Exploring the Development and Management of Mental Health Factors: A Systematic Literature Review using PRISMA and Bibliometric Analysis

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Abstract: - This research aims to explore factors that have a significant impact on Mental Health. Mental Health, as a state of psychological well-being, is the key for individuals to overcome life's challenges, recognize their potential, function effectively, and make positive contributions to society. The analytical method used in this research is Systematic Literature Review (SLR) with the PRISMA (Preferred Reporting Items for Systematic Review and Meta-analysis) method and Bibliometrics analysis. Data was taken from Scopus and Google Scholar over a five year period (2018 to 2023). The research results show that there are six determinant variables that significantly influence mental health, including Education, Spiritual Quotient/Intelligence, Emotional Quotient/Intelligence, Life Style, Worry/Anxiety, and Resilience. In addition, these findings identify that the United States, England and China are the countries with the largest number of corresponding authors in Mental Health research. The most productive journal in publishing this research is the International Journal of Environmental Research and Public Health. Meanwhile, research with the theme Mental Health is mainly focused on the fields of medicine (49.0%), psychology (11.8%), and social sciences (10.2%). The dominant words that appear in this research include human, depression, female, young adult, mental illness, etc..

1 Introduction

Mental health is a state of psychological well-being that enables a person to face life's challenges, recognize their abilities, learn and work effectively, and make a positive contribution to their society (WHO, 2022). According to Schneiders (1965), mental health is related to a person's personality characteristics, including mental efficiency, control and integration of thoughts and behavior, conflict resolution, positive emotions, mental calm, healthy attitudes, positive self-concept, and adequate ego identity. Additionally, it involves the individual in maintaining a satisfying relationship with reality.

Mental health problems have been a concern for a long time and have received little attention and focus from health care facilities and systems. Therefore, it is important for the government to take adequate steps to ensure that people's mental health challenges are addressed appropriately to achieve high levels of mental well-being (Limone & Toto, 2022). This ongoing problem is also developing in various sectors of society. In the contemporary era, many changes have occurred in various aspects of life, ranging from economic progress, politics, education, to culture. This rapid development often creates challenges for individuals who have difficulty adapting, potentially having a negative impact on mental health.

Mental health problems are conditions where there is a disturbance in the way a person thinks, feels, or reacts, making it difficult or even impossible to overcome them. This can feel as severe as a physical illness or even worse (Mind, 2017). Mental health is an important aspect of everyday life that influences a person's psychological well-being. In recent years, awareness of the importance of maintaining mental health has increased significantly. Despite this, the complexity of factors that can influence mental health is still a growing area of research.

Maintaining optimal mental health is critical to cultivating resilience and coping with stress, ultimately improving one's overall quality of life. This involves forming a positive mindset, nurturing supportive relationships, and seeking professional

help when needed, promoting a holistic approach to wellbeing. Therefore, it is important to pay attention to the recognition of mental health problems.Top of Form

To address mental health problems, a thorough understanding of the factors that influence mental health is essential. Therefore, further research is needed to explore and analyze these factors to help develop more effective interventions. According to Videback (2011), factors that influence mental health involve individual factors, psychological factors, cultural and social factors, and precipitating factors. In this research, identification of factors that influence mental health will be developed in the last 5 years, from 2018 to 2023.

The research is entitled **"Exploring the Development and Management of Mental Health Factors: A Systematic Literature Review using PRISMA and Bibliometric Analysis"** aims to investigate the various factors that influence mental health. Through this research it is hoped to build on existing knowledge and contribute to enhance comprehension of the intricate interactions between factors that influence mental health in various populations.

2 Literature review

2.1. Mental Health

Mental health reflects a state of psychological well-being that empowers individuals to face life's challenges, recognize their abilities, increase knowledge, operate with efficiency, and have a positive impact on their communities (WHO, 2022). According to Schneiders (1965), mental health is related to personality characteristics, involving mental efficacy, regulation and integration of thoughts and actions, conflict resolution, positive emotions, mental calm, healthy attitudes, positive self-concept, and adequate ego identity. A mental health problem is a condition in which there is a disturbance in a person's thought process, emotions, or responses, making it difficult or even impossible to overcome them. This condition can feel as serious as a physical problem or even more serious (Mind, 2017).

The Mental Health Foundation (2008) emphasizes that mental health is determined by individuals' thoughts and feelings about themselves and their lives, influencing how they navigate and handle challenges. It is viewed as an influence on a person's ability to operate and take advantage of available opportunities, as well as interact fully with family, the workplace, community, and peers. Mental health is characterized as a state of psychological well-being, or conversely, the absence of mental disorders. It can also be defined as the ability to express personal emotions and adapt effectively to various demands (Kalantar et al., 2013).

According to Freeman (2022), mental health is described as a condition of mental well-being that empowers individuals to overcome the stresses of life, recognize their abilities, succeed in learning and work, and make positive contributions to their society. Mental health is a fundamental aspect of overall health and well-being and goes beyond the mere absence of mental disorders. Based on the explanation above, it can be concluded that mental health refers to a state of psychological well-being that enables individuals to face life's challenges, recognize their potential, function effectively, and make positive contributions to society, beyond the mere absence of mental disorders.

