja and Kuyini (2017) go into greater detail about how the aforementioned questions were derived from the four perspectives on the relationship between knowledge and the known, namely, intuitive knowledge, authoritative knowledge, logical knowledge, and empirical knowledge. Sunders, Lewis and Thornhill (2019:114) including Makombe (2017), claim that this is because they attempt to articulate the answers to the preceding epistemological knowledge question:

- Intuitive knowledge is derived from other forms of knowledge. For example, the faith of a researcher, beliefs, and intuition are the epistemological basis of your research.
- With authoritative knowledge, the researcher focuses on and relies on the existing data gathered from people in the know. This data can be in the form of leaders in institutions, books, or articles. Consequently, that is considered authoritative knowledge.
- If rationalist epistemology, or conversely, logical knowledge, emphasises reason as the most reliable path to knowing the truth, then this approach is appropriate.
- In empirical epistemological knowledge, emphasis is placed on the understanding that knowledge is best derived from sense experiences and demonstrable, objective facts of the researcher.

In addition to that, there are other ontologies that can be opted when conducting a study for instance, empiricism, and rationalism. As a result, this study is founded on empirical epistemological knowledge. The researcher's assumptions are based on a scarcity of literature in South Africa on the discipline of 'bibliotherapy.' However, the researcher's assumptions are based on his or her interactions with the outside world. The epistemology of knowledge places a strong emphasis on scientific study's effectiveness and discipline as the most accurate and comprehensive method of acquiring knowledge. In the case of bibliotherapy, the process frequently entails developing a hypothesis and deriving conclusions by analysing empirical evidence gathered from databases. As a result, this study adopts the positivist theory, which will be discussed further in the following paragraph of this chapter.

3.2.2.1 Positivism

Positivism holds that reality exists independently of humans. According to Don-Solomon and Eke (2018), it is a branch of philosophy that emerged in the early nineteenth century and states that everything is governed by laws rather than our senses. In contrast, positivism's main point of view is derived from realism (Iofrida, De Luca, Strano & Gulisano 2018). This means that reality is free of constraints. Furthermore, the researcher has a sense of freedom in relation to what they perceive to be reality, which is also independent of the researcher. For example, because they are usually not in contact with the participants and their data is collected using software, researchers can work anywhere and at any time. As previously stated, realism is derived from positivism's ontological point of view, and the position of positivism paradigms

is also derived from objectivism (Kivunja & Kuyini 2017). Furthermore, from an epistemological standpoint, researchers favour positivism. According to the researcher, and based on the study's hypothesis in Chapter 1, there is only one reality, and that reality is that there is a "lack of bibliotherapy literature in South Africa." The goal of post-positivist research, according to Creswell and Creswell (2018), is to generate new knowledge. As a result, post-positivists construct, solve, and invent knowledge, such as conducting research to implement new policies within a company. As a result of their observations of post-positivism, researchers have influences on the research's conclusion. According to post-positivists, there is no reality of social phenomena that is independent of the observer. It does, however, acknowledge the possibility that the researcher's own values and beliefs may influence what is observed. As a result, Kumar (2019) as well as Leedy and Ormrod (2015) elaborate that post-positivism aims to find unbiased answers by working with theorists' biases. Post-positivism, on the other hand, seeks to address the shortcomings of the traditional positivist paradigm; in this case, the ontological position is based on the concept of critical realism (Kumar 2011). As a result, from an epistemological standpoint, post-positivism knowledge is not based on an objective individual, but rather on conjectures.

3.3 Research approach

According to Mohajan (2018), a research approach is a plan of action that provides a study with a systematic direction. Alternatively, it is a set of procedures and plans that describe the various decisions that a researcher makes during a study. Furthermore, these decisions are not taken in the order that they make sense to the researcher but rather in the order that they are most likely to benefit the study (Babariya & Gohel 2017:48). Therefore, for this study, the researcher describes the three research approaches utilised in social science, namely qualitative, quantitative, and mixed approaches. The distinction between the approaches is framed based on their nature. For example, while qualitative research focuses on the use of words rather than numbers (quantitative research), mixed-methods research embraces the principles of both qualitative and quantitative approaches (Brown 2019:227). Therefore, looking at the qualitative approach, Leavy (2017) indicates that qualitative as an approach is the process of discovering the phenomena around institutions, individuals, or society regarding social or human issues. Furthermore, qualitative researchers are usually inductive in nature and aim for a complex, informative, and interpretative framework (Kumar 2019).

On the other hand, quantitative research is a type of study that examines the relationship between various variables to test the validity of objective hypotheses about a phenomenon. Also, quantitative researchers focus on collecting data using various instruments and then analysing the results using statistical processes (Babariya & Gohel 2017:51). Additionally, quantitative researchers, unlike qualitative researchers, make presumptions about how to test hypotheses. When it comes to the mixed approach, Brown (2019: 227/8) states that it is a type of study that incorporates both qualitative and quantitative approaches. It entails working with both types of data as well as a variety of theoretical frameworks. According to Babariya and Gohel (2017:53), mixed-method researchers usually aim to gain better knowledge of a research study. As a result, the afore-mentioned approaches are considered the three most prominent parts of research projects in the social sciences. Unquestionably, they can be utilised differently, and they all have the same objective and represent different outcomes, depending on the nature of the study. Figure 3.3 depicts the interaction of these three approaches.

Item	*Positivism*	*Post-Positivism*	*Critical theory*	*Constructivism / interpretive*
Ontology	*Naive Realism* - Real reality (apprehendable reality) is assumed to exist. - Knowledge is summarised in the form of time and context free generalisations which take the form of cause-effect laws.	*Critical realism* - Reality is assumed to exist but to only imperfectly apprehendable because of flawed human intellectual mechanisms and the fundamentally intractable nature of phenomena.	*Historical realism:* Reality is assumed to be apprehendable that was once plastic and was shaped by a congeries of social, political, cultural, economic, ethnic, and gender factors.	*Relativist* - Realities are apprehendable in the form of multiple intangible mental constructions, socially and experientially based. - Reality is relative to observer, as there are many socially constructed realities that are not subject to any natural laws.
Epistemology	*Dualism/ Objectivism*: - The investigator and the investigated object are assumed to be independent entities and can not affect each other. - When influence in either direction (threats to validity) is recognised or suspected various strategies are followed to reduce or eliminate it. - Findings are true	*Modified Dualism/ Objectivism*: - It is possible to approximate reality but it is never fully known. - Special emphasis is placed on external guardians of objectivity such as critical traditions and the critical community. - Findings are probably true	*Transactional/ Subjectivist*: - The investigator and the investigated object are assumed to be interactively linked, with the values of the investigator inevitably influencing the inquiry. - Therefore findings are value mediated	*Transactional/ Subjectivist*: - The investigator and the object of investigation are assumed to be interactively linked so that the findings are literally created as the investigation proceeds. - Therefore findings are created by the investigator.

Figure 3.3: Research approaches in Social Science (Creswell & Creswell 2018:52)

As a result, this study adopted a quantitative approach, whereby data is collected to confirm or dispute the hypothesis of the study. In relation to that, the quantitative approach remains suitable as it analyses numerical data using statistical techniques to answer the questions of the study (Abuke 2017). It aims to test a theory or assumption elaborated in the form of narrow hypotheses for the study (Creswell 2017:42). As a result, the researcher indicated a lack of

bibliotherapy literature in South Africa. Therefore, the quantitative approach remains suitable for this study, as it is characterised by deductive approaches aiming to confirm, prove, or disprove existing theories (Leavy 2017:10). As a result, this leads to the analysis of bibliotherapy publications in South Africa to trace bibliotherapy literature focusing on the objectives of the study.

3.4 Research design

Research designs are types of inquiries that provide specific guidance for procedures in a research study (Creswell & Creswell 2018:49). It usually focuses on organising the various activities related to a study so that they are most likely to achieve the objectives (Brown 2019:228). As a result, the researcher decides on the design to be performed, including the related activities for the study to be completed. However, Kumar (2018:94) perceives research design as a blueprint or a plan for how a study will be carried out. It involves gathering data to be used as a starting point for testing hypotheses, and it usually includes the selection of a sample of interest. Basically, the research design can be regarded as a map of the data collected using a sampling technique. It also has a variety of tools and techniques for analysing data. Alternatively, research design is a procedural plan used by the researcher to answer questions in a valid, objective, accurate, and cost-effective manner (Kumar 2019:87). This means having a research design that indicates the relevancy of the study and also ensures the researcher meets the objectives of the study in the most cost-effective way possible.

In addition, various factors, such as the number of participants, the nature of the research question, and the researchers' personal experiences, can influence the design of a study. According to Gomez and Mouselli (2018:35), the researcher decides on the most appropriate methods and techniques to collect data. Furthermore, the decisions made are influenced by the nature of the research project. Regardless of diverse researchers' perspectives on research designs, the common motive comprises the decision on the design adopted for a study. As a result, Kumar (2019:86) indicates that a faulty design leads to misinformation and wastes, respectively, human, and financial resources. Therefore, Creswell and Creswell (2018) indicate that there are several design frameworks in a quantitative research approach. Even though experimental and survey designs are the most widely used (Leedy & Ormrod 2015), there are other types of quantitative research designs that can be used in a study.

These include informetrics, bibliometrics, cybermetrics, and almetrics (Onyancha 2018). For this study, the researcher opted for descriptive bibliometrics as the research design. The study's topic, 'bibliometrics analysis of bibliotherapy literature in South Africa', informed the researcher's decision on the design, which will concentrate more on analysis of publication trends. According to Onyancha (2020), the adoption of bibliometrics studies is attributed to the trends and developments in the publications of a specific phenomenon. Subsequently, below are some of the designs that can be used to analyse publication trends. Furthermore, all the metrics play a significant role in assessing the scientific impact of publications. The metrics include bibliometrics, librametrics, scientometrics, petantometrics, informatics, webometrics, and cybermetrics (Garcia-Villar & Garcia-Santos 2021). This is also confirmed by Pacheco, Sousa, Yanai, Lopes and Machado (2018): all the metrics contribute to research in general and individual scientific knowledge. This indicates a complementary relationship between all the metrics. However, Haustein, Costas and Lariviere (2015) argue that online metrics should not act as a replacement for traditional metrics. Instead, enhance and grow to assess and analyse the productivity and activities of publications through the internet among academic peers on networks such as Facebook and Twitter, including traditional and printed literature (Pacheco et al. 2018).

3.4.1 Scientometrics

The term 'scientometrics' was first introduced in 1969 by Vassily Nalimov and Z.M. Mulchenko (Wani & Zainab 2019). It is a combination of science and technology with information science and portrays numerous mathematical, statistical, and data mining techniques and procedures to measure and quantify scientific information concerning publications (Wani & Zainab 2019). According to Hai-Yun, Zeng-Hui, Chao, Kun, Hong-Shen, and Zhengbiao (2017), scientometrics is a metric encompassing core activities such as science and technology indicators, information systems, cognitive structures, and interaction between technology and society. It focuses on the study of science and technology. Also, it aims to provide a comprehensive view of various features of scientific and technical fields as far as publication trends are concerned.

In contrast, scientometrics analyses the quantitative method of producing, using, and disseminating scientific information to achieve a better understanding of the mechanisms of scientific research and publication productivity (Chellappandi & Vijayakumar 2018).

According to De Bellis (2009), it is a set of methods used to measure the scientific communication of researchers and philosophers. Also, scientometrics involves studying various types of publications and the people who make them. Additionally, and within the field of LIS, scientometrics is concerned with the quantitative aspects of scientific knowledge production, for example, publications, conferences, and papers, as far as author productivity is concerned. Also, De Bellis (2009) indicates that scientometrics is measured and analysed at three levels of aggregation: micro, meso, and macro. For instance, the micro-level is focused on the publication of individual papers and studies, while the meso-level focuses on the output of institutions and regional aggregations, while the macro-level concerns the publication outputs of countries, regions, and supranational levels (De Bellis 2009).

Although in the past scientometrics was viewed as just a way to measure scientific progress, it has been growing over the years in various fields. Scholars developed an interest by embarking on studies related to scientometrics. For example, Hai-Yun et al. (2017) conducted a scientometric study on the introduction of multi-source data fusion (MSDF), overviewing its challenges and ingredients. Also, Onyancha (2020) conducted a scientometric study on 'a meta-analysis study of the relationship between research and economic development in selected countries in sub-Saharan Africa. Given these points, this study will not attempt to investigate bibliotherapy trends using a scientometrics route, as it is not in line with the intentions of the researcher. However, scientometrics is included in this study as a 'concept, forming part of the conceptual framework.

3.4.2 Webometrics

The availability of webometrics has developed and changed various research areas that require special and scientific skills for research (Chellappandi & Vijayakumar 2018). For instance, areas such as the library and information sciences have experienced the application of Web 2.0 technologies that are currently dominant within the interest of research as far as publication productivities are concerned. Also, the rapid growth of the internet and cyberspace in publications has made research and information available online (Varghese & Lawrance 2017). According to Undertseva (2018), webometrics has developed a rapid research direction, more specifically in areas such as information and communication technologies. As a result, the analysis and indexing of websites and hyperlinks gained popularity among researchers, and it is known as webometrics. The term 'webometrics' was coined by Thomas Almid and Peter

Ingwersen in the 1990s with the motive of indexing, analysing, and assessing publication productivities in conjunction with their impact on the World Wide Web. It then merged as one of the useful metrics in research, especially after the development of internet resources (Khamala, Makori & Njiraine 2018). In an attempt to define webometrics, it is a metric for indexing websites, hyperlinks, and networks to trace the reflection of publications (Varghese & Lawrance 2019). Also, it is used for understanding web usage, for instance, visitations on a website and peer-to-peer interaction (Undertseva 2018).

