Explore 000 (2021) 1–8

Contents lists available at ScienceDirect

Explore

journal homepage: www.elsevier.com/locate/jsch

Academic studies on claimed past-life memories: A scoping review

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ARTICLE INFO

Article History:
Received 17 May 2021
Accepted 28 May 2021
Available online xxx

Keywords:
Life after death
Past-life memories
Reincarnation
Children
Religion

ABSTRACT

This study reviews observational studies regarding alleged past-life memories published as scientific articles, and points out their bibliometric and methodological characteristics. Scientific databases were screened (Scopus, Web of Science, PubMed/Medline, PsycINFO, Scielo, and OpenGrey). The 78 included studies were classified by their methodological and bibliometric characteristics. The peak of publications occurred from 1990 to 2010 (45%), and Asia was the most investigated territory (58 studies); most of investigations were related to children (84%) and case report was the predominant study design (60%). Interview was the predominant methodological approach (73%), followed by documental analysis (50%). Claimed past-life memories (100%), unusual behaviors (74%) and birthmarks/defects (37%) were the most investigated variables. Investigations of past-life memories should be encouraged around all cultures, and future studies should consider previous methodological features and try to overcome their limitations.

Introduction

Belief in some form of life after death is widespread throughout history and different cultures, and it has taken place as a central component in most religious systems.[1,2] Recent data from worldwide surveys showed that most of world`s population believe in afterlife, e.g. Mexicans (76%), South Africans (73%), Canadians (72%), Indians (65%), Iranians (98%), Japanese (51%), and including 46% to 60% of those with no religious affiliation.[3] However, correlates of these afterlife beliefs are still poorly investigated, and studies from different countries have found that they do not show correlation or even some positive association with educational level[1] and with mental health or quality of life.[4,5] Furthermore, a common way of conceiving life after death is believing in reincarnation, and it has been shown as a topic of interest of many religious and beliefs systems, with several variations in its concept that may include the rebirth of a soul, a self, a spirit, a stream of consciousness, or the migration of a form of being to another human or animal body.[6] However, as a "core definition", reincarnation might be understood as "the transfer of life force or consciousness stream of a human being to the body of another human being"[6] . Additionally, belief in reincarnation is reported by 27% of citizens in Western Europe and 20% in Eastern.[7-9] And, according to Pew Research Center, belief in reincarnation among Western Europe countries has an average of 20% (minimum rate of 15% in Germany and maximum of 31% in Portugal); and, among those who describe themselves "spiritual but not religious", 38% believe in reincarnation. This belief is also widespread in Latin American countries, pointed by more than 20% of its population, from 23% in Dominican Republic to 51% in Panama.[10-12] In Brazil 37% fully believe in reincarnation, 18% have doubts about it, and 44% do not believe in reincarnation.[13] Further, belief in reincarnation may impact people's worldview, as well as their coping with stressful events, illnesses, health treatment choices and/or its implementation,[14] as well as a way of overcoming illnesses.[15] On the other hand, belief in reincarnation also can be associated with psychological struggle, guilt feelings and/or an existential sense of passivity.[16]

Beyond socio cognitive aspects of belief in reincarnation, empirical investigations of claimed past-life memories (PLM) have been developed in the last decades. The psychiatrist Ian Stevenson (M.D.) from the Division of Perceptual Studies at the University of Virginia began the systematic academic investigation of the phenomena of people who claimed supposed PLM. Stevenson dedicated nearly 50 years for scientific investigation of these cases, known as Cases of Reincarnation Type (CORT), and more than 2000 of them were recorded.[17] Past-life memories claims have been studied by researchers from different countries with different academic backgrounds (anthropologists, psychiatrists, psychologists and others) and were

