The effect of life review interventions on the psychological and spiritual well-being of older people: a systematic review protocol

Li Ka Man, RN, BN (Hons), MSc (Clinical Gerontology), Doctoral Nursing Student¹
Professional Consultant, The Nethersole School of Nursing, The Chinese University of Hong Kong
Phone: (852) 2696 1246
Fax: (852) 2696 1254
Email: carmenli@cuhk.edu.hk

Chow Ka Ming, RN, RM, BN (Hons), MN, Doctoral Nursing Student¹
Professional Consultant, The Nethersole School of Nursing, The Chinese University of Hong Kong
Phone: (852) 39434431
Fax: (852) 2603 5269
Email: kmchow@cuhk.edu.hk

Centre conducting the review

Hong Kong Centre for Evidence Based Nursing: a Collaborating Centre of the Joanna Briggs Institute
The Nethersole School of Nursing
The Chinese University of Hong Kong, Hong Kong

Correspondence

Hong Kong Centre for Evidence Based Nursing: a Collaborating Centre of the Joanna Briggs Institute, 8/F, Esther Lee Building, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong.

Email: janitachau@cuhk.edu.hk

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Introduction

Many older people enjoy sharing their life stories and this seems to be a pleasurable experience for them. Haber stated that storytelling not only serves as a means to pass information from one generation to the next, but also to uplift the older people’s status within the community. ¹ Reviewing one’s life allows the older people to preserve their identity while shaping and evaluating it in a new way. Black and Height used a metaphor to describe the relationship between life and life review. ² According to Black and Height, life is made up of a mass of tangled threads without patterns. Life review is like the weaver that helps to form patterns and finally make the threads into a beautiful tapestry. ²

Life review is a psychoanalytically based intervention which critically analyses one’s life history and aims to achieve ego integrity of the participant.¹ Life review is commonly used to provide emotional and spiritual support for older people and any person who is facing the end of life.³⁴ It is also regarded as an important developmental task of an individual throughout the life span.⁵⁶

Theoretical background of life review

Dr. Butler, a pioneer of this field, has a landmark article about his observations on older people’s reminiscences, “The life review: an interpretation of reminiscence in the aged”.⁷ This article was the major impetus for research in the field. Butler stated that life review is a necessary part of successful aging, and is a means of deriving meaning from the past and resolving old conflicts. Life review can, in turn, prepare an individual to face death and to lessen their fear.

Life review is theoretically grounded in the life-stage developmental theory of Erikson,⁸ which is the first psychosocial model of development throughout the entire lifespan. Prior to Erikson, developmental psychologists presumed that development stopped beyond adolescence while Erikson asserted that the development of an individual continued beyond puberty and throughout the entire lifespan.⁸⁻⁹

In Erikson’s theory, there are eight stages of an individual’s development, from early childhood to oldest adulthood in an epigenetic developmental ladder to portray the individual’s growth. An individual must accomplish specific developmental tasks at each stage in order to traverse to the next stage effectively.¹⁰ The first four stages in this theory, trust versus mistrust, autonomy versus shame and doubt, initiative versus guilt, and industry versus inferiority, relate to the childhood of an individual. The last four stages, identity versus role confusion, intimacy versus isolation, generativity versus stagnation, and integrity versus despair, relate to adulthood. Erikson believed that failure at certain stages causes dysfunction in later stages.⁹

For people in old age, they are in the integrity versus despair stage, which is considered to be the last stage of development in an individual’s life. Integrity is the acceptance of one’s one-and-only life cycle as something that had to be and believing that it probably permitted no substitutions. An older person who reaches integrity
accepts the summation of his or her life from birth to the present and increases the likelihood of meaning and order in his or her life. Conversely, if an older person is unable to accept his or her life at this stage, he or she may end up in despair, which is associated with hopelessness, and the feeling that it is too late to make alterations in order to achieve integrity.\textsuperscript{9,10} Erikson\textsuperscript{10} considered life review as a vital task in this stage of life, through which older people are allowed to reintegrate past experiences and value the present with their eye on the future. Life review is an important intervention that helps people to resolve the past and overcome any unsuccessful earlier stages in their life.\textsuperscript{9,11} Hence, it promotes the attainment of ego integrity and therefore avoids despair in late adulthood.\textsuperscript{1,7,12}