In contrast, webometrics is a quantitative study focusing on the construction and use of technological resources to index publications on the web, drawing on informetric approaches and bibliometrics (Israel 2017). At this current stage, the internet and websites are the main sources of information; therefore, more knowledge on webometrics is needed to improve the skills of the researchers since it is still new. According to Israel (2017), webometrics is regarded as a new subdiscipline of informatics. For example, webometrics is currently applied to rank publication visibility and impacts (Khamala, Makori & Njiraine 2018). For example, webometrics enables the indexing of university webpages regarding scientific outputs, including publication productivity. Both scholars and institutions benefit from the application of webometrics via academic excellence, promotions, the creation of web policies, and substantial publication volumes, including quality in electronic publications.

Invalidating the relevancy of webometrics, Brahmah and Verma (2019) conducted a study on the ‘evaluation of national library websites of Brazil, Russia, India, and China (BRICS) countries, analysing the domain and page authority on internal links and internal equity passing links. The study indicated a successful outcome of the application of webometrics, whereby 67 domains and 73 pages of authority were found. As indicated, as webometrics is a new subdiscipline of informatics, the researcher needs to familiarise themselves with and align their skills towards webometrics, especially due to the rapid internet developments. Also, researchers tend to share more of their work on websites. This includes universities; for example, academic libraries use websites to maintain their institutional activities, including publications (Undartseva 2018). Therefore, the nature of this study focuses outside of the subdiscipline of ‘webometrics’. However, it is included as it forms part of the metrics. Also, it is included because the researcher intended to portray a comprehensive description of the conceptual framework for this study.

3.4.3 Librametrics

Over the past decades, several metrics have been developed to further investigate and index knowledge productivity, including research in field areas such as LIS, which gave birth to the term ‘librametrics (Alamelu & Vandar 2020). Additlonally, to Alamelu and Vandar (2020), further indicates that bibliometrics is a quantitative method of investigating services and activities within libraries. However, since the term was coined in the 1960s, it is still not a popular metric in the LIS area. Also, the term ‘librametrics’ is not widely adopted in areas of LIS (Alamely & Vandar 2020). During the year 1969, DR. Ranganathan, a librarian at Madras University Library, coined the term librametrics’ term for the first time at a conference in Lamington Spa (Prasath, Raja & Sangeetha 2016). Although librametrics complements the rest of the metrics, it does not entail the same attributes as them. According to Alamelu and Kuzhali (2020), the various metric fields of scientometrics, webometrics, bibliometrics, patentometrics, almetrics, and cybermetrics consist of various attributes and application measurements around LIS that differ from librametrics. meaning they encompass the analysis and indexing of publication productivity. In contrast, librametrics focuses on maintaining and controlling the outputs of the services and activities occurring in libraries. This includes library materials, library staff, and users.

In addition, libraries are information centres that provide services to users. As a result, all the services and activities need to be indexed in the form of investigations for further service improvements and policy development where necessary, and that is done through librametrics. Prasath, Raja, and Sangeetha (2016) indicate that due to the application of librametrics, user book behaviour and library staff performance can be quantifiable. For instance, library users are classified based on the types of material they are frequently using and book requisition patterns. Furthermore, the library staff, library material, and library users remain the key indicators of this metric. Ultimately, this matrix will not be used for further investigations of this study. Instead, the researcher intends not to investigate library and user services but rather the trends of bibliotherapy literature in South Africa. However, librametrics forms part of the conceptual framework; hence, it is included in this study.

3.4.4 Almetrics

The trends of publication productivity are not only taking place among authors; research, however, is included in web-based media and websites. According to Mohammad (2021), several research studies on publication trends have been conducted traditionally at the author and journal level, excluding the online level. Moreover, this might be due to unfamiliarity and insufficient knowledge of almetrics. Also, it may include the fact that traditional measures of publications solely encompass articles, authors, and journals, leaving unaccounted for the work that is on web-based sites, such as blogs. Almetrics is another metric conducted during the measurement of social media and web usage. Williams (2017) explains that almetrics are a way of measuring the impact of activities, publications, journal articles, and overall research outputs on social platforms.

On the contrary, it is how people interact with scholarly publications online. Robinson-Gracia, Torres-Salinas, Zahedi, and Costas (2015) indicate that peers or people interact with each other with a given scholarly work to measure how often research is blogged about, tweeted, or bookmarked similarly. Roldan-Valadez, Salaza-Ruiz, Ibavra-Contreras and Rios (2019) persevere almetrics as the interaction between scholars works and individuals in general on mainstreams such as blogs, Wikipedia, syllabi, reference managers like Mendeley, and news, in conjunction with social media platforms. For instance, on Twitter, YouTube, and Facebook, one may conclude that Almetrics is an online platform that allows scholars, researchers, philosophers, and every individual interested in any area of study to exchange ideas, comment, and engage further. A significant part of it may not only encompass the measurement of usage but also influence collaboration relationships between researchers to further produce more publications.

As a result, it is significant that researchers step out of their comfort zone when conducting studies that mainly require the application of traditional metrics, such as measuring author productivity through the h-index. For example, many individuals interact more often on social platforms (Dutta 2016). This means researchers should be measuring web-based sites and social webs in the same way as publications. Also, ever since the beginning of the 1990s and mid-2000s, technological changes and developments have resulted in scholarly works becoming more widely open and accessible through social networking and social webs (Dutta

2016). This means publications should not only be measured traditionally since there are almetrics among other metrics.

Subsequently, Williams (2017) indicated two web-based sites that support and promote the use of almetrics, namely, Almetrics.org and Almetrics.com. Furthermore, they are considered web-based sites that are developed, created, maintained, and monitored by scholars to transfer insight into the creation and study of almetrics, especially in the informing and analysis of scholarships (Williams 2017). There are also apps created regarding promotions on Almetrics, for example, Crowd Metre and Paper Critic. In this way, almetrics enable researchers to discover new insights regarding the impact of publications outside of the parameters of traditional metrics. According to Mohammad (2021), almetrics enable further engagements in various disciplines by analysing citations, online viewing, downloading, recommendations, and discussions. In other words, the main purpose focuses on measuring the volume of mentions and the authority of the authors in an online space. In this regard, the study will not opt for almetrics as a key metric to support the objectives of the study. However, the study encompasses the measurement of publication trends in a discipline called bibliotherapy," not the usage trends of this discipline on the internet.

3.4.5 Patentometrics

The importance of patents has become more significant in recent years of research, especially after the invention of scientific publications. According to Malea, Thelwall and Kousha (2017), patents are technical documents consisting of legal rights protection for monographs, scientific articles, and proceedings papers that can be used to trace publication productivity in academia, including other areas such as businesses. This means more publication activities take place on online platforms, and various types of media are used to publish scientific and technological information online. As a result, this changed the narrative behind the measurement of publication productivity, whereby research metrics were introduced. For example, the measurement of patents is called patentometrics. Patentometrics forms part of the metrics technique that is commonly used by informetrics researchers to study the various characteristics of patent documents (Thelwall & Kousha 2017).

According to Hammarfelt (2021), patentometrics is a term that refers to the systematic analysis of patents carried out using metric methods. It is commonly used for policy documents and

economic research, such as patent statistics. On the other hand, patentometrics in the field of LIS remains minimal. According to Hammarfelt (2021), during the 1980s, patents became a vital statistical unit for measuring the interaction between technology and science and further took the methodological route. Furthermore, Hicks and Isett (2020) indicated that the increasing number of patent citation research areas has had a significant impact, such as being applied in policy discussions at some points. Regardless of that, patentometrics remains marginalised and unpopular (Malea, Thelwall & Kousha 2017). Due to insufficient research on patentometrics in LIS, more detailed studies in patentometrics should be studied to see how they contribute to the overall quality of research in LIS. It should also be investigated why researchers opt to conduct studies using other metrics instead of patentometrics. As a result, the researcher will not opt for patentometrics in the interest of this study; however, the indicator forms part of the conceptual framework.

3.4.6 Bibliometrics

One of the most popular quantitative designs for evaluating research is bibliometrics. It is a design that considers the measurement impacts of publications (Bornmann 2016). According to Wani and Zainab (2019:24), bibliometrics is the measurement of scientific performance based on citations and publications, or the accumulation of bibliographies on research areas supplemented by citations. Essentially, it is used to track the impact of various researchers' publications and literature. For example, researchers in the field of library and information science may choose to trace publication trends in a discipline such as the Fourth Industrial Revolution. Also, bibliometrics as a research tool became more visible and traceable between 2011 and 2015 in the field of LIS literature (Onyancha & Majanja 2017).

On the contrary, it is a statistical and mathematical tool to analyse and interpret literature that has been regarded as a vital component of knowledge-based communication (Chellappandi & Vijayayakumar 2018). It is a tool that helps researchers analyse the literature contained in publications. However, these publications can be in the form of articles or books, as well as other informational material. Furthermore, there are two techniques of bibliometrics that can be applied, namely, descriptive bibliometrics and evaluative bibliometrics (Onyancha 2020). Mathankar (2018) indicates descriptive bibliometrics as a type of research that focuses on an aspect of a document or piece of literature. For instance, documents that carry information, the form of presentations, the nature of information, the quantity of information, the time and

frequency of studies, the origin and geographical scattering or distribution, etc. Over and above that, evaluative bibliometrics encompasses the typical examination of the link between various elements of a given piece of literature or document, such as authorship, bibliographic history, and content analysis (Mathankar 2018). Also, according to Wani and Zainab (2019:19), bibliometrics can be used in three ways, depending on the researcher's motive, and they are as follows:

- Bibliometrics for Scientific Disciplines (Scientific Information)

Due to their scientific backgrounds, researchers have a strong interest in information retrieval, whereby discipline is often referred to as an extension of their specialty or to the extent of knowledge within a field.

- Bibliometrics for Science Policy and Management (Science Policy)

The field of research evaluation is currently focused on the dissemination of scientific knowledge. This discipline involves working with various institutions and national authorities for further implementation of policies as far as new knowledge is concerned.

- Bibliometrics for Bibliometricians (Methodological Tool)

This involves conducting systematic research on the various aspects of bibliometric studies.

In this regard, bibliometrics can be used in the three afore-mentioned mechanisms, depending on the researcher's motivation or inquiry into the study. Moreover, in this study, the researcher used descriptive bibliometrics as a methodological mechanism instead of a scientific discipline or science policy and management. Wani and Zainab (2019:23) indicate that descriptive bibliometrics measures productivity by author, organisation, geographical region, period, or discipline. As a result, this study opts to measure the productivity of a discipline over a specific period of time. Therefore, this influenced the researcher’s interests based on the comprehensive analysis of bibliotherapy literature. Also, to analyse the trends of bibliotherapy literature in South Africa, Furthermore, it will benefit the researcher to discover the state of publications on bibliotherapy as a discipline.

In addition, the scientific output of a discipline, for instance, 'bibliotherapy, will assist the researcher in determining publication productivity and the impact of the work produced. In view of the above, when applying descriptive bibliometrics as a methodological mechanism, this design includes indicators such as citation analysis, word frequency analysis, co-word analysis, and simple document counting, such as the number of publications by an author, institution, research group, or nation (Wani & Zainab 2019:30). Additionally, it is necessary to

discuss indicators of publication trends from the standpoint of bibliometrics as a design or methodological mechanism.

From a methodological point of view, an indicator is a metric that expressly addresses certain assumptions (Bornmann 2020). For example, what scientific features can be expressed numerically? As a result, indicators cannot exist in the absence of a specific goal. They must be problem-oriented; otherwise, they are ineffective (Van-Raan 2019:249). Hence, Garcia-Villar and Garcia-Santos (2021) indicate that one of the most widely used indicators is quantitative and can be measured numerically as far as the h-index is concerned. This means that h-indexing is when researchers measure scientists' impact on the field of scientific study. Also, h-indexes are used to analyse various facets of a scientist's work (Kolton & Hafner 2021). There are the most popular bibliometric indicators that can be adopted when performing a bibliometric study, depending on the researcher's inquiry (Bornmann 2020:3). For example, these indicators may include citation analysis, author productivity, and publication analysis (Lim, Kumar, Pandey, Verma & Kumar 2021). For this study, the researcher will look at publication trends as the 'indicators, which are further discussed below (Donthu, Kumar, Mukherjee, Pandey & Lim 2010):

Publication indicators:

- Publication activity can be represented by the number of published productivities at a given period and is governed by the law of scientific productivity, known as Lotka's law of productivity. Its primary benefit is that it can compare the impact of production on researchers from various angles.
- Different types of publications can be produced from the results of research productivity. For instance, articles, books, journals, and letters. This means that every scientifically produced work can be traced and measured, regardless of its nature. For example, authors, countries, disciplines, and journals.
- The level of aggregation is very significant when it comes to measuring the productivity of publications. The publications of various entities, including research groups, authors, co-authors, and institutions, serve as representations of their output. For example, author and research group publications are measured at the micro level; institutional publication output; scientific journal studies; and so on are measured at the meso level. Finally, a macro level measures the publication output of regions, countries, and national and international groups.

- Publication counts may encompass co-authored publications (CA), productivity per active year of publications (PAY), sole-authored publications (SA), total number of publications (TP), publication in a discipline (PD), and number of contributing authors (NCA).

According to Davies and Fishers (2018), an interpretive paradigm represents a philosophical position that is opposed to positivism. It asserts that reality is subjective and varies from person to person. In light of the preceding discussion, interpretivism challenges the notion of a single, verifiable reality and instead posits that reality is subjective, encompassing multiple interpretations. Moreover, interpretivism places great importance on interpersonal interaction, acknowledging that a complex understanding of reality emerges from diverse perspectives and inputs.

However, it's worth noting that different researchers may have varying perspectives on interpretivism. For instance, Creswell and Creswell (2018) define interpretivism as a philosophical paradigm, sometimes referred to as constructivism, which is commonly used in qualitative research. In this context, interpretivism seeks to comprehend phenomena and engage with the researcher's surroundings. Here, the researcher's objective is to understand and interpret phenomena rather than uncover objective truths and knowledge.

Furthermore, Davies and Fishers (2018) clarify that interpretivism is rooted in a relativist ontological foundation and is subjective from an epistemological standpoint. Additionally, the interpretive paradigm has given rise to a number of methodological approaches, such as phenomenology, grounded theory, or ethnography, each of which has a distinct philosophical perspective. Data collection methods employed within this paradigm may include observations, interviews, and/or focus groups (Flick 2018). In this study, it is worth noting that the interpretivism paradigm will not be utilised. Despite this, the researcher included it in the discussion to shed light on the study's context and origin, underscoring its theoretical framework.