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https://doi.org/10.1016/j.explore.2021.05.006

evidenced among different countries/cultures such as: USA,[18] Africa,[19] Brazil,[20,21] India,[22,23] Sri Lanka,[24,25] Turkey[26] and Europe.[27] Methods for investigating these cases include: a) interviews with the subject, his/her parents, relatives or other first-hand witnesses, as well as with the alleged previous personality's relatives; b) analysis of documents, objects, photographs and all kind of available records. Furthermore, some of these studies have been replicated, and their findings are relatively consistent, thus making it possible to point out some typical patterns of these cases,[6,28] that are, children usually start to make statements about a previous life when they are about 35 months; 20% make statements concerning an interval between the two lives (intermission memories), and the interval between death and rebirth showed a median of 16 months; 75% describes the mode of death; 35% shows phobias related to an unnatural mode of death.[17] And, others common features verified were philias, skills not learned, unusual behaviors, birthmarks/birth defects, statements related especially with the last years of the alleged previous life, their own name and names of persons whom they knew, as well as places where they have been lived.[29-31,17]

Although significant evidence has been produced by alleged PLM studies, there is much controversy about the possible explanations of these memories: children's fantasies, fraud, socio-psychological needs of reincarnationist families, inherited memory, extrasensory perception, cryptomnesia, paramnesia, or possession. Therefore, to move the research field on PLM claims forward, it seems to be important to have an overview of what has been produced so far, mainly regarding data from academic studies published in scientific journals, such as: main authors' profiles, publications' characteristics, countries/territories of investigations, and methodological features. Therefore, to pursue this goal, this paper reports an original scoping review, that is "...an ideal tool to determine the scope or coverage of a body of literature on a given topic and give clear indication of the volume of literature as studies available as well as an overview (broad or detailed) of its focus."[32] And, consequently, this study aimed to investigate the bibliometric and methodological features of observational studies (case-report, case-control, cross sectional, and cohort) regarding spontaneous alleged PLM, published in scientific journals indexed in the largest mainstream scientific databases, as well as to point out the main scientific challenges for this research field.

Methods

We followed the search strategy and data collection procedures recommended by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews - PRISMA-ScR[33] (Fig. 1).

Search strategy and data collection

During March and April 2020 we searched the electronic databases Scopus, Web of Science, PubMed/Medline, PsycINFO, Scielo, and OpenGrey. The search terms were reincarnation, previous-life memor*, previous-lives memor*, past-life memor*, past-lives memor*, past-life claim*, past-lives claim* (title/abstract, key-words and/or MeSH terms). In addition, aiming to broaden our search, we have screened reference lists from significant articles and accessed the resources and publications listed at the website of the Division of Perceptual Studies from University of Virginia (https://med.virginia.edu/perceptual-studies). Further verification of our search strategy and data collection procedures can be verified in the online supplementary material (Table S1: Search strategy), as well as the summary of all included articles (Table S2: Summary of studies).

Eligibility criteria

We only included papers published in academic journals indexed in the major mainstream scientific databases (Scopus, Web of Science, PubMed/Medline, PsycINFO, Scielo, or OpenGrey). Only observational studies were included (case report, case-control, cross sectional, and cohort) of spontaneous alleged PLM with no language