2.2. Systematic Literature Review

Systematic literature review(SLR) is a systematic and planned research method for identifying, evaluating, and synthesizing all relevant evidence published in scientific literature regarding a particular topic or research question (Triandini et al., 2019). The data collected includes findings from original research published in national and international journal articles. This data collection process involves the use of electronic sources registered and indexed by platforms such as Google Scholar, Semantic Scholar, ERIC, as well as direct access to national journals. The primary aim of a systematic literature review is to offer a thorough and unbiased overview of the existing knowledge and research within a specific field.

A Systematic Literature Review described as "*Method for identifying, evaluating, and interpreting all existing research relevant to a particular research question, topic area, or phenomenon of interest*" (Kitchenham, 2004). A Systematic Literature Review has the ability to provide high-quality reviews (Dingsøyr & Dybå, 2008) and reviews that are transparent and replicable (Leidner & Kayworth, 2006). According to Khan et al. (2003), there are five stages in conducting a SLR, namely: *formulating research questions*, *searching for articles, evaluating articles, summarizing articles,* and *interpreting article findings*.

2.3. PRISMA

PRISMA (Preferred Reporting Items for the Systematic Review and Meta-analysis) described as an iterative approach to ensure the quality of Systematic Literature Review analysis. The PRISMA procedure can be seen as a method of more in-depth examination of the systematic

mapping process, involving increased inclusion of qualitative studies, with the aim being to guarantee the quality of the systematic mapping process (Marjamäki, 2017). According to Bueno et al. (2021), PRISMA aims to improve the quality of systematic review protocols, assisting authors in documenting the design before finalizing it. According to et al. (2021), the first step in implementing the PRISMA method is planning the review, which includes identification, determining the scope of the review, and developing a review protocol. Next, a review was conducted to identify primary studies, select and assess the quality of these studies, and extract and synthesize data. In the final stage, data analysis, discussion and conclusion drawing are carried out.

2.4. Bibliometric

*Bibliometrics*described as a method for assessing and tracking the development of a specific discipline by organizing data, which includes author affiliations, citations, keywords, methods, and themes discussed used in research published in that discipline, using basic/advanced statistical techniques (Diodato, 1994 ; McBurney and Novak, 2002). According to Pritchard (1969) as quoted in Yilmaz (2019), Bibliometrics or bibliometrics is characterized as a method that involves examining scientific journals, books and other written communication media using mathematical and statistical techniques. Based on the journal, it can be concluded that bibliometrics is a method used to assess and monitor the development of a specific discipline by analyzing data such as author affiliations, citations, keywords, methods, and themes used in published research, using mathematical and statistical techniques.

3 Research Method

This Systematic Literature Review research was carried out in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines and with the help of Bibliometrics Software. This approach involves several stages, including determining eligibility criteria, determining sources of information, selecting studies, conducting the data gathering process, and selecting data items.

3.1. Research Question (RQ)

The RQ (Research Questions) used in this research are as follows::

RQ 1	:	What variables influence mental health that can be identified through empirical research?

RQ 2	:	What is the distribution of countries in research on the theme of Mental Health?
RQ 3	:	What are the most relevant sources in research on Mental Health?
RQ 4	:	What is the impact of local authors based on the H-Index in research on Mental Health?
RQ 5	:	How are research themes on Mental Health grouped by subject area?
RQ 6	:	What are the dominant words with research in the realm of Mental Health?

3.2. Eligibility Criteria

Inclusion Criteria(IC) used as a guideline for conducting Systematic Literature Review analysis is as follows:

- IC1: All literature that is both original and subject to peer review, composed in the English and published between 2018-2023.
- IC2: Studies aimed at understanding factors that influence mental health.
- IC3: Research with the type of article or original paper.

In IC1, only studies written in English were selected because studies generally conducted in English provide the most current information between the period 2018-2023 for more accurate updates. Meanwhile, for IC2, the document used is one that specifically aims to understand the factors that influence mental health, indicating that mental health functions as a dependent variable. This is based on Schneider's (1965) theory, which asserts that mental health is related to individual personality characteristics, involving mental efficiency, control and integration of thoughts and behavior, conflict resolution, positive emotions, mental calm, healthy attitudes, positive self-concept, and adequacy. As for IC3, only research is in the form of papers or articles.

3.3. Resources

Researchers searched the Scopus scientific database and the Google Scholar database, which is one of the largest and most well-known scientific databases that provides access to various journal articles that have gone through a peer-review process. In this research, the articles used cover the period from 2018 to 2023. The selection of this time period was implemented to ensure the relevance and novelty of the literature data used in the research analysis.

3.4. Research Steps

The steps of this research were carried out in three stages as follows::

1) By using search keywords that are appropriate to the research objectives,

namely "Factors that Influence Mental Health" or other keywords related to similar reports. The search keywords entered are:: TITLE-ABS-KEY((factors AND that AND influence "mental health*") AND (LIMIT-TO (OA , "all")) AND (LIMIT-TO (PUBSTAGE , "final")) AND (LIMIT-TO (SRCTYPE , "journal")))

2) Explore and select the titles , abstracts, and keywords the articles based on IC (Inclusion Criteria).