3.5 Target population

It is significant that the researchers thoroughly considered the selection of the study's target population. According to Brown (2019:269), target population refers to individuals, organisations, businesses, and other entities that are involved in the study. On the contrary, the target population refers to a unit of study that the researcher uses to gather various elements of

data that they wish to use in making inferences (Bulmberg, Cooper & Schindler 2011). Also, it is necessary for researchers to keep in mind that the target population of a quantitative approach usually differs from that of a qualitative approach. For example, Kumar (2011:55) indicates that, for a quantitative approach, the researcher needs to ensure that both the study population and the research problem are clear and specific. Alternatively, in a qualitative approach, the study population should remain flexible and free to roam whenever a situation arises to enable the researcher to collect rich and varied data (Kumar 2011:55). However, in every research project the target population should include or exclude individuals or entities participating. Also, researchers aim to investigate the 'target population', which must be a subset of the population in question among population inside the interest limitations of the study (Hossan, Jaharuddin & Mansor 2023). Therefore, in the bibliometrics approach, online databases are regarded as the target population of a study. According to Onyancha (2020:344), online databases are involved in analysing the productivity of publications in scientific disciplines; this includes tracing and identifying trends and developments on a concept in a study. As a result, the target population of this study focuses on the biggest databases in the world, which include Web of Science, Scopus, and Google Scholar, from the year of inception until 2022. According to Pacauskas and Naukkarinen (2020), Scopus, Web of Science, and Google Scholar are identified as the major databases worldwide.

3.6 Sampling

Under normal circumstances, the scope and size of a research project can be challenging to manage for researchers. Hence, it is important that researchers conduct a study in a manner that is appropriate to the research population (Brown 2019:256). According to Bulmberg, Cooper and Schindler (2011), this involves making sure that the necessary number of samples are included in the study. As a result, that is known as sampling. Creswell and Creswell (2018) indicate that sampling refers to a list of elements and entities that are of interest to the study. Alternatively, it is a strategy that allows the researcher to develop a plan that will meet the objectives and answer the questions that will be presented in the study (Leavy 2017). Furthermore, the selection of a sample is part of both qualitative and quantitative research, which is carried out according to two opposing philosophies. In qualitative research, the researcher tries to select a sample that is representative of the entire population, while in quantitative research, the researcher tries to select a sample that is unbiased. Additionally, to Hossan, Jaharuddin and Mansor (2023) indicate that researchers possessing the sample frame,

or group of subjects, that is too small may results in an adequate data. Additionally, this could lead to research that fails to provide an accurate estimate of the impacted area. In this study, the researcher opts to use patterns in the form of years, for example, 1916–2021, as a sampling. However, in the case of bibliometrics design, sampling entails researchers studying frequency (numbers) and patterns related to the act of publishing (Palinkas, Horwitz, Green, Wisdom, Duan & Hoagwood 2015)). Furthermore, the data collected from a sampling is derived from the publication productivity of online publications over a certain period. Therefore, in this study, the researcher opted for three major databases namely WoS, Scopus and GS as the target population of the study as indicated in 3.4. Therefore, the years of publication trends serve as a sampling frame for this study. According to Hossan, Jaharuddin and Mansor (2023), a sampling frame is described as a sufficient quantity of units to permit the gathering of a complete information set, which may be an essential need. This means that the sampling frame of the study is from its inception in 1916 to the previous year 2022. As a result, the concept of bibliotherapy was formally coined for the first time by Samuel McChord Chrothers (Moy 2017). Moreover, it is important to index the discipline of bibliotherapy's years of development. Furthermore, it is concluded that, the sampling of the study involves around the keywords that will be used to conduct a bibliographic query. These keywords include bibliotherapy as the compound word, self-help books, reading therapy and poetry therapy.

3.7 Data collection

Data collection is the systematic process of gathering, evaluating, and measuring data to test hypotheses and answer questions in social science. According to Giri and Biswas (2019:15), there are two sources of data in social science: primary data (from the original source) and secondary data (data obtained from the second source). For instance, regarding the primary data, researchers obtain it directly from the participants in the form of interviews and observations. Alternatively, secondary data is absorbed from second sources, which can be in the form of a dissertation, political commentary, books, the internet, or journal sites. Therefore, this study opts to embark on secondary data, as it is derived directly from the databases. According to Sile, Guns, Ivanovic, Polonen and Engels (2019:17), a database refers to a well-structured set of bibliometric data source records or a digital repository. Similarly, it is a digital collection of newspaper articles, reports, conference proceedings, patents, books, and legal publications (Kujur & Modak 2019). In addition, bibliometric data sources enable the retrieval of data from scientific publications, including the names of the authors, corporate addresses,

subject headings, and citations. This study aims to analyse the bibliotherapy literature in South Africa, whereby bibliometric data sources are used to collect data from the major databases in the world. Furthermore, the data in this study is drawn for the first time by the researcher through direct consultation with the data sources, which encompass the most widely published databases in the world. In this case, the researcher opts to conduct a bibliographic search of the most popular publishing databases.

3.7.1 Bibliographic search

Before beginning a search, researchers must have a clear understanding of which databases must be searched in light of the study's objectives. This can be accomplished by identifying the keywords that will be used to retrieve the necessary data. For example, the term "bibliotherapy" is identified as the study's keyword and is used in a bibliographic database search. However, in order to obtain a broader range of data, the researcher must look for other concepts related to bibliotherapy. As a result, this is a method of developing a search query that will identify concepts related to bibliotherapy. Furthermore, depending on the researcher's preferences, this can be accomplished in a variety of ways. Some researchers, for example, prefer to do it by hand, consulting books such as SEARS, whereas others may use software such as VosViewer to index similarities. Alternatively, dictionaries and thesauruses can be helpful in identifying relevant words. Finally, this will reduce the likelihood of data loss. The keywords associated with the discipline of bibliotherapy identified by VosViewer software are listed below.

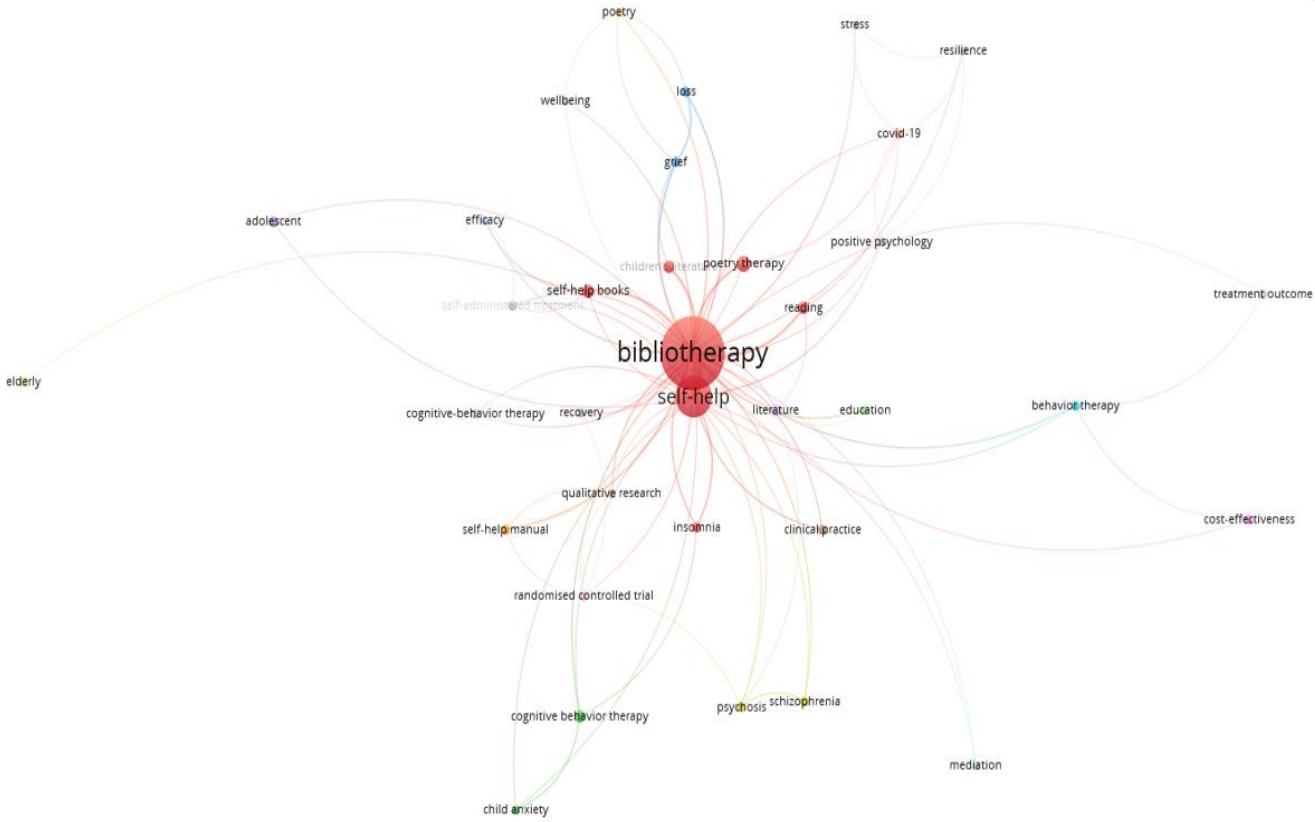


Figure 3.4: Identified keywords from the VosViewer software (by researcher 2023)

For the purpose of this study, the researcher used VosViewer software to identify other words that might be used in addition to the phrase "bibliotherapy" to find pertinent and related keywords for the concept. This is significant as it ensures that researchers do not overlook data that might surface in search results for terms other than "bibliotherapy," such as its synonyms. To find further information, the researcher ran a search for the term "bibliotherapy" in the Scopus databases. This is because the data from both WoS and Scopus can be analysed using a VosViewer programme.

Unlike Google Scholar, where the Publish or Perish system is used, this will be discussed at a later stage. Therefore, the researcher used a Scopus database to search the related words for the compound keyword 'bibliotherapy' within article titles, abstracts, and keywords. As a result, the Scopus database retrieved data, and the entire data set was then exported via CVS Excel to identify alternative keywords for ‘bibliotherapy’ in the form of displaying network visualisation. The displays of network visualisation for the term "bibliotherapy" that was

exported, and the keywords were shown by their labels in the form of circles. In VosViewer software, the size of the circle represents the relatedness of the keyword. This means that the larger the circle, the higher the relatedness or index similarity to the compound keyword, which in this study is ‘bibliotherapy’. Also, circles that are more visible than others in terms of size mean that there is a high index. The larger circles indicate keywords that might be related to the compound keyword, which is 'bibliotherapy' for this study. These keywords include 'self-help books', 'reading therapy', and ‘poetry therapy. The following keywords are used alongside the main keyword "bibliotherapy" during bibliographic searching:

For further retrieval of the required documents in the case of this study, the Boolean operators ‘AND’, ‘NOT’, and ‘OR’ remain one of the bibliographic tools to execute data. Additionally, when using large databases for bibliographic search, it is crucial to take language usage into account (Campos-Asensio 2018). In view of the above, the researcher will exclusively opt for English since it is a universal language. Additionally, all search queries will be conducted in English, regardless of the type and characteristics of the database. Alternatively, bibliographic searches such as proximity and truncations can also be used for the retrieval of data. However, for this study, a Boolean operator is used to perform a bibliographic search. The use of query operators, also known as booleans," is usually used to find multiple terms that are either excluded from or related to a given list.

Aliyu (2017) indicates that a Boolean system is an online process that involves transforming research questions into a collection of research strings that can be used to find online sources. This method is carried out using a combination of these terms. These terms can be combined using the operators "AND," "OR," and "NOT'. Additionally, each connecting operator has a major and distinctive role in terms of limiting or broadening searches. For instance, the 'AND' is applied when the researcher aims at connecting words to enlarge the search, for example, 'bibliotherapy' AND 'therapy'. On the other hand, the 'OR' operator focuses on detecting mostly a similar word in the compound 'keyword' that the researcher is looking for. Basically, the researcher is interested in an alternative keyword to the compound keyword. For example, 'publications' or 'books’ alternatively, the operator 'NOT' does the same thing as the other operators; however, it excludes data that is not needed in a search, for instance, 'bibliotherapy, not 'poetry therapy’. In this regard, the researcher intends to perform a bibliographic search. This includes the Boolean operator ‘OR’ from the three biggest databases opted for this study, namely the WoS and Scopus, databases.

3.7.2 Databases

In accordance with the findings of Pacauskas and Naukkarinen (2020), Scopus, Web of Science, and Google Scholar are recognised as the predominant global databases. Consequently, the researcher has chosen to access and gather data from these databases, aligning their search criteria with the study's objectives as outlined in the conceptual framework. These databases play a pivotal role in sourcing data for this study, ensuring that the extracted information is aligned with the research objectives.

Furthermore, the researcher's focus is on delineating productivity trends within the field of bibliotherapy. To accomplish this, the mentioned databases possess robust features that empower researchers to tailor their searches, browse through relevant content, and efficiently store pertinent information. Below, we provide a more detailed overview of these three databases.

In addition to the insights offered by Pacauskas and Naukkarinen (2020), it is crucial to consider the distinctive characteristics of each database when retrieving data. Databases, despite serving similar functions, can exhibit variations in their search controls and bibliographic attributes. According to Hood and Wilson (2003), these distinctions result from their distinctive traits.