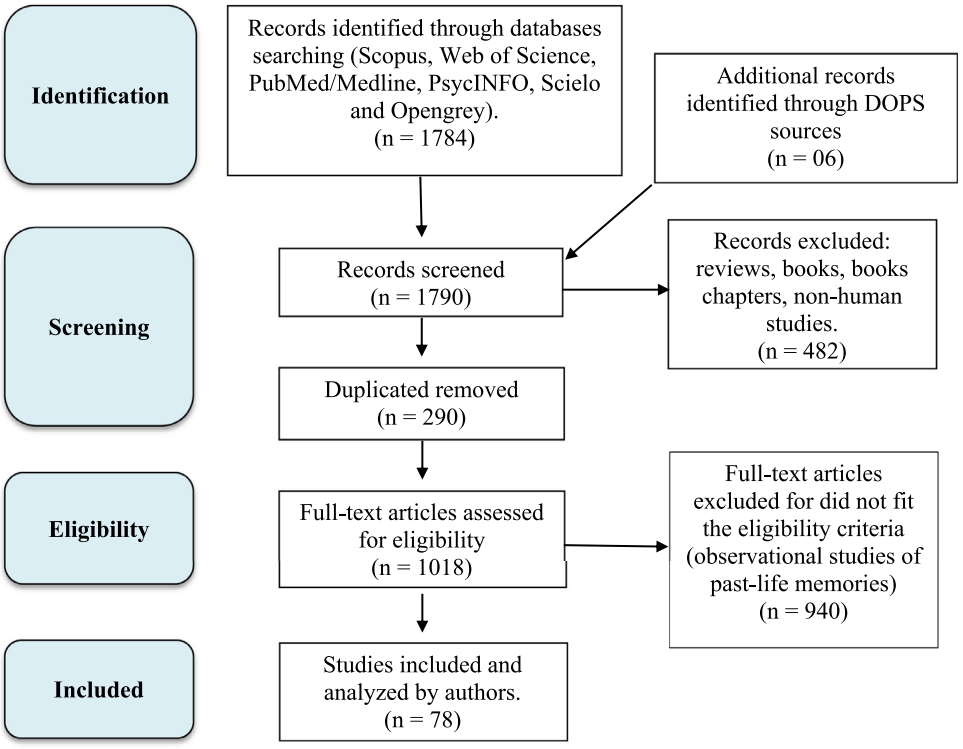

Fig. 1. Flowchart.

or date limits. Reviews, books, book chapters, and studies related to non-spontaneous memories, (e.g. hypnotically induced) were excluded. Three reviewers independently assessed the eligibility of all studies in a standardized manner. Disagreements between these 3 reviewers were solved by a fourth and/or a fifth reviewer opinion.

Analysis and classification of studies

All references found throughout database searches were converted into RIS format and exported to the Endnote software (Thompson Reuters, X7.4) for the study's data-set construction. Duplicated files were excluded, and titles and abstracts were screened for studies' quality and relevance verification. Relevant studies (after observing inclusion and exclusion criteria) were classified according to: a) year of publication; b) author; c) journal; d) study design (case report, case-control, cross sectional, or cohort); d) sample (number of children, adults or both); e) nationality/territory where the sample was collected; f) method (procedures/measures/instruments); and g) results; additionally, bibliometric characteristics were accessed through the electronic database Scopus: a) journals' CiteScores; b) number of PLM publications per journal; c) number of studies' citations per journal; d) authors' h-index; e) total authors' publications f) authors' PLM publications; and g) author's total citations.

Finally, methodological features were analyzed and described according to their study design (case report, case-control, cohort, or cross sectional analysis) and procedures (interviews, documental analysis, psychological measures, comparisons between cases and controls subjects).

We have defined as case report those papers concerning detailed narratives that describe, for medical, scientific, or educational purposes, PLM situations experienced by one or several individuals.[34] On the other hand, a cross-sectional study involved the analysis of characteristics of a sample in a single moment in time, as well as we have considered cohort studies those related to the analysis of specific characteristics of a sample throughout a period of time, and case-control studies as the comparison between CORT and non-CORT or controls.[35] As verified among our sample, an example of cross-sectional study was related to the analysis, in a single time point, of birthmarks and birth defects probably related to PLM.[36] An example of cohort study was the follow up analysis of the possible influences of families' attitudes toward children who claimed PLM,[37] and a case-control study was the measure and comparison of abilities and personality traits between children who claimed PLM and those who have never claimed.[38]

Results

A total of 1784 studies were found throughout databases searches: Scopus (948); Web of Science (542); PubMed/MEDLINE (192); PsycINFO (93); Scielo (01); OpenGrey (08). Reviews, books, book chapters and non-human studies were excluded (482). Duplicated references were excluded (290), and six (06) more articles were included[31,36,39-42] after the access into the alternative source of information (Division of Perceptual Studies website) and after a screening through the articles' bibliographic references. The remaining 1018 studies had their title and abstract screened and 940 were excluded for not fitting the eligibility criteria. A recently published paper[43] was included later. The final sample was composed of 78 studies (Fig. 1). Further descriptions of the 78 included studies (authors, year, country/territory, design, sample, and method) are available in our online supplementary material (Table S2: Summary of studies). The frequency of studies by territory can also be verified (Fig. 2).

