



Trends and Implications of Motivational Interviewing From 2017-2022: A Bibliometric Review

Bambang Dibyoy Wiyono¹, Nur Hidayah², M. Ramli², Adi Atmoko²

¹ Universitas Negeri Surabaya, Surabaya, Indonesia

² Universitas Negeri Malang, Malang, Indonesia
bambangwiyono@unesa.ac.id

Abstract. The study aims to identify research on the topic of motivational interviewing. Motivational interviewing is a client-centered counseling approach to encourage behavioral change. This article uses a bibliometric method, analysis using journal documents for the period 2017-2022. The research questions asked in this bibliometric study as follows: (1) How is the growth from 2017-2022? (2) What are the types of publications on the topic of Motivational Interviewing? (3) What are the scientific areas in the topic of motivational interviewing? (4) Who are the most productive publishers and authors? (5) What keywords often appear on the topic of motivational interviewing? Articles are obtained from Scopus assisted by Vos Viewer. The number of documents is 7087. The analysis in this study is related to frequency analysis, and data visualization. The most types of documents are journal types with a total of 6741, the most scientific areas in medicine with a total of 5500, the country with the most publications is the United States with 3,821, while the journal with the most citations is the Journal Of Substance Abuse Treatment with citations 52. The next researcher is recommended to focus on combining with other counseling approaches that are developed online so that they are easily accessible to clients.

Keywords: motivational interviewing, trends, bibliometric

1 Introduction

Education has now become the concern of every nation, because education alone has the ability to build a new world and open dimensions for positive results [1] [2]. This was also expressed that quality education is education that is able to lead students to meet their needs [3] [4], supported by education 4.0 which is a new educational paradigm that seeks to answer the needs and opportunities of the industrial revolution [5]. One of them is by maximizing the role of school counselors [6]. School counselors are components that play an important role in schools in facilitating students to be able to develop their potential and achieve their development tasks so that students can actualize themselves optimally [7] [8]. A counselor has pedagogical competence, personality competence, social competence and professional competence [9] [10]. One of the professional competencies that a counselor needs to have is mastering the theoretical framework [11] [12].

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Guidance and counseling teachers are expected to have various professional competencies, especially regarding the theoretical framework of the counseling approach [13] [14]. Based on conditions that occur in the field, namely the lack of counselor competence in providing counseling services, counselors need to be given counseling training to improve their skills [15] [16]. This was also expressed by Heriyati 2012 if 60% of counselors are not competent in professional competence, one of the obstacles is the absence of development guidelines, while individuals are required by technological changes [17]. So counselors must be able to improve the theoretical framework in the counseling approach [18] [19].

One of the theoretical frameworks that counselors must have is motivational interviewing counseling [20]. Motivational interviewing is a client-centered counseling method used to encourage behavioral change by eliciting client motivation to change and analyzing client motivation [21] [22] while according to MI it helps accelerate the change process "by inviting yourself to make changes" [23]. So the more often an individual fights for change, the more likely it is to change, conversely the more individuals express reasons, the less change will be made [24] [25].

This is also reinforced by the results of research that motivational interviewing shows a significant increase in behavioral and emotional functions, self-efficacy to regulate behavior, positive expectations for success, academic motivation [26]. The services provided can be individual or group services [27] [28]. Because guidance and counseling have a role to increase student motivation with counseling services that can be accounted for with a code of ethics [29]. Changes in achievement motivation possessed by students must be attempted to experience an increase through a learning process that takes place during the counseling process [30]. So this study aims to the purpose of this study is to gain a deeper understanding of the practice of motivational interviewing counseling, it is hoped that this study will provide additions and recommendations in counseling services.

2 Method

This research uses bibliometric analysis. Bibliometric analysis is a quantitative tool for examining bibliographic data and is used in many fields [31] [32]. Bibliometric analysis is a quantitative method which is a study of bibliographic analysis of scientific activities, which is based on the assumption that a researcher is carrying out research and must communicate the results to colleagues [33] [34] [35]. Bibliometrics is composed of three parts, specifically: A few examples of bibliometric research methodologies are (a) bibliometrics, which is the primary field of study; (b) bibliometry for scientific disciplines (scientific information), which takes into account that researchers have a scientific orientation, that their interests impact their field of expertise, and that this allows for collaboration with quantitative research in information retrieval; and (c) bibliometrics for science policy and management (science policy), which is the field of research evaluation on a variety of research topics [36]. Performance analysis or science mapping exercises can be carried out in this way [37]. The data used for bibliometric

research is research in the 2017-2022 range which is secondary data obtained from Scopus. The flow of this research is as shown in Figure 1.