3) Sort and select all articles that were not eliminated in the previous selection by reading each article based on eligibility criteria.

3.5. Data Gathering Process

The data gathering process involved manual extraction methods using content analysis. This includes extracting information such as type of article, name of the journal, year of publication journal, topic and title articles, respondents or research data, country where the research was conducted, factors influencing mental health, mental health indicators, and research results showing the impact of determinant variables on mental health.

3.6. Data Items

The information extracted from every article was condensed into the following categories: year of publication the journal, researcher details, country or sample information, project objectives, Investigated factors or variables , influence on Mental Health, and findings regarding the impact of determinant variables on Mental Health. The stages of the SLR (Systematic Literature Review) analysis method presented in full in Figure 1 below.
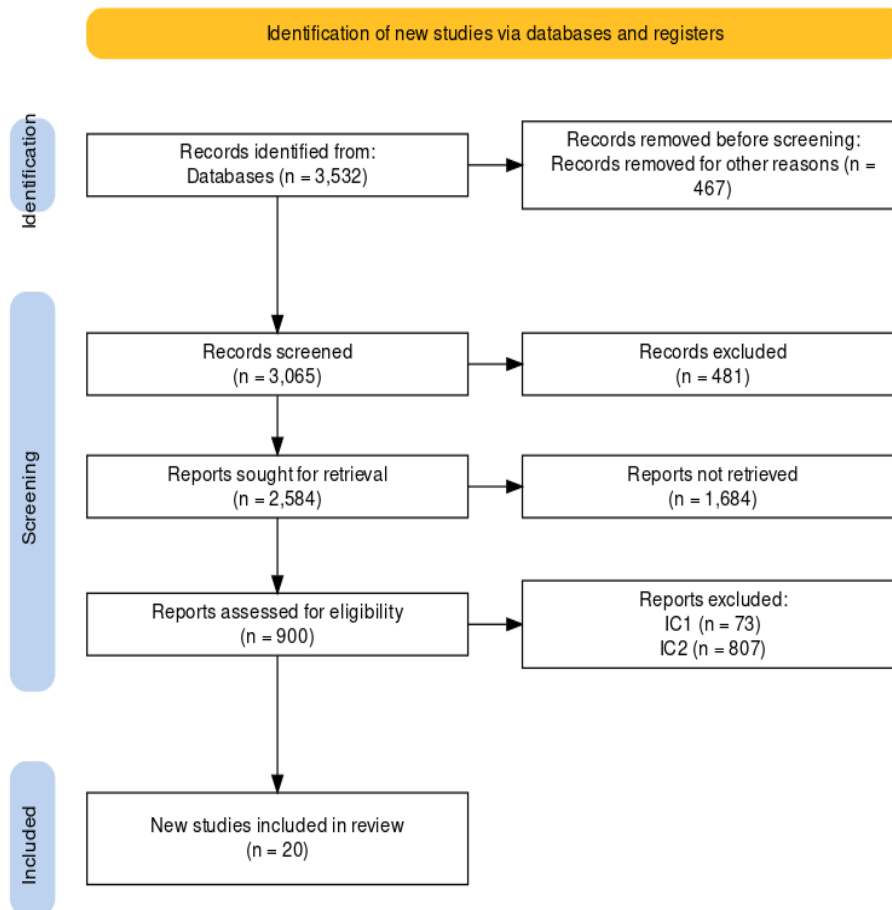

Figure 1. PRISMA Flowchart

4 Result and Discussion

4.1 Prisma Analysis and Discussion Results

RQ1: What variables influence mental health that can be identified through empirical research?

The data depicts trends in the number of articles published about mental health each year from 2018 to 2023. The peak of activity occurred in 2020, while other years tend to have lower contributions. Despite these fluctuations, awareness of mental health appears to be increasing, reflecting increased interest and attention to this topic in the scientific literature, as depicted in Figure 1 below.

Table 1. List of Selected Articles

No.	Years	Authors	Title	Country & Sample	Purpose
1	2018	Li and Jiang	"Social..Exclusion,.. Sense..of..School..Belonging..and..Mental. .Health..of..Migrant.. Children..in..China:.. A..Structural..Equation..Modeling..Analysis."	Sample obtained from the 2013-2014 of the China Education Panel Survey (CEPS).	Investigating the impact of social exclusion and school belonging on the mental well-being of migrant children in China.
2	2019	Sala et al.	"The..impact..of..leisure..activities..on..older..adults'..cognitive.. function,..physical..function, ..and..mental..health."	A sizable group of elderly individuals in Japan (N = 809; aged between 72 and 74 years).	The aim of this research is to support elderly people in Sustaining cognitive function, physical well-being, and mental health through the hope of contributing to the success of the aging process.
3	2020	Huang et al.	"Psychological..resilience,..self-acceptance, ..perceived..social..support..and..their..associations..with..mental ..health..of..incarcerated..offenders..in..China."	This cross-sectional study took place in two detention centers in Guangdong Province, China, spanning from March 1, 2019, to May 30, 2019. The study involved participants from these two detention centers who were capable of both speaking and writing Mandarin, and had a	The aim of this research is to assess the mental health condition of individuals incarcerated in detention centers, examining associated factors. Additionally, it aims to introduce psychological resilience, self-acceptance, and perceived social support for in-depth analysis, with the purpose of exploring the connections between these