3.7.2.1 Web of Science database

The Web of Science is a global database that connects scientists and technical experts and features a variety of scientific and technical journals covering all areas of science (Andres 2009:142). Furthermore, the WoS contains information about scholarly publishing, such as journals and books that have been published. According to Birkle, Pendlebury, Schnell and Adams (2018), WoS has increased significantly since its inception, and there are now around 34,000 journals. For example, the WoS platform allows users to access the Core Collection through various citation databases. For instance, the BIOSIS citation index, the Russian Science citation index, the SciELO citation index, the Inspect, Medline, the Korean Journal, and the Derwent Innovations Index (Birkle, Pendlebury, Schnell Adams 2018). As a result, the researcher opts to use the WoS database since it is regarded as the largest database for scientific

literature. Also, a comprehensive database that features a variety of citation links and enhanced metadata. In addition, this will provide the researcher with a wide range of data regarding bibliotherapy. In this study, a search query will be executed in a WoS database using similar keywords linked with the compound word ' bibliotherapy'. To identify the trends of bibliotherapy as a discipline, a conducted search query is as follows: *'Bibliotherapy* (Topic) OR "Self-help books" (All Fields) OR "Reading therapy" (All Fields) OR "Poetry-therapy" (All Field)'*. Also, with the WoS database, the term "bibliotherapy" is considered the main topic instead of a 'keyword'. On the other hand, the keywords that are related to the topic are known or regarded as keyword plus. Therefore, the extracted data from a WoS database shows that there were 1,530 publications produced on bibliotherapy from 1972 to 2023. However, the focus of this study is on 1972 to 2022. This means the year 2023 is excluded since it is still incomplete. This enables the researcher to evaluate relevant literature during the time frame specified and form conclusions based on the available results. Therefore, there are 1,481 publications produced from 1972 to 2022. This includes a total of 1,395 publications produced in English and six papers published in South Africa. In that regard, the search query for this study from a WoS database is as follows: *'Bibliotherapy* (Topic) OR "Self-help books" (All Fields) OR "Reading therapy" (All Fields) OR "Poetry-therapy" (All Field) and 2023 (Exclude – Publication Years) and English (Languages) and SOUTH AFRICA (Countries/Regions)'*. Subsequently, a comprehensive analysis is presented in Chapter 4 of this study. This will entail a general overview of the trends of bibliotherapy publications based on the following indicators: years of publications, number of publications, number of published authors, number of published countries, subject areas, and journal of publication or publishers.

3.7.2.2 Scopus

According to Baas, Schotten, Plume, Cote and Karimi (2019), Scopus is a database of scientific journals designed to provide the broadest coverage of various scientific disciplines. This also includes a variety of other publications, such as conferences, trade publications, and patents. Its main strength is based on all areas used by researchers to find and analyse thousands of peer-reviewed journals, and it covers over 16,000 journals (Andres 2009:142). Furthermore, the Scopus database has the largest citations and abstracts, including references that were not included in the database in 1996 (Andres 2009:143). In that regard, Scopus provides a deeper understanding of the various facets for researchers. However, as with WoS, the Scopus database consists of a comprehensive and broad range of information from various disciplines. The

broad range of information contained in the Scopus database makes it an ideal tool for researchers to collect data. Alternatively, Scopus's capacity to offer a simple means of discovering data, with its numerous characteristics, such as its discovery tools, is one of the key reasons the researchers opted to incorporate Scopus databases for the study. Opting for the Scopus database, a search query is created using a combination of the keywords *(KEY (bibliotherapy*) OR TITLE-ABS-KEY ("Self-help books") OR TITLE-ABS-KEY ("Reading therapy") OR TITLE-ABS-KEY ("Poetry therapy"))'* . A total of 1,685 publications on bibliotherapy were produced worldwide. This means that publications were published from 1946 to 2023. However, all the publications from the calendar year 2023 will be excluded since the year is still incomplete. Furthermore, there were 1,514 publications produced from 1946 to 2022. Additionally, a total of 1,563 publications were produced in the English language. As previously stated by the researcher, the study intends to focus on publications written in English. Lastly, the retrieved data indicate that only three publications on bibliotherapy were produced in South Africa. In that regard, the search query for this study from a Scopus database is as follows: *(KEY (bibliotherapy*) OR TITLE-ABS-KEY ("Self-help books") OR TITLE-ABS-KEY ("Reading therapy") OR TITLE-ABS-KEY ("Poetry therapy")) AND PUBYEAR > 1946 AND PUBYEAR < 2023 AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (AFFILCOUNTRY , "South Africa"))'*. Considering the foregoing, a comprehensive analysis is discussed in Chapter 4 of this study. This includes an overview of the trends in bibliotherapy publications based on the following indicators: years of publications, number of publications, number of published authors, number of published countries, subject areas, and journal of publication or publishers.

3.8 Data presentation and analysis

Babariya and Gohel (2017:61) emphasise that data analysis is an essential process employed to interpret data by identifying pertinent issues and devising strategies to address anticipated questions. In this context, Onyancha (2020:345) elaborates that bibliometric data analysis encompasses a wide array of techniques and methods for analysing and visualising collected information. Given that this study is characterised as descriptive bibliometrics, it involves several steps in the analysis process, leveraging specialised software to conduct and present the study's findings.

For instance, Microsoft Word and Excel serve as indispensable tools for the analysis and presentation of quantitative data. These software applications are not only capable of managing data but also facilitate diverse tasks, including data collection, analysis, and simulation. Consequently, the researcher employed these aforementioned tools to both present and analyse the quantitative data in this study.

3.9 Reliability and validity

Validity and reliability are the two main criteria for evaluating a quantitative study (Leavy 2017:48). According to Mohajan (2017), validity reveals the truthfulness of the findings, whereas reliability refers to the consistency of the results obtained in a study. They are regarded as the most important features in a study because they are used for evaluating data collection tools/instruments in order to replace the bias of the findings with transparency. This means that the two aforementioned main criteria can be applied during a process in which the study is questioned based on the researcher's subjectivity to determine its credibility and accuracy. The researcher chooses to validate the study by using the keywords as a guide for searching information on bibliometric data sources. Furthermore, these keywords are congruent with the study's objectives. This means that the researcher is guided by keywords that are linked to the study's objectives to ensure that data is validated. Furthermore, in terms of dependability, the researcher prefers to retrieve data from commonly used databases, such as Google Scholar. As a result, and during the study's reliability evaluation, (Kumar 2011:168) emphasises that the same set of data collected using the same instruments must produce the same results under the same conditions or follow the same procedure if they are to be repeated.

3.10 Ethical consideration

Ethical clearance formed part of the research study. According to Islam (2019:15), ethical clearance refers to the rights and risks that both a researcher and the participants might have encountered in the process of the study. It was used in fields such as social science research and tended to involve human beings as participants, depending on the nature of the study. However, for this study, the University of South Africa’s guidelines indicating ethical considerations were followed. These included informed consent forms, confidentiality, privacy, and anonymity. For instance, the Unisa ethical research policy was based on the vision of the university towards African universities to promote research that would ultimately support

South Africans. Ethical clearance had been obtained to ensure that all bases of excellence, ethical behaviour, social responsibility, and scholarly integrity were maintained (see Annexure A). As a result, the researcher adhered to the University of South Africa's ethical consideration guidelines, and the study was conducted ethically. These guidelines included academic fraud, plagiarism, and misrepresenting data. Additionally, the researcher applied for ethical clearance before the collection of data. Although the study consisted of no participants, as it was a desktop type of study, the researcher also adhered to the three broad issues, including using Turnitin to provide a similarity index during the conduct of the study (see Annexure B for the similarity index report).

3.11 Evaluation of methodology

According to Pinho and Rosa (2017), research evaluation is the systematic process of gathering and analysing data in order to clearly explain the value and quality of research. Furthermore, research evaluation is used to assess the significance, quality, and research impact of outputs such as outcomes. Given the preceding statement, the goal of this study is to conduct a bibliometric analysis of bibliotherapy literature in South Africa. A comprehensive bibliometric analysis is based on three prominent databases, namely Web of Science, Scopus, and Google Scholar, and includes publishing data from each database from the inception of bibliotherapy until the year 2022. This means that the databases mentioned above are being used to analyse five indicators: publishing trends, author productivity, subject areas, journal productivity, and the most produced journals. Despite the study's focus on the South African context, a comprehensive analysis of global perspectives is carried out in order to provide a contextual framework for bibliotherapy.

This is narrowed even further to the South African context. In light of this statement, it is worth noting that, while bibliographic searches use similar keywords, they should not be used in the same way depending on the database's attributes. The Web of Science, for example, chose 'bibliotherapy* (Topic) OR "self-help books" (All Fields) OR " therapy" (All Fields) OR "Poetry therapy" (All Fields) and 2023 (Exclude – Publication Years) and English (Languages) and SOUTH AFRICA (Countries/Regions)'. The Scopus database followed ''(KEY (bibliotherapy*) OR TITLE-ABS-KEY ("Self-help books") OR TITLE-ABS-KEY ("Reading therapy") OR TITLE-ABS-KEY ("Poetry therapy")) AND (LIMIT-TO (LANGUAGE , "English")) AND (EXCLUDE (PUBYEAR , 2023))'. Alternatively,

Google Scholar could also be used to search for '"South Africatitle], Bibliotherapy OR Self-help books OR Poetry therapy OR Reading therapy'.

One of the problems with databases is the lack of consistency in the retrieved data. It should be noted that the data in Web of Science and Scopus is regularly updated on a daily basis. In this context, the researcher has currently obtained a total of 10 articles, with an additional 12 papers expected to be obtained tomorrow. As a result, maintaining a consistent bibliographic query is critical. Alternatively, when using Google Scholar databases, researchers may encounter limits on the number of records that can be exported concurrently, preventing bulk export of records. However, the following chapters of this study provide a detailed examination of data collection and the resulting findings.

3.12 Summary

The application of research methodology involved the utilisation of quantitative methods within a bibliometric design. Statistical analysis was conducted using online databases, and Microsoft Word and VosViewer were employed for data analysis and presentation. Throughout the study, strict ethical considerations were observed. The upcoming chapter will delve into the analysis of the data and the presentation of the results. It is important to note that the study consciously set limitations to ensure alignment with its aims and objectives, thereby maintaining relevance. Since this study focuses on the analysis of 'bibliotherapy literature' across various database searches to retrieve data, certain limitations, or delimitations, have been established. Specifically, the study will narrow its focus by excluding keywords unrelated to the research topic. The selected keywords are derived from the study's title, Bibliometrics Analysis of Bibliotherapy Literature in South Africa.' These keywords include 'bibliotherapy,' 'bibliotherapy literature,' 'bibliotherapy publications,' 'bibliotherapy writings,' and 'bibliotherapy composition.' Consequently, any other keywords not falling under these categories will be omitted, allowing the researcher to effectively control the study's scope. In this regard, the following chapter will present and analyse the study's data.

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The previous chapter provided an overview of the research methodology employed in the study's execution. As a result, the purpose of this chapter is to present and analyse the data gathered through bibliographic queries using three major databases. Furthermore, the publication trends of bibliotherapy literature in South Africa are presented per database, from the first publication to the previous year 2022.

Before presenting the collected data, Cox et al. (2019) state that bibliometrics indicators such as publication trends make it easier for researchers to comprehensively analyse data for profound results in tracing a particular discipline. As a result, the researcher investigated various findings of bibliometric data extracted from the two databases, WoS and Scopus. This is required for the study to indicate the inception of bibliotherapy literature from a global perspective, regardless of its demography based on the study's objectives. Alternatively, when it comes to precise statistics, the extracted findings are not the same because each database contains a different attribute. In this regard, data is presented and analysed in accordance with the study's objectives. Data was gathered using the WoS and Scopus database. To elaborate, data was extracted from the selected databases to obtain the bibliometric results, which were saved in an Excel spreadsheet for the study's presentation analysis. As a result, the following objectives are addressed in this study:

1. Publication trends of bibliotherapy literature in South Africa
2. Most published authors in bibliotherapy literature in South Africa
3. Subject areas published in bibliotherapy in South Africa.
4. Most published journals in bibliotherapy literature in South Africa
5. Top publishing affiliations in bibliotherapy in South Africa

While the focus of the study is on South Africa, the presentation of data is compared to the global trends.

4.2 Global view of bibliotherapy literature from databases

Regardless of whether the study focused on the South African context, the researcher needed to provide a global overview of bibliotherapy literature. This is useful for the study because it serves as a point of reference in comparison to the publication trends at a global perspective, to the South African context. The researcher extracted data on the visibility of bibliotherapy publications from two different databases in Chapter 4 of the study. As a result, Web of Science recorded a total of 1,395 publications. This includes the Scopus database, which has 1, 635 entries. Therefore, the subsequent paragraph provides a comprehensive overview of bibliotherapy literature's global publication productivity. It serves as an introductory background before delving into the specifics of the South African context.

4.2.1 Web of Science

The extracted data from a WoS database indicate a total number of 1,530 publications produced on bibliotherapy from the inception year of 1972–2023, following a bibliographic query ‘*‘Bibliotherapy* (Topic) OR "Self-help books" (All Fields) OR "Reading therapy" (All Fields) OR "Poetry-therapy" (All Field)’*. Furthermore, 1,395 publications were produced in the English language. This includes a total of 200 authors, 72 countries, 29 subject areas, 158 journals, and 161 affiliations. For the purpose of this study, data was extracted from the year of the inception of bibliotherapy literature in 1972 to the year 2022. In that regard, a total of 1,481 publications were produced on bibliotherapy literature from 1972–2022, following a bibliographic query *‘Bibliotherapy* (Topic) OR "Self-help books" (All Fields) OR "Reading therapy" (All Fields) OR "Poetry therapy" (All Fields) and 2023 (Exclude: Publication Years)’*. Table 4.1 presents a general overview of the trends in bibliotherapy publications based on the following indicators: years of publications, number of publications, number of published authors, number of published countries, subject areas, journal of publication, and affiliations.