The majority of PLM investigations were performed in Asian countries (58), followed by North America (10), Europe (2), Africa (1), and 7 studies were composed of multiterritorial samples.[31,39,44-48] Moreover, as pointed out on Fig. 3, there was a gradual increase on publications per decade since the first academic CORT study was published during the 1960s (Stevenson, 1960), and during the period between 1990s to 2010s most of papers were published (n = 35). Then it has slightly decreased in the last decade (n = 15) (Fig. 3).

Table 1 presents the main researchers' profiles and their amount of published general articles, as well as their PLM articles, citations, and h-index scores. As it was verified, Ian Stevenson is the author with the majority of publications and citations. In addition, Table 2 shows the main journals' CiteScores, and their amount of observational PLM publications. And, how was checked, the journals are mainly from psychiatry, psychology and parapsychology fields, and the "Journal of Scientific Exploration" has published the highest amount of observational PLM papers. However, 29 studies from our sample (37%) are not indexed on Scopus, as well as seven journals.

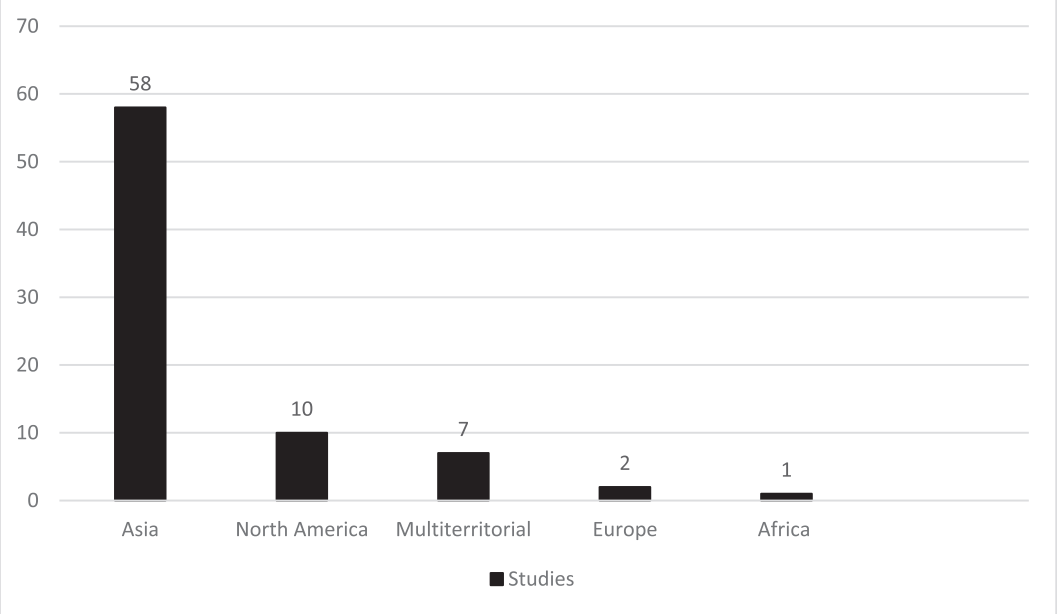

Fig. 2. Distribution of studies per continent.