No.	Years	Authors	Title	Country & Sample	Purpose
				comprehension of the scale instructions.	variables and mental health within this specific population.
4	2020	Jahangir et al.	"Impact..of..Spiritual ..Intelligence..and..Happiness..on..Mental..Health..among..Adults."	This quantitative research focuses on adults, and the study's population comprises individuals from diverse areas in Multan. A sample size of N = 400 was chosen, and convenient sampling techniques were employed for sample selection.	The study aimed to assess the influence of spiritual intelligence and happiness on the mental health of adults.
5	2020	Yang et al.	"How..Resilience..Promotes..Mental..Health..of..Patients..With..DSM-5..Substance..Use..Disorder?..The..Mediation..Roles..of..Positive..Affect,..Self-Esteem,..and-Perceived..Social..Support."	The sample of this study was 415 patients diagnosed with the Diagnostic and Statistical Manual of Mental Disorders-SUD, fifth edition from China	"This research explored how positivity, perceived social support, and self-esteem mediate the relationship between resilience and both perceived stress and life satisfaction in individuals with Substance Use Disorder (SUD)."
6	2020	Wu et al.	"The..Relationship..Between..Resilience..and..Mental..Health..in..Chinese..College..Students:..A..Longitudinal..CrossLagged..Analysis."	Sample of 314 students in China (China)	The objective of this study is to understand the connections between elevated resilience levels predicting reduced mental illness and increased positive mental health, and vice versa. Additionally, the research aims to monitor fluctuations in resilience, mental

No.	Years	Authors	Title	Country & Sample	Purpose
					illness, and positive states over time.
7	2020	Bhandari & Paswan	"Lifestyle..Behaviors ..and..Mental..Health ..Outcomes..of..Elderly:..Modification..of.. Socio-Economic..and..Physical..Health..Effects."	Out of the overall sample size of 9852, four samples were excluded due to missing values in the psychological questionnaire. Consequently, the analysis was conducted using 9848 samples. (India)	"This study has sought to comprehend both the direct and indirect consequences of lifestyle behaviors on the mental health outcomes of older adults, utilizing statistical pathways."
8	2020	Tyler et al.	"Structural..Equation ..Modeling..of..Parkinson's..Caregiver..Social..Support,..Resilience, ..and..Mental..Health :..A..Strength-Based..Perspective."	The sample for this study was 250 PD caregivers consisting of 2 clinics in the United States and Mexico.	"The goal of this research was to create and validate a theoretical structural equation model establishing an association between social support and increased resilience in caregivers of individuals with Parkinson's disease (PD), and further linking increased resilience to reduced symptoms of mental health."
9	2020	Jenatabadi et al.	"Association..of..Body..Mass..Index..with.. Demographics..Lifestyle,..Food..Intake, ..and..Mental..Health ..among..Postpartum. .Women:..A..Structural..Equation..Approach."	The final sample size for this study comprised 443 observations. (Malaysia)	This research seeks to contribute to understanding the factors that influence postnatal obesity, especially ated to mental health, lifestyle, demographics and food intake.
10	2020	Abdala et al.	"Religion,..Age,..Education,..Lifestyle,..and..Health:..Structural. .Equation..Modeling. "	A cross-sectional research employing a non-randomized sample of 392 participants.	The objective of this research is to examine how religion moderates the influence of self-referential sociodemographic variables, lifestyle, and physical and

No.	Years	Authors	Title	Country & Sample	Purpose
					mental health.
11	2020	Yıldırım et al.	"Why..Do..People..High..In..Covid-19..Worry..Have..More..Mental..Health..Disorders? ..The..Roles..Of..Resilience..And..Meaning ..In..Life."	284 young adults who speak Arabic (60.6% female; with a mean age of 26.25±7.57 years) were asked to fill out the COVID-19 Concern Scale, Brief Resilience Scale, Meaning in Life Measure, and Patient Health Questionnaire-9.	The objective of this research was to investigate how resilience and the sense of meaning in life mediate the connection between concerns about COVID-19 and the presence of mental health disorders.
12	2020	Hosseinkhani et al.	"Academic..Stress..and..Adolescents..Mental..Health: ..A..Multilevel..Structural..Equation..Modeling..(MSEM)..Study..in..Northwest..of..Iran."	A total of 1,724 students, ranging from 12 to 19 years old, were chosen using stratified cluster sampling from 53 secondary schools in Qazvin City, located in northwestern rather than central Iran.	The objective of this study is to establish the correlation between diverse sources of academic stress and the mental health of adolescents by examining mediator variables at both the student and school levels.
13	2021	Dhami & Sharma	"A..Relational..Analysis..of..Mental..Health..and..Spiritual..Intelligence..among..Youth: ..A..-New..Paradigm."	"The study involved 360 individuals in the age range of 20 to 22 years, who were enrolled at Punjab Agricultural University in Ludhiana, Punjab, and Govind Ballabh Pant University of Agriculture and Technology in Pantnagar, Uttarakhand."	The objective of this research is to evaluate and contrast the mental well-being of adolescents hailing from two distinct states in India.
14	2022	Cao et al.	"Coping..Style..and..Resilience..Mediate..	Information for this cross-	The aim of this research was to