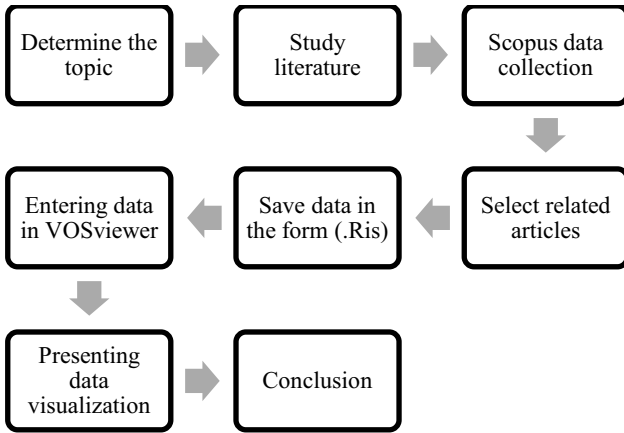


Fig 1. Research Flow

The research questions asked in this bibliometric study on peer supervision are as follows: (1) How is the growth from 2017-2022? (2) What are the types of publications on the topic of Motivational Interviewing? (3) What are the scientific areas in the topic of motivational interviewing? (4) Who are the most productive publishers and authors? (5) What keywords often appear on the topic of motivational interviewing?

3 Result and Discussion

In the beginning, there is a comprehensive summary of research on the topic of Motivational interviewing for the period 2017-2022. The data source comes from Scopus. The data on the topic of motivational interviewing has increased and decreased from year to year. In 2017, it produced 800 publication documents, then in 2018 it increased with a total of 1443 publications and increased again in 2019 with a total of 2099. While in 2020 it decreased, producing 1186 documents, in 2021 there was another decrease in the topic of motivational interviewing with a total of 746, while in 2022 it increased with a total of 812 publications. This indicates that the motivational interviewing approach is one of the approaches in counseling services used by counselors in dealing with clients. It is even used as a research topic by lecturers (see **Error! Reference source not found.**).

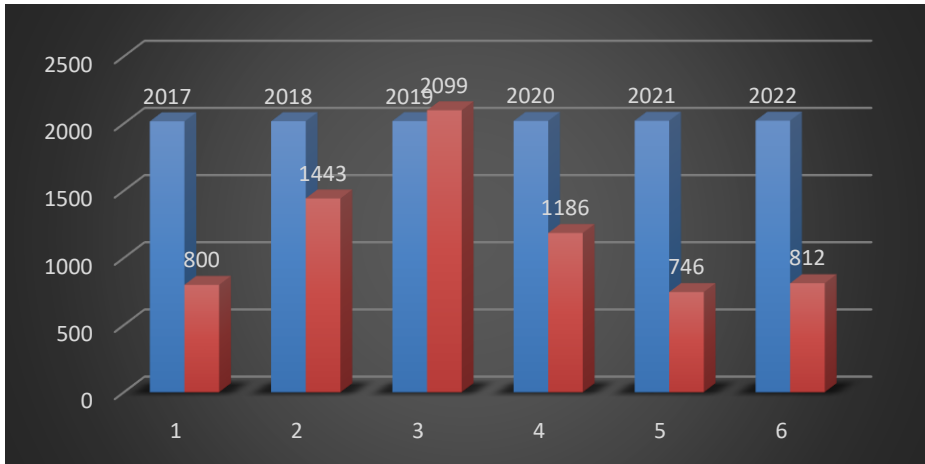


Fig. 2. Publication growth from 2017-2022

The data obtained is based on the type of data source, including journals, books, conferences, book series, undiefine, trace journals. For the most types of journals with a total of 6741, books 239, conference proceedings 67, book series 19, unaffiliated 11 and trace journals 10 (see **Error! Reference source not found.**).

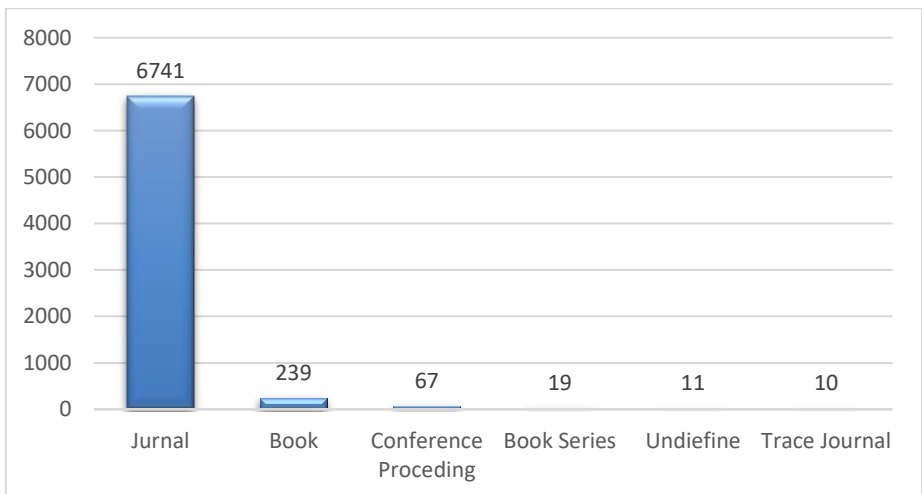


Fig. 3. Publication type

In this study, several papers were categorized according to the scientific fields, including medicine with 5500 publications, psychology with 1463 publications, nursing with 945 publications, social sciences with 731 publications, pharmacology, toxicology and pharmaceuticals with 411 publications, health professions with 331 publications,