Years of publications	Number of publications	Number of published authors	Number of published countries	Number of subject areas published on Bibliotherapy	Number of publishers/ journals	Number of published affiliations/ institutions
1972-2023	1,530	200	72	29	158 journals	161
English language	1, 395					
Search Date:	20/12/2022					

***Table 4.1**: Global view of bibliotherapy from WoS database. (N=1,530)*

4.2.2 Scopus

Following a bibliographic query ‘ (KEY (bibliotherapy*) OR TITLE-ABS-KEY ("Self-help books") OR TITLE-ABS-KEY ("Reading therapy") OR TITLE-ABS-KEY ("Poetry therapy"))’, a total of 1,685 publications were produced on bibliotherapy literature from the inception year 1946–2023 in the SCOPUS database. In addition to that, Table 4.2 indicates a total of 1,635 publications from 1946–2022, following a bibliographic query: ‘ *(KEY (bibliotherapy*) OR TITLE-ABS-KEY ("Self-help books") OR TITLE-ABS-KEY ("Reading therapy") OR TITLE-ABS-KEY ("Poetry therapy")) AND PUBYEAR > 1945 AND PUBYEAR < 2023’*. Moreover, 1,514 publications were produced in the English language. This includes a total of 159 authors, 73 countries, 25 subject areas, 161 journals, and 161 affiliations.

Years of publications	Number of publications	Number of published authors	Number of published countries	Number of subject areas published on Bibliotherapy	Number of publishers/ journals	Number of published affiliations/ institutions
1946-2023	1,685	159	73	25	161	161
English language	1,514					
Search Date:	20/12/2022					

***Table 4.2**: Global view of bibliotherapy from Scopus database. (N=1,685)*

4.3 Bibliometric data of bibliotherapy literature in South Africa

The subsequent paragraph of this study comprehensively analyses bibliotherapy literature in South Africa. This entails an in-depth analysis of publication trends, in conjunction with the indicators.

4.3.1 Publication trends of bibliotherapy literature

As indicated that the study opted for WoS and Scopus, which are widely recognized as the primary databases on a global scale. Consequently, the provided data focuses on the aforementioned databases based on the objectives, the conceptual framework within the South African context.

4.3.1.1 Web of Science database

In this study, Table 4.3 indicates the publication trends of bibliotherapy literature that were produced in South Africa from the WoS database following a bibliographic query *'bibliotherapy* (Topic) OR "self-help books" (All Fields) OR "Reading therapy" (All Fields) OR "Poetry therapy" (All Fields) and 2023 (Exclude – Publication Years) and English (Languages) and SOUTH AFRICA (Countries/Regions)'*. A total of six publications were produced on bibliotherapy from 1972 to 2022. Referring to Table 4.3, the study indicates zero publications related to bibliotherapy between 1972 and 2008. This exposes a gap in the literature regarding bibliotherapy, including associated keywords during that period. Alternatively, only one publication was produced in 2009, followed by a subsequent decrease of zero publications from 2010–2013. Furthermore, the first constant increase in publications in the history of bibliotherapy from the WoS database was recorded in both 2014 and 2015, with a total of one publication each year. Following this, there was a decrease of 0 publications noted in 2016, but 2017 only managed to produce one publication. Moreover, no publications were produced between 2018 and 2022. Ultimately, by the end of 2022, the study recorded a total of six papers, which is a very low increase in publications between the years. Below is Table 4.3, depicting publication productivity in bibliotherapy in South Africa from 1972 until 2022 in a tabular format.

Years	No of publications per year	Years	No of publications per year	Years	No of publications per year	Years	No of publications per year	Years	No of publications per year	Years	No of publications per year
1972	0	1981	0	1990	0	1999	0	2008	0	2017	1
1973	0	1982	0	1991	0	2000	0	2009	1	2018	0
1974	0	1983	0	1992	0	2001	0	2010	0	2019	2
1975	0	1984	0	1993	0	2002	0	2011	0	2020	0
1976	0	1985	0	1994	0	2003	0	2012	0	2021	0
1977	0	1986	0	1995	0	2004	0	2013	0	2022	0
1978	0	1987	0	1996	0	2005	0	2014	1		
1979	0	1988	0	1997	0	2006	0	2015	1		
1980	0	1989	0	1998	0	2007	0	2016	0		
Total	6 publications										

Table 4.3: *Publication productivity of bibliotherapy in South Africa from the WoS database: 1972-2022. (N=6)*

4.3.1.2 Scopus database

The study indicates in Table 4.4 the trends in the publication of bibliotherapy literature in South Africa according to a bibliographic *query '(KEY (bibliotherapy*) OR TITLE-ABS-KEY ("Self-help books") OR TITLE-ABS-KEY ("Reading therapy") OR TITLE-ABS-KEY ("Poetry therapy")) AND (LIMIT-TO (LANGUAGE , "English")) AND (EXCLUDE (PUBYEAR , 2023))'*, from the Scopus database. Additionally, Table 4.4 further indicates the origin of bibliotherapy, traced all the way back to 1946 from the Scopus database; however, no publications were produced in South Africa. According to the presented data in Table 4.4, there were zero publications produced from 1946 to 2013. This implies no output or productivity growth in the literature related to bibliotherapy in South Africa for over a 67-year period. In South Africa, the first publication of bibliotherapy came out in 2014 with just one publication, and in the years that followed—2015 and 2016—there were zero publications. This has, however, indicated a concerning trend of limited productivity after the first visibility of bibliotherapy as a discipline. Alternatively, the year 2017 produced one publication, following zero productivity in 2018. In relation to that, the most recent publication productivity of bibliotherapy was produced in 2019. Therefore, there was only one publication in 2019, with zero publications in 2020, 2021, and 2022. Below is Table 4.4, depicting publication

productivity in bibliotherapy in South Africa from 1946 until 2022 in a tabular format.

Years	No of publications per year	Years	No of publications per year	Years	No of publications per year	Years	No of publications per year	Years	No of publications per year
1946	0	1964	0	1981	0	1998	0	2015	0
1947	0	1965	0	1982	0	1999	0	2016	0
1948	0	1966	0	1983	0	2000	0	2017	1
1949	0	1967	0	1984	0	2001	0	2018	0
1950	0	1968	0	1985	0	2002	0	2019	1
1951	0	1969	0	1986	0	2003	0	2020	0
1952	0	1970	0	1987	0	2004	0	2021	0
1953	0	1971	0	1988	0	2005	0	2022	0
1954	0	1972	0	1989	0	2006	0		
1956	0	1973	0	1990	0	2007	0		
1957	0	1974	0	1991	0	2008	0		
1958	0	1975	0	1992	0	2009	0		
1959	0	1976	0	1993	0	2010	0		
1960	0	1977	0	1994	0	2011	0		
1961	0	1978	0	1995	0	2012	0		
1962	0	1979	0	1996	0	2013	0		
1963	0	1980	0	1997	0	2014	1		
TOTAL	**3**								

Table 4.4: *Publication productivity of bibliotherapy in South Africa from the Scopus database: 1946-2022. (N=3)*

4.3.2 Most published authors on bibliotherapy literature in South Africa

In order to assess the productivity of authors, it is essential to analyse a variety of indicators and metrics inside the databases of WoS and Scopus. This aids in evaluating the influence that an author exerts on the field of literature of bibliotherapy.

4.3.2.1 Web of Science

This section examines the productivity of authors based on data obtained from the WoS database. This pertains to data organized in a tabular format.

Published authors	No of publications per authors	Affiliations	Document type
Chapman, M	1	Durban University of Technology	Article
Joubert, C. Hay, J	1	Northwest University	Article
Theron, L.	1	University of Pretoria	Article
Cockcroft, K		University of Witwatersrand	
Wood, L		Northwest University	
Strong, P. Lotter, G	1	Northwest University	Article
Donald, DR.	1	University of Cape Town	Article
Theron, L.		University of Pretoria	
Stein, DJ	1	University of Cape Town	Article
Total: 10			

Table 4.5*: Published authors on bibliotherapy in South Africa from the Web of Science database (N=10)*

Referring to Table 4.5 of the study, data was extracted from the WoS database, indicating the most published authors on bibliotherapy in South Africa. Based on the study's objectives, in which the researcher is interested in the South African context, the data was refined through a manual search of each author from the six retrieved publications, resulting in a total of 10 authors. This allowed the researcher to obtain an improved comprehension of the authors who contributed bibliotherapy research outputs. Additionally, the bibliographic search also included other keywords related to bibliotherapy 'self-help books, reading therapy and poetry therapy'. For example, it's possible that the results could encompass authors who didn't directly publish on bibliotherapy, but rather on 'self-help books', as this term is also used as a synonym. Therefore, a manual search also provided the identities of notable authors who have made substantial contributions to bibliotherapy. As a result, the list prioritised only South African authors who have published on bibliotherapy. Furthermore, the repository data shows the South African authors who published on bibliotherapy, together with their affiliations and a total of one publication per author. This included Chapman, M. Joubert, C. Hay, J. Theron, L. Cockcroft, K. Wood, L. Strong, P. Lotter, G. Donald, DR. Theron, L. Stein, DJ. However, Theron, L from the University of Pretoria is the only author who has produced two publications. On the other hand, Chapman, M. Joubert, C. Hay, J, and Stein, DJ, published individually, whereas Theron, L. Cockcroft, K. Wood, L, and Donald, DR published collectively.

4.3.2.2 Scopus

According to the data taken from the Scopus database in Table 4.6 of the study, there are a total of six authors who have published on bibliotherapy in South Africa. This encompasses two published articles and one review. Also, the study adopted the same procedure as the WoS database, omitting authors who are not South African but have published on bibliotherapy in South Africa. This procedure enables the study to focus on authors producing bibliotherapy publications in the country, with the ultimate objective of tracing the evolution of bibliotherapy in South Africa. As a result of the extracted data, the only identified authors published in bibliotherapy in South Africa from the Scopus database were Carmen, J. Hay, JF. Lochner, C. Stein, DJ. Ross, A., and Cooper, PJ. In addition to that, Lochner, C. Stein, DJ, and Ross; Carmen, J and Hay, JF produced collectively in exclusion of Cooper, PJ who produced individually. Therefore, below is Table 4.6 with a list of the South African authors who had the greatest number of publications produced.

Published authors	No of publications per authors	Author affiliations	Document type
Carmen, J. Hay, JF	1	Northwest University	Article
Lochner, C. Stein, DJ	1	University of Cape Town	Article
Ross, A.		Stellenbosch University	
Cooper, PJ	1	Stellenbosch University	Review
Total: 6			

***Table 4.6**: Published authors on bibliotherapy in South Africa from the Scopus database. (N=6)*

4.3.3 Subject areas published on bibliotherapy in South Africa

In order to assess the most published subject areas, it is essential to analyse a variety of indicators and metrics inside the databases of WoS, Scopus, and Google Scholar. This aids in evaluating the subject areas in the field of bibliotherapy.

4.3.3.1 Web of Science

Table 4.7 depicts the various subject areas extracted from the WoS database. The most common subject area with the most publications in the bibliotherapy literature. A total of six publications on bibliotherapy literature in South Africa were retrieved from the WoS, following bibliographic search '*Refine results for Bibliotherapy (Topic) OR "Self-help books" (All Fields) OR "Reading therapy" (All Fields) OR "Poetry therapy" (All Fields) and 2024 or 2023 (Exclude – Publication Years) and English (Languages) and SOUTH AFRICA (Countries/Regions)*'. Consequently, the subject areas were afterwards identified from all the six publications retrieved within the South African context. This includes Clinical Neurology, Literature, Psychology Educational, Psychiatry, Education Educational Research and Religion subject areas. Regardless of output, the field of educational psychology has the most publications (2). Following that are clinical neurology, education educational research, literature, psychiatry, and religion, each of which contributed one publication. As a result, the following chapter of the study includes an in-depth discussion of the findings regarding bibliotherapy subject areas. Furthermore, Table 4.7 depicts data extracted from the WoS database regarding the majority of published subject areas on bibliotherapy in South Africa.

NO	SUBJECT AREAS	TOTAL NUMBER OF PUBLICATIONS
1	Psychology educational	2
2	Clinical neurology	1
3	Education educational research	1
4	Literature	1
5	Psychiatry	1
6	Religion	1
TOTAL	**6**	

Table 4.7: *Subject areas published on bibliotherapy in South Africa from the WoS database. (N=6)*

4.3.3.2 Scopus

Table 4.8 illustrates the subject areas retrieved from the Scopus database to identify where the majority of the bibliotherapy literature was published, following a systematic bibliographic search *'(KEY (bibliotherapy) OR TITLE-ABS-KEY ("Self-help books") OR TITLE-ABS-KEY ("Reading therapy") OR TITLE-ABS-KEY ("Poetry therapy")) AND PUBYEAR > 1945 AND PUBYEAR < 2023 AND (LIMIT-TO (AFFILCOUNTRY , "South Africa")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SUBJAREA , "MEDI") OR LIMIT-TO (SUBJAREA , "NEUR") OR LIMIT-TO (SUBJAREA , "SOCI"))*'. The literature is classified and distributed across three subject areas. However, with a total of two articles, Medicine was identified as the most prevalent subject area for bibliotherapy publications. This was followed by an equal contribution of one publication from Neuroscience and one publication from Social Science. Despite, one publication was acknowledged in two distinct subject areas, notably medicine and neuroscience. Table 4.8 shows the three subject areas where bibliotherapy was produced in South Africa. Surprisingly, there are none in information and library science, which is a cause for concern.

NO	SUBJECT AREAS	TITLES	TOTAL NUMBER OF PUBLICATIONS
1	Medicine	Excoriation (skin-picking) disorder: a systematic review of treatment options	1
		Assessment and management of anxiety disorders in children and adolescents	1
2	Neuroscience	Excoriation (skin-picking) disorder: a systematic review of treatment options	1
3	Social Science	Capacitating postgraduate education student with lay counselling competencies via the culturally appropriate bibliotherapy read-me-to-resilience intervention	1
TOTAL	**3 subject areas**	4 publications	4 publications
NB:			

Table 4.8: *Subject areas published on bibliotherapy in South Africa from Scopus database. (N=3)*

4.3.4 Most published journals on bibliotherapy literature in South Africa

In order to assess the journals with the highest productivity, this study used the databases of the WoS and Scopus.