No.	Years	Authors	Title	Country & Sample	Purpose
			the..Effect..of..Childhood..Maltreatment..on..Mental..Health..Symptomology."	sectional study was gathered from a convenient sample of 740 students in China, specifically from Gansu Province.	evaluate the impact of coping styles and resilience on the connection between childhood maltreatment and the manifestation of mental health symptoms in college students.
15	2022	Sun et al.	"How..Does..WorkRelated..Depression,..Anxiety,..and..Stress..Hamper..Healthcare..Employee..Performance..during..COVID-19?.-The..Mediating..Role..of..Job..Burnout..and..Mental..Health."	Research data was collected through structured questionnaires out of a total of 669 participants employed in the healthcare sector in Pakistan.	The objective of the study is to investigate how the COVID-19 pandemic has psychologically affected the performance of healthcare workers.
16	2022	Kara &Çanakçi	"The..Mediating..Role..of..Resilience..in..the..Relationship..between..Fear..of..COVID-19-and..Mental..Health..Continuum..during..the..COVID-19-Pandemic..Process."	This research involved 443 individual volunteers who experienced the COVID19 pandemic process in Türkiye.	The overarching goal of this research is to establish the mediating function of resilience in the relationship between the fear of COVID-19 and the mental health continuum.
17	2022	Kartika et al.	"The..Effect..of..Improving..Spiritual..Quotient..and..Emotional..Quotient..onMental..Health..in..Sya'ban..Month..at.the..Pandemic..Covid-19..in..Jakarta-Indonesia."	The sample was randomly determined to be 100 people (Indonesia)	The objective of this study is to identify and analyze the beneficial impact of spiritual intelligence on mental health during the month of Sha'ban.
18	2022	Zhou et al.	"A..Structural..Equation..Model..of..the..Relationship..among..Occupational..Stress,..Coping.-.Styles,..and..Mental..Health..of..pediatric..nurses..in..China:..a..cross-sectional..study."	The respondents in this study were 381 children from Chongqing, China	The purpose of this research is to explore the effects of postnatal obesity as a significant global health concern.
19	2021	Liu et al.	"Social..support,..resi	The study	"The objective of

No.	Years	Authors	Title	Country & Sample	Purpose
			lience,..and..self-esteem..protect.-.against..common..mental..health..problems..in..early..adolescence."	enlisted 1015 adolescents with an average age of 12.7 years from two junior high schools.	this research was to investigate the mutual influences between self-esteem and common mental health problems (CMHPs), as well as the reciprocal impacts of self-esteem and resilience during early adolescence."
20	2023	Ataei et al.	"Coping..with..Identity..threat..and..health..literacy..on..the..quality..of..life..and..mental..health..in..students:..Structural..Equation..Modeling."	"A random sampling method was employed to select 300 students from Alborz University of Medical Sciences. " (Iran)	"The objective of this research is to identify how predictors related to overcoming identity threats and health literacy contribute to the quality of life and mental health of students. "

4.1.1 Systematic Impact

Based on 20 selected articles and analysis using the systematic literature review method, the impacts, findings, conclusions and references for Sustainability Reporting are shown in Table 2 below.

Table 2. Impact of Mental Health

No	Variable Determinant Factors	Previous Research	Results	Conclusion
1	*Education*	Sala et al. (2019) and Hosseinkhani et al. (2020)	Not significant	Inconsistent results
		Abdala et al. (2020)	Positive	
2	*Lifestyle*	Abdala et al. (2020), Bhandari & Paswan (2020) and Jenatabadi et al. (2020)	Positive	Significant Positive
3	*Spiritual Quotient/Intelligent*	Dhami & Sharma (2021), Kartika et al. (2022) and Jahangir et al. (2020)	Positive	Significant Positive
4	*Emotional Qoutient/Intelligent*	kartika et al. (2022)	Positive	Significant Positive
5	*Worry/anxiety*	Yıldırım et al. (2020)	Positive	Significant Positive
6	*Resilience*	Cao et al. (2022), Huang et al. (2020), Tyler et al. (2020), Yang et al. (2020) and Yıldırım et al. (2020)	Negative	Inconsistent results

No	Variable Determinant Factors	Previous Research	Results	Conclusion
		Kara &Çanakçi (2022) and Wu et al. (2020)	Positive	

4.1.2 Influence of Variables

a) Education

Impact of the Education variable on Mental health, as shown by previous research, produces inconsistent results. Sala et al. (2019) and Hosseinkhani et al. (2020) found the impact to be insignificant, while Abdala et al. (2020) identified a significant positive relationship. The contrasting results indicate inconclusive findings in the existing literature, and it is clear that research on this topic is still limited. The inconsistency of results emphasizes the need for further investigation and a more comprehensive understanding of the role of education as a determinant of mental health.