neuroscience with 190 publications, biochemistry, genetics and molecular biology with 160 publications, dentistry with 149 publications and art and humanities with 126 (see **Error! Reference source not found.**).

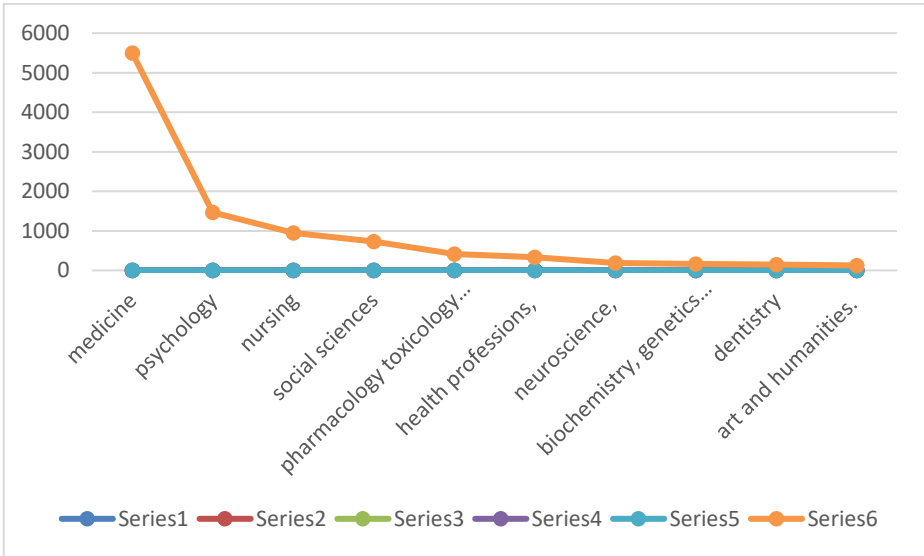


Fig. 4. Area of Knowledge

This section explains the identification of publishers for the most active motivational interviewing topics. The largest is the Journal of Substance Abuse Treatment with 144 documents and the lowest with 69 (see **Error! Reference source not found.**).

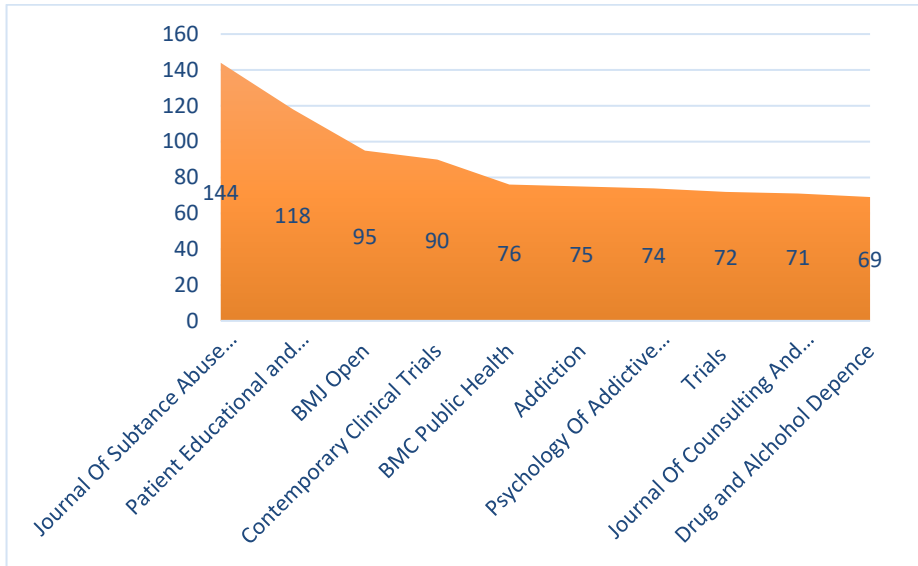


Fig. 5. Most active publishers

The measure in determining active publishers is by the number of citations, this is because to find out the impact of a study. That can be seen from the h index and citations per publication in a study. In addition, combining the number of citations received with the number of publications. On the topic of Motivational Interviewing, the most influential publisher is Psychology Of Addictive Behaviors with the number of citations, namely 153, which is used as a reference for the topic of motivational interviewing. The following Table 1 gives the number of citations.