**Potential benefits of life review**

Given that life review is grounded in the life-stage developmental theory of Erikson, it is not surprising that the outcomes variables of related studies are usually related to ego integrity and despair. Some studies revealed that life review interventions promoted ego integrity\textsuperscript{13} and enhanced psychological well-being in older people.\textsuperscript{14} These studies showed that life review improved personal meaning,\textsuperscript{15} increased life satisfaction,\textsuperscript{13-14,16} increased self-esteem,\textsuperscript{13,16} and promoted adaptation of older people.\textsuperscript{16} In addition, studies also revealed that life review interventions prevented despair in older people.\textsuperscript{13} These alleviated depressive symptoms,\textsuperscript{15,17-18} decreased anxiety,\textsuperscript{19} death anxiety,\textsuperscript{20-21} and hopelessness in older people.\textsuperscript{18-19}

**Potential risks of life review**

Notwithstanding the many studies that have shown positive effects of the life review process, life review interventions may have potential risks even though this has been seldom mentioned in the literature. Life review intervention may induce many emotions to roll to the surface. If the reviewer could not work through the events and transcend the negative feelings, negative effects may result. A sense of dismay and suicidal thoughts may occur.\textsuperscript{6} Caution in performing life review with therapeutic listeners equipped with client-centred counselling skills has been advocated.\textsuperscript{6,22-23}

**Life review versus reminiscence**

Although the research literature has shown the therapeutic effects of life review in older people, the confusion between the concept of life review and reminiscence clouds the implementation and therapeutic effects of both modalities.\textsuperscript{11,23} In the literature, the terms ‘life review’ and ‘reminiscing’ have often been used interchangeably. Although both life review and reminiscence use memory and recall to construct the process, they are two separate modalities.\textsuperscript{13} Life review is one type of reminiscing, and reminiscing is a part of the life review process. True life review is more complicated than a simple reminiscing.\textsuperscript{2,7}

*Reminiscence* is the recall of memories. That is, to recall what can be remembered.\textsuperscript{1,6} The recall can proceed chronologically, but not necessarily. Although reminiscence may be a bittersweet experience, pain is usually minimal. It is usually a pleasurable experience and can improve the quality of life of the reminiscer.
Reminiscence can be performed in dyad or in group format. The group dynamic and the interaction between members of the group have special therapeutic effects among the reminiscers. The goal of dyad reminiscence is usually to obtain data. Hence, the therapeutic listener's role is that of questioner and listener. For group reminiscence, the goal is to share experience with those who have similar histories, so as to increase socialisation, improve communication skills and increase self-confidence.\textsuperscript{11-12} The role of the group leader is to facilitate interaction and sharing within the group.\textsuperscript{11} It is not necessary for the leader to reframe, probe or push for insight, or to ask the reminiscers to evaluate the shared memories. Spontaneity, a focus on pleasurable memories and the group process are the three distinguishing characteristics that make reminiscence different from life review.\textsuperscript{11}

Life review is a critical analysis of one's life history.\textsuperscript{12} The goal of life review is to achieve ego integrity. This is a psychoanalytically based intervention, couched in the life-stage developmental theory of Erikson. The review need not proceed in chronological order, but each developmental stage must be included.\textsuperscript{9, 11} Although both happy and sad moments are being recalled during the life review process, it is hard work when compared with reminiscence. Many emotions may roil to the surface, both joyful and despairing feelings may be evoked and pain may be induced during the process.\textsuperscript{11, 22} The role of a therapeutic listener is to act as a sounding board for the reviewer to listen more accurately to oneself, directs the reviewer to review their life systematically and then pushes them to evaluate and integrate the shared memories.\textsuperscript{7, 9, 24} The therapeutic listener should be skilled with client-centred counselling skills, in which empathic understanding and unconditional positive regard are essential components for completing a life review successfully.\textsuperscript{11} There are three characteristics of life review that differentiate it from reminiscence.\textsuperscript{9, 11-12} The first one is evaluation. Evaluation is the most important part of the life review process. Haight\textsuperscript{12} claimed that without evaluation, there will be no therapeutic effect on achieving integrity of an individual. Another one is structure. Life reviews must cover the entire life span of development. The last, but not the least, is individuality. Although literature shows that life review can be conducted in dyad or a group approach, scholars believe that it is best performed in private with only one therapeutic listener to direct the reviewer during the process.