4.3.4.1 Web of Science

Table 4.9 summarises the most notable journals that address bibliotherapy as a subject in South Africa. *This followed a bibliographic search 'Refine results for Bibliotherapy (Topic) OR "Self-help books" (All Fields) OR "Reading therapy" (All Fields) OR "Poetry therapy" (All Fields) and 2024 or 2023 (Exclude – Publication Years) and SOUTH AFRICA (Countries/Regions) and English (Languages)'.* The order of the list is determined by the number of publications published by each journal. The study also discovered five journals, with School Psychology International topping the list with two publications. Each of the remaining journals published one article on bibliotherapy. South African journal of Education, Current writing-text and reception in South Africa, HTS teologiese studies-theological studies, and CNS Spectrums journal were among the journals included. The table 4.9 below summarises the various journals that published on bibliotherapy in the South African context.

No	Publishing journal	No of publications
1	School psychology international	2
2	South African journal of Education	1
3	Current writing-text and reception in South Africa	1
4	HTS teologiese studies-Theological studies	1
5	CNS Spectrums	1
Total	**5**	

Table 4.9: *Journals published in bibliotherapy in South Africa from the WoS database. (N=5)*

4.3.4.2 Scopus

Table 4.10 lists the most productive journals that published in the field of bibliotherapy, following a bibliographic search *'(KEY (bibliotherapy) OR TITLE-ABS-KEY ("Self-help books") OR TITLE-ABS-KEY ("Reading therapy") OR TITLE-ABS-KEY ("Poetry therapy")) AND PUBYEAR > 1945 AND PUBYEAR < 2023 AND (LIMIT-TO (AFFILCOUNTRY , "South Africa")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SRCTYPE , "j"))'* Only three journals were found to have contributed to bibliotherapy publications in South Africa. Neuropsychiatric Disease and Treatment, South African Journal of Education, and Archives of Disease in Childhood are among the journals. The Journal of Neuropsychiatric Disease and Treatment generated two publications on bibliotherapy in South Africa based on the data provided. However, the South African Journal of Education and the Archives of Disease in Childhood each published one article. This results in four publications. This means that one paper was published in two separate journals, for a total of four publications and three journals. Table 4.10 provides an overview of the majority of published journals.

No	Publishing journal	No of publications
1	Neuropsychiatric Disease and Treatment	2
2	South African Journal of Education	1
3	Archives of Disease in Childhood	1
Total	**3**	

Table 4.10: *Journals published on bibliotherapy in South Africa from the Scopus database. (N=3)*

4.3.5 Top publishing affiliations on bibliotherapy in South Africa

In order to assess the most produced affiliations on bibliotherapy in South Africa. This is retrieved from the WoS and Scopus.

4.3.5.1 Web of Science

Table 4.11 shows that all of the affiliations listed have contributed to the publication of bibliotherapy publications in South Africa. Given this, the University of North-West contributed the most publications (4), followed by the University of Cape Town (2). Alternatively, the remaining affiliations were rated equally, with each contributing one publication, in the form of collaborative work. This includes Durban University of Technology, Stellenbosch University, the University of the Witwatersrand, the University of KwaZulu-Natal, and the University of Pretoria were among these affiliations. Furthermore, discussions about funding are conducted in Chapter 5 of the study.

RANK	TITLES	AFFILIATIONS
1	The Story of an Anthology: Conjunctures in a Disjunctive Society?	Durban University of Technology University of KwaZulu-Natal Stellenbosch University
2	The resilience-enabling value of African folktales: The read-me-to-resilience intervention	University of Pretoria University of Witwatersrand Northwest University
3	Reel help for real life: Film therapy and beyond	Northwest University
4	AIDS in South Africa: Therapeutic interventions to strengthen resilience among orphans and vulnerable children	University of Cape Town Northwest University
5	Capacitating postgraduate education students with lay counselling competencies via the culturally appropriate bibliotherapeutic Read-me-to-Resilience intervention	Northwest University
6	Self-Help and Internet-Guided Interventions in Depression and Anxiety Disorders: A Systematic Review of Meta-Analyses	University of Cape Town
TOTAL		11 affiliations

Table 4.11: *Affiliations published in bibliotherapy in South Africa from the WoS database. (N=11)*

4.3.5.2 Scopus

The study highlights the top South African institutions in terms of the number of bibliotherapy publications in Table 4.12. Stellenbosch University, the University of Cape Town, and North-West University were among them. Notably, Stellenbosch University has the highest total number of publications (2). The University of Cape Town and North-West University tied for second place with a total of one publication. Furthermore, Stellenbosch University was linked to two of the three South African publications. This means that one publication was affiliated in two affiliations, for a total of four publications in terms of affiliations. Table 4.12 provides an overview of the majority of published journals.

RANK	TITLES	AFFILIATIONS
1	Assessment and management of anxiety disorders in children and adolescents	Stellenbosch University
2	Capacitating postgraduate education students with lay counselling competencies via the culturally appropriate bibliotherapeutic Read-me-to-Resilience intervention	North-West University
3	Excoriation (skin-picking) disorder: A systematic review of treatment options	Stellenbosch University
		University of Cape Town
TOTAL	3	4

Table 4.12: *Affiliations published in bibliotherapy in South Africa from the Scopus database. (N=4)*

4.4 Summary

This chapter provided a comprehensive summary of data obtained from Web of Science and Scopus, followed by an in-depth examination. The chapter presents scholastic interest in bibliotherapy literature, starting with a global perspective and extending to the South African context, which serves as the primary objective of the study. The chapter presents publications from various regions around the world, highlighting the diverse and global nature of bibliotherapy literature. This chapter provided a review of the total number of publications in the South African context over time, highlighting significant periods of growth and decline. The trends in the number of publications from both databases indicate that bibliotherapy literature is extremely limited within the South African context. These findings affected author, subject, journal, and affiliation productivity. In brief, a decrease in the number of publications

inevitably impacts a discipline's overall productivity. It is crucial to acknowledge that many researchers, particularly those studying author productivity in the field of LIS, are unfamiliar with the concept of bibliotherapy, which raises some concerns. The following chapter contains a discussion and interpretation of the findings of the study.

CHAPTER FIVE
DATA INTERPRETATION AND DISCUSSIONS

5.1 Introduction

The previous chapter discussed how to present and analyse collected data. As a result, this chapter interprets the data obtained from bibliographic queries on three major databases: Scopus and Web of Science. . The study also sought to analyse the trends in the publication of bibliotherapy literature in South Africa. Furthermore, emphasis is placed on indexing the visibility of bibliotherapy-related publications accessible through the aforementioned databases. In this regard, the study's findings are discussed in Chapter Four in accordance with data analysis themes:

- Publication trends of bibliotherapy literature
- Most published authors in bibliotherapy literature
- Subject areas published in bibliotherapy literature
- Most published journals in bibliotherapy literature
- Top publishing affiliations in bibliotherapy in South Africa

Regardless of whether the study focused on the South African context, the researcher needed to provide a global overview of bibliotherapy literature. This is useful for the study because it serves as a point of reference in comparison to the South African context. The researcher extracted data on the visibility of bibliotherapy publications from two different databases in Chapter Four of the study. Furthermore, Web of Science recorded a total of 1,395 publications. This includes the Scopus database, which has 1, 635 entries in English. Furthermore, when compared to other published disciplines such as library and information science, the concept of bibliotherapy has a low global visibility, according to the extracted data. Consequently, this chapter provides an in-depth review of data interpretation and discussion pertaining to the present study.

5.2 Publication trends of bibliotherapy literature

The practice of presenting discussions concerning trends in publication carries substantial significance within the field of scholarly inquiry, particularly in the context of bibliotherapy.

Hence, the subsequent paragraph of the study presents a comprehensive analysis concerning the data given in chapter four of the study.

5.2.1 Web of Science

This section provides a review of bibliotherapy-related publications extracted from the Web of Science database between 1972 and 2022. Data from the Web of Science database was examined, and patterns in publication findings across different years were examined. There was a total of (6) publications in the extracted data. In addition, Chapter 4 of the study includes Table 4.3, which depicts the publication trends. The extracted data included the keywords that the researcher identified for the purpose of conducting a bibliographic query. According to the study's findings, no publications on the discipline of bibliotherapy were discovered between 1972 and 2008. This means that, according to the Web of Science database, there were instances of a lack of publication productivity over a 36-year period.

However, with the addition of (1) publication produced in the following year of 2009, the study saw a significant improvement. Furthermore, the study implies this event may have sparked interest in the concepts of 'bibliotherapy' among specific researchers. Nonetheless, a further decline in publication productivity was observed following the preceding year 2009. The findings revealed that there was no productivity for four years in a row, from 2010 to 2013. Furthermore, the study found a significant lack of publication production related to the concept of "bibliotherapy," resulting in its low visibility. In addition, two additional publications were recorded for the years 2014, 2015, 2016, and 2017. In the year 2019, a remarkable event occurred in the field of bibliotherapy. The incident was the only instance in which literature was produced on two occasions in the same year. According to the analysis of publication patterns presented in Chapter 4 (Table 4.3), bibliotherapy has not been widely produced in the South African context. Additionally, Figure 1 indicates the correlation between the number of publications and years of production driving the annual pattern. It also shows the distribution of the most productive percentages. For example, the year 2019 produced a total of 33.333%, which earned the highest rank for publication productivity. As a result, the years 2017, 2015, 2014, and 2009 each have a publication productivity of 16.667%.

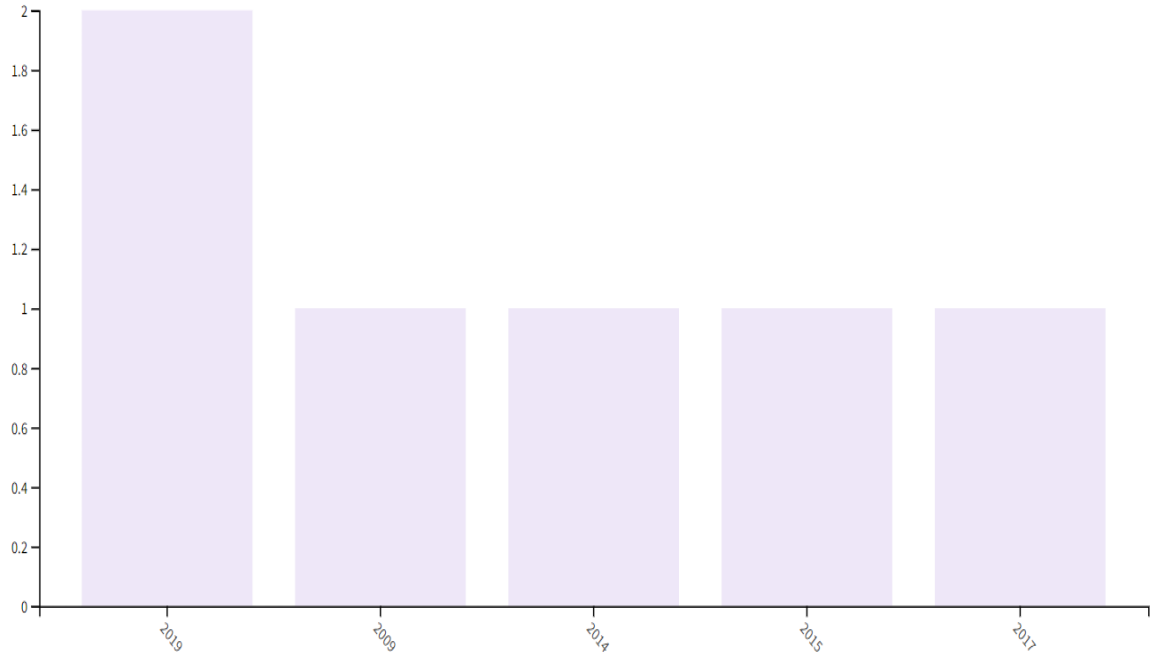


Figure 6: *The annual scientific production of bibliotherapy in South Africa from the WoS database. (N=6)*

5.2.2 Scopus

According to the Scopus database, the findings of this study revealed a low level of productivity in the bibliotherapy literature. Between 1946 and 2022, a total of three publications were published in South Africa. During the trend analysis in Chapter Four, the study reveals a consistent and sustained lack of productivity over a 67-year period. This observation indicates a lack of recognition and understanding of the concept of bibliotherapy. In contrast, one publication occurred in 2014. Despite the fact that the concept was released (1) in the previous year of 2014, the number of publications shows no signs of growth. This strongly validates a lack of recognition of bibliotherapy, particularly in the current years of 2020-2022. It is projected that bibliotherapy will have made significant progress in recent years, particularly in 2020 to 2022, due to advancements in knowledge consumption and generation compared to the past. This takes into account the fact that information is widely available and that researchers are knowledgeable about knowledge dissemination. Based on the available research resources, which include significant databases, it is possible that bibliotherapy has not reached its midpoint in comparison to previous eras of limited resources. Therefore, Figure 2 shows the relationship between the number of publications and the years of production that determine the annual trends, according to the Scopus database.

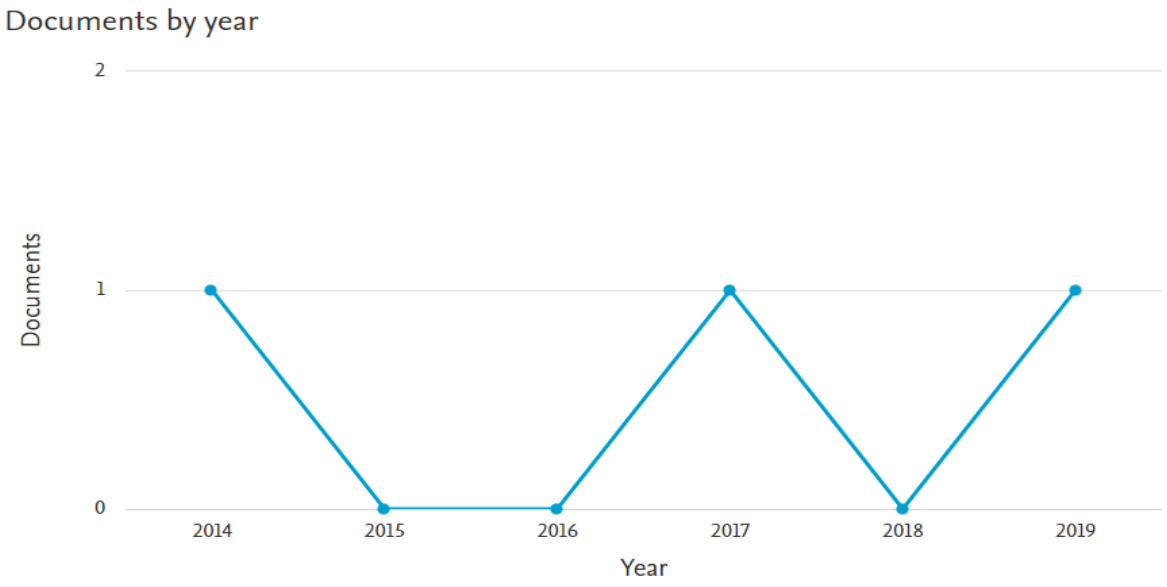


Figure 7: *The annual scientific production of bibliotherapy in South Africa from the Scopus database. (N=3)*

5.3 Most published authors on bibliotherapy literature

The subsequent paragraph of the research study contains the interpretations concerning author productivity data presented in chapter four, which pertains to the productivity of authors in the study as derived from the selected databases.