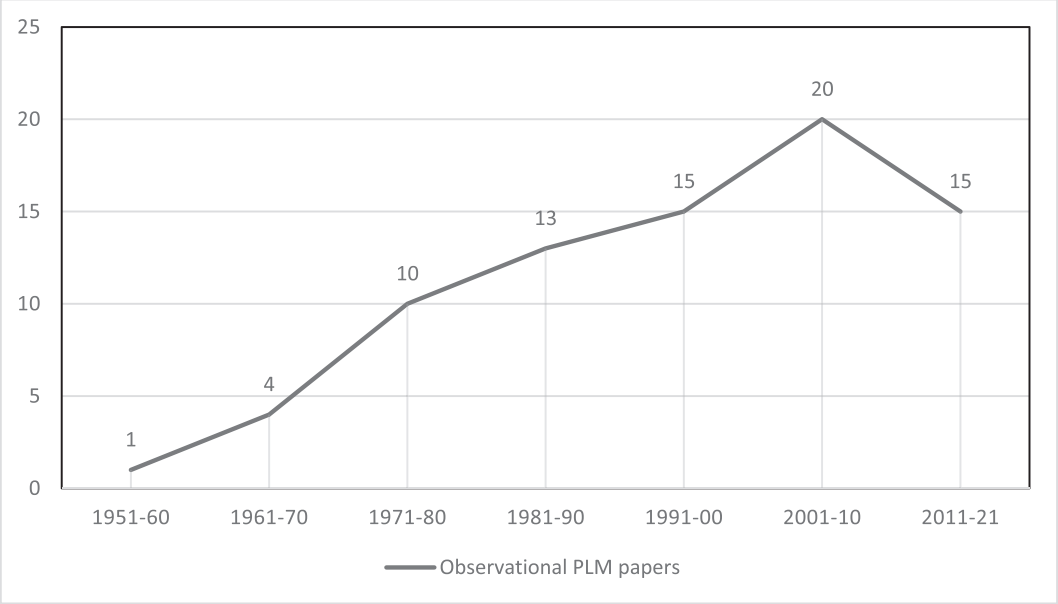

Fig. 3. Distribution of publications per decade.

As showed on the Table 3, most of the included studies are case reports (47), followed by cross-sectional (15), case-control (12) and cohorts (4). Moreover, interviews (73%) and documental analysis (50%) were the predominant methodological approaches. In addition, there was a predominance of studies with children in all study designs (84%). Further, 100% of studies are related to PLM claims, and/or unusual behavior (74%), and birthmarks/defects (37%) were frequently described, especially in case reports. Information concerning a supposed previous family was pointed among 41% of studies, and 11% had their written records made before the contact with the alleged previous family. Additionally, 75% of case-control studies have measured and compared psychological/personality traits.

Discussion

Among the 78 included studies, 58 were related to Asian cultures, and similar findings were verified in the previous literature, such as in India,[49] Sri Lanka,[50] and the Druze in Lebanon.[51] Hypothetically, this Asian predominance of PLM studies might be associated with a cultural predominance of beliefs in reincarnation shared among its religious/spiritual traditions such as Hinduism, Buddhism and Jainism.[6] However, past-lives cases were also verified among western and non reincarnationist cultures, such as North America[52] and Europe.[53]

Furthermore, regarding methodological features of claimed past-lives investigations, we found a predominant amount of studies designed as cases reports (60%), followed by cross-sectional studies (19%), case-control (15%), and cohort (5%), and most of investigations were related to children who claimed past-lives memories (84%), and few studies have investigated the possible impacts of PLM in adults (15%). Moreover, interviews showed to be largely used as an instrument during these investigations (73%), and, consequently, own subjects (61%) and their current families (68%) were interviewed as first-hand witnesses, and, in some cases, their supposed previous families were also interviewed (41%). Additionally, documental analysis (e.g. pictures, videos, news, birth or death reports, etc.) was usually included as a methodological approach for the searching for empirical evidence possibly associated with the past-lives claims (50%). Further, past-life claims (100%), unusual behaviors (74%), and birthmark or birth defects (37%) were pointed to as significant aspects possible

Table 1
Main authors´general publications, citations, past-life memories publications and H-index.