**Different designs of life review interventions**

In the literature, there are numerous designs of life review interventions conducted in order to achieve ego integrity of older people. Besides reviewing one's life along each developmental stage, life review can also be structured around one or more life themes, such as family themes or work themes.\textsuperscript{1} Life review can be conducted in either dyad or group format. Dyad life review is on a one-to-one basis, with one reviewer and one therapeutic listener.\textsuperscript{11} This is easier to access and poses less complicated confidentiality issues. Group life review consists of a therapeutic listener and a group of reviewers. This may raise more complicated confidentiality issues, yet adds the benefit of helping the reviewers establish new peer relationships.\textsuperscript{1} Recent studies with group format usually have eight reviewers in a group.\textsuperscript{15, 26} There are also different designs of life review interventions with respect to the number, duration and frequency of sessions. The number of sessions may range from two sessions up to twelve sessions. The duration of each session may range from thirty minutes to two hours, with one-week interval or more.\textsuperscript{18, 19, 26} In some studies, researchers used the Life Review
and Experiencing Form (LREF) to guide the reviews;\(^3\) while some used special designed programmes, such as the “looking for meaning” programme, to frame the reviews.\(^{15,25}\) Some memorabilia, like scrapbooks, family photo albums, letters, and cherished possessions, were involved as catalysts to inspire memories during the life review process.\(^{19,27}\)

Life review is considered an important development process to promote psychological and spiritual well-being and achieve ego integrity for older people. However, with the confusion between the modalities of life review and reminiscence, the various different designs of life review interventions and the potential risks of life review, the effectiveness of the interventions may be affected and the willingness of nurses to implement the interventions may also be lowered.\(^{11,23}\) There are no published systematic review reports on the effect of life review interventions for older people from Cochrane Library, Joanna Briggs Institute (JBI) Library of Systematic Reviews and other major databases such as MEDLINE and CINAHL. Thus a systematic review is required to identify the most effective format and design of life review interventions in order to promote psychological and spiritual well-being in older people, and hence assist them to achieve ego integrity.

**Review objective/question**

**Objective**

The objective of this systematic review is to synthesise and present the best available research evidence related to the effectiveness of life review interventions on the psychological and spiritual well-being of older people. A further aim is to identify the most effective format and intensity of life review interventions for older people.

**Review questions**

The specific review questions designed to fulfil this objective are:

1. What is the effectiveness of different formats of life review interventions (e.g., in dyad or in group format) on older people’s psychological well-being (including anxiety, depression, self-esteem, death anxiety and suicidal intent) and spiritual well-being (including meaning in life, meaning in death, life satisfaction, hopelessness and loneliness)\(^1\)?

2. What is the effectiveness of life review interventions of different intensities (e.g., different number, duration and frequency of sessions) on the psychological and spiritual well-being of older people?\(^2\)

3. What is the effectiveness of life review compared with usual care on the psychological and spiritual well-being of older people?\(^3\)
Methods of review

Inclusion criteria

Types of participants

The participants of interest will be older people aged 60 years or above, irrespective of gender, race, health status, and whether community-dwelling or institutionalised, who must have gone through life review interventions in the studies.

Types of interventions

The intervention of interest will be life review. It is a psychoanalytically based intervention which critically analyses one’s life history and aims to achieve ego integrity of the participant. Life review with the following features will be included:

- either in dyad or in group formats;
- in different settings, including acute setting, rehabilitation setting, palliative care setting, residential home setting, community setting or home setting;
- of different designs, i.e. different in the number, duration and frequency of sessions;
- conducted by different intervention providers, including physicians, psychiatrists, nurses, psychologists, social workers, chaplains, or counsellors.

This review will consider for inclusion studies in which life review intervention is the only intervention used, and will exclude those studies which combine life review with any other intervention in the experimental group, such as counselling interventions or multifaceted interventions.

Types of comparisons

Foreseen comparisons include:

- comparison between life review interventions with usual care;
- comparison between life review interventions with other interventions, such as watching a video about aging in the control group;
- comparison between life review interventions in dyad or in group format;
- comparison between different designs of life review interventions, including the number, duration and frequency of sessions;
- comparison between nurses and other health care providers as the intervention providers.
Types of outcome measures

The outcomes of interests will be:

- Psychological well-being, including anxiety, depression, self-esteem, death anxiety and suicidal intent, measured by, but not limited to, Affect Balance Scale (ABS), Hospital Anxiety and Depression Scale (HADS), Center for Epidemiological Studies Depression Scale (CES-D), Geriatric Depression Scale (GDS), Rosenberg Self-Esteem Scale (RSES), Revised Death Anxiety Scale (RDAS), and the Beck Scale for Suicidal Ideation (SSI).