Table 1. The number of citations

Publishers	Country	Examples of published journals	TP	TC
Journal Of Substance Abuse Treatment	United State	A brief motivational interviewing intervention conducted in groups to lower substance use and risky sexual behavior in young adults experiencing homelessness	140	52
Patient Educational and Counseling	Ireland	A comprehensive assessment of the effects of motivational interviewing on adherence and symptom intensity in young adults and adolescents with chronic illnesses	101	49
BMJ Open	United Kingdom	The strategy for a cluster randomised controlled trial of a physician vaccine communication intervention is called "A Presumptively Initiating Vaccines and Optimizing Talk with Motivational Interviewing" (PIVOT with MI)	113	36

Publishers	Country	Examples of published journals	TP	TC
Contemporary Clinical Trials	United State	MOTIVATIONAL interviewing to enhance self-care in patients with heart failure (MOTIVATE-HF): a three-arm multicenter randomized controlled trial's study protocol	99	33
BMC Public Health	United Kingdom	Short-term vaccination coverage is increased by a postpartum vaccination promotion campaign that makes use of motivational interviewing techniques: PromoVac research	69	79
Addiction	United Kingdom	Three-year follow-up profiles of recovered alcohol use disorder patients: may high-functioning heavy drinkers be included in the criteria of recovery?	37	62
Psychology Of Addictive Behaviors	United State	A thorough review of treatments for internet addiction and Internet gaming problem	54	153
Trials	United Kingdom	Study protocol for a cluster randomized controlled trial comparing designated and dedicated strategies of integrating mental health into the treatment of chronic illnesses	41	44
Journal Of Consulting And Clinical Psychology	United State	Technical, relational, and conditional process models of change: a meta-analysis of the motivational interviewing process.	33	150
Drug and Alcohol Dependence	Ireland		36	61

TP: Total Publication; TC: Total Cite

In this section is to identify related to the authors who are active in publishing journals with the topic of motivational interviewing. Authors who have the most citations based on the h-index. For authors there are 10 with the most citations on the topic of motivational interviewing. Complete with a diagram showing the number of citations from each author. The following Table 2 gives an author's analysis.

Table 2. Author's analysis

No	Author	Title and Year of Publication	Number of Citations
1	Wolraich M.L.; Hagan J.F., Jr.; Allan C.; Chan E.; Davison D.; Earls M.; Evans S.W.; Flinn S.K.; Froehlich T.; Frost J.; Holbrook J.R.; Lehmann C.U.; Lessin H.R.; Okechukwu K.; Pierce K.L.; Winner J.D.; Zurhellen W.	Clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents [38]	831

No	Author	Title and Year of Publication	Number of Citations
2	Kaner E.F.S.; Beyer F.R.; Muirhead C.; Campbell F.; Pienaar E.D.; Bertholet N.; Daepfen J.B.; Saunders J.B.; Burnand B.	Effectiveness of brief alcohol interventions in primary care populations [39]	535
3	Barberan-Garcia A.; Ubré M.; Roca J.; Lacy A.M.; Burgos F.; Risco R.; Momblán D.; Balust J.; Blanco I.; Martínez-Pallí G.	Personalised Prehabilitation in High-risk Patients Undergoing Elective Major Abdominal Surgery : A Randomized Blinded Controlled Trial [40]	481
4	Singal, Ashwani K. (57195144178); Bataller, Ramon (7003595696); Ahn, Joseph (35739657300); Kamath, Patrick S. (7005842458); Shah, Vijay H. (56052061300)	ACG clinical guideline: Alcoholic liver disease [41]	467
5	Samdal G.B.; Eide G.E.; Barth T.; Williams G.; Meland E.	Effective behaviour change techniques for physical activity and healthy eating in overweight and obese adults; systematic review and meta-regression analyses [42]	408
6	Singla D.R.; Kohrt B.A.; Murray L.K.; Anand A.; Chorpita B.F.; Patel V.	Psychological Treatments for the World: Lessons from Low- and Middle-Income Countries [43]	601
7	Pont S.J.; Puhl R.; Cook S.R.; Slusser W.; Bolling C.F.; Armstrong S.; Muth N.D.; Rausch J.; Rogers V.; Schwartz R.P.; Goodman L.A.B.; Michalsky M.; Walsh S.; Thapar M.; Gordon-Larsen P.; Levine A.S.; Apovian C.; Binks M.; Dhurandhar N.V.; Wang Y.; Kelly A.S.; French S.	Stigma experienced by children and adolescents with obesity [44]	334
8	Kini V.; Michael Ho P.	Interventions to Improve Medication Adherence: A Review [45]	271
9	Reiff C.M.; Richman E.E.; Nemeroff C.B.; Carpenter L.L.; Widge A.S.; Rodriguez C.I.; Kalin N.H.; McDonald W.M.	Psychedelics and psychedelic-assisted psychotherapy [45]	234

No	Author	Title and Year of Publication	Number of Citations
10	Burgess E.; Hassmén P.; Pumpa K.L.	Determinants of adherence to lifestyle intervention in adults with obesity: a systematic review [46]	233

The number of articles with the highest number of citations is clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents (see **Error! Reference source not found.**).