b) Lifestyle

The impact of Lifestyle as an independent variable on Mental Health has been investigated in two previous studies, namely Abdala et al. (2020), Bhandari & Paswan (2020) and Jenatabadi et al. (2020). The results of this research reveal a positive significant relationship between Lifestyle and Mental Health. Although the available evidence suggests a positive relationship between Lifestyle and Mental Health based on the studies mentioned, the conclusion that can be drawn is that more research is needed to comprehensively understand and explain the relationship.

c) Spiritual Quotient/Intelligent

The impact of Spiritual Quotient/Intelligent as an..independent..variable..on Mental Health has been investigated in several previous studies, namelyDhami & Sharma (2021), Kartika et al. (2022) and Jahangir et al. (2020). The results of this research reveal a significant positive relationship between Spiritual Quotient/Intelligent and Mental Health. Although the available evidence suggests a positive relationship between Spiritual Quotient/Intelligent and Mental Health based on the studies mentioned, the conclusion that can be drawn is that more study are needed to comprehensively understand and explain the relationship.

d) Emotional Qoutient/Intelligent

The analysis focused on the relationship between the dependent variable (Mental Health) and the variablesindependent(Emotional Quotient/Intelligence), based on previous research: Kartika et al. (2022) reported a positive significant relationship between Emotional Quotient/Intelligence and Mental Health, indicating that higher Emotional Quotient/Intelligence is associated with better mental health.Although available evidence suggests a positive relationship between*EmotionalQuotient/Intelligent*and Mental Health based on the research mentioned, the conclusion that can be drawn is that more study are needed to comprehensively understand and explain the relationship.

e) Worry/Anxiety

The relationship between Worry as..an independent..variable..and Mental Health as a dependent variable was investigated by Yıldırım in 2020, which revealed a significant positive relationship. Although the available evidence suggests a positive relationship between Worry and Mental Health based on the studies mentioned, the conclusion that can be drawn is that more research is needed to comprehensively understand and explain the relationship.

f) Resilience

The relationship..between Resilience as an..independent..variable and Mental Health as a dependent variable was investigated in previous research conducted byCao et al. (2022), Huang et al. (2020), Tyler et al. (2020), Yang et al. (2020) and Yıldırım (2020). The results..of the study show that there is a significant negative relationship between Resilience and Mental Health. WhereasKara &Çanakçi (2022) andWu et al. (2020) found that*Resilience*has a significant..negative influence on mental health. The inconsistent results in the findings highlight the importance of conducting further investigation and a more thorough understanding of the role of Resilience as a determinant of Mental Health.
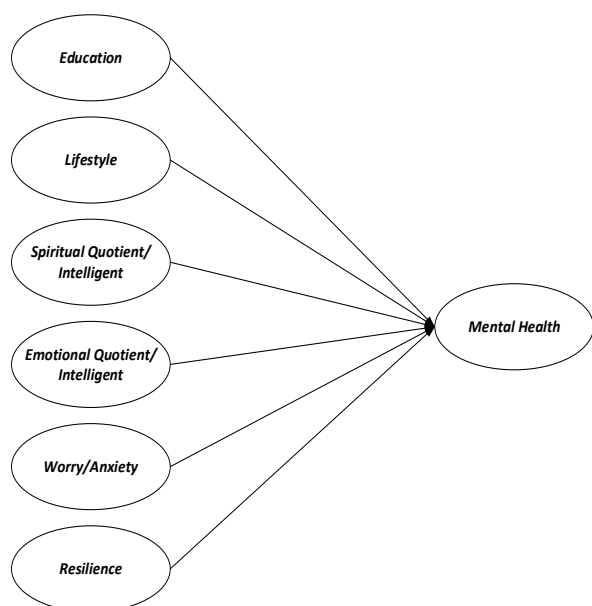
Figure 2. Variables that Influence Mental Health

Based on the discussion..above, the six determinant variables obtained from the 20 selected..articles (previous research) mostly show inconsistent results, creating something new in this research. The results show that there are three determinant variables with inconsistent effects on Mental Health, namely: Education, Spiritual Quotient/Intelligence, and Emotional Quotient/Intelligence. Meanwhile, there are also three determinant variables with consistent effects on Mental Health, namely: Lifestyle, Worry, and Resilience. Therefore, this indicates the need for further research to explore a deeper..understanding of the factors that influence mental health, especially on variables that have shown inconsistent results in previous research. Further understanding can make a significant contribution to the development of more effective interventions and policies in improving Mental Health.

4.2 Bibliometric Analysis and Discussion Results
4.2.1 Main Information

In this research, the analysis was carried out using RStudio with the use of the "bibliometrix" library. Data preparation was carried out based on predetermined Research Questions.