- Spiritual well-being, including meaning in life, meaning in death, life satisfaction, hopelessness and loneliness, measured by, but not limited to, Functional Assessment of Chronic Illness Therapy-Spiritual (FACIT-Sp) Scale, Good Death Inventory, Life Satisfaction Index A (LSIA); Beck Hopelessness Scale (BHS) and the Reminiscence Function Scale (RFS).

Types of studies

The studies of interest will be any experimental study design including randomised controlled trials (RCTs) and quasi-experimental that examines the effects of life review interventions on the psychological and spiritual well-being of older people. Papers based on single case studies, descriptive studies or surveys will be excluded, as will literature reviews, systematic reviews, case reports, editorials or reports of expert opinions. Only studies which were written in either English or Chinese languages will be included.

Search strategy

The search strategy is aimed to identify all published and unpublished studies in both English and Chinese using a three-stage approach. In the first stage, a limited search of MEDLINE and CINAHL will be undertaken followed by an analysis of text words contained in the title and abstract, and of the index terms used to describe the article (e.g., Appendix I shows the search strategy to be used in MEDLINE).

The initial English keywords to be searched will include:

- Concept 1: Life review*
- Concept 2: Psychological or psychological outcomes or anxiety or depress* or self esteem or suicid* or death anxiety or quality of life
- Concept 3: Spiritual* or spiritual outcomes or meaning in life or life satisfaction or meaning in death or hopelessness or loneliness
- Concept 4: Older people or older adult or senior* or senile or old aged or aged or elder*
The initial Chinese keywords to be searched will include:

- **Concept 1:** 生命回顧
- **Concept 2:** 心理 or 心理健康 or 憂慮 or 消沉 or 抑鬱症 or 抑鬱徵狀 or 自我評價 or 自殺 or 自殺念頭 or 死亡恐懼 or 生命質素 or 生存質量
- **Concept 3:** 灵性 or 灵性健康 or 生命意義 or 生命滿意度 or 死亡的意義 or 絕望 or 孤單
- **Concept 4:** 老人 or 老年人 or 長者 or 耆英 or 銀髮族群

The second stage of the search will be an extensive search using all identified keywords and index terms across all included databases.

The databases to be searched for English studies will include:

- All EBM Reviews
- Allied and Complementary Medicine (AMED) (1985-present)
- British Nursing Index (1994-present)
- Centre for Reviews and Dissemination (CRD)
- CINAHL Plus (1937-present)
- Cochrane Central Register of Controlled Trials
- EMBASE (1980-present)
- Health and Psychosocial Instruments (HaPI) (1985-present)
- MEDLINE (1950-present)
- ProQuest 5000 (1923-present)
- ProQuest Dissertations and Theses
- ProQuest Social Science Journals (1994-present)
- PsycARTICLES
- Psychology: A SAGE Full-text Collection
- PsycINFO (1806-present)
- Scopus (1823-present)
The databases to be searched for Chinese studies will include:

- China Journal Net (CJN) (中國期刊全文數據庫)
- Chinese Biomedical Literature Database (CBM) (中國生物醫學文獻數據庫)
- Chinese Medical Current Contents (CMCC) (中國生物醫學期刊數據庫)
- Hong Kong Index to Chinese Periodical (HKInChiP) (香港中文期刊論文索引)
- HyRead (台灣全文資料庫)
- Taiwan Electronic Periodical Services (TEPS) (台灣電子期刊服務網)
- WanFang Data (萬方數據)

The databases to be searched for unpublished studies or grey literature will include:

- Academic Archive Online
- Agency of Healthcare Research and Quality
- Althealth Watch
- Digital Dissertations
- Dissertation Abstracts International
- Grey Literature Report (via New York Academy of Medicine)
- Index to Theses
- Lancashire Care Library and Information Service
- MEDNAR
- National Library of Medicine Gateway
- Netting the Evidence
- The Networked Digital Library of Theses and Dissertations