Author	Profile	Articles (n)	PLM articles (n)	Citations	H-index
Ian Stevenson	M.D. Psychiatrist and professor at University of Virginia School of Medicine - USA; Founder and director of the Division of Perceptual Studies; born in Canada (1918) and died in USA (2007).	82	20	744	14
E. Haraldsson	PhD. Psychologist and emeritus professor of psychology on the faculty of social science at University of Iceland; born in Iceland (1931) and died in Iceland (2020).	28	10	357	10
H. H. J. Keil	PhD. Psychologist and emeritus professor in psychology at University of Tasmania – USA; research fellow at the Parapsychology Laboratory of North Carolina's Duke University - USA; born in Germany (1930).	07	03	15	02
S. Pasricha	PhD. Psychologist and professor at National Institute of Mental Health and Neuroscience in Bangalore, India; affiliated to the Division of Perceptual Studies; born in India (1952).	15	07	80	04
Jim B. Tucker	M.D. child psychiatrist and professor of psychiatry and neurobehavioral science at the University of Virginia School of Medicine; current director of the Division of Perceptual Studies; born in USA (1960).	15	13	70	05
Antonia Mills	PhD. Anthropologist and professor in First Nations studies at the University of Northern British Columbia, Canada. Affiliated to the Division of Perceptual Studies; born in USA (1942).	14	08	39	03
Total		161	61	1305	–
Mean (±SD)		26(±27)	10(±5.8)	217(±286)	

Retrieved from scopus.com.
PLM= past-life memories.

Table 2
Journals' CiteScore and their observational past-life memories publications and citations.

Journal	Observational PLM Publications n (%)	Observational PLM Citations n (%)	CiteScore
Journal of Scientific Exploration	24 (30.8)	73 (30.8)	0.8
Journal of the American Society for Psychical Research	22 (28.2)	- -	NA
Journal of Nervous and Mental Disease	05 (6.5)	68 (28.7)	3.0
Explore - The Journal of Science and Healing	04 (5.2)	12 (5.0)	1.6
Journal of Asian and African Studies	03 (3.8)	18 (7.6)	1.0
Transcultural Psychiatry	02 (2.5)	25 (10.5)	2.8
Culture, Medicine and Psychiatry	02 (2.5)	14 (6.0)	2.5
Psychological Reports	02 (2.5)	04 (1.7)	1.9
Indian Journal of Psychiatry	02 (2.5)	03 (1.3)	1.4
Anthropology and Humanism	02 (2.5)	05 (2.1)	0.3
Journal of Anthropological Research	01 (1.3)	- -	1.8
International Journal of Comparative Sociology	01 (1.3)	- -	2.0
International Journal of Sexual Health	01 (1.3)	- -	1.7
Anthropologica	01 (1.3)	- -	0.8
British Journal of Medical Psychology	01 (1.3)	13 (5.5)	NA
NIMHANS Journal	01 (1.3)	–	NA
Anthropology of Consciousness	01 (1.3)	02 (0.8)	NA
Journal of Near-Death Studies	01 (1.3)	–	NA
Journal of Psychology and Human Sexuality	01 (1.3)	–	NA
Subtle Energies & Energy Medicine	01 (1.3)	–	NA
Total	78 (100)	237 (100)	**–**
Mean(±SD)	3.9 (±6.6)	21(±25.2)	1.7(±0.9)

Retrieved from scopus.com.
PLM= past-life memories.

Table 3
Methodological features.