Figure 3. Important Information about Mental Health

From the picture above, it can be concluded as follows.

a) **Timespan (Time Period):**This bibliometric data covers the period from 2018 to 2023, meaning that data analysis was carried out in the most recent period (the last five years).

b) **Sources:**There are 2826 sources used in this analysis, this shows that the data was collected from various reference sources.

c) **Documents (Documents):**There are 16546 documents used in this analysis including scientific articles.

d) **Annual Growth Rate % (Annual Growth Rate):**The annual growth rate of 25.54% shows that the number of documents relevant to this research has increased quite significantly during the research period.

e) **Authors (Writers):**There are 64269 authors in the documents analyzed which shows that the diversity of authors contributed to this research topic.

f) **Authors of Single-Author Docs:**A total of 676 documents were written by a single author who showed a contribution to this research topic.

g) **International Co-Authorship (International Collaboration):**presentation of international collaboration of 28.59% shows that most documents involve authors from more than one country.

h) **Co-Authors per Doc:**an average of 6.18 authors were involved in each document analyzed, reflecting teamwork in scientific research.

i) **Author's Keyword:**There are 20989 keywords used by the author in this document, this provides insight into the topics most frequently identified by the author.

j) **References:**On average only one reference was used in each document, which may indicate that these documents focused more on primary data analysis or had a newer research approach.

k) **Document Average Age:**The average age of documents is 1.81 years, this shows that the documents used in this analysis tend to be the newest documents.

l) **Average Citations per Doc:**An average of 13.51 citations were received by each document, indicating that these documents are recognized by other researchers in the scientific literature.

Overall, this bibliometric analysis provides an overview of the data sources used in research, research growth in a certain period, author characteristics, and other important aspects related to this research. Various important and relevant elements have been identified in this research, such as Annual Scientific Production, Significant Primary Sources, Notable Authors, and so on. Each statement in this research provides valuable insight into the results and contribution of the research to the understanding of the topic under study. By detailing the statements of this research, it is hoped that it will provide a deeper understanding of the results of this research and their relevance in a wider context.

4.2.2 RQ 2: What is the distribution of countries in research on the theme of Mental Health?
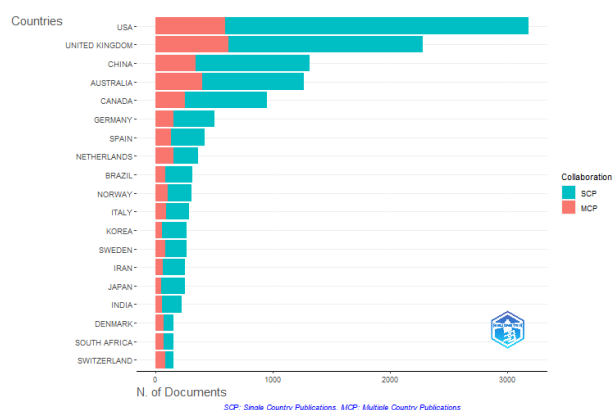
Figure 4. Countries conducting research on Mental Health

Corresponding authors countries refer to the country or countries of origin of the author who acts as corresponding author in a scientific or research publication. Corresponding author is the author who is usually responsible for communications with publishers, scientific journals, or conferences related to the publication. The 10 countries with the most corresponding author's names respectively are USA, United Kingdom, China, Australia, Canada, Germany, Spain, Netherlands and Brazil. These ten countries involve authors from more than one country (Multiple Country Publication/MCP) and also authors from only one country (Single Country Publication/SCP).

4.2.3 RQ 3: How many research documents are published by each journal based on their level of relevance to the mental health theme?
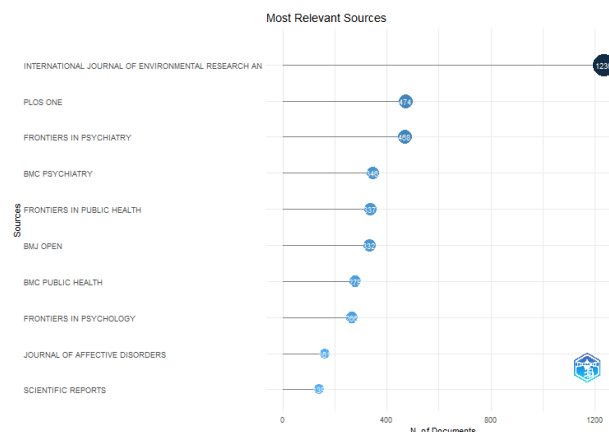
Figure 5. Most Relevant Resources on Mental Health

Based on Figure 5, it can be seen that the number of research articles published by each journal is based on their level of relevance regarding Mental Health. The data illustrates a blue bar chart presenting the names of the most prolific journals along with ranges for the number of published documents. The intensity of the blue color reflects the quantity and significance of research themes, with the total number of documents ranging from 0 to 1236. At the forefront is the International Journal of Environmental Research An, leading with an impressive 1236 published documents. Following closely are PLOS ONE and Frontiers in Psychiatry, contributing 474 and 408 articles, respectively. These journals exhibit darker blue bars compared to the lighter tones of other journals, indicating their strong relevance to the discussed theme.