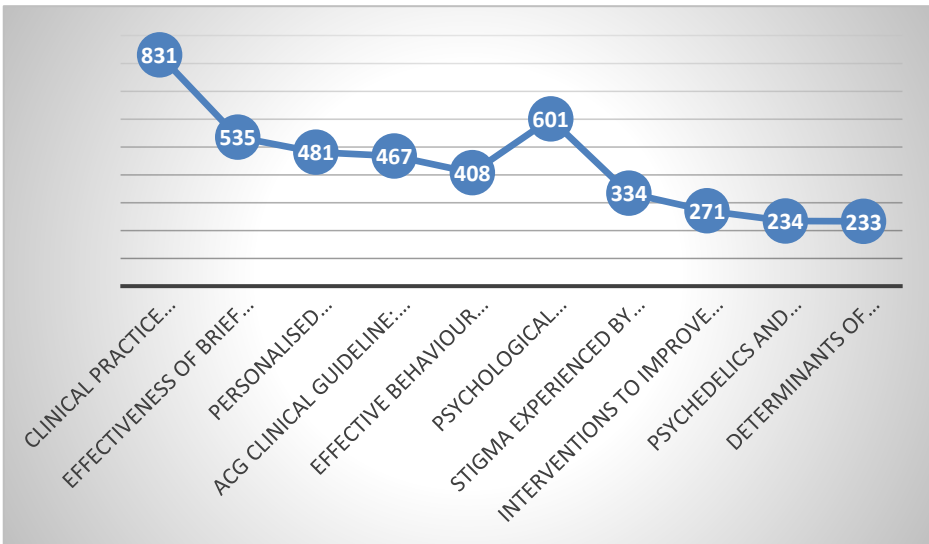


Fig. 6. Number of Citations

Based on the distribution of countries, the published documents include 3,821 in the United States, 838 in the United Kingdom, 540 in Australia, 463 in Canada, 332 in the Netherlands, 271 in Germany, 219 in England, 193 in Sweden, 176 in Switzerland and 166 in Spain (see **Error! Reference source not found.**).

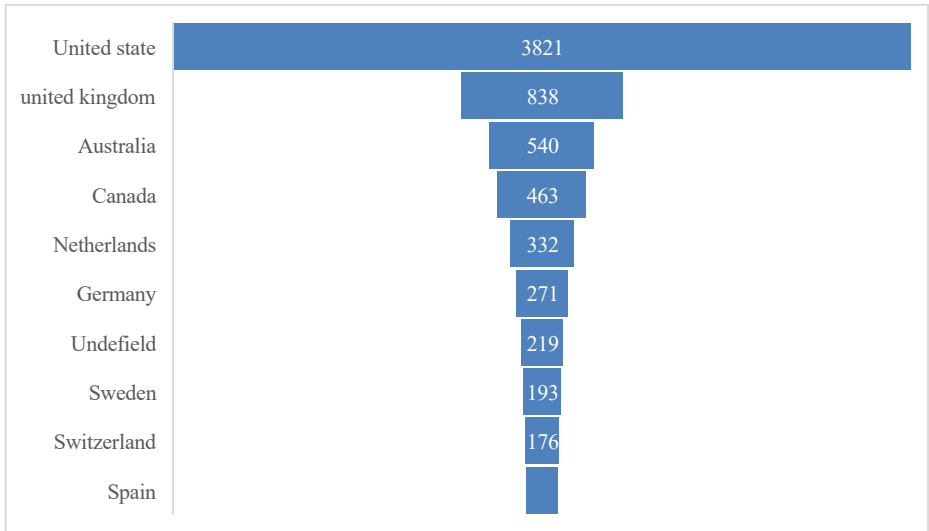


Fig. 7. Distribution of countries

Based on the key analysis detected on the topic of motivational interviewing in guidance and counseling services. In network visualization, it is easy to identify the relationship between terms and clusters. With the image in the image depicting the conclusion between the main node and the interconnected network on motivational interviewing in guidance and counseling services (see **Error! Reference source not found.**).