5.3.1 Web of Science

The majority of authors make significant contributions to a wide range of research disciplines, both nationally and internationally. Nonetheless, bibliotherapy is not as common or widely recognised as other disciplines. According to the data presented in Chapter 4 of the study, obtained from the Web of Science database, there are 10 authors who have contributed to the body of literature on bibliotherapy in South Africa. Chapman, M. Joubert, C. Hay, J. Theron, L. Cockcroft, K. Wood, L. Strong, P. Lotter, G. Donald, DR., and Stein, DJ were among those involved. As a result, this observation implies that the discipline is unpopular, possibly due to lower number of author productivity. This further implies a lack of familiarity among South African researchers, including knowledge creators. On the other hand, this finding may serve as evidence supporting the study's hypothesis, which suggested a lack of productivity in terms

of publications. The lack of attention paid to bibliotherapy suggests that literature has not recognised it as a healing option. It is critical to recognise that disciplines evolve and undergo transformations over time. In this regard, bibliotherapy may be regarded as an unknown or developing discipline within the South African context, despite the fact that it has been practised since time immemorial.

5.3.2 Scopus

Scopus primarily contains scholarly publications such as scientific research articles and conference papers. The data gathered in Chapter 4 revealed that the Scopus database contained only three publications on bibliotherapy. Nevertheless, in terms of analysing author productivity, the study documented an overall number of six authors. This included Carmen, J., Hay, JF. Lochner, C. Stein, DJ. Ross, A., and Cooper, PJ were among the authors. In a nutshell, the number of author productivity doubled since some of the authors collaborated, despite a smaller number of publications indicated in Table 4.6. Regardless of collaborative efforts, the study reveals a remarkably low level of visibility, as evidenced by the authors' lack of presence in the Scopus database. Furthermore, the study shows that the identified authors are regarded as the primary contributors to bibliotherapy literature in South Africa, as evidenced by their inclusion in the Scopus database.

5.4 Subject areas published on bibliotherapy literature

The subsequent paragraph of the research study contains the interpretations concerning subject areas in chapter four, which pertains to the productivity of authors in the study as derived from the selected databases.

5.4.1 Web of Science

The study's findings, obtained from the Web of Science database, revealed a total of six publications related to bibliotherapy literature. The publications originated in a variety of subject areas. This included educational psychology, clinical neurology, educational research, literature, psychiatry, and religion. The study's primary focus is bibliotherapy, which originates from the field of LIS. Upon examining all the retrieved subject areas, it was found that none of the publications originated from the field of LIS. Based on the Web of Science database, the

study suggests that bibliotherapy literature is rather scarce and lacks comprehension due to a limited number of subject areas that encompass the discipline. Nonetheless, it is clear that 'Psychology education' maintains a prominent position in bibliotherapy literature, outnumbering other subject areas in terms of publication output. According to the study, bibliotherapy is widely recognised as a specialised and focused topic within the larger domains of therapy and mental health services. As a result, librarians, practitioners, and researchers are unaware of the potential for interdisciplinary collaboration between books and health. For example, in the field of library and information science.

5.4.2 Scopus

The study collected and examined three publications related to the discipline of bibliotherapy using the Scopus database. This included medicine becoming the most dominant subject area, accounting for two publications, while neuroscience and social science each accounted for one publication. Bibliotherapy has emerged as a prominent approach in medicine. In contrary, it highlights its multidisciplinary integrity and potential for addressing diverse disciplines in research. Furthermore, despite its multidisciplinary nature, it is astonishing how the concept can be inadequately produced. Additionally, Chapter Four of the study, which was conducted using the Scopus database, confirms the lack of visibility in the field of library and information science. According to the study, while bibliotherapy has numerous benefits, its effectiveness may not garner the same level of agreement as publication productivity. This could stymie the growth of researchers in their pursuit of additional publications.

5.5 Most published journals on bibliotherapy literature

The subsequent paragraph of the research study contains the interpretations concerning most published journal of the study as derived from the selected databases.

5.5.1 Web of Science

The study focuses on the output of the discipline of bibliotherapy, incorporating both national and international journals. This means, if the study primarily examines the production of national journals while disregarding international journals, the outcomes may yield a limited number of findings. In that regard, a total of (5) journals have been identified, encompassing

both national and international. These journals included ‘School psychology international, South African journal of Education, Current writing-text and reception in South Africa, HTS teologiese studies-Theological studies and CNS Spectrums’. Furthermore, the school psychology international journal was identified to have the highest number of publications, totalling (2) in contrast with the rest of the journals. The study demonstrates that the findings derived from the Web of Science database imply that the visibility of bibliotherapy literature is limited and unsatisfactory. In this context, the study shows that the discipline of bibliotherapy is more dominant in the journals of Psychology. Based on the data obtained, the study suggests that there is a limited visibility of bibliotherapy literature in South Africa, particularly in the indicator of publishing journals. In a nutshell, none of the journals in the discipline of LIS are considered notable or included in the aforementioned journals, according to the WoS database.

5.5.2 Scopus

In the context of South Africa, only three journals were found to have made contributions to the discipline of bibliotherapy literature. Neuropsychiatric Disease and Treatment, the South African Journal of Education, and the Archives of Disease in Childhood are among the journals mentioned above. According to the Scopus database, the aforementioned journals are appropriate for publishing research on bibliotherapy literature and gaining knowledge in this specific journals. Given the preceding statement, the results are deemed inadequate, implying that national and international publications do not recognise bibliotherapy as a distinct discipline. On the contrary, one could argue that journals should not be held accountable for a discipline's publication visibility and productivity. However, it is critical to recognise that authors bear the primary responsibility for publication productivity because they are the most significant contributors. As a result of the findings of this study, there is poor journal productivity of bibliotherapy literature in South Africa, as evidenced by the Scopus database. This could be attributed to a lack of discipline knowledge.

5.6 Top publishing affiliations on bibliotherapy in South Africa

The following paragraph of the research study contains the interpretations regarding the top publishing affiliations of the study as derived from the selected databases.

5.6.1 Web of Science

Given that the study's primary goal was to compromise all affiliations in South Africa, the researcher conducted a manual analysis using Excel data exported from the WoS. This helped to identify only South African affiliations. As a result, the study identified a total of 11 affiliations that have contributed to bibliotherapy literature in South Africa. University of North-West, University of Cape Town, Durban University of Technology, Stellenbosch University, University of the Witwatersrand, University of KwaZulu-Natal, and University of Pretoria were among the affiliations. According to the data presented in Table 4.3, the study identified six publications originating from the WoS in total. In contrast, when it came to affiliation productivity, the WoS documented the eleven institutions as previously mentioned. This indicates that a subset of the publications was affiliated with multiple institutions. As a result, North-West University accumulated the most productive affiliations. In a nutshell, the University of North-West produced the most (4) publications in the field of bibliotherapy of any affiliation studied. According to the study's findings, a discipline with significant popularity and visibility should be associated with a large number of affiliations. In contrast, according to a Web of Science database, this study found only 11 affiliations in terms of bibliotherapy productivity. In that regard, the level of productivity can be considered to be rather low. In contrast, South Africa has a total of 25 universities, but only 11 have contributed to the bibliotherapy literature.

5.6.2 Scopus

Similarly to the WoS database, the researcher compromised all South African affiliations and performed a manual analysis using Excel data exported from Scopus to identify South African affiliations exclusively. Therefore, the study discovered three affiliated bodies that made significant contributions to the discipline of bibliotherapy after searching the Scopus database. The University of Stellenbosch had the most publications, totalling two, while the University of Cape Town and the University of Northwest each had one. Furthermore, the study revealed a lack of non-academic affiliations contributing to the production of bibliotherapy literature. Another question that arises is whether academic affiliations are the only reliable affiliations of publication productivity. This is due to the importance of bibliotherapy to health and therapeutic affiliations, which are supposed to be at the forefront of bibliotherapy advocacy when compared to academic affiliations. Taking all of this into account, the analysis confirms

the low level of publishing productivity in bibliotherapy literature as evidenced by the Scopus database.

5.7 Summary

This chapter included detailed interpretations and discussions of the research findings. The findings revealed a low and unsatisfactory level of publication productivity in the field of bibliotherapy literature in South Africa. The findings also revealed that the low productivity of publications extends to all two databases used in the study.

Furthermore, the study found a lack of output in terms of publication productivity, author productivity, subject areas, published journals, and affiliations. Despite the observed lack of bibliotherapy publishing production, the findings indicate this discipline is relatively unknown and unpopular among researchers and institutions.

Moreover, it is possible that the discipline in question is not widely understood, but individuals may interact with it unknowingly without fully comprehending its nature. Finally realising that it is bibliotherapy and that it is a medical adjunct. Given the foregoing, it is possible to conclude that bibliotherapy is currently at its lowest point in terms of publication output. However, the application of knowledge sharing, collaborations, and the cultivation of discipline awareness among researchers and institutions can help to increase the publication productivity of bibliotherapy in South Africa. The following chapter contains the study's summary, conclusion, and recommendations.

CHAPTER SIX
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

The preceding chapter offered a comprehensive analysis of the bibliometric data obtained through bibliographic queries. This chapter, in contrast, provides a succinct overview of the research findings, presents the study's conclusions, and offers recommendations for future research. The primary aim of this study was to analyse trends in the published literature related to bibliotherapy within the South African context. This analysis aids researchers in assessing the visibility of bibliotherapy within the discipline. Additionally, the study aimed to test the hypothesis put forth by researchers, which suggested a lack of productivity in bibliotherapy literature in South Africa. To achieve these objectives, data from two distinct databases was analysed. As such, the following objectives were formulated to align with the study's purpose:

1. Publication trends of bibliotherapy literature in South Africa
2. Most published authors in bibliotherapy literature in South Africa
3. Subject areas published in bibliotherapy in South Africa
4. Most published journals in bibliotherapy literature in South Africa
5. Top publishing affiliations in bibliotherapy in South Africa

6.2 Summary of the findings

This section of the study summarises the research findings, which are organised according to the objectives outlined in Chapter 1.

6.2.1 Publication trends of bibliotherapy literature

It is essential to recognise that no single database can contain all of the academic publications. Given the preceding statement, the study used multiple databases to ensure an accurate representation of bibliotherapy literature. Web of Science and Scopus were among the databases used in the study. As a result of this. The study analysed bibliotherapy literature publications written primarily in English. Prior to refining the bibliographic query to include 'South Africa' as a specific parameter for data extraction from databases, global findings revealed a large number of publications related to bibliotherapy literature. Despite the study's

primary focus on the South African context, it was necessary to evaluate a broad range of bibliotherapy literature within a global framework. Furthermore, the Web of Science database recorded a total of 1,530 publications pertaining to bibliotherapy literature, 1,395 of which were produced in English. Furthermore, the Scopus database recorded a total of 1,685 publications, of which 1,635 were produced in English.

The study's main objective, however, was to focus on South Africa. Each database ran a bibliographic query containing similar keywords. The main keywords were bibliotherapy, and the synonym keywords were self-help books, reading therapy and poetry therapy, as identified by VosViewer software.

The Web of Science database followed a bibliographic search: *'bibliotherapy* (Topic) OR "self-help books" (All Fields) OR "Reading therapy" (All Fields) OR "Poetry therapy" (All Fields) and 2023 (Exclude – Publication Years) and English (Languages) and SOUTH AFRICA (Countries/Regions)'*. In light of the aforementioned, the study retrieved a cumulative number of six publications pertaining to bibliotherapy literature within the context of South Africa. The Scopus database followed a bibliographic query *'(KEY (bibliotherapy*) OR TITLE-ABS-KEY ("Self-help books") OR TITLE-ABS-KEY ("Reading therapy") OR TITLE-ABS-KEY ("Poetry therapy")) AND (LIMIT-TO (LANGUAGE , "English")) AND (EXCLUDE (PUBYEAR , 2023))'*. A total of three publications were produced on bibliotherapy literature in South Africa.

6.2.2 Published authors in bibliotherapy literature

The study conducted entailed a bibliographic inquiry *'bibliotherapy* (Topic) OR "self-help books" (All Fields) OR "reading therapy" (All Fields) OR "poetry therapy" (All Fields) and 2023 (Exclude – Publication Years) and English (Languages) and SOUTH AFRICA (Countries/Regions)'*. Furthermore, the study obtained a total of 10 South African authors who have published on the topic of bibliotherapy, as collected from the Web of Science database. The authors responsible for publishing were determined by a bibliographic search that included synonyms of the term "bibliotherapy." Therefore, the authors may not explicitly focus on bibliotherapy, but rather on self-help books, as they are associated with the term 'bibliotherapy'.