4.2.4 RQ 4: What is the impact of each author who publishes articles about mental health?
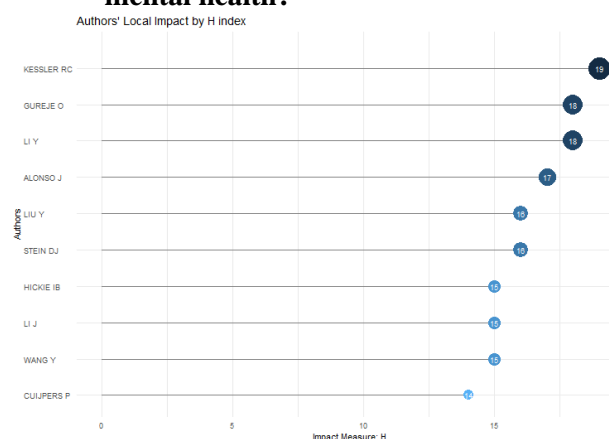

Figure 6. Impact of Each Author

The authors' evaluation of this study involved measuring the impact of each publication on mental health. The method used is calculating the H-index for each author, which is depicted in Figure 6. Apart from displaying the H-index value, this figure also illustrates the impact produced by the author. The

H-index range observed in this study ranges from 0 to 19. In the picture, Kessler RC occupies the top rank with an H-index value of 16, marked in dark blue. Next there are Gureje O, Li Y and Alonso J with H-index values of 18, 18 and 17 respectively, and still show a dark blue graph color.

RQ 5 What is the distribution of subject areas in journal publications on mental health?
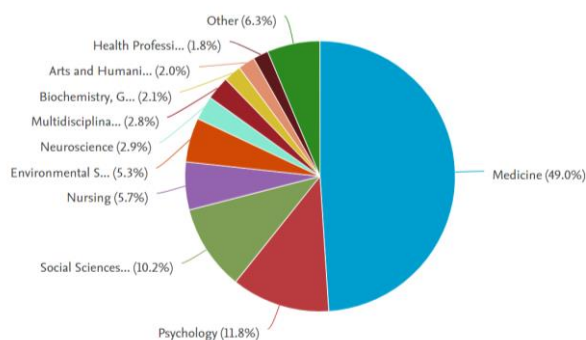
Figure 7. Distribution of Subjects in Research Areas on Mental Health

In an analysis of the distribution of subject areas in journal publications on mental health, it was found that the majority of research focused on the area of medicine with a percentage reaching 49.0%. This illustrates that the medical community is significantly involved in exploring understanding and solutions related to mental health. Followed by the subject area of psychology which ranked second with a contribution of 11.8%, indicating that the psychological approach is also an important research focus. In addition, social sciences accounted for 10.2% of publications, indicating their relevance in understanding the social dimensions of mental health. The subject area of nursing in the context of mental health was also recorded with a percentage of 5.7%. Apart from that, other subjects, environmental sciences, neuroscience, multidisciplinary, biochemistry, arts and humanities, health professionals and other subjects also contributed, although in smaller proportions. Given the diversity of this subject area, it can be concluded that understanding mental health involves a variety of scientific disciplines, emphasizing the importance of a multidisciplinary and collaborative approach to addressing mental health issues holistically.

4.2.5 RQ 6: What are the dominant words with research in the realm of Mental Health?

Figure 8. The most dominant words

The dominant words in research on mental health are displayed in word cloud form as in Figure 8 above. Wordcloud is a visual representation of words that frequently appear in a data set of articles studied using keywords related to Mental Health. Wordcloud will display these words in varying sizes according to the frequency with which they appear. The placement of words in the word cloud is random, but the most dominant words are placed in the middle and have a larger size. Based on Figure 8, the dominant words in research on mental health are as follows: Human, Depression, Female, Young Adult, Mental Disease and so on.

5 Conclusion

Based on the Systematic Literature Review analysis, it can be concluded as follows.

a) There are six determinant variables that influence Mental Health, namely: Education, Spiritual Quotient/Intelligence, and Emotional Quotient/Intelligence, Lifestyle, Worry, and Resilience.

b) The ten countries with the most corresponding author's research on mental health are USA, United Kingdom, China, Australia, Canada, Germany, Spain, Netherlands and Brazil.

c) *International Journal Of Environmental Research An*is the largest journal that publishes on mental health with a total of 1236 documents. And followed by PLOS ONE and Frontiers in Psychiatry with the number of published documents of 474 and 408 documents respectively.

d) The author of the most relevant document on mental health is Kessler RC with an H-index value of 16. Next there are Gureje O, Li Y and Alonso J with H-index values of 18, 18 and 17 respectively.

e) Most research on mental health focuses on the area of medicine with a percentage reaching 49.0%, Psychology (11.8%) and Social Sciences (10.2%)

f) The dominant words that are relevant in research on mental health are Humans,

Depression, Female, Male, Adult, Psychology and article.

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A.A. contributed to the methodology. Y.P. was responsible for software development, while validation and data curation were jointly managed by S.I. and A.A. Formal analysis and investigation were led by A.A., who also secured the necessary resources for the project. The initial draft of the manuscript was prepared by A.Y., with A.A. providing valuable input during the review and editing process. A.A. also took charge of data visualization, while project administration and funding acquisition were overseen by Y.P. It is important to note that all authors have thoroughly reviewed and approved the final version of the manuscript for publication.

Conflict of Interest

The authors have no conflicts of interest to declare that are relevant to the content of this article.