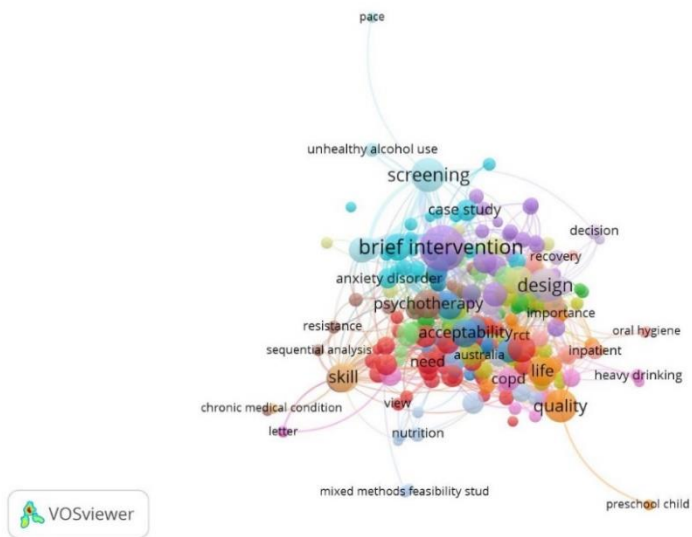


Fig. 8. Keyword analysis

Each cluster has a network on the available keywords. Based on the image, there are 6 clusters in the image, including:

Table 3. Cluster has a network on the available keywords

Cluster	Keywords
Red	Need, view
Purple	Brief intervention, heavy drinking, decision, letter, recovery. design
Dark blue	Acceptability, anxiety disorder,
Light blue	Case study, nutrition, screening, unhealthy-alcohol use, pace
Brown	Resistance, sequential analysis, skill, chronic medical condition
Orange	Quality, life, inpatient, oral hygiene

Although Scopus is one of the most comprehensive databases for archiving all academic research, this cluster will later provide discussion and elaboration in research development, both the most booming and frequently researched. With this visualization also provides an opportunity to develop research aspects that are appropriate to the image.

Motivational Interviewing research results conducted by Scales et al. that effectively reducing doubts about community-oriented MI can maximize the persuasive effect on those around them while minimizing the potential for reactance from those who have committed beliefs [47]. This is also reinforced by research by Afriwilda & Mulawarman knowing the strength-based counseling intervention based on motivational interviews to improve psychological well-being [15]. In addition, combining and applying solution-focused brief counseling and motivational interviewing which have been shown to increase levels of psychological well-being more significantly and can develop in online types.

4 Conclusion

Based on this research, it increasingly provides information to improve professional competence, especially theoretical studies of motivational interviewing. The medical scientific fields with the highest number of publications—5500—are journal types, followed by the United States with 3,821 publications, and the Journal of Substance Abuse Treatment, with 52 citations, as the journal with the highest number of publications overall. It is advised that the following researcher concentrate on integrating with other online counseling ways in order to make them easily available to clients.

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References

1. A. Adhikari and B. Saha, "The Three Epochs of Education: Outlining Mary Wollstonecraft, Maria Montessori and Nel Noddings," *Int. J. Res. Rev.*, vol. 10, no. 1, pp. 698–703, 2023.
2. B. D. Wiyono, N. Hidayah, M. Ramli, and A. Atmoko, "Student achievement motivation scale: Hope for success and fear of failure?," in *Reimagining Innovation in Education and Social Sciences*, Routledge, 2023, pp. 252–257.
3. C. P. Bhakti, "Program bimbingan dan konseling komprehensif untuk mengembangkan standar kompetensi siswa," *J. Konseling Andi Matappa*, vol. 1, no. 2, pp. 131–132, 2017.
4. B. D. W. and H. Susilo, "Development of Online Learning for Undergraduate Guidance and Counseling Students," *Int. J. Innov. Creat. Chang.*, vol. 5, no. 5, pp. 623–634, 2020.
5. J. Udvaros and N. Forman, "Artificial intelligence and Education 4.0," in *INTED2023 proceedings*, 2023, pp. 6309–6317.
6. A. Atmoko, W. N. E. Saputra, I. M. Hambali, and E. T. Wahyuni, "Achievement Motivation and Learning Behavior of Students During COVID-19 Pandemic : Gender Differences," vol. 12, no. 4, pp. 260–268, 2022, doi: 10.47750/pegegog.12.04.27.
7. E. A. Richards, *An Exploration of School Counselors' Experience with Restorative Practices*. California State University, Long Beach, 2018.
8. R. Hidayati, N. Hidayah, M. Ramli, I. M. Hambali, M. M. D. Nor, and I. Lestari, "Cyber counseling: Counseling in the digital age under the Covid 19 pandemic," *Turkish J. Physiother. Rehabil.*, pp. 8157–8165, 2021.
9. M. Sheremet, L. Rudenko, D. Suprun, and T. Hrygorenko, "Basic approaches to professional competence determining," *Int. J. Pedagog. Innov. New Technol.*, no. 7 (2), pp. 64–68, 2020.
10. [H. Hanafi, N. Hidayah, A. Atmoko, M. Ramli, and T. Triyono, "Cognitive fusion on counselor performance: A comparative study of the experienced and novice counselor," *Pegem J. Educ. Instr.*, vol. 12, no. 1, pp. 48–55, 2022.
11. R. S. Wijaya, W. D. Husniah, R. Taherong, C. Nuryadin, L. Hanifa, and N. Ichsan, "Professional competency levels teacher guidance and counseling/counselor school," in *IOP Conference Series: Earth and Environmental Science*, 2019, vol. 235, no. 1, p. 12105.
12. B. D. Wiyono, B. Purwoko, and N. Naqiyah, "Online Counselling Website for Student Psychological Assistance in Learning From Home," in *International Joint Conference on Arts and Humanities (IJCAH 2020)*, 2020, pp. 1127–1130.
13. P. Utomo, N. J. M. Isa, and M. F. Ilhamuddin, "Multicultural Counseling in the 21st Century: A Paradigm and Framework for Professional Counseling Services," *Indones. J. Guid. Couns. Res.*, vol. 1, no. 2, pp. 51–65, 2023.
14. B. D. Wiyono, N. Hidayah, M. Ramli, A. Atmoko, and M. A. A. Shafie, "SMIOC Strategic Model to Improve the Achievement Motivation of Students: Literature Review," in *International Joint Conference on Arts and Humanities 2023 (IJCAH 2023)*, 2023, pp. 1341–1350.