In the third stage, a hand search of other sources of studies, including a manual search of relevant conference proceedings and journals, postgraduate and doctoral dissertations, online databases search and websites, will be performed to identify additional literature which are not located through the search strategies. Furthermore, the reference lists and bibliographies of all retrieved articles will be searched to reveal additional relevant studies.
Assessment of eligibility

All the studies identified from the database searches will be assessed by two reviewers independently for relevance based on the title and abstract. All abstracts of identified studies will be assessed by using the Study Eligibility Verification Form (Appendix II) which has been developed according to the inclusion and exclusion criteria of this review. If a study is considered to be eligible for inclusion into the review, the full text will be retrieved for critical appraisal and data extraction. If a study is inconclusive based on the title and abstract, the full text will also be retrieved for further analysis. Any disagreement between the two reviewers will be resolved by discussion or by consultation with the third reviewer. The details of the eligible studies will be saved in a bibliographic software package (Refworks) and duplicated studies will be deleted.

Assessment of methodological quality

All eligible studies selected for retrieval will be assessed by two independent reviewers for methodological quality prior to inclusion in the review. Standardised critical appraisal checklists for randomised controlled/pseudo-randomised trials (Appendix III) from the Joanna Briggs Institute Meta Analysis Statistics Assessment and Review Instrument (JBI-MAStARI) will be used for the assessment. Any disagreement between the reviewers will be resolved by discussion or by consultation with the third reviewer. Kappa tests will be performed to assess agreement between the two reviewers.

Data Extraction

Data of the included studies will be extracted and summarised by using the JBI-MAStARI data extraction form (Appendix IV). The reviewers will extract data independently before conferring in order to facilitate accurate and reliable data for analysis. Any discrepancy between the reviewers will be resolved by discussion. The authors of the included studies will be contacted in order to obtain any missing statistical data from the studies. The data extracted will include specific details about format and intensity of the interventions, populations of the study, study methods, outcome measures, result, and the number and the reasons for withdrawals and dropouts.

Data synthesis

The included studies will be categorised according to the design and format of life review interventions being conducted. Analysis of outcomes will be made using intention-to-treat results where possible. Publication bias will be evaluated graphically using a funnel plot.

For summary measure of effect of continuous data which are collected using same scale, mean difference and 95% confidence interval will be calculated for each included study; while for continuous data which are collected using different scales, the standardised mean differences and 95% confidence interval will be calculated. The summary measure of effect of dichotomous data, relative risk, odds ratio and 95% confidence interval will be calculated. If appropriate, quantitative data from comparable studies will be pooled in statistical meta-analysis using the JBI-MAStARI.

Clinical heterogeneity of the studies will be assessed by considering the settings, design of life review interventions and outcomes. The statistical heterogeneity of the combined studies will be tested using the $I^2$,
which describes the percentage of total variation across studies that is due to heterogeneity rather than chance. Subgroup analyses and sensitivity analyses will be performed to explore heterogeneity.

Statistical meta-analyses are planned to evaluate the following comparisons; subgroup analyses will be performed where applicable:

- life review interventions versus usual care;
- life review interventions versus no intervention;
- life review interventions in dyad versus group format;
- different designs of life review interventions, including the number, duration and frequency of sessions; nurses versus other health care providers as life review intervention providers.

Sensitivity analyses assessing the impact of unpublished studies and studies with high risk of bias will be performed for addressing heterogeneity, if appropriate. A random effects model will be applied for pooling if there is statistical heterogeneity; while a fixed effects model will be applied if statistical heterogeneity is absent. If statistical pooling of results of the included studies is not appropriate, the findings will be presented in narrative form.

**Conflict of interest**

No conflict of interest.
References:


Appendix I: Initial search strategy

MEDLINE

1. Life review*.mp.
2. Psychological well-being.mp.
3. Psychological outcomes.mp.
4. Anxiety.mp.
5. Depressi*.mp.
7. Self-concept.mp.
10. 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9
11. 1 and 10
13. Spiritual well-being.mp
14. Spiritual outcomes.mp.
15. Meaning in life.mp.
16. Life satisfaction.mp.
17. Meaning in death.mp.
19. Loneliness.mp.
20. 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19
21. 1 and 20
22. 11 or 20
23. Older people.mp.
24. older adult.mp.
25. elder*.mp.
26. senior*.mp.
27. senile.mp.
28. old aged.mp.
29. aged.mp.
30. 23 or 24 or 25 or 26 or 27 or 28 or 29
31. 1 and 30
32. 11 and 30
33. 21 and 30
34. 32 or 33
35. Hospital Anxiety and Depression Scale.mp.
36. 1 and 35
37. 34 and 35
38. Center for Epidemiological studies Depression Scale.mp.
39. 1 and 38
40. 34 and 38
41. Geriatric Depression Scale.mp.
42. 1 and 41
43. 34 and 41
44. Rosenberg Self-esteem Scale.mp.
45. 1 and 44
46. 34 and 44
47. Revised Death Anxiety Scale.mp.
48. 1 and 47
49. 34 and 47
50. Beck Suicide Scale.mp.
51. 1 and 50
52. 34 and 50
53. Functional Assessment of Chronic Illness Therapy-Spiritual (FACIT-Sp) Scale.mp.
54. 1 and 53
55. 34 and 53
56. Good Death Inventory.mp.
57. 1 and 56
58. 34 and 56
59. Life satisfaction index.mp.
60. 1 and 59
61. 34 and 59
63. 1 and 62
64. 34 and 62
65. Reminiscence Function Scale.mp.
66. 1 and 65
67. 34 and 65
# Appendix II: Study Eligibility Verification Form

The effects of life review on the psychological and spiritual well-being of older people: a systematic review

<table>
<thead>
<tr>
<th>Inclusion Criteria</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>1. <strong>Participants</strong></td>
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<tr>
<td>Older people aged 60 or above</td>
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<td>2. <strong>Interventions</strong></td>
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<tr>
<td>Life review intervention is the only intervention for experimental group</td>
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<td>3. <strong>Outcomes</strong></td>
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<td>Psychological wellbeing</td>
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<td>For example: anxiety, depression, self-esteem, death anxiety and suicidal intent</td>
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<td>Spiritual wellbeing</td>
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<td>For example: meaning in life, meaning in death, life satisfaction, hopelessness</td>
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<td>and loneliness</td>
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<td>4. <strong>Study design</strong></td>
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<td>Randomised controlled trial</td>
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<td>Quasi-experimental studies</td>
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<td>5. <strong>Language</strong></td>
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<td>Written in English or Chinese</td>
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Eligible study should have at least one YES for each number.

This study to be included? Yes ☐ No ☐
# Appendix III: JBI Critical Appraisal Checklist for Randomised Controlled/Pseudo-Randomised Trials

Reviewer: ________ Date: ______ Record Number: 

**First Author/Year:**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unclear</th>
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<tbody>
<tr>
<td>1. Was the assignment to treatment group truly random?</td>
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<td>2. Were participants blinded to treatment allocation?</td>
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<td>3. Was allocation to treatment groups concealed from the allocator?</td>
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<td>4. Were the outcomes of people who withdrew described and included in the analysis?</td>
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<td>5. Were those assessing outcome blind to the treatment allocation?</td>
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<td>6. Were the control and treatment groups comparable at entry?</td>
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<td>7. Were groups treated identically other than for the named interventions?</td>
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<td>8. Were outcomes measured in the same way for all groups?</td>
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<td>9. Were outcomes measured in a reliable way?</td>
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<td>10. Was appropriate statistical analysis used?</td>
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**Overall appraisal:** Included ☐ Excluded ☐ Seek further info. ☐

**Comments:** (Including reasons for exclusion)

________________________________________________________________________
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________________________________________________________________________
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Appendix IV: JBI data extraction form for Experimental/Observational studies

<table>
<thead>
<tr>
<th>Reviewer</th>
<th>Date</th>
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<tbody>
<tr>
<td>Author</td>
<td>Year</td>
</tr>
<tr>
<td>Journal</td>
<td>Record Number</td>
</tr>
</tbody>
</table>

**Study Method**  
RCT ☐  Quasi-RCT ☐  Longitudinal ☐  
Retrospective ☐  Observational ☐  Other

**Participants**

Setting

Population

Sample Size

Intervention 1 ☐  Intervention 2 ☐  Intervention 3 ☐

**Interventions**

Intervention 1

Intervention 2

Intervention 3

**Clinical outcome measures**

<table>
<thead>
<tr>
<th>Outcome Description</th>
<th>Scale/measure</th>
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19
### Study results

#### Dichotomous data

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Intervention ( ) Number/ total number</th>
<th>Intervention ( ) Number/ total number</th>
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#### Continuous data

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Authors Conclusions

Comments