As a result, the extracted data was manually refined through a meticulous examination of the authors' affiliations, with the aim of distinguishing authors from South Africa from those who are not affiliated with South Africa. The authors included Chapman, M. Joubert, C. Hay, J. Theron, L. Cockcroft, K. Wood, L. Strong, P. Lotter, G. Donald, DR and Stein, DJ. Regarding the Scopus database, this research identified a total of six authors who have contributed to the discipline of bibliotherapy in South Africa. The study conducted involved a bibliographic inquiry *'(KEY (bibliotherapy*) OR TITLE-ABS-KEY ("Self-help books") OR TITLE-ABS-KEY ("Reading therapy") OR TITLE-ABS-KEY ("Poetry therapy")) AND (LIMIT-TO (LANGUAGE , "English")) AND (EXCLUDE (PUBYEAR , 2023))*' and refined to 'authors indicator'. The authors included Carmen, J. Hay, JF. Lochner, C. Stein, DJ. Ross, A and Cooper, PJ. Regarding the Google Scholar, the study applied a Publish or Perish for the purpose of data extraction. The bibliographic enquiry was initially conducted using a combination of keywords, which was subsequently refined into a single keyword, notably 'bibliotherapy'.

6.2.3 Subject areas published in bibliotherapy literature

The historical examination of subject areas in bibliotherapy throughout time offers a dynamic perspective on the development of the field. This meets the objective of the study by monitoring the development of the bibliotherapy concept. In terms of subject areas, the study used the indicator 'subject areas' to conduct the aforementioned bibliographic query. Nonetheless, both Web of Science and Scopus used the same data extraction strategy. Given the preceding assertion, it is worth noting that Web of Science generated more than Scopus produced a comparatively narrower range of three subject areas. The limited number of publications in subject areas indicates that bibliotherapy is becoming less familiar among academics. This trend indicates that there is no increase in people's curiosity about the advantages and potential uses of this therapy approach. On the contrary, bibliotherapy should be one of the most prominent and increasing concepts, as it includes diversity from various fields.

6.2.4 Journals publishing in bibliotherapy literature

Throughout the study, a similar bibliographic query was used, with the indicator of 'journals' in both Web of Science and Scopus. Following the preceding statement, it is important to note that the Web of Science has recorded a total of five published journals. School psychology international South African journal of education, Current writing-text and reception in South

Africa, HTS teologiese studies-Theological studies, and CNS Spectrums are among the topics covered. Furthermore, the Scopus database has recorded a total of three published journals. Neuropsychiatric Disease and Treatment, South African Journal of Education, and Archives of Disease in Childhood were among them.

The study found a significant difference in data extraction techniques between the Web of Science and Scopus. A bibliographic search was conducted using the compound keyword 'bibliotherapy'. Furthermore, the use of both the WoS and Scopus databases has facilitated the assessment of bibliotherapy comprehensively. Additionally, the study highlighted the collaborative nature of the bibliotherapy concept in journal productivity by, examining co-authorship. This revealed that certain publications appeared across multiple affiliations which at least boasted number of journals. Also, these data underscore the persistent lack of productivity enhancement since bibliotherapy serves as a therapeutic adjunct. In this regard, there are additional possibilities for future research that emphasize bibliotherapy requires further investigation, particularly in journals that specialize in LIS.

6.2.5 Affiliation publishing in bibliotherapy literature

The Web of Science database followed the bibliographic query *"bibliotherapy* (Topic) OR "self-help books" (All Fields) OR "Reading therapy" (All Fields) OR "Poetry therapy" (All Fields) and 2023 (Exclude – Publication Years) and English (Languages) and SOUTH AFRICA (Countries/Regions)*', under the indicator 'affiliations. This included a total of seven, namely North-West University, the University of Cape Town, Durban University of Technology, Stellenbosch University, the University of the Witwatersrand, the University of KwaZulu-Natal, and the University of Pretoria.

Additionally, the Scopus database employed a bibliographic search using an approach that was largely consistent throughout the entire study. The search under the indicator of affiliations included ''(KEY (bibliotherapy*) OR TITLE-ABS-KEY ("Self-help books") OR TITLE-ABS-KEY ("Reading therapy") OR TITLE-ABS-KEY ("Poetry therapy")) AND (LIMIT-TO (LANGUAGE , "English")) AND (EXCLUDE (PUBYEAR , 2023))'. This resulted in a total of three affiliations published in bibliotherapy.

6.3 Bibliotherapy literature in South Africa based on the publication productivity

This research is based on the discipline of Library and Information Science, with a particular emphasis on using books in the fields of clinical and psychology for therapeutic purposes. This is commonly referred to as bibliotherapy. The study revealed in Chapter One that bibliotherapy is a well-established therapeutic modality. It also includes the use of literary materials to promote and improve emotional, psychological, and mental well-being. Given the preceding statement, the study chose to investigate the visibility of bibliotherapy through publications derived from books.

The study was guided by a hypothesis that alluded to a lack of publication productivity on the concept of 'bibliotherapy' in South Africa. Given the preceding statement, the research analysed publication trends in order to assess the existence, popularity, and prevalence of the bibliotherapy discipline. The findings of this study have helped to determine the legitimacy, impact, and visibility of future research.

6.4 Conclusion of the study

The study's findings indeed confirm the initially proposed hypothesis, which suggested an insufficiency of bibliotherapy literature within the South African context. The observation that there are fewer than 20 publications coming from South Africa, indicating a limited overall publication output in this area, supports this assertion. Consequently, it can be reasonably concluded that bibliotherapy lacks widespread recognition as a discipline in South Africa.

Additionally, when comparing subject areas, it is noteworthy that bibliotherapy is predominantly published within the field of psychology, with no identified publications in the field of library and information science. This suggests that, from the perspective of library and information science, books are not widely recognised as a legitimate therapeutic approach. Furthermore, the study also reveals a lack of interdisciplinary collaboration in bibliotherapy literature in South Africa. This highlights an opportunity for psychology and information science to identify areas of collaboration to promote multidisciplinary research and application.

In summary, the implications of this study can be categorised into two key areas:

Scholarly Benefits: This includes knowledge creation and the potential for interdisciplinary collaboration between fields of study such as information science, psychology, linguistics, and criminology. This collaboration can lead to further research and the enhancement of academic curricula.

Social Benefits: The study's findings may encourage the public and reading clubs to consider the therapeutic potential of books. This could lead to the utilisation of books as tools for therapy and self-improvement, benefiting individuals and communities.

Furthermore, **t**he study's implications extend to various audiences, including citizens, scholars, public libraries, correctional service facilities, and hospitals. It highlights the potential for these entities to explore and incorporate bibliotherapy as a valuable approach for personal development and well-being.

In conclusion, the study's findings underscore the need for increased awareness and collaboration in the field of bibliotherapy in South Africa, with potential benefits spanning academia, society, and various institutions.

6.5 Recommendations

6.5.1. **Publication trends of bibliotherapy literature in South Africa**

The low number of publications produced on bibliotherapy has a direct impact on its influence and publishing expansion. Furthermore, its unfamiliarity hinders the dissemination and implementation of the notion among the general public, institutions, and libraries. Based on the evidence presented in the study, it can be concluded that there is a noticeable lack of publication productivity, indicating a deficit in knowledge about bibliotherapy. Furthermore, the ability to produce research publications is closely tied to one's knowledge base. In line with the ultimate goal of this study, considering the scarcity of bibliotherapy literature, the researcher intends to integrate bibliotherapy awareness into community engagement initiatives with the support of the University of South Africa. The researcher will participate as a leader of the project team focused on the development of school libraries. These community engagement efforts will revolve around promoting bibliotherapy as an academic discipline and the utilisation of bibliotherapy as a therapeutic tool within libraries and educational institutions. Initially, these

initiatives will be concentrated in a single province, specifically the Limpopo Province in South Africa, with plans for expansion to encompass the entire country at a later stage.

6.5.2. Author productivity of bibliotherapy literature in South Africa

To improve author productivity, the study recommends implementing strategies such as research retreats to increase visibility and acknowledgement of bibliotherapy literature amongst researchers. The study recommends promoting awareness among researchers regarding bibliotherapy as a therapeutic adjunct within South African communities. This can be achieved through the use of South African media outlets, including campaigns, radio broadcasts, and television interviews, as well as collaborations with educational systems, healthcare organisations, churches, and libraries to ensure that communities are familiar with the concept of 'bibliotherapy.' The study suggests conducting a comprehensive qualitative or mixed-methods investigation to delve deeper into the issue of low publication productivity in bibliotherapy literature within South Africa. It is important to focus on prominent institutions, including hospitals, the Department of Education, academic institutions, registered churches, and researchers at large, in order to gain a more comprehensive understanding of the challenges and potential solutions related to this problem. This is in addition to projects pertaining to bibliotherapy, as it might enhance their visibility and productivity. Starting collaborative research and producing co-authored publications can accomplish this.

6.5.3. Subject productivity of bibliotherapy literature in South Africa

This study recommends the promotion of interdisciplinary collaboration with other academic disciplines, such as linguistics, criminology, and psychology, to enhance research publications. For instance, within the field of linguistics, bibliotherapy primarily involves reading as a therapeutic tool. Language barriers and reading illiteracy can potentially hinder the effective application of bibliotherapy. Therefore, a deep understanding of languages and proficient reading skills are essential prerequisites before integrating bibliotherapy as a medical adjunct. This proficiency is crucial for a comprehensive comprehension of written materials and the realisation of therapeutic benefits through bibliotherapy. Consequently, the study strongly advocates for interdisciplinary collaboration between the fields of linguistics and psychology.

6.5.4. Journal productivity of bibliotherapy literature in South Africa

A lack of productivity in academic journals can greatly hinder the spread and progress of bibliotherapy publications. Researchers, particularly those in the field of LIS, need to acquire knowledge on bibliotherapy since they are the main custodians and specialists in information creation. This can facilitate a context of new knowledge in bibliotherapy. Poor journal publication can result in a poor rate of knowledge progression and a drop in the prominence of bibliotherapy literature in the entire research context looking at the journals. This study suggests that there should be an increased emphasis on peer review, particularly in relation to the concept of bibliotherapy. Additionally, the study recommends that professionals and researchers in the field of LIS should adopt a Discipline Buddy System (DBS), given the evidence of bibliotherapy's decline in South Africa.

This system entails establishing professional friendships among researchers who specialize in the same field, with the aim of creating an academic community for easy information and knowledge dissemination. This can help researchers conduct peer reviews and actively engage with research topics on a personal level. The study suggests that researchers should engage verbally and practically with the concept of bibliotherapy, which currently lacks public consciousness. Additionally, this will yield a greater number of publications, thereby enhancing the overall productivity of journals with a wider range of content. Finally, since bibliotherapy is considered an interdisciplinary concept, this is achievable. A variety of journals, such as psychology, education, theology, rehabilitation, and LIS, can publish on bibliotherapy.

6.5.5. Affiliation productivity of bibliotherapy literature in South Africa

In addition to producing bibliotherapy literature through affiliations, it is crucial to remember that researchers and institutions must have a thorough understanding of bibliotherapy before publication of literature can occur. However, this study suggests that institutions should work together regardless of affiliation. Libraries may significantly enhance bibliotherapy literature by incorporating bibliotherapy programs into their services. This includes integrating librarians and medical professionals as bibliotherapy facilitators in healthcare facilities. Finally, educational institutions should introduce bibliotherapy, focusing specifically on reading and developing bibliotherapy practices. Basically, proper staff and user education training may encourage a bibliotherapeutic culture and facilitate effective bibliotherapy practice. It is believed that if bibliotherapy gains widespread acceptance in various institutions, publishing

the concept in the South African environment will become less difficult. As a result, the study recommends promoting awareness among researchers regarding bibliotherapy as a therapeutic adjunct within South African communities. This can be achieved through the use of South African media outlets, including campaigns, radio broadcasts, and television interviews, as well as collaborations with educational systems, healthcare organisations, churches, and libraries to ensure that communities are familiar with the concept of 'bibliotherapy.

Based on the evidence presented in the study, it can be concluded that there is a noticeable lack of publication productivity, indicating a deficit in knowledge about bibliotherapy. Furthermore, the ability to produce research publications is closely tied to one's knowledge base. In line with the ultimate goal of this study, considering the scarcity of bibliotherapy literature, the researcher intends to integrate bibliotherapy awareness into community engagement initiatives with the support of the University of South Africa. The researcher will participate as a leader of the project team focused on the development of school libraries. These community engagement efforts will revolve around promoting bibliotherapy as an academic discipline and the utilisation of bibliotherapy as a therapeutic tool within libraries and educational institutions. Initially, these initiatives will be concentrated in a single province, specifically the Limpopo Province in South Africa, with plans for expansion to encompass the entire country at a later stage.

6.6 Final conclusion

This research aimed at investigating the publication output of bibliotherapy literature within the context of South Africa. The hypothesis was that there is a lack of publication productivity on the discipline bibliotherapy in South Africa. On the other hand, it is evident that bibliotherapy is not widely practiced in South Africa due to the limited output from the study.

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ANNEXURE A: Ethical clearance

UNISA university of south africa

COLLEGE OF HUMAN SCIENCES RESEARCH ETHICS REVIEW COMMITTEE

15 March 2023

NHREC Registration # :
Rec-240816-052
CREC Reference # :
54167027_CREC_CHS_2023

Dear Ms Koketso Bernice Manamela

Decision:
Ethics Approval from 15 March 2023 to 15 March 2024

Researcher(s): Name: Ms. K. B. Manamela
Contact details: 54167027@mylife.unisa.ac.za
Supervisor(s): Name: Prof. M. S. Ngoepe
Contact details: ngoepms@unisa.ac.za

Title: BIBLIOMETRIC ANALYSIS OF BIBLIOTHERAPY LITERATURE IN SOUTH AFRICA

Degree Purpose: Masters

Thank you for the application for research ethics clearance by the Unisa College of Human Science Ethics Committee. Ethics approval is granted for one year.

The *negligible risk application was reviewed by* College of Human Sciences Research Ethics Committee, in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the College Ethics Review Committee.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.

Open Rubric

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4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
7. No fieldwork activities may continue after the expiry date **(15 March 2024).** Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

*The reference number **54167027_CREC_CHS_2023** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Yours sincerely,

Signature:

Prof. KB Khan
CHS Research Ethics Committee Chairperson
Email: khankb@unisa.ac.za
Tel: (012) 429 8210

Signature: PP

Prof ZZ Nkosi
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ANNEXURE B: TURNITIN DIGITAL RECEIPT

turnitin

Digital Receipt

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