15. M. T. Afriwilda and M. Mulawarman, "The effectiveness of motivational interviewing counseling to improve psychological well-being on students with online game addiction tendency," *Islam. Guid. Couns. J.*, vol. 4, no. 1, pp. 106–115, 2021.
16. B. Wiyono, M. Nursalim, T. I. Pratiwi, and M. F. Ilhamuddin, "Evaluation of the Quality of Counseling Services in Improving the Achievement Motivation of Senior High School Students," in *International Joint Conference on Arts and Humanities 2022 (IJCAH 2022)*, 2023, pp. 1027–1038.
17. A. Oktradiksa, C. P. Bhakti, S. J. Kurniawan, and F. A. Rahman, "Utilization artificial intelligence to improve creativity skills in society 5.0," in *Journal of Physics: Conference Series*, 2021, vol. 1760, no. 1, p. 12032.
18. K. A. Fall, J. M. Holden, and A. Marquis, *Theoretical models of counseling and psychotherapy*. Routledge, 2017.
19. J. Sommers-Flanagan and R. Sommers-Flanagan, *Counseling and psychotherapy theories in context and practice: Skills, strategies, and techniques*. John Wiley & Sons, 2018.
20. A. C. de Almeida Neto, "Understanding motivational interviewing: an evolutionary perspective," *Evol. Psychol. Sci.*, vol. 3, no. 4, pp. 379–389, 2017.
21. W. R. Miller and T. B. Moyers, "Motivational interviewing and the clinical science of Carl Rogers," *J. Consult. Clin. Psychol.*, vol. 85, no. 8, p. 757, 2017.
22. E. R. Wulandari, L. Lindayani, and H. Herdiman, "The Effect of Motivational Interviewing on Adolescent Risk Behaviors: A Literature Review," *KnE Life Sci.*, pp. 995–1003, 2022.
23. W. R. Miller and S. Rollnick, *Motivational Interviewing: Helping People Change*. New York: Guilford Press, 2013.
24. A. J. Frey et al., "Mechanisms of Motivational Interviewing: a Conceptual Framework to Guide Practice and Research," *Prev. Sci.*, vol. 22, no. 6, pp. 689–700, 2021, doi: 10.1007/s11121-020-01139-x.
25. A. J. Frey, J. Lee, J. W. Small, H. M. Walker, and J. R. Seeley, "Motivational interviewing training and assessment system (MITAS) for school-based applications," *Rep. Emot. Behav. Disord. youth*, vol. 17, no. 4, p. 86, 2017.
26. J. D. Terry, M. D. Weist, G. G. Strait, and M. Miller, "Motivational Interviewing to Promote the Effectiveness of Selective Prevention: an Integrated School-Based Approach," *Prev. Sci.*, vol. 22, no. 6, pp. 799–810, 2021, doi: 10.1007/s11121-020-01124-4.
27. [W. Ratanavivan and R. J. Ricard, "Effects of a Motivational Interviewing–Based Counseling Program on Classroom Behavior of Children in a Disciplinary Alternative Education Program," *J. Couns. Dev.*, vol. 96, no. 4, pp. 410–423, 2018, doi: 10.1002/jcad.12223.
28. W. Ratanavivan and R. J. Ricard, "Making positive changes counseling (MPCC) program: A creative adaptation of motivational interviewing for use with children in school settings," *J. Creat. Ment. Heal.*, vol. 15, no. 2, pp. 162–175, 2020.
29. V. K. Salgong, O. Ngumi, and K. Chege, "The Role of Guidance and Counseling in Enhancing Student Discipline in Secondary Schools in Koibatek District," *J. Educ. Pract.*, vol. 7, no. 13, pp. 142–151, 2016.
30. O. Yavuz, N. Cayirdag, C. Dahir, and A. İ. Gümüşeli, "Improving student achievement through strengthening principal and school counselor partnership," *Int. J. Educ. Reform*, vol. 26, no. 2, pp. 176–201, 2017.
31. R. Todeschini and A. Baccini, *Handbook of bibliometric indicators: Quantitative tools for studying and evaluating research*. John Wiley & Sons, 2016.