	Design n (%)				
Studies	**Case report** 47 (60.2)	**Case-control** 12 (15.4)	**Cohort** 4 (5.2)	**Cross sectional** 15 (19.2)	**N (%)** 78 (100)
Children	42 (89.3)	8 (66.6)	3 (75.0)	13 (86.6)	66 (84.6)
Adults	5 (10.6)	4 (33.3)	1 (25.0)	2 (13.3)	12 (15.3)
Interviews	47 (100)	–	2 (50.0)	8 (53.3)	57 (73.0)
Subject	47 (100)	–	–	1 (6.6)	48 (61.5)
Current family	47 (100)	–	2 (50.0)	4 (26.6)	53 (68.0)
Previous family	31 (66.0)	–	–	1 (6.6)	32 (41.0)
Other firsthand witness	23 (49.0)	–	–	–	23 (29.4)
Documental analysis	31 (66.0)	–	3 (75.0)	5 (33.3)	39 (50.0)
Related to current life	31 (66.0)	–	–	–	31 (39.7)
Related to previous personality	31 (66.0)	–	–	–	31 (39.7)
Past-life memories	47 (100)	12 (100)	4 (100)	15 (100)	78 (100)
Birthmark/defect	21 (44.6)	4 (33.3)	1 (25.0)	3 (20.0)	29 (37.1)
Experimental birthmark	7 (15.0)	1 (8.3)	–	–	8 (10.2)
Unusual behavior	47 (100)	4 (33.3)	2 (50.0)	5 (33.3)	58 (74.3)
Phobia	15 (32.0)	3 (25.0)	1 (25.0)	5 (33.3)	24 (30.8)
Philia	10 (21.2)	3 (25.0)	1 (25.0)	–	14 (18.0)
Gender nonconformity	5 (10.6)	3 (25.0)	1 (25.0)	1 (6.6)	10 (12.8)
Skills/Habits	17 (36.1)	1 (8.3)	–	–	18 (23.0)
Intermission memories	2 (4.2)	1 (8.3)	–	1 (6.6)	4 (5.2)
Subject's contact with its previous family	31 (66.0)	–	–	1 (6.6)	32 (41.0)
Written before previous family	9 (19.1)	–	–	–	9 (11.5)
Psychological/personality measures	–	9 (75.0)	–	1 (6.6)	10 (12.8)
Intelligence	–	2 (16.6)	–	1 (6.6)	3 (3.8)
Social behavior	–	7 (58.3)	–	1 (6.6)	8 (10.2)
Suggestibility	–	3 (25.0)	–	1 (6.6)	4 (5.2)

related to past-lives memories. Other relevant aspects were the intermission memories between death and rebirth (5%), and the experimental birthmarks (10%). In summary, our data is consistent with a methodological standard previous established.[30] In other words, the uses of interviews, documental analysis and *in loco* approaches have been widely used by researchers interested in PLM investigations. Moreover, our data resemble with cross-cultural patterns related to cases of reincarnation type, as pointed by Matlock[6]: children about two years old who spontaneously started to claim PLM, which gradually faded by nine years old; the memories were often associated with a violent mode of death during the previous life; unusual behaviors were verified, such as phobias, xenoglossy, unusual skills; and birthmarks or birth defects matching wounds from the previous life were sometimes present on the child. Further, the phenomenon of intermission memories between death and rebirth was analyzed more deeply,[54] as well as the phenomenon of experimental birthmarks.[55] In addition, a case in which a deceased individual has been identified whose life corresponds to the child's statements has been termed a solved case.[30] And, documentation of the child's statements that was made before the case was solved is considered an important factor for the strength of the cases,[56] since it eliminates the possibility that the children, their parents, friends or other first-hand witnesses

could have gotten any information through some usual way of communication from members of the alleged previous family.[57] Overall, in what concerns the methodological features of observational PLM studies, it is possible to verify that a methodological standard was followed by the most of researchers, and this was probably due to Stevenson's development of methods for tracking an investigation of people who claimed PLM.[58] Consequently, this fact might be considered as a good thing for this scientific field, since it makes it easy to compare the methodological quality between different studies. In addition, it is possible to verify that most of the methodological approaches are related to qualitative aspects, and it may be due to the nature of the research object, that is people who claimed PLM, their witnesses' reports, and analysis of documents associated with these cases. However, some studies were related to quantitative methods, such as those which have measured personality traits and behavioral aspects of people who claimed PLM.[50,59] As found through our bibliometric analysis, the first detected academic paper related to PLM was published in 1960s,[39] and the amount of publications reached a peak in the 2000s and stabilized since then. However, the earliest search entries concerning PLM on scientific databases have first occurred on Pubmed, in 1977, and later on Scopus in 1982.[60] Moreover, it was made clear that Ian Stevenson has significantly impacted the field of CORT academic studies, since he not only is the author with the most publications, but all the main authors in the field have been directly involved with Stevenson's works during his life, and some authors have also taken part in Stevenson's investigations,[61-63] or even have replicated Stevenson's investigations.[64] Furthermore, also concerning authors, we could verify research groups spread in different places around the world, such as in India, USA, Europe and Japan. Moreover, a significant variety of scientific peer reviewed journals have published papers related with PLM, about 2/3 from parapsychology or anomalous phenomena field and followed mainly by mainstream journals on psychiatry and psychology, with a mean impact factor (Scopus CiteScore) of 1.7 (range 0.3–3.0), a mean of 3.9 (range 01–24) articles per journal and an average of 21 citations per article. For comparison purposes, we used available bibliometric data at Web of Science (usually close to Scopus, although often with values a bit lower) for two more established fields related to health sciences, occupational therapy and cancer rehabilitation. Regarding the occupational therapy literature published in the past two decades,[65] where among a total of 5315 articles published through 821 scientific journals, was verified a mean of 6.4 publications per journal, and 83% received no citations in the year they were published. And, among the ten journals that most published papers in occupational therapy, the mean impact factor was 1.1, ranging from 0.3 to 2.6. Concerning cancer rehabilitation,[66] in a sample of 1743 papers published between 1967 and 2008, it was found a paper mean impact factor of 1.9, and 37% were not indexed in the Journal Citations Report (JCR). Among the indexed papers, only 15% were published in journals that have published more than 6 articles concerning cancer rehabilitation during the period of 1967 to 2008.