32. X. Su, X. Li, and Y. Kang, "A bibliometric analysis of research on intangible cultural heritage using CiteSpace," *Sage Open*, vol. 9, no. 2, p. 2158244019840119, 2019.
33. T. Tupan, R. N. Rahayu, R. Rachmawati, and E. S. R. Rahayu, "Bibliometric analysis of research developments in instrumentation," *Baca J. Dokumentasi Dan Inf.*, vol. 39, no. 2, pp. 135–149, 2018.
34. J. M. Merigó and J.-B. Yang, "A bibliometric analysis of operations research and management science," *Omega*, vol. 73, pp. 37–48, 2017.
35. N. Donthu, S. Kumar, D. Mukherjee, N. Pandey, and W. M. Lim, "How to conduct a bibliometric analysis: An overview and guidelines," *J. Bus. Res.*, vol. 133, pp. 285–296, 2021.
36. B. E. Ziegler, "Methods for bibliometric analysis of research: renewable energy case study." Massachusetts Institute of Technology, 2009.
37. R. Farooq, "Mapping the field of knowledge management: a bibliometric analysis using R," *VINE J. Inf. Knowl. Manag. Syst.*, vol. 53, no. 6, pp. 1178–1206, 2023.
38. M. L. Wolraich et al., "Clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents," *Pediatrics*, vol. 144, no. 4, 2019, doi: 10.1542/peds.2019-2528.
39. E. F. S. Kaner et al., "Effectiveness of brief alcohol interventions in primary care populations," *Cochrane Database Syst. Rev.*, vol. 2018, no. 2, Feb. 2018, doi: 10.1002/14651858.CD004148.pub4.
40. A. Barberan-Garcia et al., "Personalised Prehabilitation in High-risk Patients Undergoing Elective Major Abdominal Surgery : A Randomized Blinded Controlled Trial," *Ann. Surg.*, vol. 267, no. 1, pp. 50–56, 2018, doi: 10.1097/SLA.0000000000002293.
41. A. K. Singal, R. Bataller, J. Ahn, P. S. Kamath, and V. H. Shah, "ACG clinical guideline: Alcoholic liver disease," *Am. J. Gastroenterol.*, vol. 113, no. 2, pp. 175–194, 2018, doi: 10.1038/ajg.2017.469.
42. G. B. Samdal, G. E. Eide, T. Barth, G. Williams, and E. Meland, "Effective behaviour change techniques for physical activity and healthy eating in overweight and obese adults: systematic review and meta-regression analyses," *Int. J. Behav. Nutr. Phys. Act.*, vol. 14, no. 1, Mar. 2017, doi: 10.1186/S12966-017-0494-Y.
43. D. R. Singla, B. A. Kohrt, L. K. Murray, A. Anand, B. F. Chorpita, and V. Patel, "Psychological Treatments for the World: Lessons from Low- and Middle-Income Countries," *Annu. Rev. Clin. Psychol.*, vol. 13, pp. 149–181, May 2017, doi: 10.1146/ANNUREV-CLINPSY-032816-045217.
44. W. Pont, S. J., Puhl, R., Cook, S. R., & Slusser, "Stigma experienced by children and adolescents with obesity," *Pediatrics*, vol. 140, no. 6, 2017.
45. V. Kini and P. Michael Ho, "Interventions to Improve Medication Adherence: A Review," *JAMA - J. Am. Med. Assoc.*, vol. 320, no. 23, pp. 2461–2473, 2018, doi: 10.1001/jama.2018.19271.
46. E. Burgess, P. Hassmén, and K. L. Pumpa, "Determinants of adherence to lifestyle intervention in adults with obesity: a systematic review," *Clin. Obes.*, vol. 7, no. 3, pp. 123–135, Jun. 2017, doi: 10.1111/COB.12183.
47. D. Scales et al., "Community-oriented Motivational Interviewing (MI): A novel framework extending MI to address COVID-19 vaccine misinformation in online social media platforms," *Comput. Human Behav.*, vol. 141, p. 107609, 2023.

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