Overall, it is important to consider that this study is the first scoping review regarding the scientific field of observational studies of people who claimed PLM, and, as a result, our findings might help to promote a broader understanding of this cross-cultural and intriguing phenomenon, as well as to help to set up methodological approaches for future studies. Furthermore, it is important to point out that since we have focused on observational studies published as articles in scientific journals during any date, it makes it possible to consider our sample as an illustration of the total amount of observational studies of claimed PLM published in scientific journals indexed in mainstream scientific databases. However, the total amount of cases and studies showed in this study must not be considered as the accurate amount of cases and studies of PLM investigated around the world, since our study aimed to include only papers published in academic journals indexed in the main mainstream scientific databases (Scopus, Web of Science, PubMed/Medline, PsycINFO, Scielo, or OpenGrey), consequently, studies and investigations published in books or in journals not indexed at these databases were not included. Therefore, another limitation of this study, is the fact that Ian Stevenson and other key authors related to the PLM scientific field (e.g., Erlendur Haraldsson, Jim B. Tucker and Satwant Pasricha) have published a great amount of their studies, perhaps the majority of their PLM' investigations, in academic books, and consequently these cases were not included in our study due to our inclusion criteria (observational studies published as articles in scientific journals). Moreover, the total amount of cases investigated through the included studies (2214 cases in Asia, 371 in North America, 57 in Africa, and 1031 had their location not specified[31,46,48]) does not accurately reflects the actual number of PLM cases investigates because there is some sample overlapping between studies, and it was not possible to measure this. Additionally, for the purpose of getting a representative sample that shows the prevalence of people who claims PLM among the general population around the world, a large cross-cultural survey would be necessary. However, in this current study we performed a careful bibliography search and analysis that make it possible to have a concise but fairly comprehensive overview of all research articles regarding PLM published at the main mainstream scientific databases.

Conclusion

The phenomenon of people who claim past-lives memories has been pointed to as a cross-cultural phenomenon; therefore, future academic investigations regarding it should be developed around the entire world, following a methodological standard and trying to overcome possible limitations such as linguistic barriers during interviews and the limited investigations regarding adults who claim or have claimed PLM. In addition, the falsifiability of claimed PLM must always be considered and future studies should always consider the sociopsychological hypothesis for PLM.[67] In other words, researchers have to consider possible associations between these alleged memories and cultural variables, such as religious/spiritual aspects, general beliefs, children's imagination/fantasy, and, probably, different levels of sociopolitical allowance for sharing or even for publishing information on observed cases.

Source of funding

This work was supported by Bial Foundation grant No. 89/18 "National survey of Cases of Reincarnation Type in Brazil".

Declaration of Competing Interest

none.

Acknowledgements

This work was supported by Bial Foundation grant No. 89/18
Authors do not declare any conflict of interest.

Supplementary materials

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.explore.2021.05.006.

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